DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1874

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This document has been recorded as

EXPLORATION LOAN

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

To: ~~Minor and Rare Metals~~ Date ~~7-24-51~~

To: ~~Coordinating Comm~~ Date ~~7-31-51~~

To: ~~Reports & Records~~ Date AUG 2 1951

To: ~~Code 530~~ Date ~~10-29-51~~

To: Reports & Records Date 11-1-51

To: _____ Date NOV 1951

To: _____ Date _____

To: _____ Date _____

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INT.-DUP. SEC., WASH., D.C. 98868

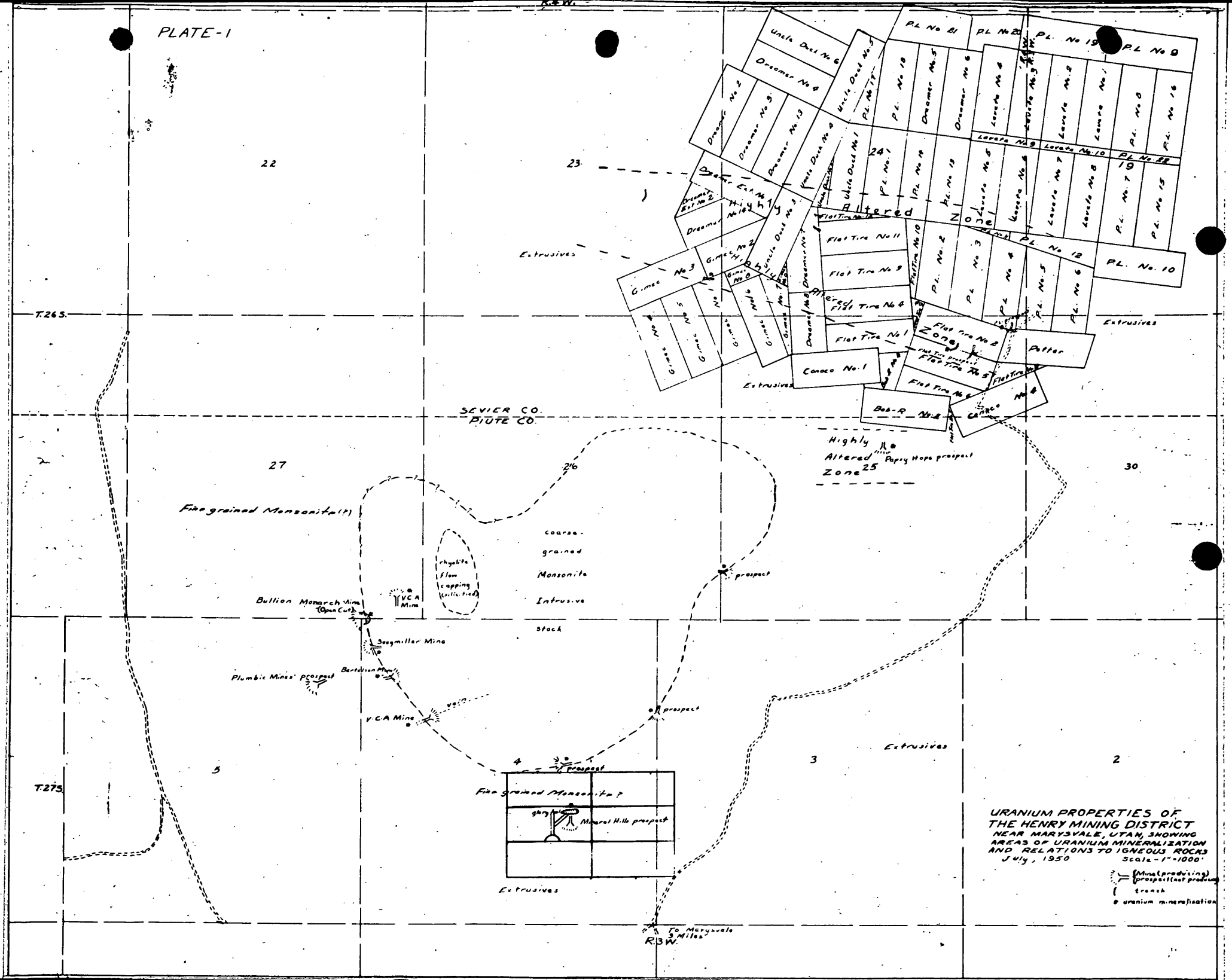
PLATE-1
R.2 W.
22
23
24
25
27
26
30
5
4
3
2
T.26S.
T.27S.
R.3 W.
Extrusives
Highly Altered Zone
Highly Altered Zone
Uncle Dick No 6
Dreamer No 4
Dreamer No 2
Dreamer No 3
Dreamer No 13
Uncle Dick No 5
Uncle Dick No 4
Uncle Dick No 1
Uncle Dick No 3
Dreamer Ext No 2
Dreamer Ext No 1
Dreamer No 14
Dreamer No 7
Dreamer No 8
Gimec No 3
Gimec No 2
Gimec No 8
Gimec No 1
Gimec No 5
Gimec No 6
Gimec No 7
Gimec No 4
P.L. No 81
P.L. No 20
P.L. No 19
P.L. No 9
P.L. No 18
P.L. No 17
P.L. No 14
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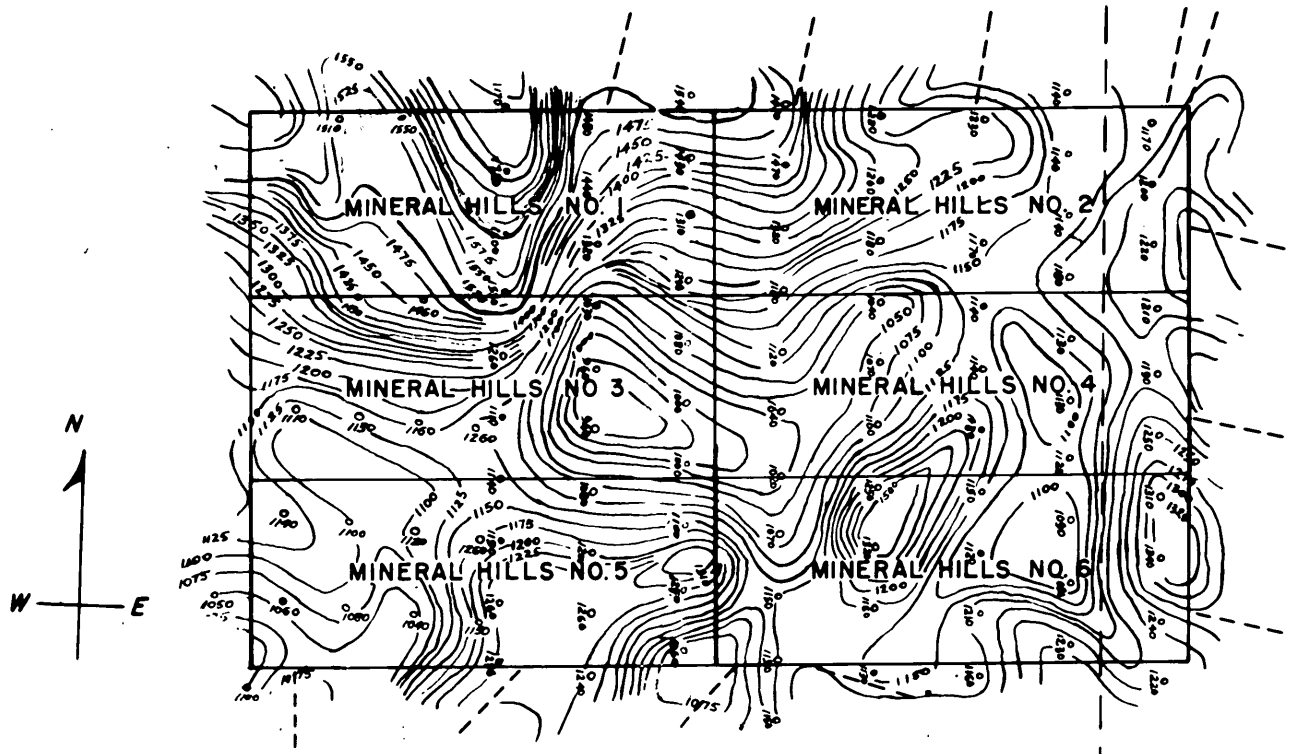
P.L. No 5
P.L. No 6
Lavela No 4
Lavela No 3
Lavela No 2
Lavela No 1
Lavela No 9
Lavela No 10
Lavela No 8
Lavela No 7
Lavela No 6
Lavela No 5
Flat Tire No 11
Flat Tire No 9
Flat Tire No 4
Flat Tire No 1
Flat Tire No 10
Flat Tire No 2
Flat Tire No 3
Flat Tire No 5
Flat Tire No 6
Flat Tire prospect
Potter
Conoco No 1
Bob-R No 2
Conoco No 4
Papsy Hope prospect
SEVIER CO.
PIUTE CO.
Fine grained Monzonite (?)
coarse-grained Monzonite Intrusive stock
rhyolite flow capping (silicified)
Bullion Monarch Mine (Open Cut)
V.C.A. Mine
Seegmiller Mine
Plumbic Mines' prospect
Bertelsen Mine
V.C.A. Mine
vein
prospect
prospect
prospect
Fine grained Monzonite ?
shaft
Mineral Hills prospect
To Marysvale 3 Miles
URANIUM PROPERTIES OF THE HENRY MINING DISTRICT
NEAR MARYSVALE, UTAH, SHOWING AREAS OF URANIUM MINERALIZATION AND RELATIONS TO IGNEOUS ROCKS
July, 1950
Scale - 1" = 1000'
Mine (producing)
prospect (not producing)
trench
uranium mineralization



1700

1500

1400

120

ISORAD MAP OF MINERAL HILLS CLAIM GROUP

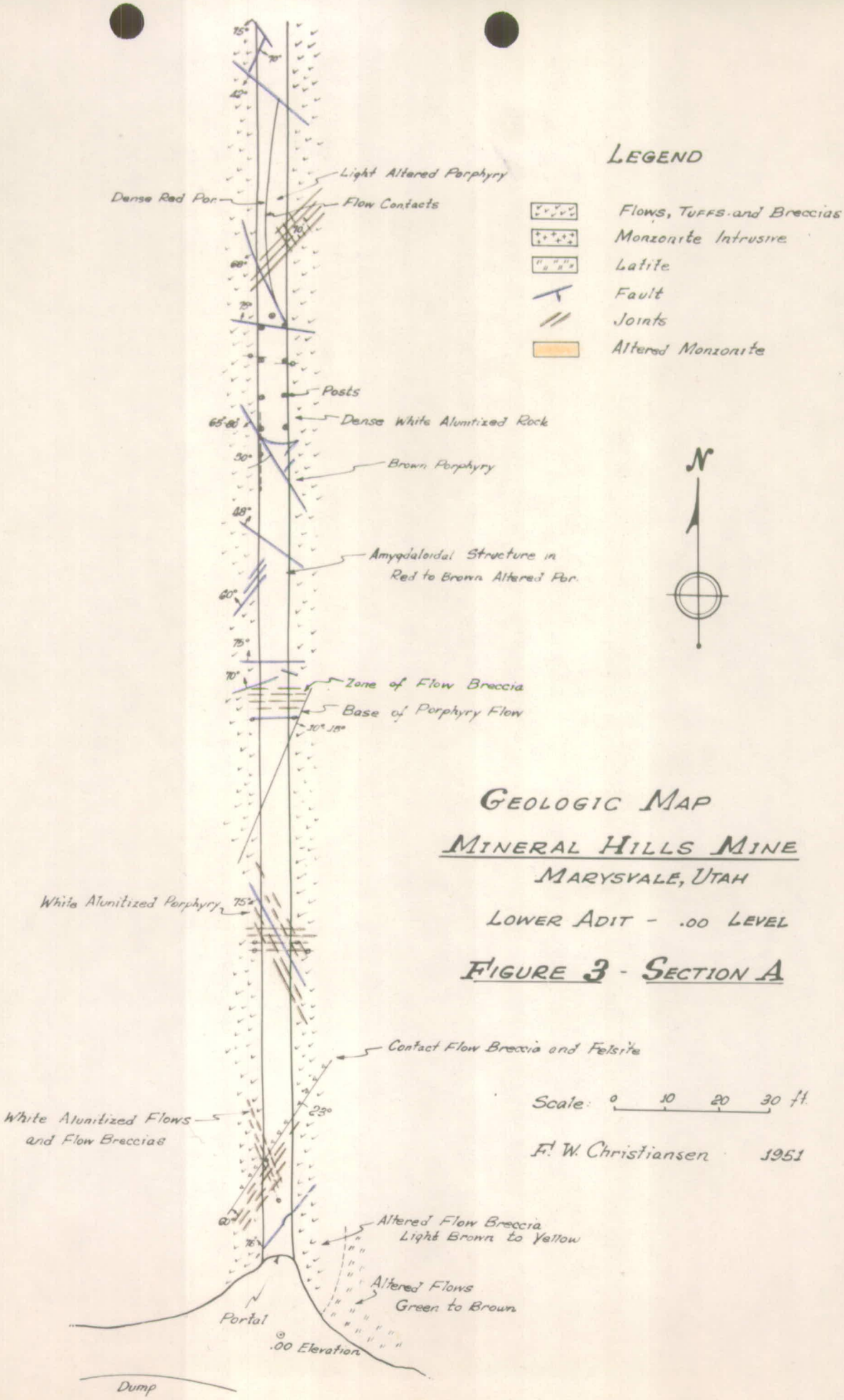
ISORAD CONTOURS IN COUNTS PER SECOND

1 INCH = 400 FEET

APPROXIMATE AREAL BACKGROUND = 600 COUNTS PER SECOND

SECTION 4 / SECTION 9 | SECTION 3 / SECTION 10

T-27-S | R-3-W



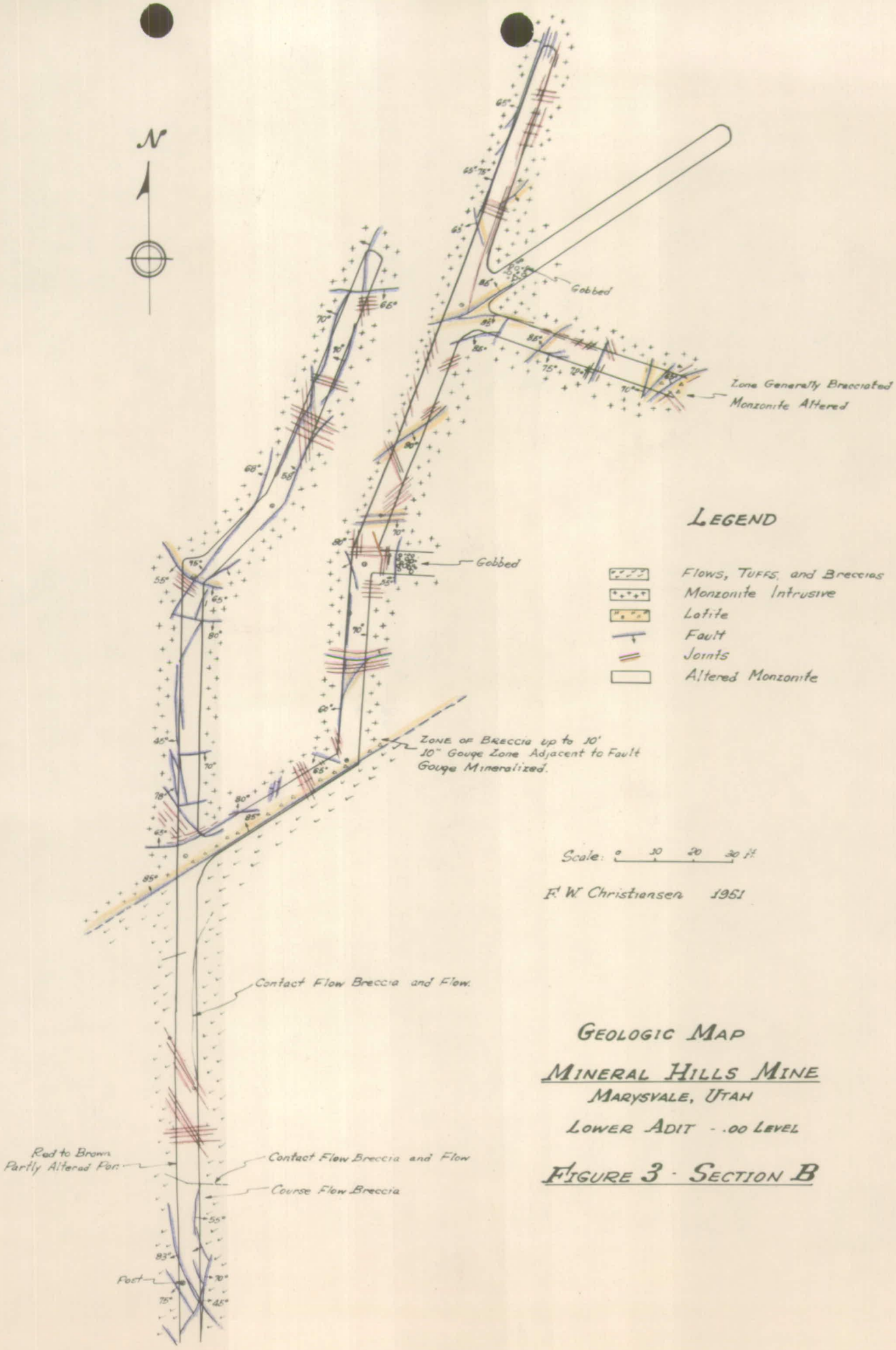
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 - SECTION A



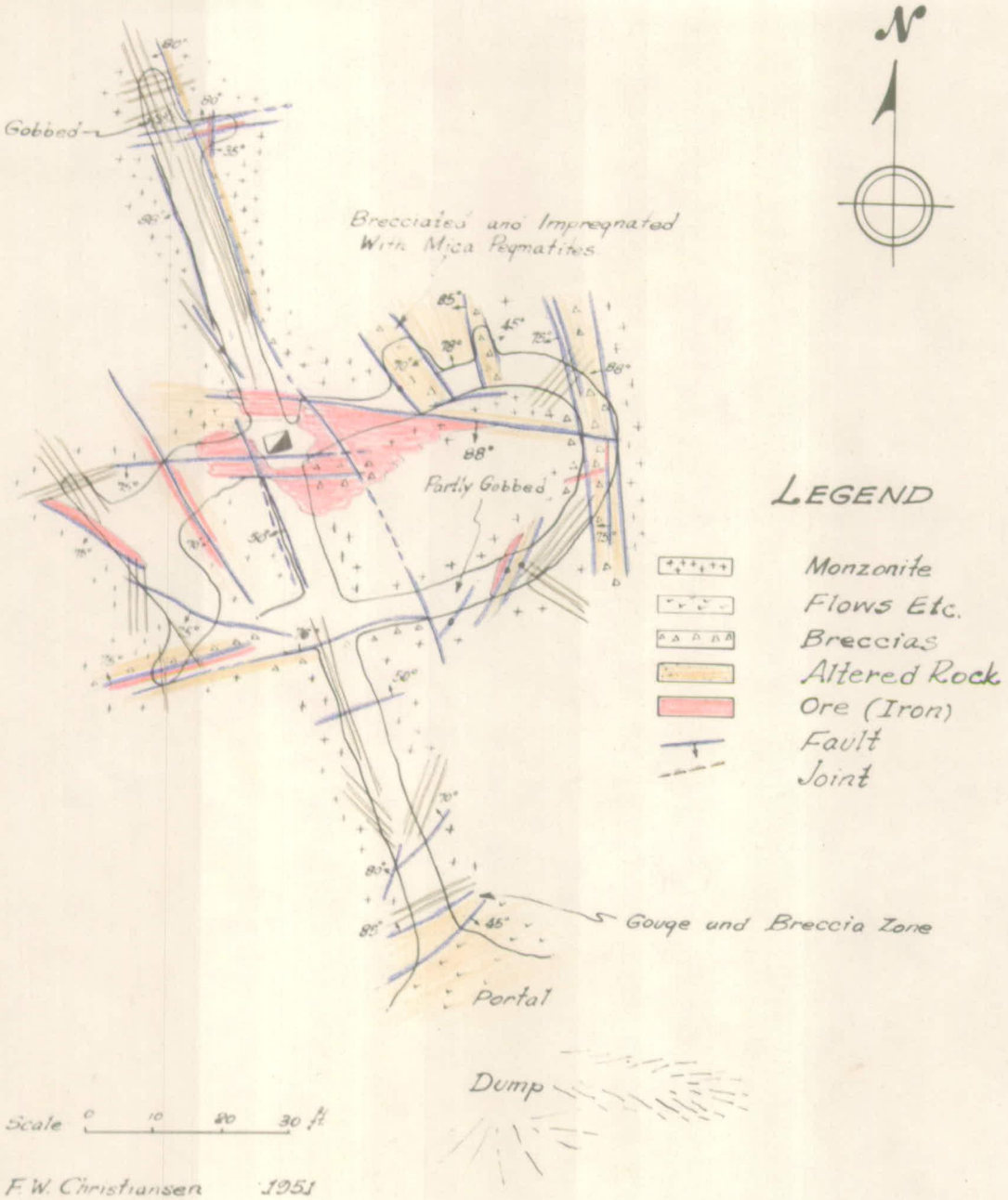
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 · SECTION B



F. W. Christiansen 1951

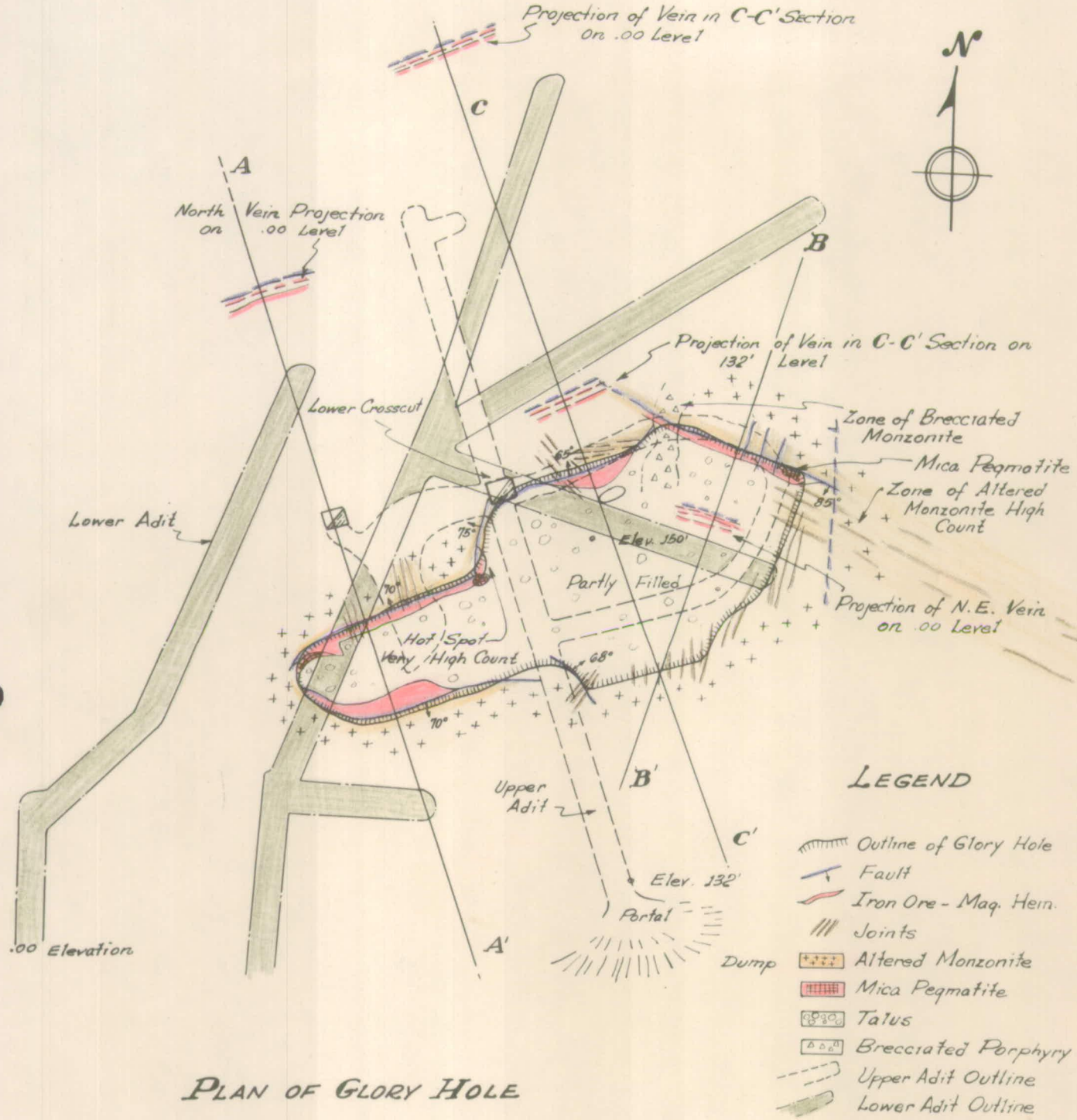
GEOLOGICAL MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

UPPER ADIT - 132' LEVEL

FIGURE 4



PLAN OF GLORY HOLE

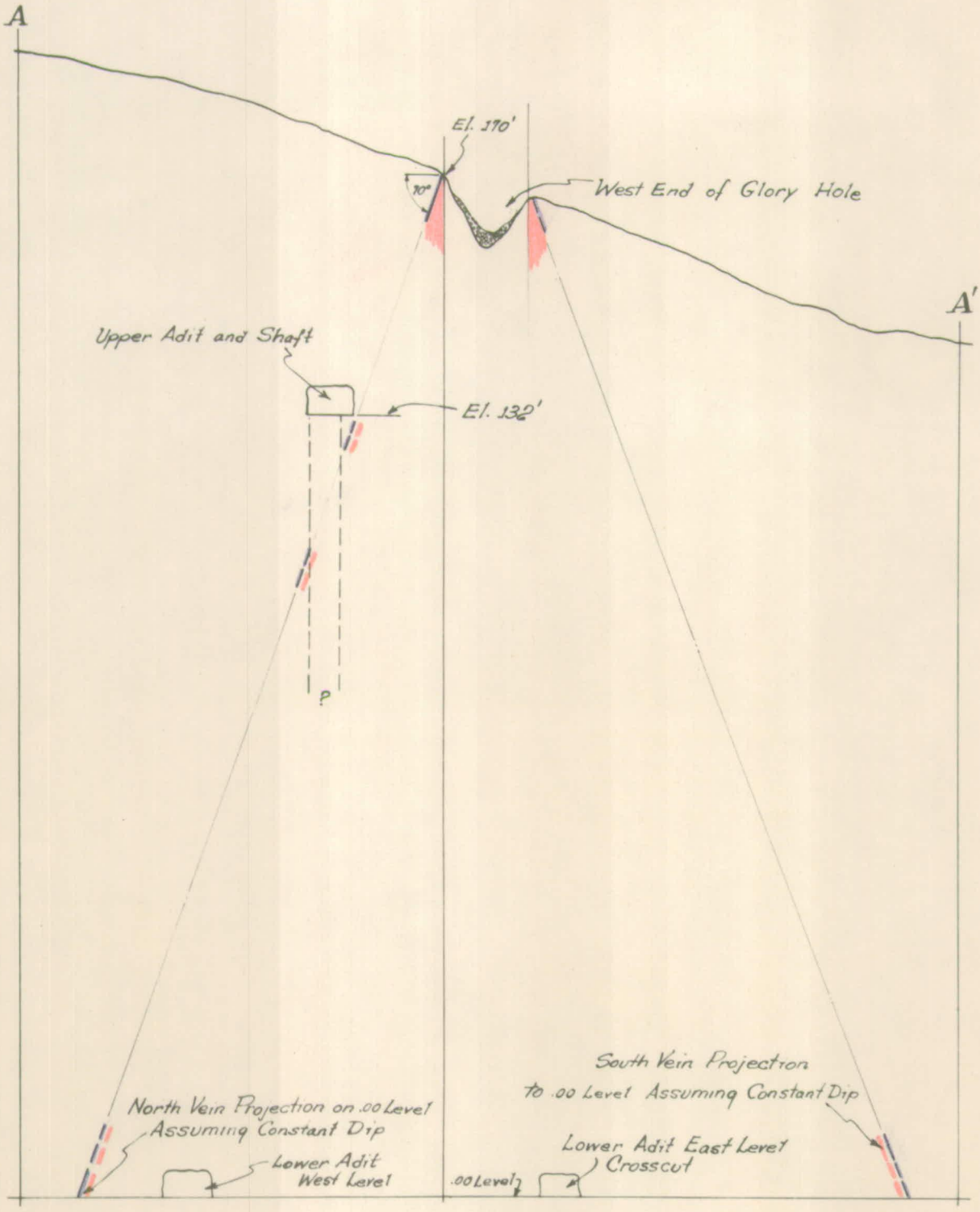
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 Ft.

F.W. Christiansen - 1951

FIGURE 5



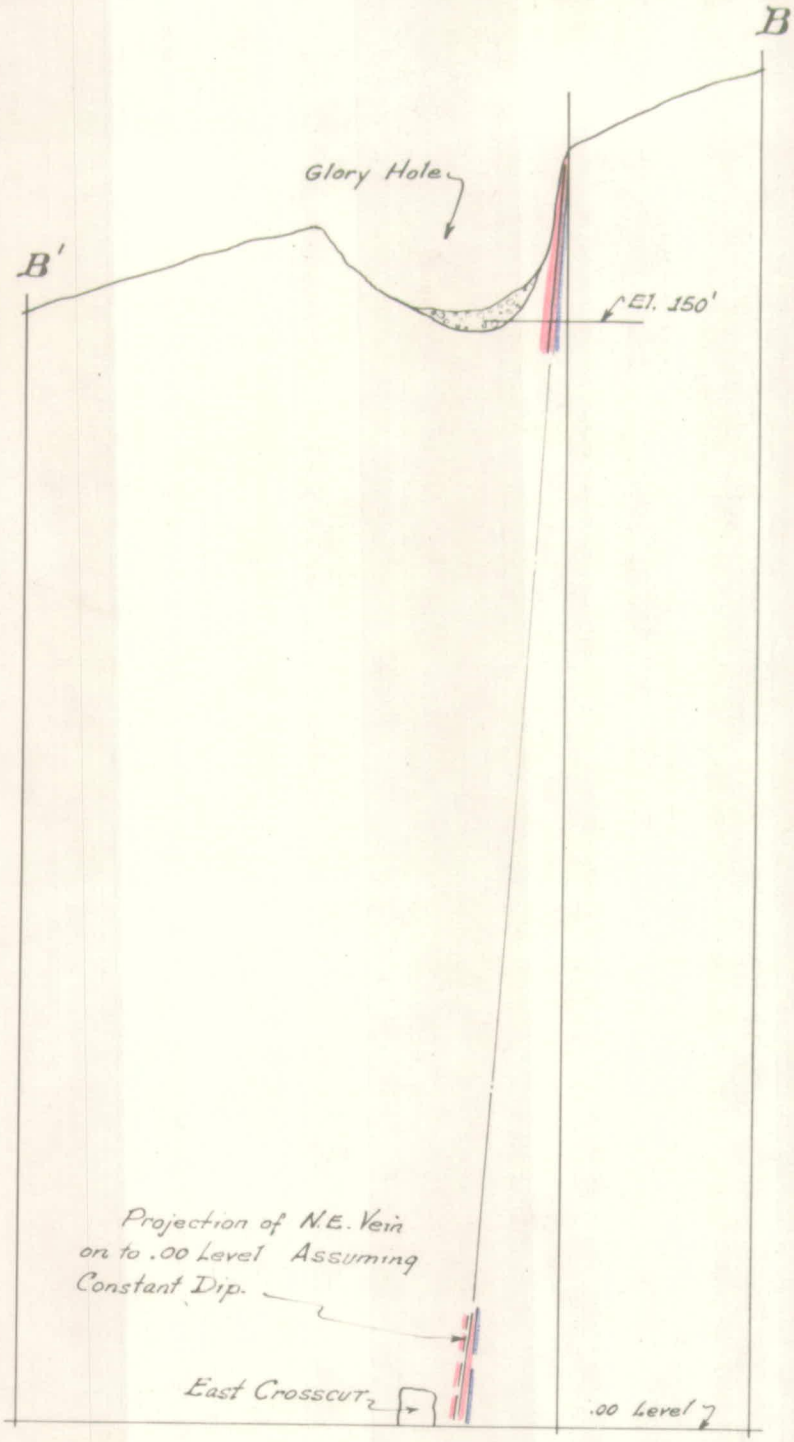
PROJECTION OF FISSURE ZONE ALONG LINE A-A prime

MINERAL HILLS MINE
MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 6



PROJECTION OF FISSURE ZONES ALONG LINE B-B prime

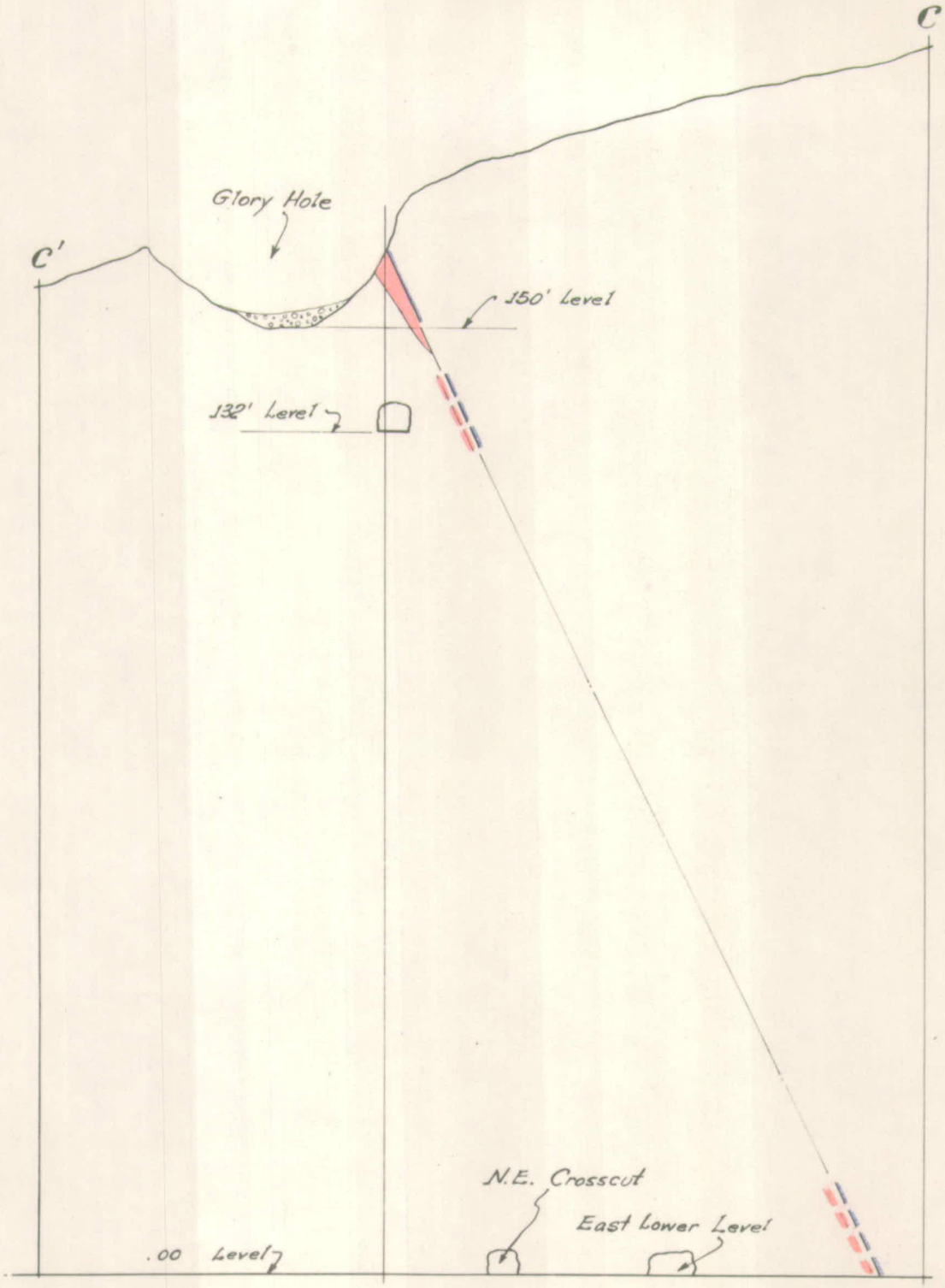
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 7



PROJECTION OF FISSURE ZONES ALONG LINE C-C prime

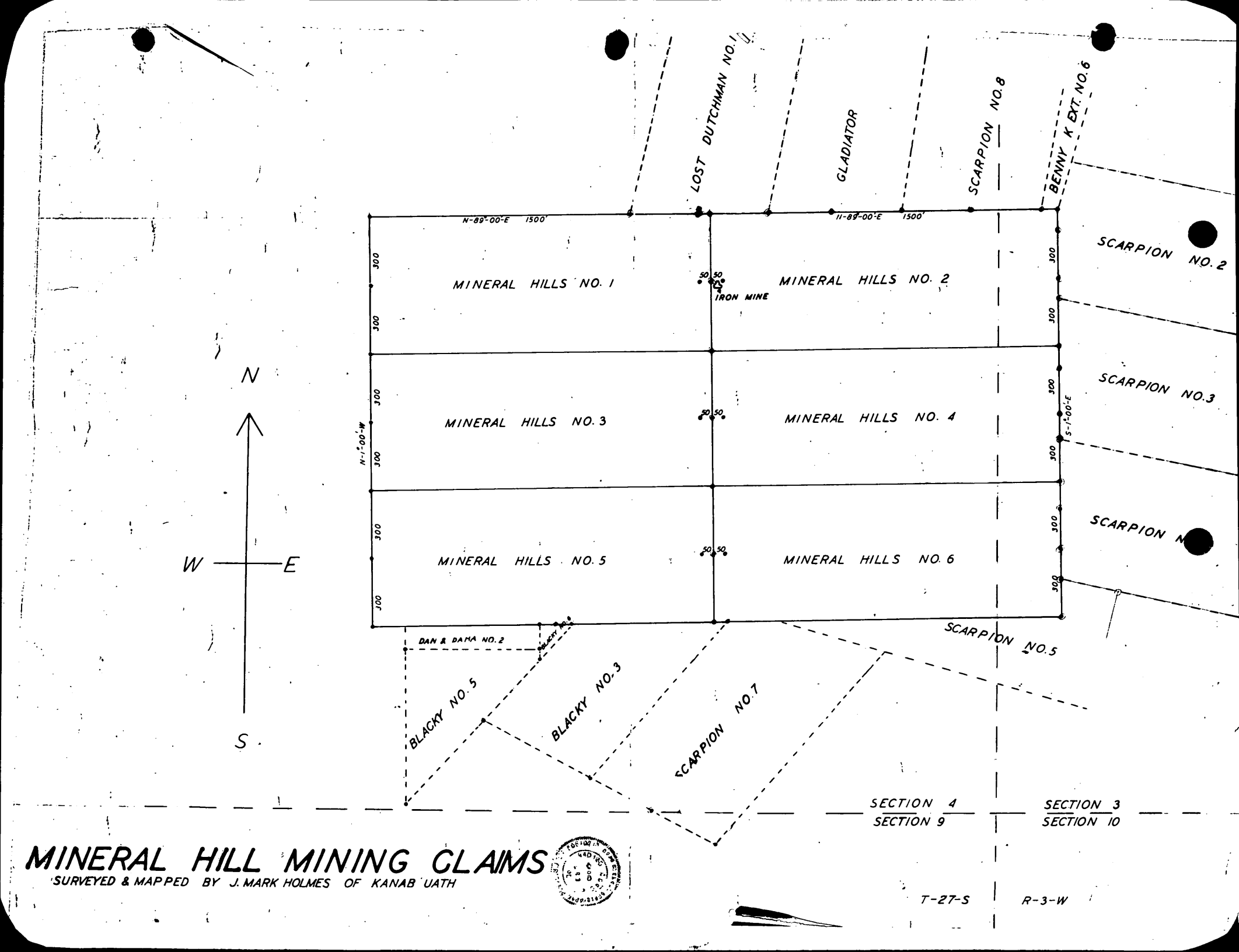
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft

F. W. Christiansen 1951

FIGURE 8



MINERAL HILL MINING CLAIMS

SURVEYED & MAPPED BY J. MARK HOLMES OF KANAB UATH

MINERAL HILLS URANIUM CO.
1012 Boston Building

Salt Lake City 1, Utah
July 6, 1951

Ancient River Channels Gold Mining Company.
Suite 1, Cornet Building
Las Vegas, Nevada.

Gentlemen:

At your request, we are writing to advise that our claim to ownership of the Mineral Hills Mining Claims numbered 1 through 6, Durkee Mining District, Piute County, State of Utah, arises from their purchase outright from Ford T. Frost. He represented that he had the right to give us complete ownership.

There is no outstanding balance owing to the said Ford T. Frost for the purchase of said claims nor is there any further obligation owing to him with respect to the same. Since the time of purchase the property has not been encumbered.

We trust this information will be of assistance to you.

Sincerely yours,

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon
President

AJA:sm

EXHIBIT 1.

SERVICE LINE FORM 606 L.W.

MINING LEASE

THIS AGREEMENT OF LEASE made and entered into this 15th day of November, 1950, by and between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, hereinafter termed the lessor, and Thomas H. Berry, and William T. Berry, hereinafter termed the lessee;

W I T N E S S E T H :

That the said lessor, for and in consideration of the rents, covenants, agreements, and royalties hereinafter reserved by the said lessor to be paid, kept, and performed, has granted, let, and demised, and by these presents does grant, let, and demise unto the said lessee the following-described mining property situate in the Durkee Mining District, Piute County, State of Utah, known as the Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, No.6, as recorded in the office of the County Recorder of Piute County, State of Utah.
There are expressly excluded from the above-described premises any portion thereof which have been or may be deeded, relinquished, or lost to the lessor in the settlement of conflicts or otherwise, insofar as any present claimants of record are concerned, including Spencer W. Gibbs, and those claiming by or through them.

The rights hereby granted to the above claims are to include all dips, spurs, and minerals therein contained and appertaining, together with a ny and all other property and rights, real, personal, or mixed, in or upon or appertaining to the claims above-mentioned; to have and to hold the said demised premises for the purpose of mining and for no other purpose for the term of ten years from the date hereof to expire at noon on the 15th day of November, 1960, with the privilege to renew the lease for ten years upon the same terms as herein contained, unless sooner forfeited or determined through violation of any agreement, covenant, or condition hereinafter contained, to be kept or performed by the said lessee.

In Consideration of said lease, the said lessee does hereby covenant and agree severally and jointly with said lessor as follows:

1. To enter upon siad premises, and to commence work thereon within twelve days from the date of this lease, and to work the same mine-fashion in the manner necessary and appropiate to good and economical mining, so as to take out the greatest amount of ore possible with due regard to the safety, development and preservation of the same as a workable mine; all work, timbering, construction and installation of improvements to be subject to the inspection and approval of the general manager, superintendent or other representative of the lessor.

2. To work and mine the said premises as aforesaid steadily and continuously during the term of this lease, with not less than sixty shifts of work during each and every calendar month of the term of this lease. No excess above the required number of shifts in any one month to apply on any other month, and failure on the part of the said lessee to work said premises with at least said number of shifts each calendar month, or failure to work said premises at all for twenty-one consecutive days, may be considered by the lessor a violation of this lease, at the option of the lessor, upon fifteen day's written demand or notice, within which time a correction of the violation alleged must be made. If correction is not made, it shall work a forfeiture of this lease. The word "shift" is taken and accepted to mean the labor of one man for one day of at least eight hours.

SERVICE LINE FORM 606 L.W.

3. To keep at all times all drifts, tunnels, shafts, winzes and other workings in said premises thoroughly drained and clear of loose rock and rubbish, and in absolutely safe and secure condition, unless prevented by riots, strikes, war, acts of God, or other conditions over which lessee has no control, and to maintain at all times and leave the floors of all drifts, crosscuts and other workings in good, even, unobstructed condition, and to stow no waste underground, nor fill any stopes, without the written consent of the lessor, its manager or any duly authorized agent.

4. To well and sufficiently timber with strong, well fitted and durable timbers, all the workings on the premises hereby leased at all points where proper, in accordance with good mining, and for ventilation, and to promptly repair or replace all timbering which may be rendered insufficient by any cause whatsoever; to keep the timbering of said workings at all times in good, safe and serviceable condition, and to remove none of the same without the written consent of the lessor, its manager or any duly authorized agent.

5. To allow the lessor, its manager or any duly authorized agent or representative at any and all times: (a) to enter and visit all parts of said leased premises and the workings thereon for the purpose of inspection and taking of assay samples; (b) to take samples fromany ores awaiting shipment; (c) to have surveys made of the workings by the lessor's surveyor and assistants whether under or above ground, or both, as often as the lessor, its manager or any duly authorized agent shall so order, and also furnish to lessor copies of blueprints of all surveys or maps made by the lessee; and generall to facilitate in every way such inspection, surveys and sampling, as above provided, as long as it can be done without inconvenience or cost to lessee.

6. There is expressly reserved to the lessor rights of way through the premises hereby leased for the more convenient working or examination of adjacent ground, but such rights-of-way shall be so excercised as not to interfere, more than necessary, with the operations of the lessee therein and there is also expressly reserved to the lessor the right and privilege to do any and all development work upon the premises hereby leased which may be rendered desirable by reason of any litigation or controversy which may arise and which may effect said leased premises or other adjacent property in which the lessor is interested, and to use the workings of the lessee herein in prosecuting such development work, providing that the same shall not interfere more than is necessary with the mining operations of the lessee and that all ore mined in the prosecution of such development work shall belong to the lessee herein (insofar as the same shall be taken from ground hereby leased) subject to the royalty hereinafter provided.

7. The lessee agrees to render to the lessor, on or before the 30th day of each month, a written statement showing the number of shifts worked, the wages therefor, amount of salaries, value of supplies and all other expenses of operating this lease incurred during the preceding month, and to afford the lessor, its manager or any duly authorized agent, every facility, at all times, for the inspection and copying of all books, assay journals, assay certificates, accounts, pay-rolls, vouchers, correspondence and papers generally of said lessee insofar only as they may relate to indebtdness or liabilities incurred or claimed for work, services, or materials in respect to said premises, or the development of other workings thereon, or shipment of ore therefrom.

8. To keep said premises and every part thereof at all times free and clear of all mechanic's or miners' liens or other liens, encumberances or liabilities; to settle, pay and discharge on or before the 30th day of each cal-

SERVICE LINE FORM 606 L.W.

endar month, all indebetedness and liabilities incurred by the said lessee prior to the expiration of the preceding calendar month for work done, services rendered or material furnished in respect of said premises, and to forthwith post, and at all times keep posted in some conspicuous place upon the premises hereby leased a notice, to be provided by lessor, that said premises are leased to the lessee and that the interest of the lessor therein shall not be subject to any lien for services, labor or material furnised upon or used in connection with this lease, or said leased premises, said notice to be on behalf and in the name of the lessor company with the signature of the lessee also attached.

9. To furnish to the lessor, its manager or any duly authorized agent, full, true, and accurate information with regard to the condition of said workings or any part thereof or the quality or character of the mineral therein, and to immediately give the lessor notice of any discovery of any mineral. The lessee agrees to furnish the lessor with a copy of any information, maps, and/or reports made from geological, metallurgical, drilling, sampling, and/or other data relating to said premises secured by and in the possession of the lessee in connection with its prospecting, mining, and development of said premises.

10. To allow no persons not in privity with the parties hereto to take or hold possession of said premises or any part thereof under any claim or pretense whatsoever. To assign no portion or all of this lease to any third party without the lessor's written consent.

11. To assume all responsibility for and save the lessor harmless from any and all accidents to himself or any of his employees, sublessees, licensees, agents, associates, or visitors, upon the property of the lessor, as herein leased and to forthwith post and at all times keep posted at the main working upon the premises hereby leased, a conspicuous notice in the name and on behalf of the lessor, with the name of the lessee also attached in substance that the premises are leased to the lessee and that the lessee will not be liable for damages on account of any such accident. The lessor shall under no circumstances be liable to the lessee or his agents, servants, employees, licensees, sublessees, associates, visitors or any other person on account of any such accident.

12. To ship all ore with reasonable diligence after mining, with the right reserved to the lessor to take and remove all ores not so shipped with reasonable diligence and to apply the proceeds under the directions of this lease; to notify the lessor, its manager or any duly authorized agent, whenever ore is ready for shipment, giving the estimated tonnage and value thereof, also the intended purchaser, but it is expressly understood and agreed that all ore extracted from said leased premises shall be shipped in the name of the lessor and lessee and shall be routed and sent to and treated at the mill, smelter, sampler, or reduction works satisfactory to both parties.

13. It is expressly understood and agreed that the lessor reserves the property and rights of property in and to all ores extracted or to be extracted from said premises and in and to all ores not shipped within ten days after the expiration or other termination of this lease; that all ores which are of too low grade for profitable shipment shall remain on the premises, subject to the sole control and disposition of the lessor, and that any loss or expense resulting from or incident to any shipment of such low grade ore shall be borne and paid by the lessee; that all low grade ore not shipped shall be kept separate from and not mixed with waste, so that it may be available for shipment at any time by the lessor, and said low gradw ore shall be deposited on the premises herein leased as directed by the lessor, its manager or any duly authorized agent.

SERVICE LINE FORM 606 L.W.

14. The lessee agrees that in the event any fractions of property shall be found to be subject to a location within the exterior boundaries or group of claims covered by this agreement, at or adjoining said group of claims, that the lessee will either locate the same in the name of the lessor or will advise the lessor to locate the same. It is understood and agreed that upon such locations said claims shall be included within and subject to the terms and conditions of this agreement.

15. At the date of the execution of this lease to make immediate payment of the balance promised to be paid under the attached contract and option.

16. To pay and deliver, or cause to be paid and delivered to said lessor, as a rental or royalty upon all ores extracted and shipped or sold from said premises, the following roylaty, the rate of which is to be determined in each case by the gross value of the ore, which shall be the price paid at the smelter, mill, or purchasing depot of the United States Government and/or such other purchaser as may offer a higher price, without any deductions, to-wit:

(a) 10% royalty on all ores computed on the gross price as above-defined on gross production for the first year;

(b) 12½% royalty on the gross price as above-defined on gross production of uranium ore up to and including 1% grade for all production after the first year; and 12½% royalty on all other ores on the gross price as defined above for all production after the first year;

(c) 14% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 1% grade and up to and including 5% grade uranium ore for all production after the first year;

(d) 16% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 5% grade uranium ore for all production after the first year;

17. Any amount due and payable to the lessors as rpyalties on ore extracted, shipped, and sold during any month shall be paid by the lessee to the lessor on or before the 15th day of the next succeeding month during which the lessee shall have received payment therefor by the deposit thereof to the credit of the lessor or assigns in a bank of the lessor's written designation, subje ct, however, to the right of the lessor to request of the purchaser of the ore shipped that a check be made payable to the lessor hereunder in conformity with the royalty schedule hereinabove set out, making direct payment to the said lessor for his per cent interest in said purchase price computed as above set out.

18. The lessor reserves the right at all times to keep its manager or any duly authorized agent at said leased premises, in whose presence all ore shall be classed, graded, sorted and shipped and said manager or agent shall be permitted to take samples from all ores mined or sorted for examination or assay. In case any dispute shall arise between the lessor and the lessee or between the agents of the parties hereto, in regard to the classing, sorting, grading, or shipping of any of said ores, then in that case all shipments of said ore in

SERVICE LINE FORM 606 L.W.

question shall cease until the controversy is settled by arbitration, as hereinafter provided, to-wit: The lessor and the lessee shall each choose one representative and the two so chosen shall choose a third, and the three so chosen shall pass upon said difficulty, and their decision shall be final; and the cost of arbitration, as above provided, is to be borne equally by the parties hereto.

19. It is expressly covenanted and agreed between the parties hereto that, should any legal proceedings be instituted, such as injunction, apex suits or any other proceedings whatsoever, which would interfere with the possession and enjoyment of the said demised premises, that the lessee shall under no circumstances attempt to hold the lessor liable for damage or otherwise to the lessee therefor on account of such disturbed and interrupted possession and enjoyment. It is nevertheless understood that if necessary the lessor will undertake to defend title to the above claims.

20. It is furthermore agreed and understood that the lessor reserves the right of property to all dumps located upon said demised premises.

21. Said lessee does hereby furthermore covenant and agree that in case he fails to commence work on said premises as aforesaid, or to work and mine the same continuously, with diligence and in workmanlike manner, or to keep the same securely timbered, drained, clear and in safe condition, or to allow inspection, sampling or survey thereof, or to furnish true information regarding the same according to the conditions herein, or to render monthly statements as provided herein; or to keep the same free from liens, or to keep notices posted upon the leased premises in manner provided herein, or to make regular settlement for work, services and materials or assign or sublet any interest in the lease or said premises without written consent of lessor, or shall in these or any other respect fail to keep and fulfil any and all conditions, covenants or agreements herein expressed or implied, then and in that case the term of this lease at the option of the lessor, expire, and it shall be lawful for the lessor, its manager, attorney, or other duly authorized agent, to declare this lease void and of no effect thereafter, and with or without process of law and after fifteen days' written notice without correction of the violation, to enter upon and take possession of said premises, and dispossess all persons occupying the same; and in such case, and also at the expiration of this lease by limitation, to-wit, at noon of the last day of the term hereby granted as aforesaid, said lessee agrees to surrender, yield and deliver to the lessor, its successors or assigns, quiet and peaceable possession and enjoyment of said premises and all buildings and other improvements thereon and therein, excepting the tracks, rails, pipelines, and machinery belonging to lessee. All dumps, ores or other materials detached or broken down from said premises, but still remaining thereon shall remain the property of the lessor, together with the appurtenances, in good order and condition, with all drifts, shafts, tunnels, winzes and other passages and workings, thoroughly clear of loose rock and rubbish, and drained, and the mine ready for immediate continued working without demand or further notice.

22. Time is the essence of this contract in all particulars.

23. All of the operations of the lessee under this lease shall be so conducted as to fully comply in every respect with the laws of the State of Utah.

24. The lessee shall not mix any ores from said premises with the ores, minerals, products, etc. derived from any other property.

25. The lessor shall pay any federal, state, and county tax assess-

SERVICE LINE FORM 606 L.W.

ments based solely on ownership of mining property and the lessee shall pay all taxes assessed because of any operations thereon, including the Utah mine occupation tax and personal property tax. The lessee shall pay and/or perform all federal, state, and county assessments of whatever nature necessary to maintain the interest of the lessor in said property. The lessee likewise agrees to pay all federal, state, and county assessments upon any and all structures and other improvements, machinery, equipment, tools, supplies, and personal property whatsoever placed upon said premises by the lessee.

26. The lessee, in the operation and development of the said property shall be subject to all applicable Federal enactments and regulations, laws of the State of Utah, and all Federal or State rules and regulations regarding Employee's Liability, Workman's Compensation and Workman's Old Age and Unemployment Insurance, and said lessee covenants and agrees to indemnify and hold harmless the lessor from and against the payment of any and all damages, claims, costs, and expenses due to the existence of such enactments, and of any and all claims, cost, and expenses in connection therewith under any claim of subrogation provided for by said enactments or otherwise; and the lessee shall further indemnify and hold harmless the lessor from and against any and all damages, claims, costs, and expenses arising out of damage to the property or any injury or death of the employees of the lessee, or any other person whomsoever other than the lessors and those acting under them where such injury, death, or damage occurs because of or in connection with the use, operation, or development in any manner, of the property hereby sold, whether such claims are based upon right conferred by the common law or by statute.

IN WITNESS THEREOF, the parties hereto have set their hands and seals this 15th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

LESSOR

THOMAS H. BERRY

WILLIAM T. BERRY

LESSEE

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

OPTION AND LEASE

THIS AGREEMENT, made and entered into by and between the Mineral Hills Uranium Co., a corporation of the State of Utah, hereinafter called the optionor, and Thomas H. Berry and William T. Berry, hereinafter called the optionee,

W I T N E S S E T H:

WHEREAS, the optionor is the owner and in possession of certain lode mining claims hereinafter more particularly mentioned and described; and

WHEREAS, the optionor represents that there is a possibility that said claims have a potential development as great ore bodies; and

WHEREAS, the proper development of such ore bodies, both present and in expectancy, and proper reduction and treatment thereof will necessitate large sums of money, and

WHEREAS, optionee is able to furnish money for such development work, but only under and in accordance with the terms and subject to the conditions hereinafter set forth;

NOW THEREFORE, for and in consideration of the payment by the optionee to the optionor of the sum of Fifteen Hundred ($1,500.00) Dollars, the receipt whereof is hereby acknowledged, and for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto agree as follows:

1. The optionor grants to the optionee, for the period from date to and including January 2, 1951, an option upon the terms and conditions in this agreement hereinafter set forth, to receive a mining lease in the form hereto annexed and hereby referred to and made a part hereof of certain properties being all those certain lode mining claims situate, lying, and being in the Durkee Mining District, in the County of Piute, State of Utah, more particularly described as follows:

> Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6, as recorded in the office of the County Recorder of Piute County, State of Utah.

2. That immediately upon the execution of this option agreement the optionee agrees to enter into and to take exclusive possession of all and singular the above-described property and, as consideration for this option, shall prospect and explore, test, develop, and work, at its own discretion and at its own proper charge and expense, said lode mining claims, and any one or more of them, provided all work done and all improvements made by said optionee upon said property, or any part thereof, under the terms hereof during the period hereof shall be done in a minerlike manner to enable said premises and all thereof to be carefully operated, and so that the minerals therein contained may be extracted in an economical and minerlike manner. All equipment, tools, structures, and personal property of every nature and description brought or placed upon said premises prior to the excercise of said option by the optionee for use in said work shall not become a fixture but shall remain the property of the optionee and subject to removal by the optionee at its discretion.

In the event the optionee does not excercise this option, it should be entitled to remove said equipment and personal property from said premises and shall have the same removed on or before January 1, 1951.

3. The optioner agrees that in the event the optionee is on the property and still conducting exploration and development work as of the 1st day of December, 1950, then and in that event the optionee will pay to the optionor the sum of One Thousand ($1,000.00) Dollars as a further consideration for said option and in the event the optionee is on the property and still conducting exploration and development workas of the 1st day of January, 1951, then and in that event the optionee will pay to the optionor the sum of Five Hundred ($500.00) Dollars.

4. It is understood and agreed by the parties hereto that if the optionee as principal, or by or through its agents, is still on the property or has its equipment on or is operating the same on the property as of January 1, 1951, that said presence, at the election of the optionor, activates the lease and the parties hereto thereupon agree to be bound by the terms of the lease hereunto attached and agree to execute the same at said time.

5. All ores extracted by the optionee during the aforesaid time shall be and remain the property of the optionor; provided, that the optionee is entitled to take and have as its own necessary and reasonable assay samples and mill test from said mining claims.

6. If , on or before the expiration of the option period, the optionee shall elect to excercise the above-mentioned option and receive a mining lease in accordance with the hereunto attached, it shall notify the optionor and it shall, upon such notice, and upon the payment of the entire consideration above-designated at the time of said excercise, rather than at the times specified for payment of said consideration, be entitled to receive in accordance with and subject to the terms of this contract a lease in the form of the lease hereunto attached and by reference made a part hereof, and the optionor hereby agrees upon such notice to make, execute, and deliver such lease to the optionee. Whether or not the optionee elects to excercise such option, the consideration promised and paid hereunder shall belong to the optionor without any claim for return thereof remaining with the optionee. In addition, if the option is not excercised the optionee shall peacefully surrender and turn over said properties to the optionor in as good condition as they now are in, reasonable wear and tear excepted, and free and clear of any and all liens and incumbrances incurred by the optionee in its operation on or about the same. The optionee shall likewise turn over the copies of all data, plans, analysis, photographs, and otherdeterminations and reports that the optionee shall have made or caused to be made or otherwise obtained in and about said premises during its possession of the same under the option.

7. The optionee during its possession of said property and all thereof, agrees to protect said property and all thereof against all claims of labor and materialmen and against all liens and liabilities arising out of the acts of the optionee upon said property, and to permit the optionor to place and maintain such notices thereon as shall be lawfully necessary to protect said optionor against claims; and the optionee further agrees to hold harmless the said optionor against any and all claims for damages for injury incurred by workmen in its employ at said properties, or any other person or persons.

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8. It is understood during the possession of said property by the optionee the optionee shall permit any authorized representative of the optionor to be, remain on, or visit the property hereinafter leased to represent the optinor and observe the performance by the optionee of each and all the terms of this agreement.

IN WITNESS THEREOF, the parties hereto have respectively caused their names to be hereunto subscribed this 20th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

OPTIONOR

WITNESSED BY

BEN J. DIERINGER

THOMAS H. BERRY

WILLIAM T. BERRY

OPTIONEE

****

Marysvale, Utah
November 30th, 1950

Thomas H. Berry

Dear Sir:

We hereby agree to amend the option agreement to provide as follows:

* $500.00 Cash
$500.00 January 15th, 1951
$500.00 March 1st, 1951

which will constitute the down payment, and the balance of $1,500.00 is to be deferred for a period of 6 months and paid as advanced royalty.

Yours very truly

ADRIAN W. CANNON

* Subject to receipt of initial $500.00 within five days

ADRIAN W. CANNON

~~THOMAS H. BERRY~~

SERVICE LINE FORM 606 L.W.

"SERVICE" LINE FORM 606 L.W.

ASSIGNMENT OF OPTION AND LEASE

(To be attached to Option and Lease dated the 20th day of November, 1950, between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, optionor, and Thomas H. Berry and William T. Berry, optionee; said option covering the period from November 20, 1950, to January 2, 1951, inclusive, and said lease for a term of ten (10) years, commencing on the 15th day of November, 1950 and ending at noon on the 15th day of November, 1960.)

THIS AGREEMENT, made and entered into this 2nd, day of January, 1951, by and between THOMAS H. BERRY and WILLIAM T. BERRY, Parties of the First Part, hereinafter called "Assignors", and the ANCIENT RIVER CHANNELS GOLD MINING COMPANY, a corporation, Party of the Second Part, hereinafter called "Assignee."

W I T N E S S E T H :

It is mutually covenanted and agreed by and between the parties hereto as follows:

1. The Assignors, for a valuable consideration, do hereby sell, assign, transfer and set over to the Assignee, all of the Assignors' right, title and interest in and to the option and lease above described.

2. The Assignee hereby accepts the above assignment and agrees to be bound by and to perform and observe fully and faithfully all of the covenants, stipulations and conditions contained in said option and lease, to be performed and observed by the Assignors, and assumes all liabilities mentioned in said option and lease, to be assumed by the Assignors, hereby indemnifying the Assignors therefor.

3. This agreement shall be considered as taking effect as of the 31st, day of December, 1950.

THOMAS H. BERRY

WILLIAM T. BERRY

ASSIGNORS

ATTEST:

W. T. BERRY
Secretary

(CORPORATE SEAL)

ANCIENT RIVER CHANNELS
GOLD MINING COMPANY

By Thomas H. Berry
Its President - ASSIGNEE

SATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, Thomas H. Berry and William T. Berry, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said
County and State

(S E A L)

My Commission expires
September 11th, 1954

****

SATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, THOMAS H. BERRY, known to me to be the President of the corporation that executed the foregoing instrument, and upon oath did depose that he is the officer of said corporation as above designated; that he is acquainted with the seal of said corporation, and that the seal affixed to said instrument is the corporate seal of said corporation; that the signatures to said instruments were made by the officers of said corporation as indicated after said signatures, and that the said corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate sirst above written.

NELLIE G. KEY
Notary Public in and for said
County and State

(S E A L)

My Commission Expires:
September 11th, 1954.

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

CONSENT OF ASSIGNMENT

Adrian W. Cannon, President of the Mineral Hills Uranium Co., a corporation of the State of Utah, does herewith, as President of the said corporation, consent to the assignment by the lessees to the Ancient River Channels Gold Mining Company., a corporation of the State of Nevada, all of their rights in and under that certain lease dated November 15, 1950, by and between Mineral Hills Uranium Co., a corporation if the State of Utah, the lessor therein and Thomas H. Berry and William T. Berry, therein designated as lessees; provided, however, that the said corporation does not waive any of the claims which it may have against the lessees designated therein.

Dates this 6th day of July, 1951.

Mineral Hills Uranium Co.

By Adrian W. Cannon

President

SERVICE LINE FORM 606 L.W.

GEOLOGICAL REPORT

ON

THE HOLDINGS OF

THE MINERAL HILLS URANIUM CO. PROPERTY

NEAR

MARYSVALE, UTAH

F. W. CHRISTIANSEN, Geologist

S. R. MAHONEY, Geologist

INTRODUCTION

The examination of the Mineral Hills Uranium Company property was made at the re quest of the Company and Mr. Thomas H. Berry, President of the Ancient River Channels Gold Mining Company., lessee.

It was undertaken primarily for the purpose of determining the relationship of the property and areas at present being explored by the company, to the general geology of the Antelope Range and operating uranium mines in the western part of the area.

The field study was made on July 7, 8, and 9, 1950, and on three short trips totaling 7 days in the summer of 1951.

LOCATION

The property consists of the Mineral Hills group, located in Sec. 4, T. 27 S., R. 3 W., S. L. B. M., about three miles north-east of Marys vale, Utah.

PHYSICAL FEATURES

The property is s erved by dirt roads which are passable by truck, except in heavy snow or rain. No timber is available on the property, but an abundant supply of suitable mine timber can be obtained from nearby hills. Water is not available within the property, but the moderate amounts required for development may be obtained nearby by tank truck.

The topography is generally rolling, and is not sufficiently rugged as to pres ent difficulties for year round operation. The property is located in the Antelope Range, a low range of mountains that connect the high Tushar Mountains on the wes t with the high Sevier Plateau on the eas t.

GEOLOGY

The rocks in the area covered by the claims are chiefly flows of dacite, latite, and rhyolite interbedded with tuff and tuff-breccia and some obsidian.

This s equence of volcanic flows has been intruded by a coarse-grained monzonite stock, which locally is expos ed by erosion in the northwestern and southwestern part of the area (See Fig. 1). The igneous geology has not been worked out in detail, and some evidence indicates the presence of a later, fine-grained monzonite intrusive in parts of the area.

The extrusive rocks are considered early Tertiary (post-Wasatch) in age. The age of the coarse-grained monzonite can be estimated only as post-extrusive, but probably is middle or late Tertiary in age. A younger phase of granite intrusions are present in adjacent areas however none have been discovered on the Mineral Hills claims. There is some evidence that indicates the uranium mineralization may be associated with granite.

Extensive silicification, alunitization, kaolinization, and other types of alteration are characteristic of the contact zone, and of extensive zones away from the intrusive. Highly-altered zones of this type occur in several places within the Mineral Hills claims particularly in and near the glory hole (Fig. 5), and in a generally north-south zone west of the glory hole. It is in this zone west of the glory hole that autunite crystals have reportedly been found and in which the highest radiometric count was obtained. (See Fig. 2) Isorad maps were obtained from the Atomic Energy Commission. A later (late-Tertiary) extrusion of rhyolite and rhyolite tuff-breccia is known to truncate earlier eroded flows in the northwestern part of the Antelope Range, but is not known to be present in the area investigated.

Extensive alteration is not pre sent in this later flow.

Alteration occurs around the margins of the monzonite, and in irregular masses in the extrusives at considerable distances from exposures of the intrusive. Localization of altered masses appears to be controlled by strong northeasterly and northwesterly zones of fracturing.

Alunite deposits of the Antelope Range consists largely of irregular bodies in highly-altered portions of the extrusive rocks. Large tonnages of high-grade alunite were developed by the U. S. Geological Survey and the Bureau of Mines in cooperation with the operators, to supply the Kalunite Corporation plant in Salt Lake City during World War 2. Operations are at present discontinued. Commercial alunite deposits have not been developed within the claims considered in this report.

The first uranium prospect was discovered in 1949 on part of the Seegmiller property, now operated as the Bullion-Monarch open pit mine. Mr. Seegmiller acquired the claims, which had previously been prospected for fluorspar, when he discovered the yellowish mineral autunite (calcium uranium phosphate). A greenish mineral found associated with it was identified as torbernite (hydrous copper uranium phosphate). Present mining operations in the pit are exclusively on autunite and torbernite ore.

The Vanadium Corporation of America (V. C. A. hereinafter) have developed two properties, both underground operations (See Fig. 1). The largest and most promising mine of the two and presently the most promising one is located about 3,000 feet northwest of the Mineral Hills glory hole and is similarly located near the contact of the flows and the monzonite intrusive. The V. C. A. mine was discovered by bulldozer cut. Autunite and torbernite were found in quantity in an east-west fissure zone, striking into the monzonite at about right angles to the contact.

Development by incline disclosed a well-defined fissure zone with high values in autunite and torbernite at the surface and at depth, pitch-blende. Approximately 100 feet beneath the surface, primary uraninite (pitch-blende) was encountered, which locally assayed very high. At present this mine, the Ballion-Monarch mines and the Bertelson mine are the only ones which have penetrated the pitchblende zone, but it is believed that most of the mines will reach the primary zone of mineralization at depth.

The discovery of the pitch-blende has greatly enhanced the future promise of the district for uranium production.

The Seeguiller and Bertelson mines (See Fig. 1) occur along the contact between the monzonite and the flows. The ore occurs in the monzo - nite, with rhyolite tuff and tuff-breccia forming the hanging wall. Values are in autunite and torbernite.

Several other prospects, within the monzonite and along the contact, have exposed good showings of autunite and torbernite. The Papsy Hope prospect (See Fig. 1) lies 2,000 feet east of the monzonite contact, and shows autunite and torbernite mineralization in a steeply-dipping, east-west broken and altered zone in dacite-porphyry flow. It is reported that assays of 0.26 percent U_2O_3 have been obtained from channel samples in the incline. (This assay was determined by a calibrated Geiger Counter). Comparable radioactive count and mineralization is present in the adjoining P. L. No. 4 prospect (See Fig. 1).

The most intense radioactivity known on company property is found in the glory hole of the old Krotski iron mine, now known as the Mineral Hills prospect (See Fig. 1). The workings thereon consist of three adits, and a surface open pit glory hole.

Magnetite and hematite iron ore were mined about 35 years ago for use as flux in Salt Lake Valley smelters.

The iron mineralization and uranium mineralization is partly a replacement and partly fissure filling, deposited at high temperatures adjacent to the zone of contact between the coarse monzonite intrusive and the finer grained igneous rocks. The surface contact is located 1,000 feet north of the glory hole. The contact is irregular, at one point essentially horizontal, but steeply-dipping nearby. In the lower adit (See Fig. 3) a finer grained monzonite (?) body is in fault contact with the extrusives. A similar fault contact between the intrusive and extrusive rock is present at the portal at the upper adit (See Fig.4). The fault zone in both levels is dipping steeply to the north and probably represents a zone of high angle reverse faulting.

A quartz-phlogopite mica-feldspar pegmatite dike cuts through the glory hole and impregnates the monzonite in a wide zone exposed on the upper adit. Some radioactivity was detected in the dike. A 2 foot zone of porphyry alongside the dike is intensely radioactive, and has yielded assays of 0.26 percent U_3O_8 (Chemical assay from Smith Laboratory, at Moab, Utah). The exact nature of the uranium mineral has not been determined, but since no secondary uranium minerals have been observed it is believed that the radioactivity is at least partly due to uranium orides.

Two zones of intense radioactivity are known in the glory hole. The first, described above, is in the east face, and the second occurs in the northwestern face (See Fig. 5).

The dimensions and attitudes of the radioactive zones are not as yet known. Present exposures indicate a somewhat irregular occurrence, controlled by intersecting fracture systems.

Additional excavation will be necessary to define the mineralization. The comparatively strong mineraliz ation of this property, and its proximity to the major producing mines of the district, are favorable to the Mineral Hills prospect.

The preliminary geologic study that has been made, both on the surface and underground, has proved inconclusive regarding the probable potentialities of the prospect. It is therefore recommended that a detailed study be made of the Mineral Hills claims and that this study be closely coordinated with a program of surface trenching, diamond drilling and extension of underground workings.

The radiometric high shown on the Isorad Map (See Fig. 2) lies in essentially virgin territory. This area should be systematically examined and trenched so as to reveal the nature of the alteration of bedrock in the covered areas. This would also expose any fracture system that may be present within this area of high count. It is suggested that from 20 to 25 days work with a D 8 or equivalent equipment would be sufficient to trench this area.

Exposed in the glory hole, (See Fig. 5) are several rather definite mineralized fracture zones. These zones are also present in slightly modified form in the upper level (See Fig. 4). Figures 6, 7 and 8 are projections of the mineralized fissures of the glory hole to the lower level (See Fig. 3). Examinations of these sections reveal that if the mineralized "shoots" are continuous at depth and do not change their attitude they have not been intersected completely by the lower adit and exploration drifts and cross-cuts. Approximately 200 feet of diamond drilling or cross-cutting would be sufficient to prove or disprove the projections. In the event the relatively strong zones of mineralization present in the glory hole and on the upper level are not encountered at depth

additional structural and mineralogical work, in addition to a detailed study of petrology, will be necessary. This should be accompanied with and followed by additional diamond drilling and underground work, in accordance with the results of the study as it progresses. Perhaps three to four thousand feet of diamond drilling may be sufficient although this is only a very rough estimate. It may also be found necessary to extend some of the cross-cuts and drifts of the lower level and to connect the shaft shown in Figs. 4 and 6 with the lower level. The amount of work that may be necessary for this type of development cannot be estimated, but provision should be made for perhaps 800 to 1,000 feet of underground work.

CONCLUSIONS

Secondary autunite mineralization is reported to be present in northwest part of the Mineral Hills claims. Areas remote from the monzonite intrusive have as yet not proved commercial, but the development of uranium in the district is comparatively recent, consequently little is as yet known about occurrences of commercial ore.

The Mineral Hills prospect shows mineralization of probable commercial grade. Size and continuity of the ore is not at present known. Proximity to the monzonite contact and to producing mines of the district suggests favorable conditions for development of ore at depth on the property.

Ore localizations appear to be related to the monzonite intrusive and to Upper (?) granite intrusions. Commercial occurences at present developed are localized in the monzonite along the contact, in fissures extending into the intrusive and in acidic dikes. Favorable showings in fissure zones in the altered extrusives at distances from the monzonite indicate that conditions were favorable for deposition of uranium minerals.

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Intensive exploration will probably disclose concentrations of ore within the intrusive rocks of the area.

F. W. Christiansen, Geologist

Stanford R. Mahoney, Geologist

556 Atlas Building
Salt Lake City, Utah

July 10th, 1951

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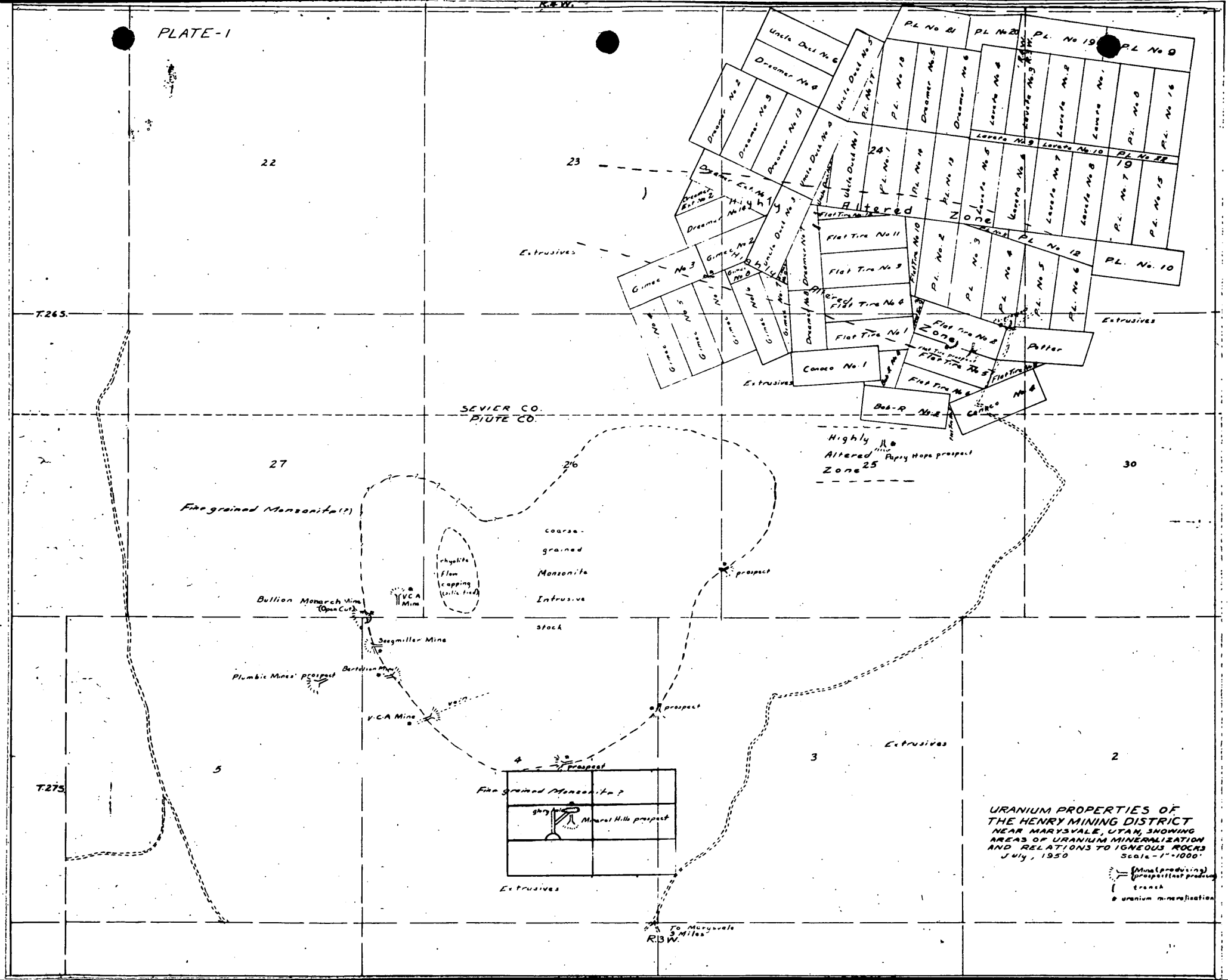
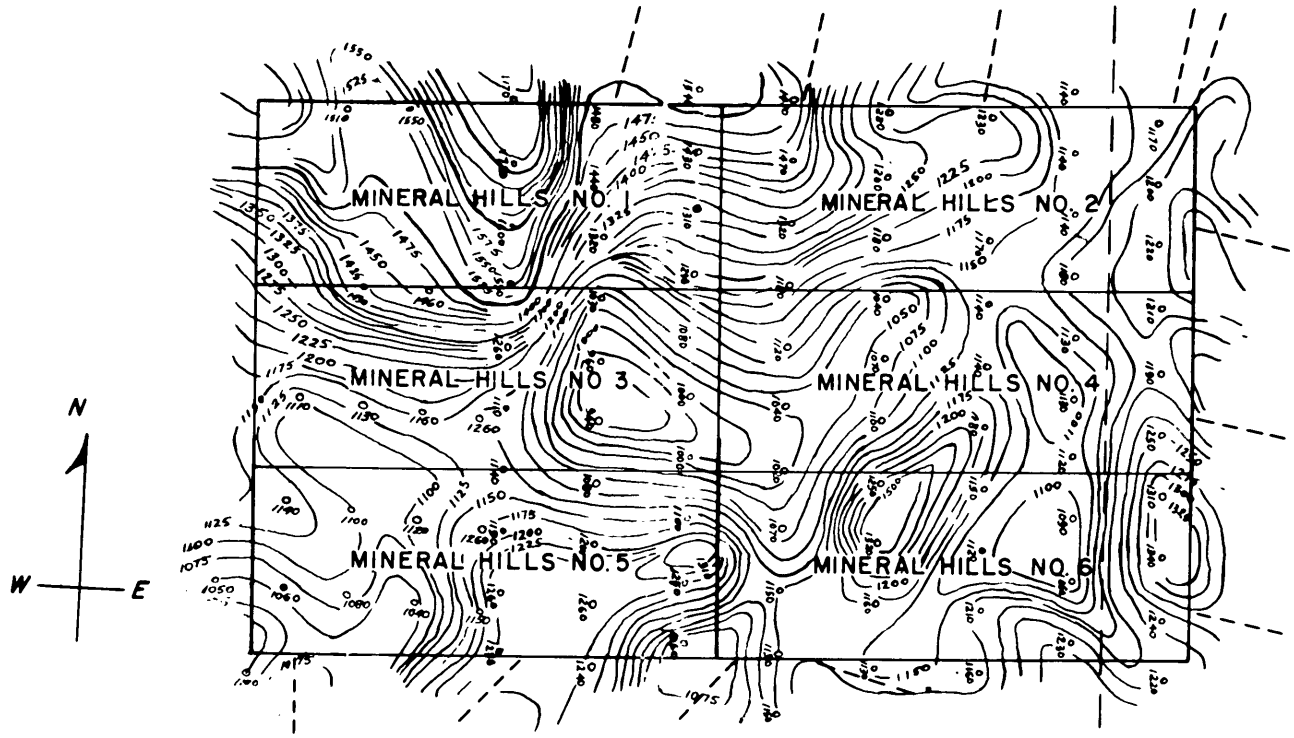


URANIUM PROPERTIES OF THE HENRY MINING DISTRICT
NEAR MARYSVALE, UTAH, SHOWING AREAS OF URANIUM MINERALIZATION AND RELATIONS TO IGNEOUS ROCKS
July, 1950 Scale - 1" = 1000'

Mine (producing) / prospect (not producing)
trench
uranium mineralization



1700

1500

1400

1200

ISORAD MAP OF MINERAL HILLS CLAIM GROUP

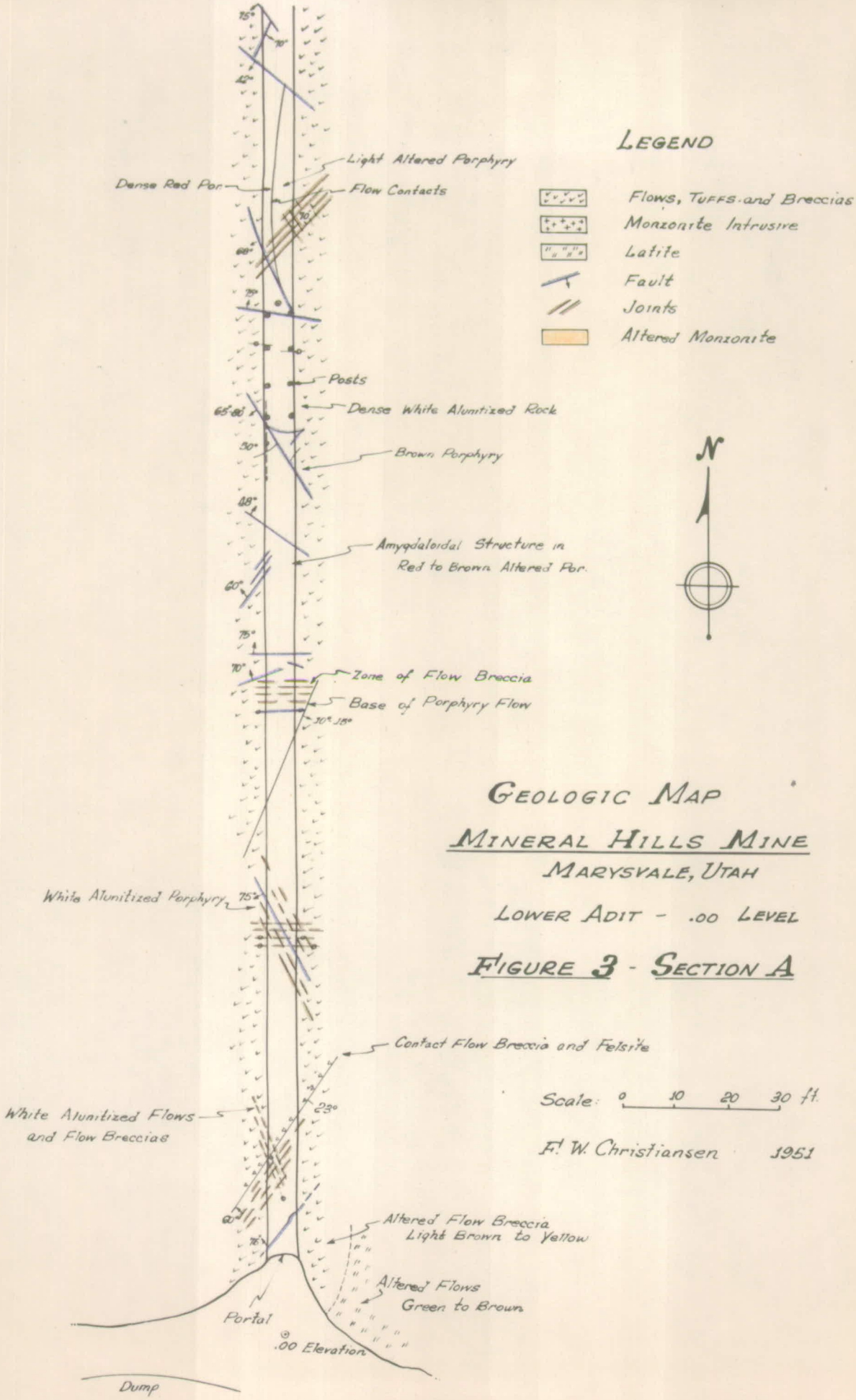
ISORAD CONTOURS IN COUNTS PER SECOND

APPROXIMATE AREAL BACKGROUND = 600 COUNTS PER SECOND

1 INCH = 400 FEET

SECTION 4 / SECTION 9 | SECTION 3 / SECTION 10

T-27-S | R-3-W



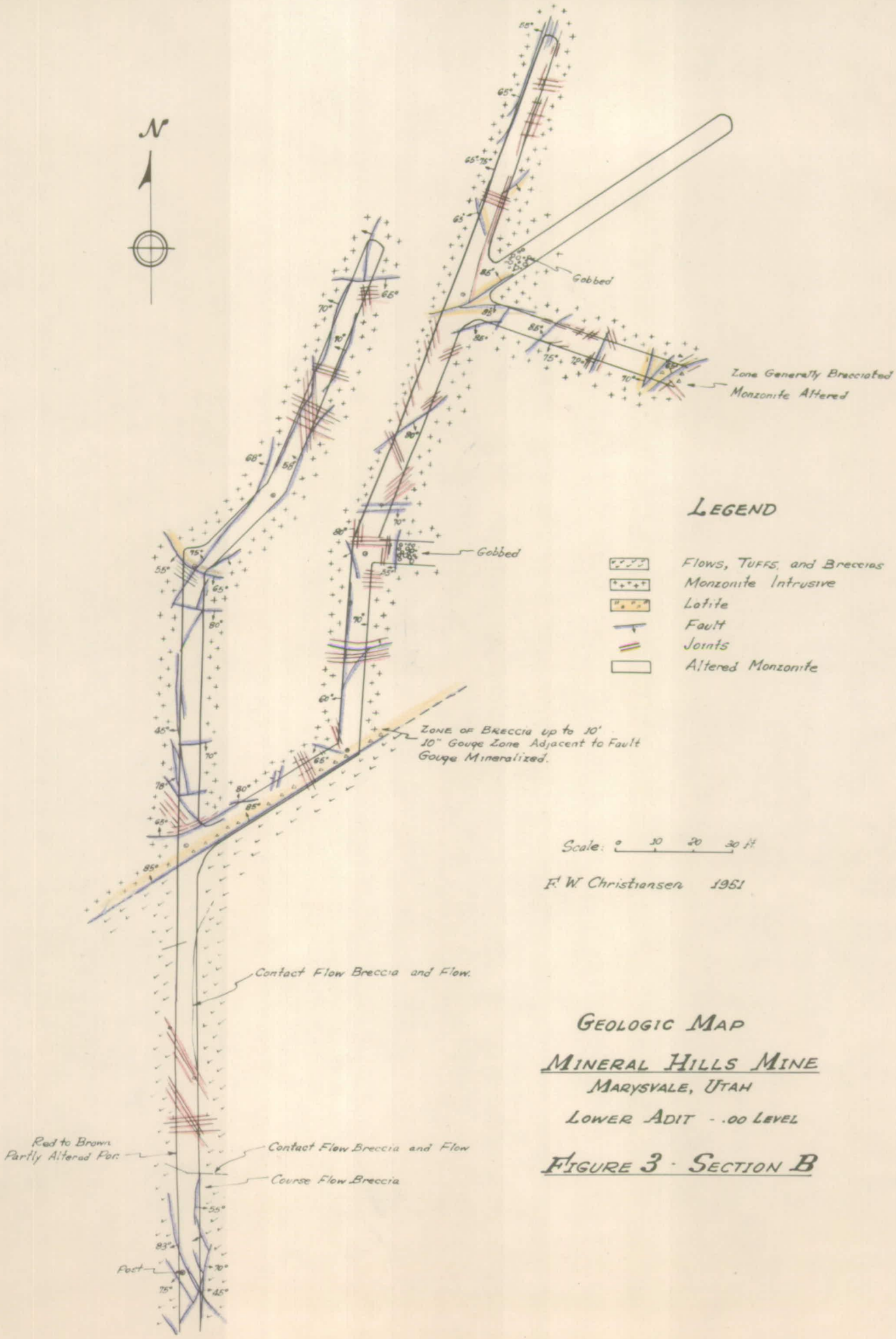
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 - SECTION A



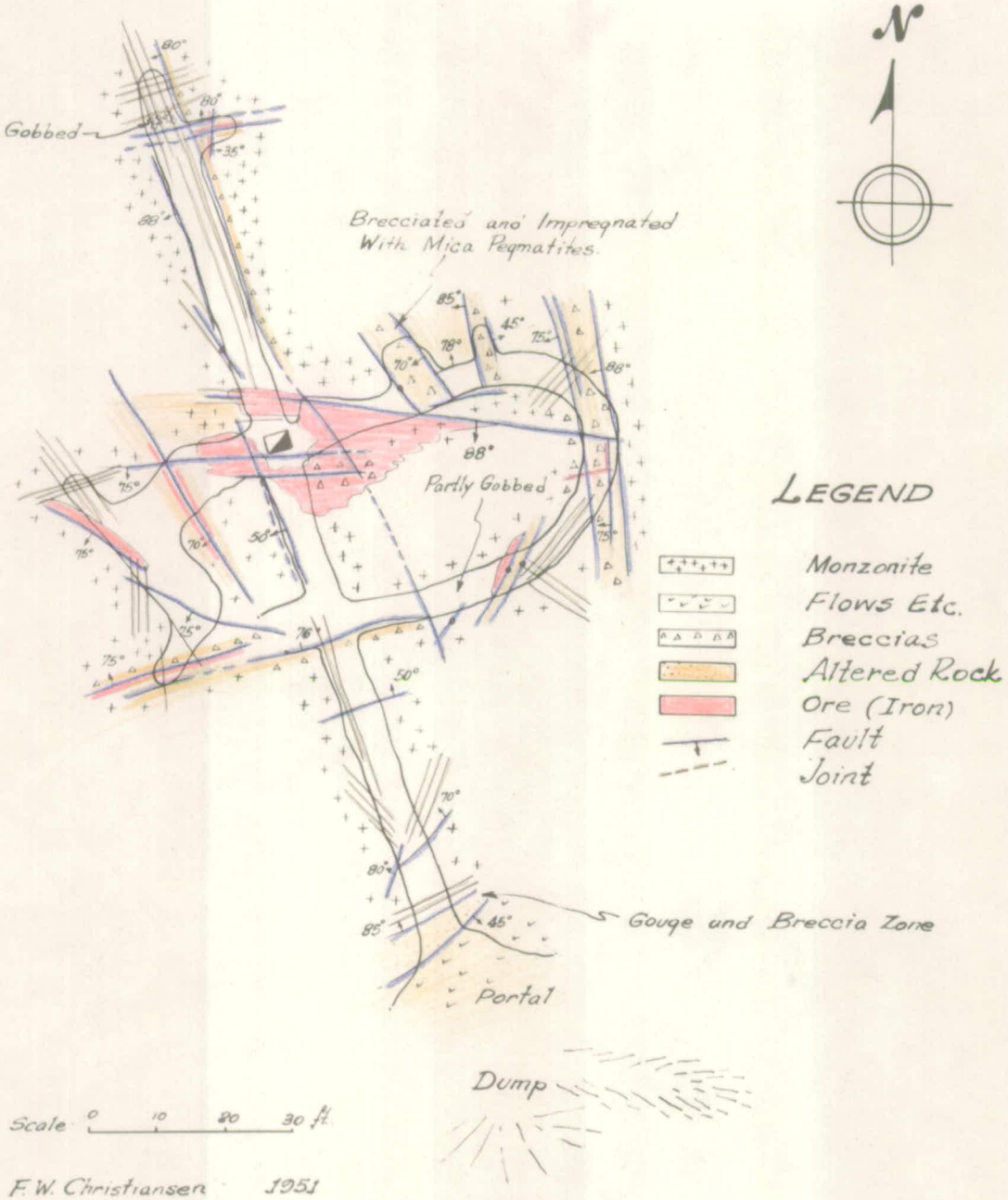
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 · SECTION B



F. W. Christiansen 1951

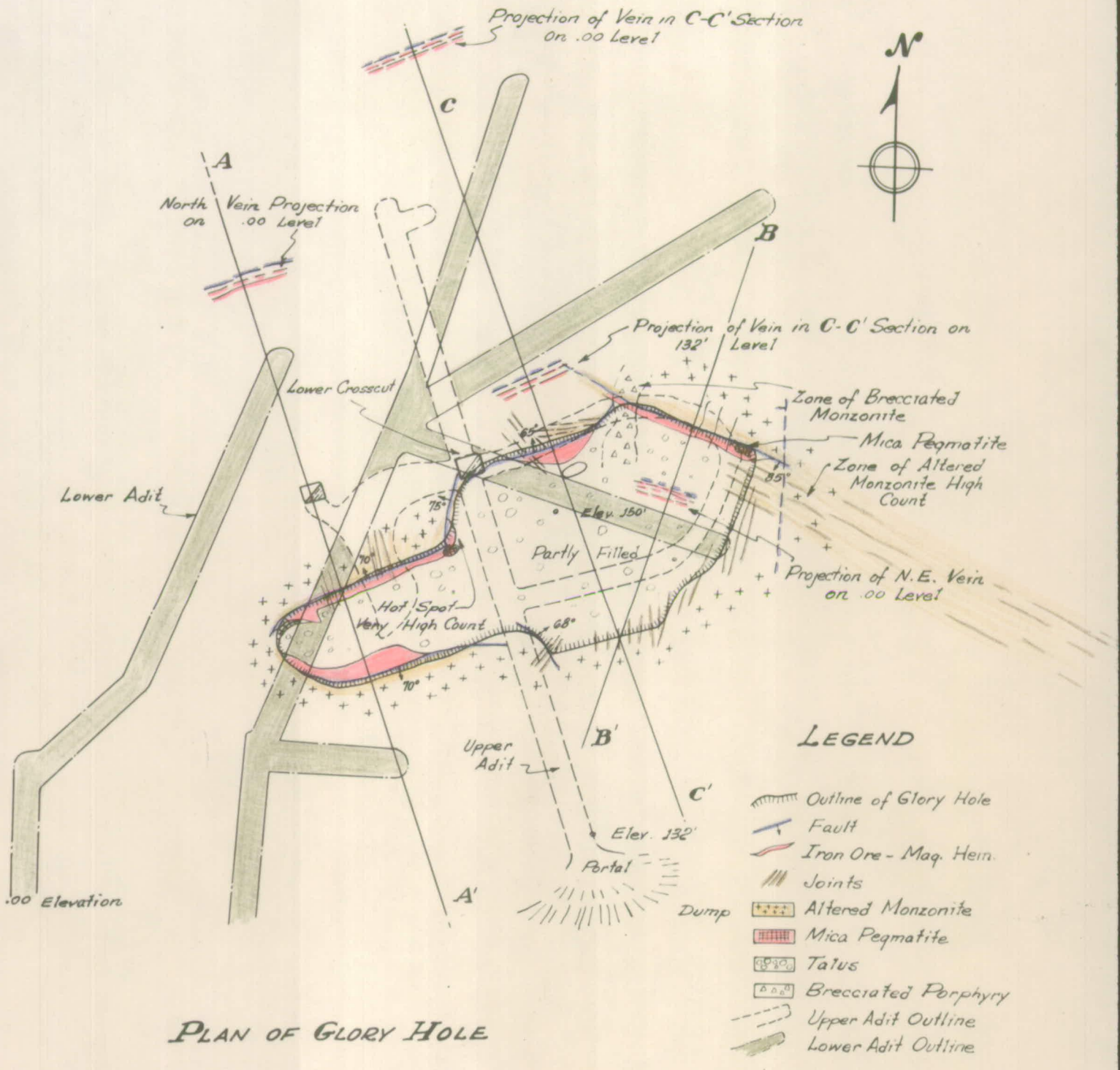
GEOLOGICAL MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

UPPER ADIT - 132' LEVEL

FIGURE 4



PLAN OF GLORY HOLE

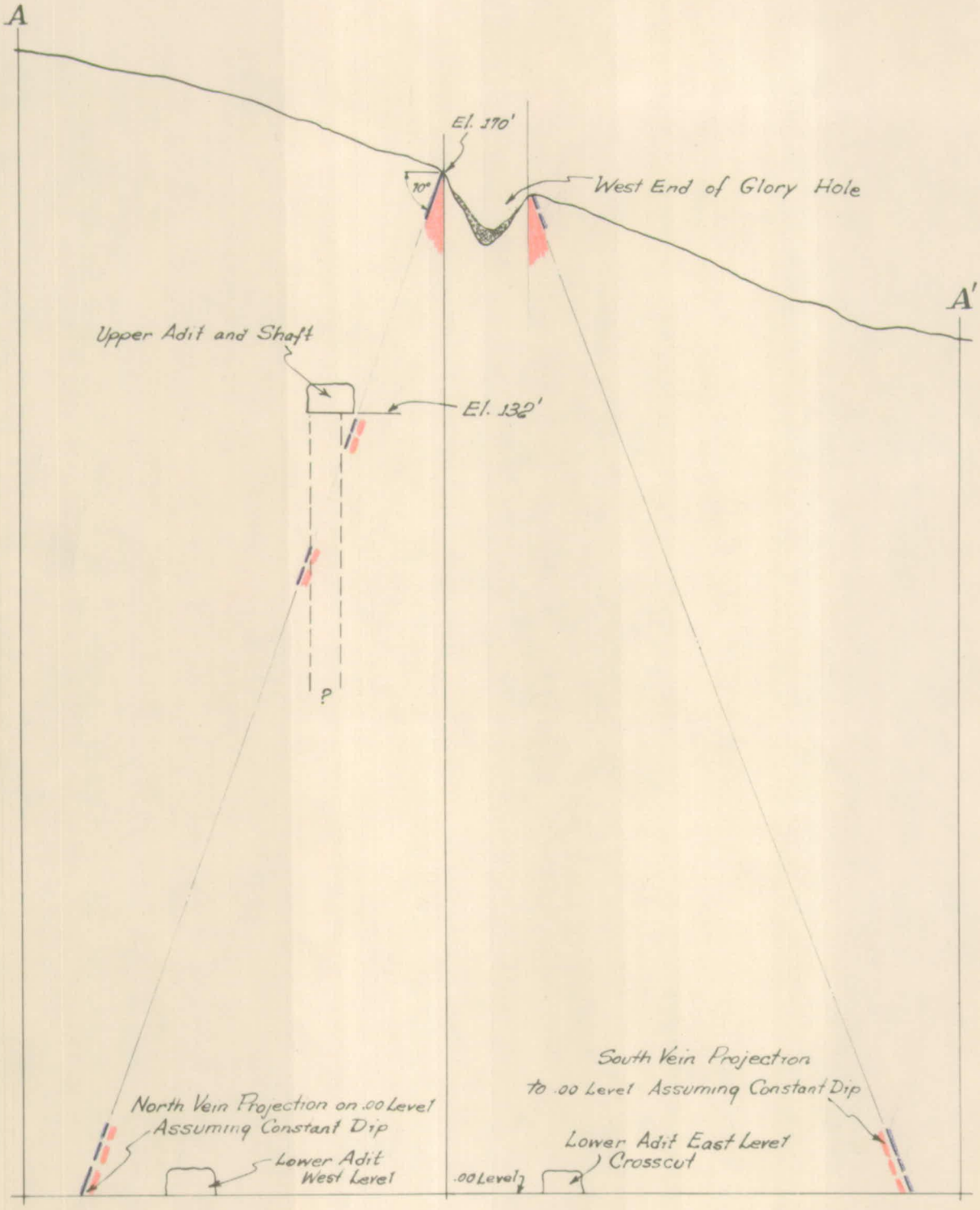
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 Ft.

F.W. Christiansen - 1951

FIGURE 5



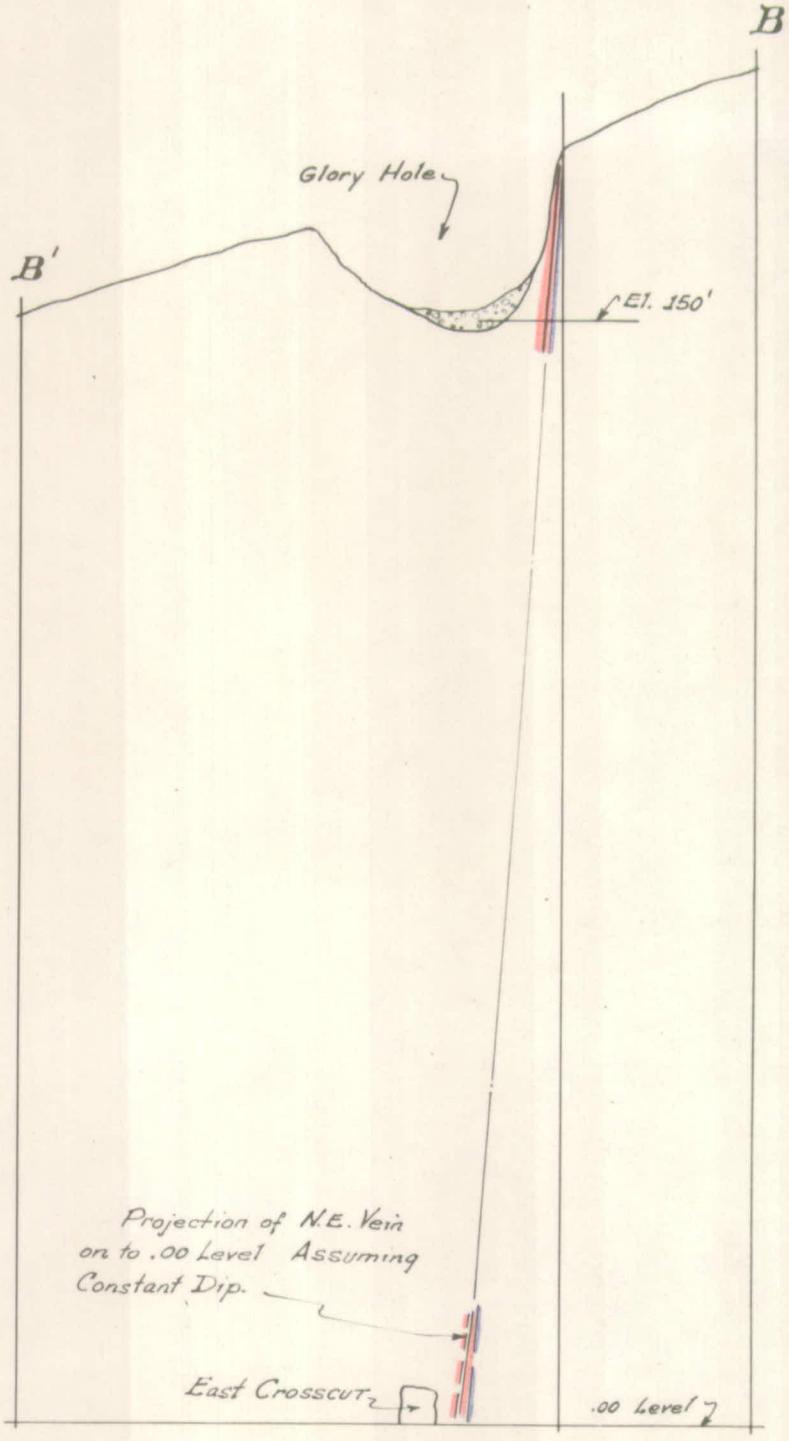
PROJECTION OF FISSURE ZONE ALONG LINE A-A prime

MINERAL HILLS MINE
MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 6



PROJECTION OF FISSURE ZONES ALONG LINE B-B prime

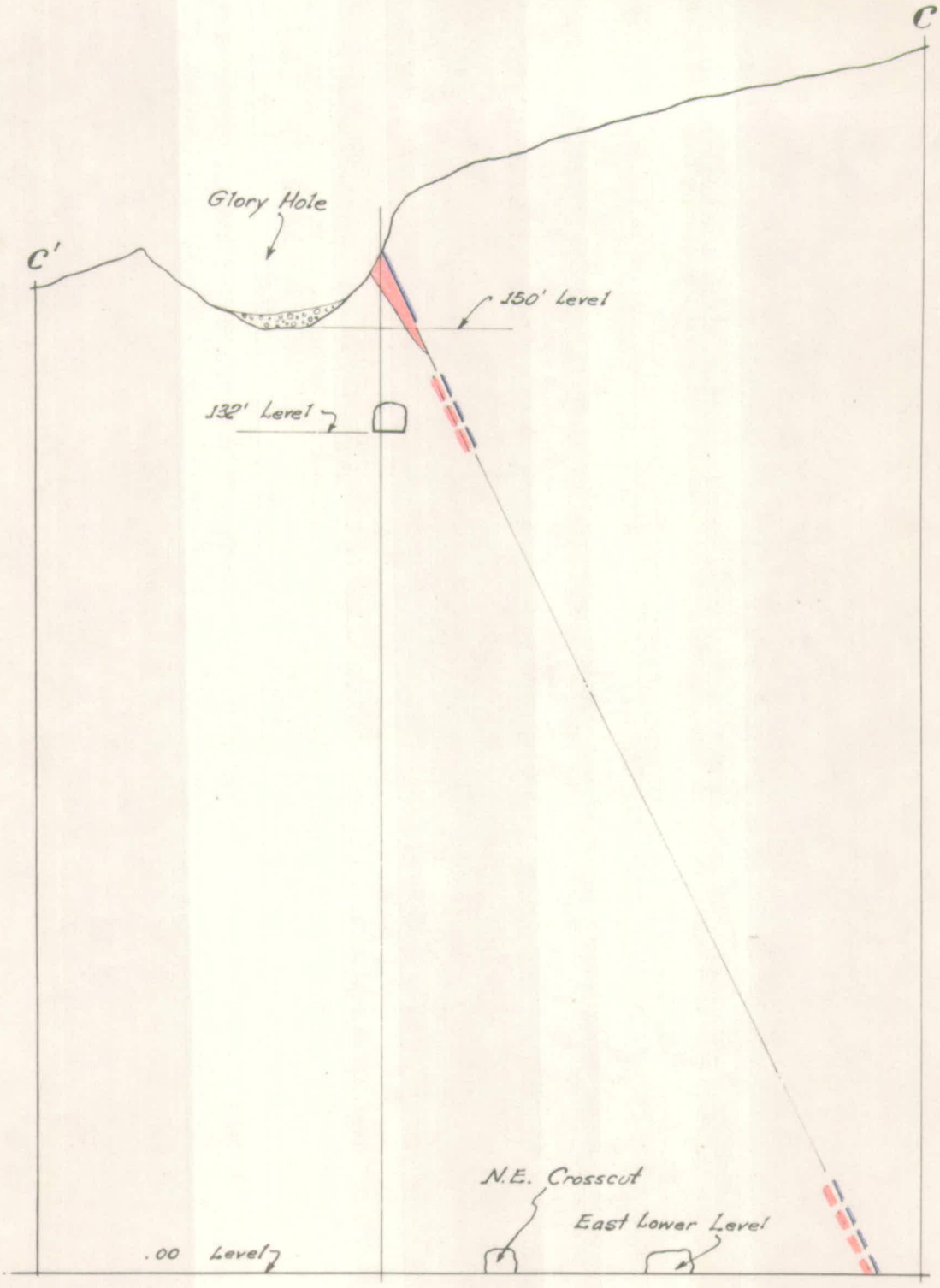
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 7



PROJECTION OF FISSURE ZONES ALONG LINE C-C prime

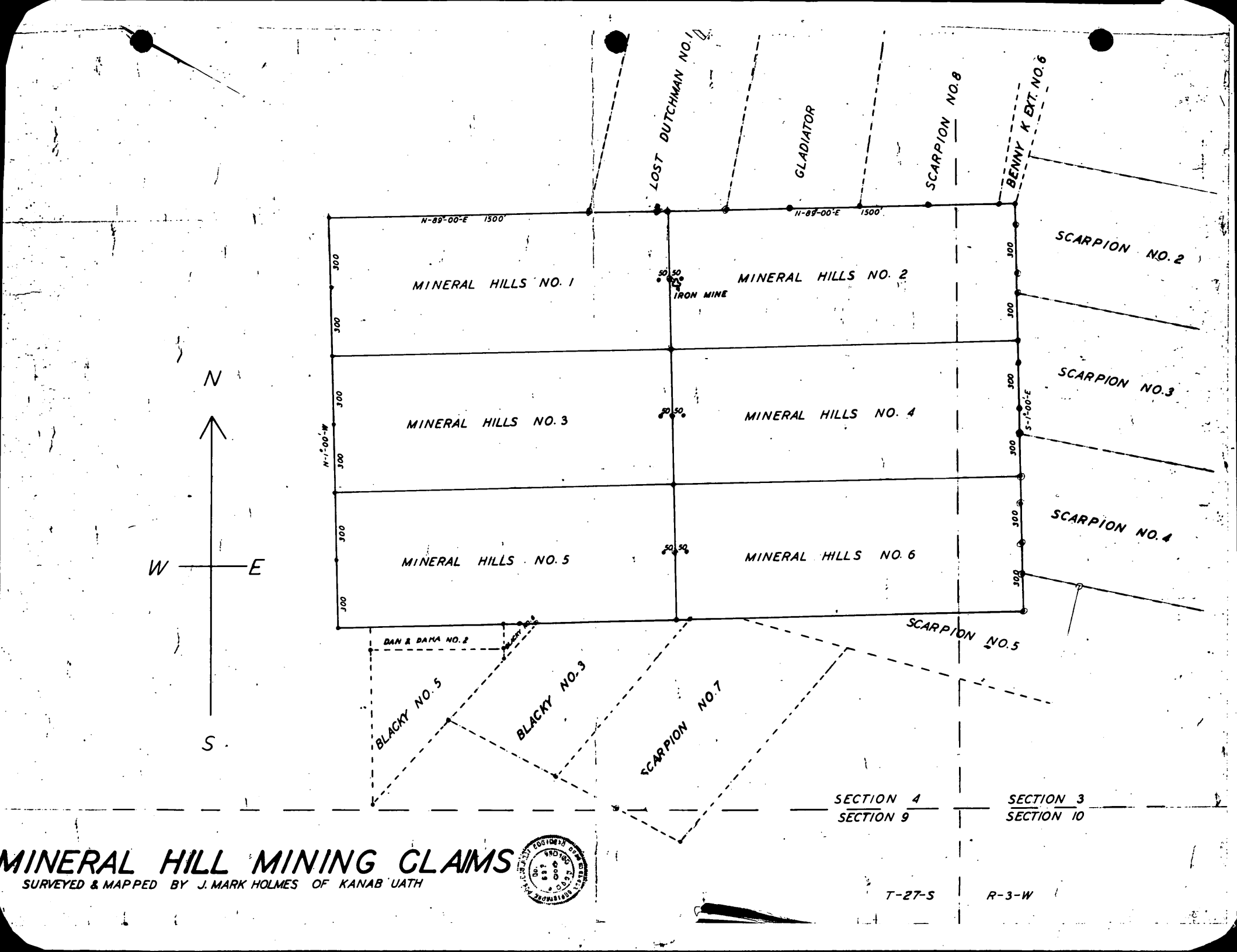
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft

F. W. Christiansen 1951

FIGURE 8



MINERAL HILL MINING CLAIMS

SURVEYED & MAPPED BY J. MARK HOLMES OF KANAB UATH

MINERAL HILLS URANIUM CO.
1012 Boston Building

Salt Lake City 1, Utah
July 6, 1951

Ancient River Channels Gold Mining Company.
Suite 1, Cornet Building
Las Vegas, Nevada.

Gentlemen:

At your request, we are writing to advise that our claim to ownership of the Mineral Hills Mining Claims numbered 1 through 6, Durkee Mining District, Piute County, State of Utah, arises from their purchase outright from Ford T. Frost. He represented that he had the right to give us complete ownership.

There is no outstanding balance owing to the said Ford T. Frost for the purchase of said claims nor is there any further obligation owing to him with respect to the same. Since the time of purchase the property has not been encumbered.

We trust this information will be of assistance to you.

Sincerely yours,

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon
President

AJA:sm

EXHIBIT 1.

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

MINING LEASE

THIS AGREEMENT OF LEASE made and entered into this 15th day of November, 1950, by and between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, hereinafter termed the lessor, and Thomas H. Berry, and William T. Berry, hereinafter termed the lessee;

W I T N E S S E T H :

That the said lessor, for and in consideration of the rents, covenants, agreements, and royalties hereinafter reserved by the said lessor to be paid, kept, and performed, has granted, let, and demised, and by these presents does grant, let, and demise unto the said lessee the following-described mining property situate in the Durkee Mining District, Piute County, State of Utah, known as the Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, No.6, as recorded in the office of the County Recorder of Piute County, State of Utah.
There are expressly excluded from the above-described premises any portion thereof which have been or may be deeded, relinquished, or lost to the lessor in the settlement of conflicts or otherwise, insofar as any present claimants of record are concerned, including Spencer W. Gibbs, and those claiming by or through them.

The rights hereby granted to the above claims are to include all dips, spurs, and minerals therein contained and appertaining, together with a ny and all other property and rights, real, personal, or mixed, in or upon or appertaining to the claims above-mentioned; to have and to hold the said demised premises for the purpose of mining and for no other purpose for the term of ten years from the date hereof to expire at noon on the 15th day of November, 1960, with the privilege to renew the lease for ten years upon the same terms as herein contained, unless sooner forfeited or determined through violation of any agreement, covenant, or condition hereinafter contained, to be kept or performed by the said lessee.

In consideration of said lease, the said lessee does hereby covenant and agree severally and jointly with said lessor as follows:

1. To enter upon sied premises, and to commence work thereon within twelve days from the date of this lease, and to work the same mine-fashion in the manner necessary and appropiate to good and economical mining, so as to take out the greatest amount of ore possible with due regard to the safety, development and preservation of the same as a workable mine; all work, timbering, construction and installation of improvements to be subject to the inspection and approval of the general manager, superintendent or other representative of the lessor.

2. To work and mine the said premises as aforesaid steadily and continuously during the term of this lease, with not less than sixty shifts of work during each and every calendar month of the term of this lease. No excess above the required number of shifts in any one month to apply on any other month, and failure on the part of the said lessee to work said premises with at least said number of shifts each calendar month, or failure to work said premises at all for twenty-one consecutive days, may be considered by the lessor a violation of this lease, at the option of the lessor, upon fifteen day's written demand or notice, within which time a correction of the violation alleged must be made. If correction is not made, it shall work a forfeiture of this lease. The word "shift" is taken and accepted to mean the labor of one man for one day of at least eight hours.

3. To keep at all times all drifts, tunnels, shafts, winzes and other workings in said premises thoroughly drained and clear of loose rock and rubbish, and in absolutely safe and secure condition, unless prevented by riots, strikes, war, acts of God, or other conditions over which lessee has no control, and to maintain at all times and leave the floors of all drifts, crosscuts and other workings in good, even, unobstructed condition, and to stow no waste underground, nor fill any stopes, without the written consent of the lessor, its manager or any duly authorized agent.

4. To well and sufficiently timber with strong, well fitted and durable timbers, all the workings on the premises hereby leased at all points where proper, in accordance with good mining, and for ventilation, and to promptly repair or replace all timbering which may be rendered insufficient by any cause whatsoever; to keep the timbering of said workings at all times in good, safe and serviceable condition, and to remove none of the same without the written consent of the lessor, its manager or any duly authorized agent.

5. To allow the lessor, its manager or any duly authorized agent or representative at any and all times: (a) to enter and visit all parts of said leased premises and the workings thereon for the purpose of inspection and taking of assay samples; (b) to take samples fromany ores awaiting shipment; (c) to have surveys made of the workings by the lessor's surveyor and assistants whether under or above ground, or both, as often as the lessor, its manager or any duly authorized agent shall so order, and also furnish to lessor copies of blueprints of all surveys or maps made by the lessee; and generall to facilitate in every way such inspection, surveys and sampling, as above provided, as long as it can be done without inconvenience or cost to lessee.

6. There is expressly reserved to the lessor rights of way through the premises hereby leased for the more convenient working or examination of adjacent ground, but such rights-of-way shall be so excercised as not to interfere, more than necessary, with the operations of the lessee therein and there is also expressly reserved to the lessor the right and privilege to do any and all development work upon the premises hereby leased which may be rendered desirable by reason of any litigation or controversy which may arise and which may effect said leased premises or other adjacent property in which the lessor is interested, and to use the workings of the lessee herein in prosecuting such development work, providing that the same shall not interfere more than is necessary with the mining operations of the lessee and that all ore mined in the prosecution of such development work shall belong to the lessee herein (insofar as the same shall be taken from ground hereby leased) subject to the royalty hereinafter provided.

7. The lessee agrees to render to the lessor, on or before the 30th day of each month, a written statement showing the number of shifts worked, the wages therefor, amount of salaries, value of supplies and all other expenses of operating this lease incurred during the preceding month, and to afford the lessor, its manager or any duly authorized agent, every facility, at all times, for the inspection and copying of all books, assay journals, assay certificates, accounts, pay-rolls, vouchers, correspondence and papers generally of said lessee insofar only as they may relate to indebtdness or liabilities incurred or claimed for work, services, or materials in respect to said premises, or the development of other workings thereon, or shipment of ore therefrom.

8. To keep said premises and every part thereof at all times free and clear of all mechanic's or miners' liens or other liens, encumberances or liabilities; to settle, pay and discharge on or before the 30th day of each cal-

SERVICE LINE FORM 606 L.W.

endar month, all indebetedness and liabilities incurred by the said lessee prior to the expiration of the preceding calendar month for work done, services rendered or material furnished in res ect of said premises, and to forthwith post, and at all times keep posted in some conspicuous place upon the premises hereby leased a notice, to be provided by lessor, that said premises are leased to the lessee and that the interest of the lessor therein shall not be subject to any lien for services, labor or material furnised upon or used in connection with this lease, or said leased premises, said notice to be on behalf and in the name of the lessor company with the signature of the lessee also attached.

9. To furnish to the lessor, its manager or any duly authorized agent, full, true, and accurate information with regard to the condition of said workings or any part thereof or the quality or character of the mineral therein, and to immediately give the lessor notice of any discovery of any mineral. The lessee agrees to furnish the lessor with a copy of any information, maps, and/or reports made from geological, metallurgical, drilling, sampling, and/or other data relating to said premises secured by and in the possession of the lessee in connection with its prospecting, mining, and development of said premises.

10. To allow no persons not in privity with the parties hereto to take or hold possession of said premises or any part thereof under any claim or pretense whatsoever. To assign no portion or all of this lease to any third party without the lessor's written consent.

11. To assume all responsibility for and save the lessor harmless from any and all accidents to himself or any of his employees, sublessees, licensees, agents, associates, or visitors, upon the property of the lessor, as herein leased and to forthwith post and at all times keep posted at the main working upon the premises hereby leased, a conspicuous notice in the name and on behalf of the lessor, with the name of the lessee also attached in substance that the premises are leased to the lessee and that the lessee will not be liable for damages on account of any such accident. The lessor shall under no circumstances be liable to the lessee or his agents, servants, employees, licensees, sublessees, associates, visitors or any other person on account of any such accident.

12. To ship all ore with reasonable diligence after mining, with the right reserved to the lessor to take and remove all ores not so shipped with reasonable diligence and to apply the proceeds under the directions of this lease; to notify the lessor, its manager or any duly authorized agent, whenever ore is ready for shipment, giving the estimated tonnage and value thereof, also the intended purchaser, but it is expressly understood and agreed that all ore extracted from said leased premises shall be shipped in the name of the lessor and lessee and shall be routed and sent to and treated at the mill, smelter, sampler, or reduction works satisfactory to both parties.

13. It is expressly understood and agreed that the lessor reserves the property and rights of property in and to all ores extracted or to be extracted from said premises and in and to all ores not shipped within ten days after the expiration or other termination of this lease; that all ores which are of too low grade for profitable shipment shall remain on the premises, subject to the sole control and disposition of the lessor, and that any loss or expense resulting from or incident to any shipment of such low grade ore shall be borne and paid by the lessee; that all low grade ore not shipped shall be kept separate from and not mixed with waste, so that it may be available for shipment at any time by the lessor, and said low gradw ore shall be deposited on the premises herein leased as directed by the lessor, its manager or any duly authorized agent.

SERVICE LINE FORM 606 L.W.

14. The lessee agrees that in the event any fractions of property shall be found to be subject to a location within the exterior boundaries or group of claims covered by this agreement, at or adjoining said group of claims, that the lessee will either locate the same in the name of the lessor or will advise the lessor to locate the same. It is understood and agreed that upon such locations said claims shall be included within and subject to the terms and conditions of this agreement.

15. At the date of the execution of this lease to make immediate payment of the balance premised to be paid under the attached contract and option.

16. To pay and deliver, or cause to be paid and delivered to said lessor, as a rental or royalty upon all ores extracted and shipped or sold from said premises, the following roylaty, the rate of which is to be determined in each case by the gross value of the ore, which shall be the price paid at the smelter, mill, or purchasing depot of the United States Government and/or such other purchaser as may offer a higher price, without any deductions, to-wit:

(a) 10% royalty on all ores computed on the gross price as above-defined on gross production for the first year;

(b) 12½% royalty on the gross price as above-defined on gross production of uranium ore up to and including 1% grade for all production after the first year; and 12½% royalty on all other ores on the gross price as defined above for all production after the first year;

(c) 14% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 1% grade and up to and including 5% grade uranium ore for all production after the first year;

(d) 16% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 5% grade uranium ore for all production after the first year;

17. Any amount due and payable to the lessors as royalties on ore extracted, shipped, and sold during any month shall be paid by the lessee to the lessor on or before the 15th day of the next succeeding month during which the lessee shall have received payment therefor by the deposit thereof to the credit of the lessor or assigns in a bank of the lessor's written designation, subje ct, however, to the right of the lessor to request of the purchaser of the ore shipped that a check be made payable to the lessor hereunder in conformity with the royalty schedule hereinabove set out, making direct payment to the said lessor for his per cent interest in said purchase price computed as above set out.

18. The lessor reserves the right at all times to keep its manager or any duly authorized agent at said leased premises, in whose presence all ore shall be classed, graded, sorted and shipped and said manager or agent shall be permitted to take samples from all ores mined or sorted for examination or assay. In case any dispute shall arise between the lessor and the lessee or between the agents of the parties hereto, in regard to the classing, sorting, grading, or shipping of any of said ores, then in that case all shipments of said ore in

SERVICE LINE FORM 606 L.W.

question shall cease until the controversy is settled by arbitration, as hereinafter provided, to-wit: The lessor and the lessee shall each choose one representative and the two so chosen shall choose a third, and the three so chosen shall pass upon said difficulty, and their decision shall be final; and the cost of arbitration, as above provided, is to be borne equally by the parties hereto.

19. It is expressly covenanted and agreed between the parties hereto that, should any legal proceedings be instituted, such as injunction, apex suits or any other proceedings whatsoever, which would interfere with the possession a nd enjoyment of the said demised premises, that the lessee shall under no circumstances attempt to hold the lessor liable for damage or otherwise to the lessee therefor on account of such disturbed and interrupted possession and enjoyment. It is nevertheless understood that if neces sary the lessor will undertake to defend title to the above claims.

20. It is furthermore agreed and understood that the lessor reser ves the right of property to all dumps located upon said demised premises.

21. Said lessee does hereby furthermore covenant and agree that in case he fails to commence work on said premises as aforesaid, or to work and mine the same continuously, with diligence and in workmanlike manner, or to keep the same securely timbered, drained, clear and in safe condition, or to allow inspection, sampling or survey thereof, or to furnish true information regarding the same according to the conditions herein, or to render monthly statements as provided herein; or to keep the same free from liens, or to keep notices posted upon the leased premises in manner provided herein, or to make regular settle ment for work, services and materials or assign or sublet any interest in the lease or said premises without written consent of lessor, or shall in these or any other respect fail to keep and fulfil any and all conditions, covenants or agreements herein express ed or implied, then and in that case the term of this lease at the option of the lessor, expire, and it shall be lawful for the lessor, its manager, attorney, or other duly authorized agent, to declare this lease void and of no effect thereafter, and with or without process of law and after fifteen days' written notice without correction of the violation, to enter upon and take possession of said premises, and dispossess all persons occupying the same; and in such case, and also at the expiration of this lease by limitation, to-wit, at noon of the last day of the term hereby granted as aforesaid, said lessee agrees to surrender, yield and deliver to the lessor, its successors or assigns, quiet and peaceable possession and enjoyment of said premises and all buildings and other improvements thereon and therein, excepting the tracks, rails, pipelines, and machinery belonging to lessee. All dumps, ores or other materials detached or broken down from said premises, but still remaining thereon shall remain the property of the lessor, together with the appurtenances, in good order and condition, with all drifts, shafts, tunnels, winzes and other passages and workings, thoroughly clear of loose rock and rubbish, and drained, and the mine ready for immediate continued working without demand or further notice.

22. Time is the essence of this contract in all particulars.

23. All of the operations of the lessee under this lease shall be so conducted as to fully comply in every respect with the laws of the State of Utah.

24. The lessee shall not mix any ores from said premises with the ores, minerals, products, etc. derived from any other property.

25. The lessor shall pay any federal, state, and county tax assess-

ments based solely on ownership of mining property and the lessee shall pay all taxes assessed because of any operations thereon, including the Utah mine occupation tax and personal property tax. The lessee shall pay and/or perform all federal, state, and county assessments of whatever nature necessary to maintain the interest of the lessor in said property. The lessee likewise agrees to pay all federal, state, and county assessments upon any and all structures and other improvements, machinery, equipment, tools, supplies, and personal property whatsoever placed upon said premises by the lessee.

26. The lessee, in the operation and development of the said property shall be subject to all applicable Federal enactments and regulations, laws of the State of Utah, and all Federal or State rules and regulations regarding Employee's Liability, Workman's Compensation and Workman's Old Age and Unemployment Insurance, and said lessee covenants and agrees to indemnify and hold harmless the lessor from and against the payment of any and all damages, claims, costs, and expenses due to the existence of such enactments, and of any and all claims, cost, and expenses in connection therewith under any claim of subrogation provided for by said enactments or otherwise; and the lessee shall further indemnify and hold harmless the lessor from and against any and all damages, claims, costs, and expenses arising out of damage to the property or any injury or death of the employees of the lessee, or any other person whomsoever other than the lessors and those acting under them where such injury, death, or damage occurs because of or in connection with the use, operation, or development in any manner, of the property hereby sold, whether such claims are based upon right conferred by the common law or by statute.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals this 15th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

LESSOR

THOMAS H. BERRY

WILLIAM T. BERRY

LESSEE

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

OPTION AND LEASE

THIS AGREEMENT, made and entered into by and between the Mineral Hills Uranium Co., a corporation of the State of Utah, hereinafter called the optionor, and Thomas H. Berry and William T. Berry, hereinafter called the optionee,

W I T N E S S E T H:

WHEREAS, the optionor is the owner and in possession of certain lode mining claims hereinafter more particularly mentioned and described; and

WHEREAS, the optionor represents that there is a possibility that said claims have a potential development as great ore bodies; and

WHEREAS, the proper development of such ore bodies, both present and in expectancy, and proper reduction and treatment thereof will necessitate large sums of money, and

WHEREAS, optionee is able to furnish money for such development work, but only under and in accordance with the terms and subject to the conditions hereinafter set forth;

NOW THEREFORE, for and in consideration of the payment by the optionee to the optionor of the sum of Fifteen Hundred ($1,500.00) Dollars, the receipt whereof is hereby acknowledged, and for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto agree as follows:

1. The optionor grants to the optionee, for the period from date to and including January 2, 1951, an option upon the terms and conditions in this agreement hereinafter set forth, to receive a mining lease in the form hereto annexed and hereby referred to and made a part hereof of certain properties being all those certain lode mining claims situate, lying, and being in the Durkee Mining District, in the County of Piute, State of Utah, more particularly described as follows:

Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6, as recorded in the office of the County Recorder of Piute County, State of Utah.

2. That immediately upon the execution of this option agreement the optionee agrees to enter into and to take exclusive possession of all and singular the above-described property and, as consideration for this option, shall prospect and explore, test, develop, and work, at its own discretion and at its own proper charge and expense, said lode mining claims, and any one or more of them, provided all work done and all improvements made by said optionee upon said property, or any part thereof, under the terms hereof during the period hereof shall be done in a minerlike manner to enable said premises and all thereof to be carefully operated, and so that the minerals therein contained may be extracted in an economical and minerlike manner. All equipment, tools, structures, and personal property of every nature and description brought or placed upon said premises prior to the exercise of said option by the optionee for use in said work shall not become a fixture but shall remain the property of the optionee and subject to removal by the optionee at its discretion.

In the event the optionee does not excercise this option, it should be entitled to remove said equipment and personal property from said premises and shall have the same removed on or before January 1, 1951.

3. The optionee agrees that in the event the optionee is on the property and still conducting exploration and development work as of the 1st day of December, 1950, then and in that event the optionee will pay to the optionor the sum of One Thousand ($1,000.00) Dollars as a further consideration for said option and in the event the optionee is on the property and still conducting exploration and development workas of the 1st day of January, 1951, then and in that event the optionee will pay to the optionor the sum of Five hundred ($500.00) Dollars.

4. It is understood and agreed by the parties hereto that if the optionee as principal, or by or through its agents, is still on the property or has its equipment on or is operating the same on the property as of January 1, 1951, that said presence, at the election of the optionor, activates the lease and the parties hereto thereupon agree to be bound by the terms of the lease hereunto attached and agree to execute the same at said time.

5. All ores extracted by the optionee during the aforesaid time shall be and remain the property of the optionor; provided, that the optionee is entitled to take and have as its own necessary and reasonable assay samples and mill test from said mining claims.

6. If , on or before the expiration of the option period, the optionee shall elect to excercise the above-mentioned option and receive a mining lease in accordance with the hereunto attached, it shall notify the optionor and it shall, upon such notice, and upon the payment of the entire consideration above-designated at the time of said excercise, rather than at the times specified for payment of said consideration, be entitled to receive in accordance with and subject to the terms of this contract a lease in the form of the lease hereunto attached and by reference made a part hereof, and the optionor hereby agrees upon such notice to make, execute, and deliver such lease to the optionee. Whether or not the optionee elects to excercise such option, the consideration promised and paid hereunder shall belong to the optionor without any claim for return thereof remaining with the optionee. In addition, if the option is not excercised the optionee shall peacefully surrender and turn over said properties to the optionor in as good condition as they now are in, reasonable wear and tear excepted, and free and clear of any and all liens and incumbrances incurred by the optionee in its operation on or about the same. The optionee shall likewise turn over the copies of all data, plans, analysis, photographs, and otherdeterminations and reports that the optionee shall have made or caused to be made or otherwise obtained in and about said premises during its possession of the same under the option.

7. The optionee during its possession of said property and all thereof, agrees to protect said property and all thereof against all claims of labor and materialmen and against all liens and liabilities arising out of the acts of the optionee upon said property, and to permit the optionor to place and maintain such notices thereon as shall be lawfully necessary to protect said optionor against claims; and the optionee further agrees to hold harmless the said optionor against any and all claims for damages for injury incurred by workmen in its employ at said properties, or any other person or persons.

SERVICE LAW FORM 606 L.W.

8. It is understood during the possession of said property by the optionee the optionee shall permit any authorized representative of the optionor to be, remain on, or visit the property hereinafter leased to represent the optiner and observe the performance by the optionee of each and all the terms of this agreement.

IN WITNESS THEREOF, the parties hereto have respectively caused their names to be hereunto subscribed this 10th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

OPTIONOR

WITNESSED BY

THOMAS H. BERRY

BEN J. DIERINGER

WILLIAM T. BERRY

OPTIONEE

****

Marysvale, Utah
November 30th, 1950

Thomas H. Berry

Dear Sir:

We hereby agree to amend the option agreement to provide as follows:

* $500.00 Cash
$500.00 January 15th, 1951
$500.00 March 1st, 1951

which will constitute the down payment, and the balance of $1,500.00 is to be deferred for a period of 6 months and paid as advanced royalty.

Yours very truly

ADRIAN W. CANNON

* Subject to receipt of initial $500.00 within five days

ADRIAN W. CANNON

THOMAS H. BERRY

ASSIGNMENT OF OPTION AND LEASE

(To be attached to Option and Lease dated the 20th day of November, 1950, between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, optionor, and Thomas H. Berry and William T. Berry, optionee; said option covering the period from November 20, 1950, to January 2, 1951, inclusive, and said lease for a term of ten (10) years, commencing on the 15th day of November, 1950 and ending at noon on the 15th day of November, 1960.)

THIS AGREEMENT, made and entered into this 2nd, day of January, 1951, by and between THOMAS H. BERRY and WILLIAM T. BERRY, Parties of the First Part, hereinafter called "Assignors", and the ANCIENT RIVER CHANNELS GOLD MINING COMPANY, a corporation, Party of the Second Part, hereinafter called "Assignee."

W I T N E S S E T H :

It is mutually covenanted and agreed by and between the parties hereto as follows:

1. The Assignors, for a valuable consideration, do hereby sell, assign, transfer and set over to the Assignee, all of the Assignors' right, title and interest in and to the option and lease above described.

2. The Assignee hereby accepts the above assignment and agrees to be bound by and to perform and observe fully and faithfully all of the covenants, stipulations and conditions contained in said option and lease, to be performed and observed by the Assignors, and assumes all liabilities mentioned in said option and lease, to be assumed by the Assignors, hereby indemnifying the Assignors therefor.

3. This agreement shall be considered as taking effect as of the 31st, day of December, 1950.

THOMAS H. BERRY

WILLIAM T. BERRY

ASSIGNORS

ATTEST:

W. T. BERRY
Secretary

(CORPORATE SEAL)

ANCIENT RIVER CHANNELS
GOLD MINING COMPANY

By Thomas H. Berry
Its President - ASSIGNEE

SERVICE LINE FORM 606 L.W.

STATE OF CALIFORNIA

: SS

COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, Thomas H. Berry and William T. Berry, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said County and State

(S E A L)

My Commission expires
September 11th, 1954

****

STATE OF CALIFORNIA

: SS

COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, THOMAS H. BERRY, known to me to be the President of the corporation that executed the foregoing instrument, and upon oath did depose that he is the officer of said corporation as above designated; that he is acquainted with the seal of said corporation, and that the seal affixed to said instrument is the corporate seal of said corporation; that the signatures to said instruments were made by the officers of said corporation as indicated after said signatures, and that the said corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said County and State

(S E A L)

My Commission Expires:
September 11th, 1954.

SERVICE LINE FORM 606 L.W.

SERVICE LAW FORM-606 L.W.

CONSENT OF ASSIGNMENT

Adrian W. Cannon, President of the Mineral Hills Uranium Co., a corporation of the State of Utah, does herewith, as President of the said corporation, consent to the assignment by the lessees to the Ancient River Channels Gold Mining Company., a corporation of the State of Nevada, all of their rights in and under that certain lease dated November 15, 1950, by and between Mineral Hills Uranium Co., a corporation if the State of Utah, the lessor therein and Thomas H. Berry and William T. Berry, therein designated as lessees; provided, however, that the said corporation does not waive any of the claims which it may have against the lessees designated therein.

Dates this 6th day of July, 1951.

Mineral Hills Uranium Co.

By Adrian W. Cannon
President

RM:RDN:jgw

JANUARY 4 1952

Ancient River Channels Gold Mining Company
Suite 1, Cornet Building
Las Vegas, Nevada

Attention: Mr. Thomas H. Berry, President

Gentlemen:

A copy of your letter of November 13, 1951 to Mr. Tom Lyon of the Defense Minerals Administration regarding DMA Uranium Loan 1874, directed to the Commission, has been referred to the Division of Raw Materials. There are several statements made in your letter concerning our exploration policy and methods of field investigations which we believe deserve comment and clarification.

It has been the purpose of the Commission, in assigning geologists and engineers to Marysvale, to follow exploration and development in the district in order to determine its uranium production potential and to assist mine operators and owners through geological and engineering advice.

To thoroughly examine the entire Marysvale district and explore all the known geologically favorable structures and mineralized areas, will require considerable time. It has been the policy of our Marysvale geologists to map and sample and recommend physical exploration work, first, on those properties which show the most favorable geological evidence for the production of uranium ore. The order in which we are investigating the Marysvale deposits has been determined solely on the geological merits of the properties. Several preliminary examinations of the Mineral Hills Group of Claims have been made by our geologists and consultants. To date, we have not found sufficient evidence of either uranium mineralization or favorable geological structure to warrant detailed mapping and core drilling of these claims ahead of other, more favorable properties. We have drilled to date approximately 35,000 feet of which about 25% has been drilled on Vanadium Corporation of America properties, which were among the earliest and most highly developed and consequently more favorable for drilling. Drilling has been done or is in progress on six other properties, and as our program continues throughout the area, the percentage figure for drilling

61

CC: Mr. Tom Lyon, Director, Supply Division
DMA, Washington, D.C.

Ancient River Channels Gold Mining Company

on V.C.A. ground will, of course, decline.

You have been furnished with a copy of our radiometric anomaly map for the Mineral Hills Group of Claims. This is an experimental map, the interpretation of which is highly uncertain. At the time of issuance it was emphasized, and stamped on the copy, that the Atomic Energy Commission made no representation of the accuracy of the data and no recommendation concerning it. We are informed that no one in our Marysvale office has recommended nor advised you that we would core drill your property at the present time. However, they have stated that your property will be examined and mapped in detail as soon as possible. That mapping is now underway and will be completed as fast as the weather permits. If the results of detailed mapping and sampling on the Mineral Hills Group of Claims reveal new geological information which might recommend that the property be core drilled, we will schedule such drilling in accordance with the importance of the information obtained.

When the DMA field team was in the area to examine the Mineral Hills Group of Claims, our A.E.C. personnel made available to them all the information they had on the property as a result of preliminary examinations. One of our geologists accompanied them to the property in order to further assist them on the ground. The examining DMA field team was composed of competent geologists, and if additional geological information was required before judging the application, they would have acquired such before submitting their recommendation. Although the Atomic Energy Commission hasbeen asked to furnish all information available on uranium properties to the DMA examining field teams, we assume no responsibility for their decisions on applications. Neither is it the policy of the Commission to assist the claim owner in making out his DMA Application. However, we are glad to offer any factual information available and to give advice regarding the property if the applicant requests it.

I hope that this letter will help to clarify the function of the Commission office in Marysvale as requested in your letter to Mr. Lyon. You may be assured that our personnel in Marysvale will give you all possible assistance consistent with our program. Please do not hesitate to call on them or on us if you have any further questions.

Very truly yours,

Phillip L. Merritt
Assistant Director

CC: Mr. J. C. Johnson
Mr. C. C. Towle, Jr. (in dup.) w/DMA-1874
Mr. Tom Lyon, DMA, Washington
Mr. J. O. Hosted

RARE & LIGHT METALS

THOMAS H. BERRY
PRESIDENT

WILLIAM T. BERRY
SEC'Y & TREASURER

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

SUITE 211, 206 NORTH VIRGINIA STREET
RENO, NEVADA

GOLDEN CHANNEL MINE
GOLDEN RIVER MINE
NEAR
ANGELS CAMP, CALIFORNIA

BRANCH OFFICE
SUITE 1. CORNET BLD'G
LAS VEGAS, NEVADA

November 13, 1951

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
NOV 16 10 34 AM '51

United States Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Attention: Tom Lyon, Director
Supply Division

Re: DMA-1874, Uranium

Dear Mr. Lyon:

This will acknowledge your letter of November 1, 1951, in which you state that our application must be denied because of insufficient evidence to indicate the geologic probability of making a significant discovery.

Please be advised that our geologic information indicates that there is quite a significant probability of high grade uranium ore available and we have had every indication to support that position. We were advised that a Mr. Sharp from Salt Lake City, Utah, in company with another man whose name was unknown, recently visited the Marysvale District without announcing themselves or their purpose, and were there apparently to appraise the probabilities of our property. These gentlemen visited our mine at Marysvale, spending less than one hour upon the premises, and there was no indication that they made any extensive or reasonable inquiry or investigation into the probability of a significant uranium discovery upon our mining property.

Yesterday, November 12, 1951, I was in Marysvale, Utah, and contacted Mr. Thomas Anderson of the Atomic Energy Commission of the Denver, Colorado office, and Mr. Walter O'Toole, Atomic Energy Commission representative at Marysvale, and they both advised me that the field team from your administration spent several hours in the Marysvale office of the Atomic Energy Commission, reviewing their accumulated data upon the Marysvale District. They informed me, however, that since they had made no detailed study of our property, they were in no position to aid or furnish any information of value to the field representatives concerning our mining properties.

United States Department of the Interior
Defense Minerals Administration November 13, 1951

At the time we acquired the Marysvale properties, we were advised by the persons then in charge of the Atomic Energy Commission in that district that their office was established for the purpose of aiding and facilitating independent operators in their search for productive zones of uranium bearing deposits. Following our acquisition of the property, we have repeatedly appealed to the Marysvale office of the Atomic Energy Commission for aid in making a proper examination to determine the location and extent of uranium ore upon our property. Their office has repeatedly assured us that they would make an examination and give us the benefit of their findings, but to date we have been unable to obtain any aid from them in this regard despite the fact that they have been making continued examinations in the surrounding area. The Marysvale office of the Atomic Energy Commission has further advised us on several occasions that they would come onto our property and core drill the same, furnishing us with the benefit of the result of such an examination. However, to date, nothing has been done in this regard nor is there any indication of any aid in that manner to be forthcoming in the near future.

It is our information that there has been a core drilling examination extending over 100,000 feet in the Marysvale District conducted by the Atomic Energy Commission, 95% of which has been performed upon the property of the Vanadium Corporation of America. We, too, have spent considerable sums of money to acquire and a great deal of time in the development of our properties and with the information that we have high grade uranium ore present, we are prepared to spend additional funds such as may be required to comply with the terms of our application for an exploration loan from the Defense Minerals Administration in the amount of $53,000.00 as originally applied for.

Under Section 4, Scope of Application, MO-5, of April 6, 1951, we appreciate the fact that the Administrator may require the filing of additional information, reports and exhibits in connection with the application, and may at his discretion require such physical examination of the project as he deems necessary, but we do feel that the Atomic Energy Commission's Marysvale office should at least help us prepare such additional data, etc., as the Administrator may require inasmuch as the Marysvale office was, as we understand, created for that purpose. The

closing statement of your letter of November 1, 1951, recites the fact that: "Should evidence be obtained in the future to be of such nature as to alter this opinion, we would gladly consider a new application." In this connection we feel that we should be privileged to amend our present application, reference DMA 1874-Uranium, rather than to file a new application. If we are in error in any of our above mentioned conclusions, we would appreciate your advice as to the functions of the Marysvale office of the Atomic Energy Commission.

Yours very truly,

ANCIENT RIVER CHANNELS
GOLD MINING COMPANY

Thomas H. Berry, President

THB:hm

CC: Gordon Dean, Atomic Energy Commission
Secretary of the Interior
Administrator, Defense Minerals Administration
Senator Pat McCarran

FILE COPY
SURNAME:

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

Gordon
Bennett
Hosted
Keiser

NOV 10 1951

Mr. Thomas H. Berry
Ancient River Channels Gold Mining Co.
Suite 1, Cornet Building
Las Vegas, Nevada

Re: DMA-1874
Uranium

Dear Mr. Berry:

Your application of July 16, 1951, for an exploration loan in the amount of $53,500.00, has been carefully reviewed by the Minor and Rare Metals Branch of the Supply Division.

We regret to advise that your application must be denied at this time because of insufficient evidence to indicate the geologic probability of making a significant discovery.

Should evidence obtained in the future be of such nature as to alter this opinion, we would gladly consider a new application.

Yours very truly,

Tom Lyon

BJ
11-1

Tom Lyon, Director
Supply Division

EGordon/mh 10-30-51
cc: Adm. Read. File
DMA docket file
Keiser, USGS
Hosted, USGS
Lyon
Field team, IV
Minor and Rare metals

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

NOV 1 1951

a.e.

Memorandum

To: Administrative Management Division

Through: Director, Supply Division

From: Minor and Rare Metals Branch

Subject: DMA docket 1874
Uranium, Ancient River Channels Gold Mining Co.

Under date of July 16, 1951, DMA docket 1874, Mr. Thomas H. Berry, Suite 1, Cornet Building, Las Vegas, Nevada, submitted the subject application, for an loan in the amount of $53,500.00.

Attached hereto find letter of even date addressed to applicant advising that the application must be denied, basing this action on the field team's recommendation, the reviewers for U.S.G.S., A.E.C. and D.M.A. concurring in same.

Complete docket is attached comprised of the following:

(a) 1 copy of letter to Mr. Berry dated 9-20-51.
(b) 1 copy of letter from Acting Secretary of Interior to Senator McCarran.
(c) 1 copy of letter from Senator McCarran to Oscar Chapman.
(d) 2 copies of letter from Mr. Lyon to Mr. Berry.
(e) 2 copies of letter from Mr. Strobel to Mr. Berry acknowledging application.
(f) Letter from Mr. Berry to Mr. Bourret.
(g) 3 copies of forms MF-103
(h) Copies of exhibits.
(i) 1 copy of field report.

Weston Bourret
Weston Bourret, Chief
Minor and Rare Metals

Enclosure

Tom Lyon
Director, Supply Division

330

FILE COPY
SURNAME:

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

Gordon
Bourret
Hosted
Keiser

NOV 1 1951

A.E.C.

Memorandum

To: Administrative Management Division

Through: Director, Supply Division

From: Minor and Rare Metals Branch

N.S.
R+R

Subject: DMA docket 1874
Uranium, Ancient River Channels Gold Mining Co.

Under date of July 16, 1951, DMA docket 1874, Mr. Thomas H. Berry, Suite 1, Cornet Building, Las Vegas, Nevada, submitted the subject application, for an loan in the amount of $53,500.00.

Attached hereto find letter of even date addressed to applicant advising that the application must be denied, basing this action on the field team's recommendation, the reviewers for U.S.G.S., A.E.C. and D.M.A. concurring in same.

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(f) Letter from Mr. Berry to Mr. Bourret.
(g) 3 copies of forms MF-103
(h) Copies of exhibits.
(i) 1 copy of field report.

Weston Bourret

Weston Bourret, Chief
Minor and Rare Metals

Enclosure

EGordon/mh 10-30-51
cc: Adm. Read. File
DMA docket file
Lyon - Minor and Rare Metals
Keiser, USGS
Hosted, USGS
Field team IV

Tom Lyon

Director, Supply Division

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

224 New Customhouse
Denver 2, Colorado

October 24, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1874, Ancient River Channels Gold Mining Co., applicant, Mineral Hills Uranium Prospects, Piute County, Utah.

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the exploration loan of $53,500 be denied.

The brochure is enclosed.

for Paul Tillman
J. H. East, Jr.

A. H. Koschmann
A. H. Koschmann

Enclosure

OCT 29 1951

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Administration

[illegible] Lowe Metropolitan
Denver 2, Colorado

October 22, 1951

Memorandum

To: DMA Field Team, Region I

From: A. N. Roschmann

Subject: DMA Docket 1574, Mineral Hills Prospect, Piute County, Utah

Enclosed are 10 copies of the geologic report by [illegible] Johnson and [illegible] Sharp of the U. S. Geological Survey, covering the above docket. It has been recommended that the loan be denied.

The U. S. Bureau of Mines engineering report is to be submitted.

The brochure is enclosed.

A. N. Roschmann
A. N. Roschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Room 307, 320 South Main
Salt Lake City 1, Utah
18 October 1951

Memorandum

To: A. R. Rosenbaum, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DVA 1874, Mineral Hills Prospect, Piute County, Utah.

Enclosed are 10 copies of a geologic report on Docket DVA 1874, Mineral Hills Prospect, Piute County, Utah.

Mr. T. K. Berry of the Ancient River Channels Gold Mining Company has applied for an exploration loan of $53,500 (government participation of $48,150) to explore six mineral claims in the Bunker Mining district, Piute County, Utah, for uranium ore.

No uranium ore was observed in any of the present mine workings. The mineral assemblage that usually accompanies uranium in the district was not found in the workings on the Mineral Hill claims. The present available evidence is insufficient to warrant government participation in further exploration of this property. It is recommended that the application for an exploration loan be denied.

I concur with the recommendations of the examining geologists.

This examination was made by the U. S. Geological Survey; no U. S. Bureau of Mines engineering report is to be submitted.

for - Ralph J. Roberts

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA 1874, Mineral Hills Prospect

Piute County, Utah

V. R. Johnson and R. J. Sharp, Geologists
U. S. Geological Survey

October 18, 1951

CONTENTS

	Page
Introduction	1
Location and Accessibility	1
History and Ownership	1
Geology	2
Ore Deposits	2
Ore Reserves	3
Proposed Exploration	3
Summary and Conclusions	3

ILLUSTRATIONS

Figure 1. Index map of Utah.

Docket DMA 1874, Mineral Hills Prospect

Piute County, Utah

INTRODUCTION

Mr. T. H. Berry, President of the Ancient River Channels Gold Mining Co., DMA Docket 1874, has applied to the Defense Minerals Administration for a loan to explore for uranium ore on the Mineral Hill group of claims.

In response to a request from the Field Team, Region IV, dated August 2, 1951, Ward H. Johnson and Byron J. Sharp of the U. S. Geological Survey visited the property on September 5, 1951, to determine if the proposed exploration has merit. Mr. Roger Caywood of the AEC accompanied the examiners. The geological report by F. W. Christiansen, which accompanies the application, is used as a reference in this report.

Location and Accessibility

The Mineral Hills claims are in secs. 3 and 4, T. 27 S., R. 3 W., Salt Lake Base and Meridian. They are approximately 4 miles northeast of Marysvale, Piute County, Utah, and are accessible by a graded road. The road can be easily maintained except in the most extreme weather.

History and Ownership

Date of filing the claims is not given in the application. The claims, according to a letter accompanying the docket, were filed by Ford T. Frost and sold to Mineral Hills Uranium Company (Adrian W. Cannon, President) from whom the Ancient River Channels Gold Mining Company is Lessee. The lease is dated November 15, 1950.

GEOLOGY

The oldest rocks in the district are the Bullion Canyon volcanic series, of Tertiary age composed mostly of latite. These volcanics are intruded by monzonite and granite. Uranium ores occur mostly in fissure veins in the monzonite, but may extend into the granite or latite.

The Mineral Hills claims are near the southeast edge of the exposed intrusive bodies. Rocks at the surface and in the mine workings are dominantly latite. The geologic maps accompanying the application show monzonite in and below an open pit. The rocks are altered and the presence of monzonite was not observed. Most of the alteration is alunitization which is not generally associated with uranium ores in this district.

ORE DEPOSITS

The mineral assemblage that usually accompanies uranium mineralization in this district is autunite, schrockingerite, and pitchblende. Gangue minerals include quartz, adularia, fluorite, ilmenite, jordisite, calcite, pyrite, marcasite and hematite. This mineral assemblage was not found in the workings on the Mineral Hills claim.

The only vein material at the Mineral Hills prospect is a pegmatite-like vein composed of feldspar, biotite, magnetite, and martite. The vein which is exposed in the open pit, occupies an irregularly curving fissure that is not intersected in the lower tunnel. No schrockingerite, as is commonly found in mine openings throughout the district, was detected on the walls of the mine openings at the Mineral Hills prospect.

ASC analyses of samples from "high count" locations in the open pit showed 0.01 to 0.02 U_3O_8 and 0.07 to 0.27 thorium. This indicates that the radiation is due mostly to the presence of thorium rather than radium.

Alunitization is the dominant form of alteration and is not generally associated with uranium in this district.

ORE RESERVES

The material on the Mineral Hill Group of claims is not of commercial grade. There are no ore reserves.

PROPOSED EXPLORATION

The applicant proposes to diamond drill and extend the present workings but does not have any definite plan of operation. Furthermore, no monzonite, which is the host rock for uranium ore elsewhere in the district, is likely to be found if exploration from the present workings were continued.

SUMMARY AND CONCLUSIONS

L. D. Berry, President, Ancient River Channels Gold Mining Co., has filed an application for an exploratory loan of $53,500.00, with government participation of $45,150.00 to be used to further explore the six Mineral Hills claims in the Durkee mining district, Piute County, Utah. Proposed exploration work would consist of core drilling and extending the present workings to search for uranium.

No uranium ore was observed in any of the present workings. Geiger counter readings showed the material in the open cut to be only slightly above the background count. The mineral assemblage which usually accompanies uranium mineralization in this district was not found in the workings on the Mineral Hills claims.

In the opinion of the examining geologists, the present available evidence is insufficient to warrant government participation in further exploration of this property. It is therefore recommended that the application for an exploration loan be denied.

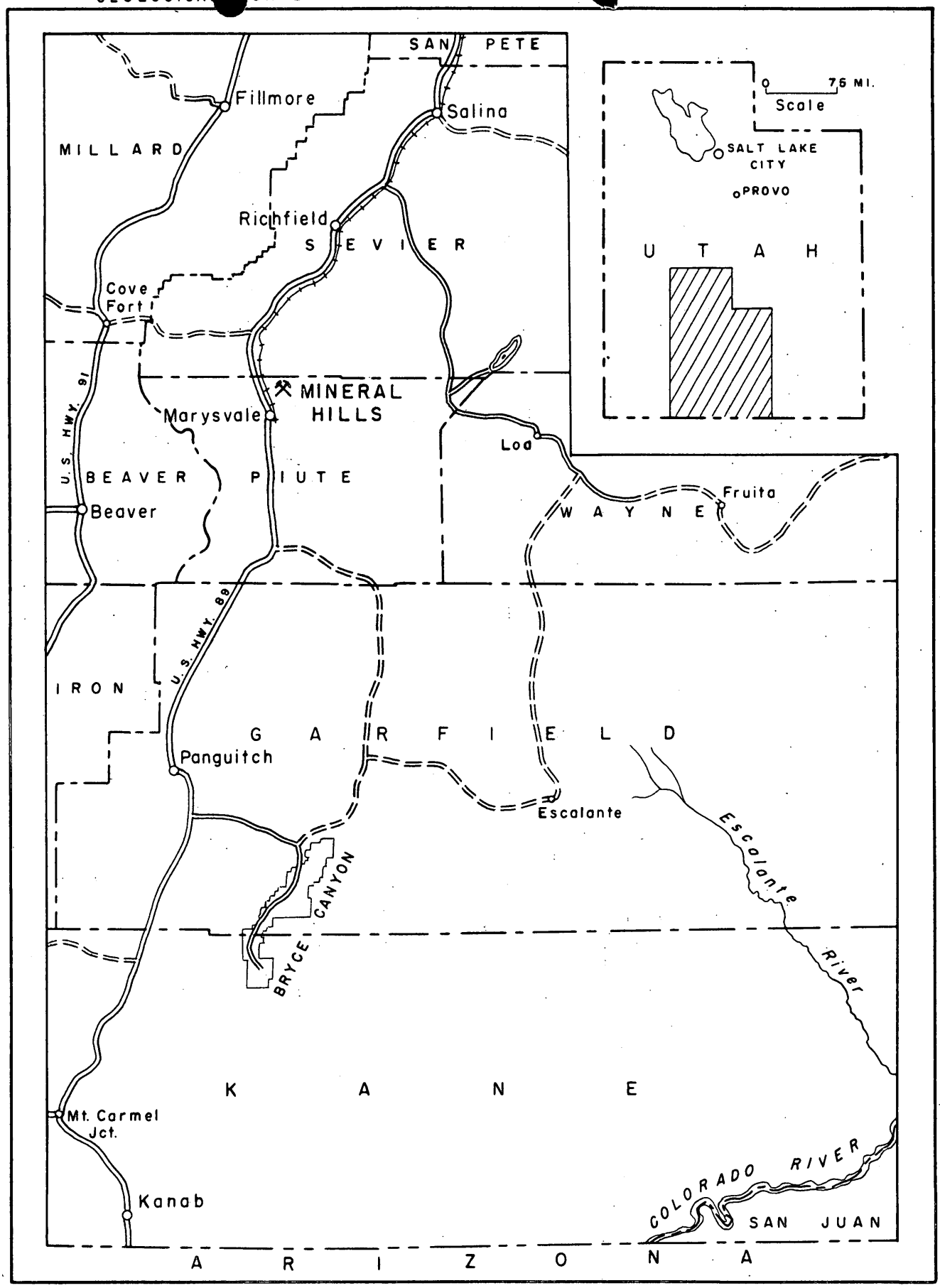

FIG. 1 INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

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

224, New Customhouse
Denver 2, Colorado

October 24, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1874, Ancient River Channels Gold Mining Co., applicant, Mineral Hills Uranium Prospects, Piute County, Utah.

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the exploration loan of $53,500 be denied.

The brochure is enclosed.

for J. H. East, Jr.

A. H. Koschmann

Enclosure

DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
OCT 29 1951

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Administration

200 New Customhouse
Denver 2, Colorado

October 22, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1874, Mineral Hills Prospect, Piute County, Utah

Enclosed are 10 copies of the geologic report by V. H. Johnson and B. J. Sharp of the U. S. Geological Survey, covering the above docket. It has been recommended that the loan be denied.

No U. S. Bureau of Mines engineering report is to be submitted.

The brochure is enclosed.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Room 307, 320 South Main
Salt Lake City 1, Utah
18 October 1951

Memorandum

To: A. H. Koschmann, Field Team, Region IV

From: Ralph J. Roberts

Subject: Docket DMA 1874, Mineral Hills Prospect, Piute County, Utah.

Enclosed are 10 copies of a geologic report on Docket DMA 1874, Mineral Hills Prospect, Piute County, Utah.

Mr. T. H. Berry of the Ancient River Channels Gold Mining Company has applied for an exploration loan of $53,300 (government participation of $48,150) to explore six mineral claims in the Durkee Mining district, Piute County, Utah, for uranium ore.

No uranium ore was observed in any of the present mine workings. The mineral assemblage that usually accompanies uranium in the district was not found in the workings on the Mineral Hill claims. The present available evidence is insufficient to warrant government participation in further exploration of this property. It is recommended that the application for an exploration loan be denied.

I concur with the recommendations of the examining geologists.

This examination was made by the U. S. Geological Survey; no U. S. Bureau of Mines engineering report is to be submitted.

for - Ralph J. Roberts

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

Docket DMA 1874, Mineral Hills Prospect

Piute County, Utah

V. H. Johnson and B. J. Sharp, Geologists
U. S. Geological Survey

October 18, 1951

CONTENTS

	Page
Introduction	1
Location and Accessibility	1
History and Ownership	1
Geology	2
Ore Deposits	2
Ore Reserves	3
Proposed Exploration	3
Summary and Conclusions	3

ILLUSTRATIONS

Figure 1. Index map of Utah.

Docket DMA 1874, Mineral Hills Prospect

Piute County, Utah

INTRODUCTION

Mr. T. H. Berry, President of the Ancient River Channels Gold Mining Co., DMA Docket 1874, has applied to the Defense Minerals Administration for a loan to explore for uranium ore on the Mineral Hill group of claims.

In response to a request from the Field Team, Region IV, dated August 2, 1951, Vard H. Johnson and Byron J. Sharp of the U. S. Geological Survey visited the property on September 5, 1951, to determine if the proposed exploration has merit. Mr. Roger Caywood of the AEC accompanied the examiners. The geological report by F. W. Christiansen, which accompanies the application, is used as a reference in this report.

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The Mineral Hills claims are in secs. 3 and 4, T. 27 S., R. 3 W., Salt Lake Base and Meridian. They are approximately 4 miles northeast of Marysvale, Piute County, Utah, and are accessible by a graded road. The road can be easily maintained except in the most extreme weather.

History and Ownership

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GEOLOGY

The oldest rocks in the district are the Bullion Canyon volcanic series, of Tertiary age composed mostly of latite. These volcanics are intruded by monzonite and granite. Uranium ores occur mostly in fissure veins in the monzonite, but may extend into the granite or latite.

The Mineral Hills claims are near the southeast edge of the exposed intrusive bodies. Rocks at the surface and in the mine workings are dominantly latite. The geologic maps accompanying the application show monzonite in and below an open pit. The rocks are altered and the presence of monzonite was not observed. Most of the alteration is alunitization which is not generally associated with uranium ores in this district.

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ORE RESERVES

The material on the Mineral Hill Group of claims is not of commercial grade. There are no ore reserves.

PROPOSED EXPLORATION

The applicant proposes to diamond drill and extend the present workings but does not have any definite plan of operation. Furthermore, no monzonite, which is the host rock for uranium ore elsewhere in the district, is likely to be found if exploration from the present workings were continued.

SUMMARY AND CONCLUSIONS

T. H. Berry, President, Ancient River Channels Gold Mining Co., has filed an application for an exploratory loan of $53,500.00, with government participation of $48,150.00 to be used to further explore the six Mineral Hills claims in the Durkee mining district, Piute County, Utah. Proposed exploration work would consist of core drilling and extending the present workings to search for uranium.

No uranium ore was observed in any of the present workings. Geiger counter readings showed the material in the open cut to be only slightly above the background count. The mineral assemblage which usually accompanies uranium mineralization in this district was not found in the workings on the Mineral Hills claims.

In the opinion of the examining geologists, the present available evidence is insufficient to warrant government participation in further exploration of this property. It is therefore recommended that the application for an exploration loan be denied.

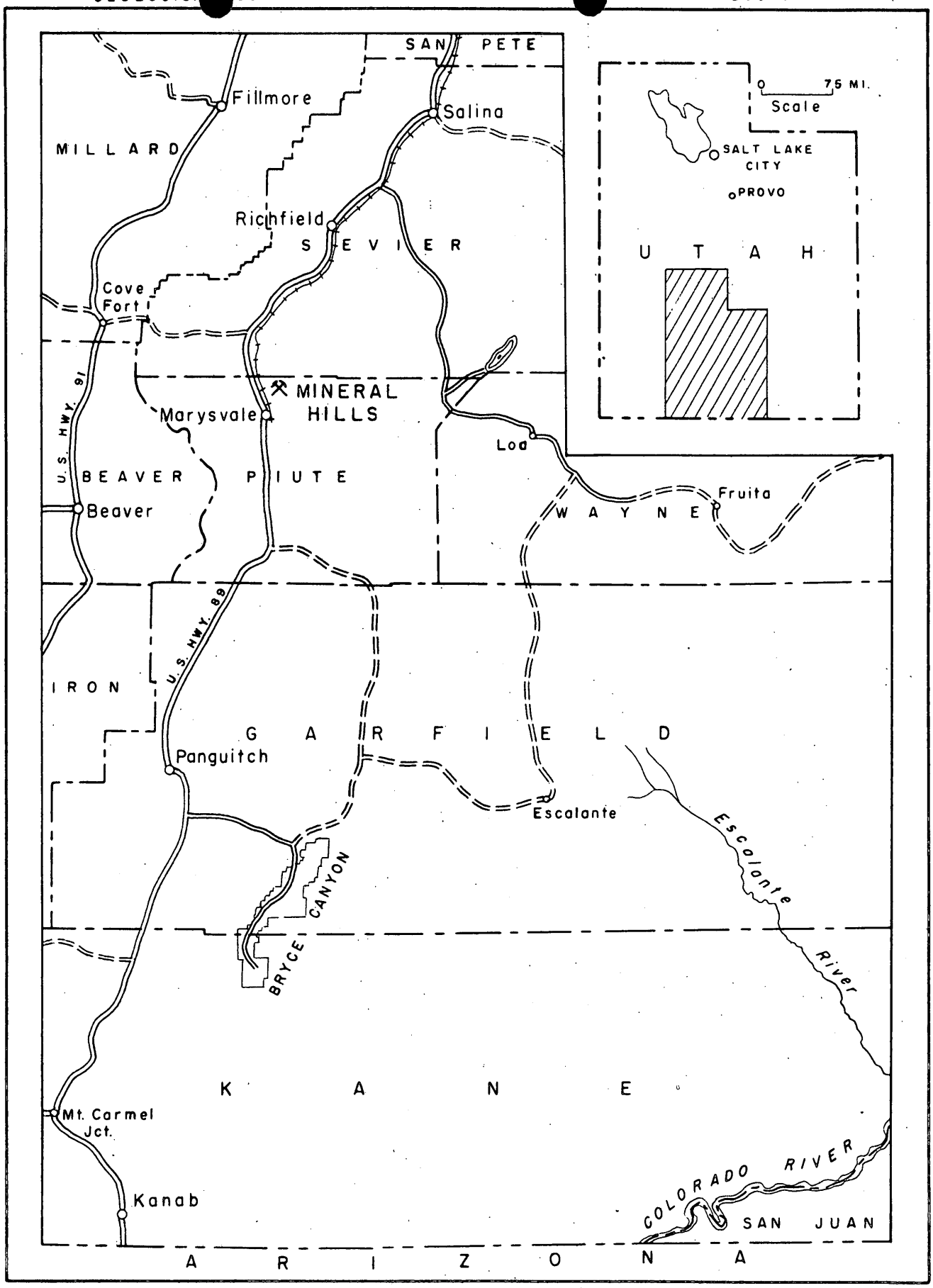

FIG. 1 INDEX MAP OF UTAH

0 5 10 15 20 MILES
Scale

FILE COPY
SURNAME:

Gordon
Bourret

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

SEP 20 1951

a.e.c.

Mr. Thomas H. Berry
President & Director
Ancient River Channels Gold
Mining Company
Suite 1, Cornet Building
Las Vegas, Nevada

Re: Uranium - DMA 1674

Dear Mr. Berry:

Receipt of your letter of September 11, 1951 is hereby acknowledged.

In reply to your query we wish to advise that your docket is still in the hands of the field team, upon receipt of whose report we shall continue our review of your application.

Yours very truly,

Weston Bourret

Weston Bourret, Chief
Minor and Rare Metals Branch

JF 9/20

EGordon/ch 9-19-51
cc: Adm. Reading File
Lyon
Bourret
Keiser - USGS
Hosted - U
Field Team - IV
DMA docket file

THOMAS H. BERRY
PRESIDENT

330

WILLIAM T. BERRY
SEC'Y & TREASURER

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

~~SUITE 1 200 NORTH VIRGINIA STREET~~
~~RENO, NEVADA~~

GOLDEN CHANNEL MINE
GOLDEN RIVER MINE
NEAR
ANGELS CAMP, CALIFORNIA

BRANCH OFFICE
SUITE 1 CORNET BLD'G
LAS VEGAS, NEVADA

Sept. 11th, 51

United Sta tes Department of the Interior
Defense Minera ls Administration
Washington 25, D. C.

Subject: DMA-1874
Re: Exploration Loan-
Mineral Hills Group

ATTENTION: Mr. Tom Lyon, Director Supply Division

Gentlemen:

Under date of July 1st, 1951, you advised us that before any decision could be reached on our request additional information would be necessary, and that you were forwarding our application to Mr. J. H. East, Jr., at Denver asking him to supply you with the needed information.

Inasmuch as about six weeks have elapsed since your communication and we have had no information whatsoever, we would appreciate it very much if you would advise us what if any action has been taken on our application.

We are,

Yours very truly

Ancient River Channels
Gold Mining Company

By

President

SEP 13 2 47 PM '51
DEFENSE MINERALS
ADMINISTRATION
WASHINGTON, D. C.

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

US

AUG 16 1951

My dear Senator McFarland:

This will acknowledge receipt of your letter of August 13, 1951 regarding the application of the Ancient River Channels Gold Mining Company for a uranium exploration loan made to the Defense Minerals Administration (DMA — 1874).

The Bureau of Mines and Geological Survey field staffs have a very large volume of this work compared with their normal operations. Because of the lack of manpower, it has taken us longer to make field investigations than we would like. We will do everything possible to expedite this investigation and keep you informed of our progress.

Sincerely yours,

Acting Secretary of the Interior

Hon. Pat McCarran
United States Senate
Washington 25, D. C.

HWShoeshan:hln:RPS:akl
8/16/51

cc: Secretary's file
Secretary's reading file
Mr. Searles
DMA

KENNETH MC KELLAR, TENN., CHAIRMAN
CARL HAYDEN, ARIZ.
ELMER THOMAS, OKLA.
RICHARD B. RUSSELL, GA.
PAT MC CARRAN, NEV.
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DENNIS CHAVEZ, N. MEX.
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MILTON R. YOUNG, N. DAK.
WILLIAM F. KNOWLAND, CALIF.

EVERARD H. SMITH, CLERK
CECIL H. TOLBERT, ASST. CLERK

United States Senate

COMMITTEE ON APPROPRIATIONS

August 13, 1951

RECEIVED
AUG 14 1951
OFFICE OF
SECRETARY

INTERIOR DEPT.
SECRETARY'S
MAIL CENTER
AUG 14 1951
RECEIVED

AUG 14 1951
U-814.3

Honorable Oscar Chapman
Secretary of the Interior
Department of the Interior
Washington 25, D. C.

My dear Mr. Secretary:

I am writing in behalf of the Ancient River Channels Gold Mining Company, a Nevada Corporation, which has made application for aid for an exploration loan pursuant to Mineral Order 5, under the Defense Production Act of 1950.

This company filed its application as of July 16, 1951, and was notified that the application was assigned Docket No. DMA-1874 and referred to Mr. Weston Bourret, Chief of the Rare Metals Branch on July 24th. The mining project contemplated by this company refers to the production of uranium ore.

It is my understanding that this case was sent to a field team on July 31st, and I am just wondering what, if any, action has been taken to date. It would be greatly appreciated if you would have this case expedited as much as possible, considering the vital need for this particular ore, and advise me as to the progress being made.

Thank you for your courtesy and cooperation, and I extend my best wishes to you.

Sincerely,

Pat McCarran

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
AUG 8 1951
BUREAU OF MINES
DENVER, COLORADO

AUG 2 1951

Mr. J. H. East, Jr., Exec. Officer
DMA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1874

Commodity Uranium

Applicant Mr. T. H. Berry

Please expedite the consideration of this application with particular reference to the points noted in the attached "Review."

Very truly yours,

Tom Lyon

Tom Lyon, Chairman
Coordinating Committee

For Bureau of Mines

For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1874

Commodity Uranium

Total Amount $53,500.00

Govt. Participation $48,150.00

1. Name and Address of Applicant Ancient River Channels Gold Mining Company Suite 1, Cornet Building, Las Vegas, Nevada

2. Location of Property Sec. 4, Twp. 27., R. 3 W., S. L. B. M., Marysvale, Piute County, Utah

3. Mineral or metal Uranium Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor

c) None

d) Don't know—needs field examination Report by field team is required. See Item 17

e) Is there an alternative and favorable project? (If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes. (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

7. Are subordination agreements necessary? yes

a) MF-201? Doesn't seem so

b) MF-202 yes

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* yes

Is a field check needed on any of these points? no

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Don't know

Is a field check needed on this point? yes

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? no

If not, are there sufficient data given so that you can describe the project? no If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? no

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? yes

If not, what part of it is?

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Yes

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? yes If so, attach a draft. see #23, MP-103

Diamond drilling cost per foot is very high.

(10-e) Are the cost estimates reasonable? Too much overhead & Officials salaries

f) Should more information be requested from applicant? yes

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? no

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed? no

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? no

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed? no

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? yes

b) Is the schedule adequate for the work proposed? seems so

c) Is the schedule excessive for the work proposed? why so much overhead?

d) Are the proposed wages and salaries reasonable? see 10-e

e) Is a field check needed? ?

14. Exhibit E (question 23-c)*

a) Is it applicable? yes

b) Sufficient data? no

c) Reasonable? yes

d) Field check needed? ?

15. In your judgment, can the proposed work be done in the proposed time? yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? It is recommended that this application be reviewed by the field team with Mr. C. C. Towle, Chief, New York Division of Raw Materials, Atomic Energy Commission, Denver Exploration Branch, Denver, Colorado.

Reviewed by: E R Sanden

H H Fisher, U.S.G.S.

J O Hosted, AEC

Date July 30, 1951

97692

FILE COPY
SURNAME:

Bourret
Ford
Merrill
Rm

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

July 31, 1951

A.E.C.

Mr. Thomas H. Berry
President & Director
Ancient River Channels Gold
Mining Company
Suite 1, Cornet Building
Las Vegas, Nevada

AUG 6 1951

Dear Mr. Berry:

Your application, Docket DMA-1874 for exploration project in the amount of $53,500.00 has been received by the Minor and Rare Metals Branch of the Supply Division.

Before a decision can be reached on your request we find it is necessary to obtain additional information on your property. Your application therefore is being referred to the office of the Executive Officer or DMA field team IV, Mr. J. H. East, Jr., 224 New Customhouse Building, Denver 2, Colorado, with the request that the needed information be supplied to us.

Yours very truly,

SIGNED By 8/6
Tom Lyon, Director
Supply Division

WBourret/mh
cc: Adm. Read. File
Reports and Records
Lyon
Keiser-Hosted, USGS
Field Team IV
Bourret
Files

FILE COPY
SURNAME:

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

July 25, 1951

Mr. Thomas H. Berry
President & Director
Ancient River Channels Gold
Mining Company
Suite 1, Cornet Building
Las Vegas, Nevada

Subject: DMA-1874
Re: Exploration Loan -
Mineral Hills Group

My dear Mr. Berry:

Receipt is acknowledged of your application and attachments of July 16, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1874 and referred to Mr. Weston G. Bourret, Chief, Minor and Rare Metals Branch on July 24, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1874.

Sincerely yours,

LANDON F. STROBEL
Mak 7/25

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
Bourret
Lyon

THOMAS H. BERRY
PRESIDENT

WILLIAM T. BERRY
SEC'Y & TREASURER

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

[redacted]

[redacted]

BRANCH OFFICE
SUITE I. CORNET BLD'G
LAS VEGAS, NEVADA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 23 1951
LANDON F. STROBEL
Executive Secretary

July 16th, 1951

DMA
1874

United States
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

ATTENTION:

Mr. Weston Bourret, Chief
Minor and Rare Metals

Dear Mr. Bourret:

We transmit herewith 4 copies of form MF-103, "APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950" duly executed and including geological report together with maps, assays and all other required supporting data.

It is our hope that you will find our application in perfect order; that you will act upon the same at your earliest possible convenience and grant our request without un-necessary delay.

Please believe us to be,

Yours very truly

Ancient River Channels
Gold Mining Company

By [signature]
President

FILE COPY
SURNAME:

Bourret.

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

June 19, 1951

Mr. Thomas H. Berry, President
Ancient River Channels Gold Mining Company
830 West 6th Street
Los Angeles 17, California

1874

Dear Mr. Berry:

Your letter of June 13, in regard to Mineral Hills Uranium Prospect near Marysvale, Utah, has been referred to this office for appropriate reply.

I am enclosing herewith copy of Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects". I am also enclosing 5 copies of form MF-103, which should be completed by you in quadruplicate, retaining one copy for your files. Please note that complete answers to the questions outlined in MF-103 is required, including maps and supporting data in order that your application may be given every consideration. The Atomic Energy Commission office in Marysvale, Utah, is familiar with the DMA program and can provide you with additional forms and assistance if so required.

The DMA Executive Officer in California, Mr. H. C. Miller, 1415 Appraisers Building, San Francisco, will I am sure be pleased to assist you if you are in doubt regarding the type of report you should submit.

Yours very truly,

Weston Bourret
M.H.

Weston Bourret, Chief
Minor and Rare Metals

Enclosure
WBourret/mh
cc: Adm. Read. File
Lyon
Strobel
Field Team III
Bourret
Files

THOMAS H. BERRY
PRESIDENT

WILLIAM T. BERRY
SEC'Y & TREASURER

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

GOLDEN CHANNEL MINE
GOLDEN RIVER MINE
NEAR
ANGELS CAMP, CALIFORNIA

BRANCH OFFICE
SUITE
LAS VEGAS, NEVADA

Bonnet

Air Mail

ans 6-19-51

Dmer 1874

June 13th, 1951

Mr. James Boyd, Administrator of the Defense Minerasls Administration
Department of Interior,
Washington 25, D. C.

Dear Mr. Boyd:

We are contemplating making application for financial assistance for Encouragement of exploration and development of our Mineral Hills Uranium Prospect, located in Section 4, Township 27 South, Range 3 West, Salt Lake Base Meridian; near Marysvale, Utah, as recorded in the Office of the County Recorder of Piute County, Utah.

We have complete Geological Report and upto date detail mapping of all under ground development consisting of several hundred feet of drifts, crosscuts, winnzes and raises; the report and mapping above referred to is made by Dr. F. W. Christiansen, of the University of Utah.

We own our own machinery, tools and equipment which is all good&paid for.

The Atomic Energy Commission has andestablished office at Marysvale, Utah, and is thoroughly acquainted with our property and development.

We will appreciate it very much if you will advise at your early convenience the necessary steps to take to make an application for such financial assistance.

We are,

Yours very truly

Ancient River Channels Gold Mining Company

By

President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 1 51951
LAWRENCE SCHWEL
Executive Secretary

Please address your reply to:
THOMAS H. BERRY
830 West 6th Street
Los Angeles 17, California.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1874

Date received 7-23-51

Participation

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
SUITE 1, CORNET BUILDING,
LAS VEGAS, NEVADA.

Name and address of applicant

Date July 16th, 1951

FILL IN THIS BLOCK

Date of application July 16th, 1951

Estimated cost $53,500.00

Mineral or metal URANIUM

Percentage of Government participation 90%

Location of mine Sec. 4, Twp. 27 S., R. 3 W., S. L. B. M.,
MARYSVALE, PIUTE COUNTY, UTAH.

Date of filing MF-100

DMA Docket Number, if available 1874

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1951

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
(Name of company)

By [signature]
(Signature of authorized official)

JULY 16th, 1951
(Date)

President.
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

THE APPLICANT

1. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation organized and existing under the laws of the State of Nevada, with an authoriz ed capital stock of Five Hundred Thousand & No/100 ($500,000.00) Dollars, divided into 5,000,000 shares of all common, fully paid and non-assessable stock with a par value of Ten ($.10) cents per share.

2. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation

OFFICERS & DIRECTORS

3. Thomas H. Berry, President & Director
830 West 6th, Street,
Los Angeles 17, California

William T. Berry, Vice-President, Secretary, Treasurer and Director
5016 Novgorod Street,
Los Angeles 32, California

Edgar G. Mason, Director
740½ Mountain View Avenue
Monrovia, California

FIVE LARGEST STOCKHOLDERS

Thomas H. Berry 830 West 6th Street, Los Angeles 17, California	53,000 Shares
William T. Berry 5016 Novgorod Street, Los Angeles 32, California	103,625 "
John M. Berry 586 Eaton Drive, Pasadena 8, California	104,125 "
Harry E. Baker 729 South Bonnie Brae Avenue, Los Angeles, California	60,000 "
Edgar G. Mason, 740½ Mountain View Avenue, Monrovia, California	50,000 "

4. The management of the project is vested in Thomas H. Berry, who has had wide experience in mining and other general business enterprises.

SERVICE LINE FORM 606 L.W.

5. LESSEE, Ancient River Channels Gold Mining Company

6. OWNER, Mineral Hills Uranium Co.,
1012 Boston Building,
Salt Lake City 1, Utah.

See EXHIBIT "A" for owners statement.

7. Copy of Lease together with Assignment and Owner's Consent to said assignment herewith attached.

8. Statement of Assets & Liabilities, and Profit & Loss Statement as of June 30th, 1951, herewith attached.

9. Applicant is prepared to further invest Five Thousand ($5,000.00) Dollars, which is considered to be more than sufficient to pay our part of the cost of the project, as detailed in question 23, of this application form, in accordance with the regulations of Government participation (Section 9 of Mineral Orfer 5.)

SERVICE LINE FORM 606 L.W.

THE PROPERTY

10. (a) The only property to be involved in this exploration project is the Mineral Hills Group of six mining claims, as per property map herewith attached.

(b) The property consists of six unpatented mining claims, located in Section 4, Township 27, South., Range 3, West., Salt Lake Base Meridian., in the Durkee Mining District, Piute County, Utah.

11. The property is known as the Mineral Hills Mine, but, is sometimes referred to as the Old Krotski Mine, or the Iron Mine.

12. The property is located about two miles northeast of Marysvale, Utah., and is served by good, well kept country roads.

Marysvale is the terminus of the Denver & Rio Grand Railroad; and in addition thereto is served by the "Trailways Bus System" of the A. T. & S. F., operating over United States (paved) Highway No. 89, and is about 175 miles south of Salt Lake City.

13. An unlimited supply of water is available at all times from the Savier River, about one mile distant; very little water is required however, other than for drilling purposes.

The Utah Power Co., serves the district, and power is available at reasonable rates, if and when required. Present operations are conducted through the use of gasoline powered equipment.

14. The mine is presently equipped with 1-105' Ingersol-Rand portable air compressor, 1-J 49 Ingersol-Rand Jackhammer, complete with air and water hose, column, arm, cradle and all attachments., about 1,500' 12# mine rail, 500' 2" iron water pipe, 1-27 Cu. Ft. steel mine car, 1-3/4 ton Army Type truck and all necessary small tools and equipment.

THE REQUIREMENTS AND COST

23. Itemized statement of estimated requirements and cost of the project in which the Government will participate.

(a) Underground work estimated to be about 1,200 feet of drifting, crosscutting, raising and sinking will be contracted to Mr. Chell Dalton, a recognised and highly responsible Independent Mining Contractor, of Marysvale, Utah., on an overall cost basis of mining of $25.00 per lineal foot. 30,000.00

About 200 lineal feet underground and 300 lineal feet surface core drilling at an average estimated cost of about $15,00 per lineal foot 7,500.00

(b) Supervision and management of the project is to be vested in Mr. Thomas H. Berry, President of the corporation and Mr. William T. Berry, Vice-President, Secretary and Treasurer of the corporation at salaries of $300.00 per month each 6,000.00

(c) Estimated cost of necessary repairs to existing facilities, structures and buildings 500.00

(d) No additional facilities, structures or buildings required

(e) No equipment required not now owned by operator

(f) Operator proposes to rent no additional equipment

(g) Operator now owns equipment valued in excess of $2,500.00 for the use of which no rental charge is to be made.

(h) All materials and supplies including items of equipment costing less than $50.00 each is to be furnished and paid for by the contractor

(i) Cost of power, water, utilities and other items not provided for above

1. Cost of power, water and utilities to be furnished and paid for by contractor

2. Cost of other items not provided for above 8,500.00
(See following page for detail)

53,500.00

SERVICE LINE FORM 606 L.W.

15. The ore is to be delivered by truck, to the American Smelting & Refining Co., at their purchasing depot at Marysvale, for the account of the United States Atomic Energy Commiss ion.

16. The history of the property is as follows:

(a) This property was developed and operated as an Iron Mine during the first World War; the product (as rumor has it) was shipped to the smelters at Salt Lake City, and used as flux; operations were suspended at the close of the war and the property lay idle until the recent discovery of Uranium in the district.

(b) There are a number of immediately adjoing properties in the process of exploration and development. The neighboring properties of the Vanadium Corporation of America., the Bullion-Monarch Mine and the Bertelson Mine are all producing; the quantity and quality of the ore is however, unknown to the applicant, but is well known to the Marysvale office of the Atomic Energy Commiss ion.

(c) We have no private reports that may apply to this application other than the reports submitted herewith. The Atomic Energy Commission, at Marysvale does however, have complete information on all of the properties in the district.

17. There is no production, prospecting only.

18. There are no mineral reserves developed.

(a) Prospecting for primary or secondary Uranium ores.

(b) Maps and assay data herewith.

(c) No estimate of tonnage or class of ore can be compiled as of this date.

19. There are no conditions or circumstances regarding the property not brought out in the foregoing.

THE EXPLORATION

20. The exploration is to be conducted for the purpose of developing and producing primary and secondary uranium ores.

21. The proposed work, consisting of drifting, crosscutting, raising, sinking and generally extending the present workings.

Core drilling and otherwise generally prospecting the property.

It is estimated that the maximun time required to complete the proposed work will not exceed two years.

22. The factors leading the applicant to expect the finding of commercial ore bodies is based upon herewith attached Geological Reportand supporting maps and data.

SERVICE LINE FORM 606 L.W.

Detail from page four:

Office Rent,	10 Mos @	$ 50.00	per Mo.		500.00
Office Supplies	"	25.00	"		250.00
Telephone & Telegraph	"	25.00	"		250.00
Miscellaneous General Exp.	"	100.00	"		1,000.00
Traveling Expenses	"	150.00	"		1,500.00
Professional Services	"	500.00	"		5,000.00
Legal Expenses	"	50.00		$ 5000.00	
Accounting	"	50.00		500.00	
Engineering	"	400.00		4,000.00	
TOTAL OF ITEM (i) 2.					8,500.00

The estimated time required to complete the project is about ten months after the project is approved.

The progress expected to be accomplished is a minimum of ten per cent of the total program as outlined above, at an average cost of about $5,350.00 per month.

SERVICE LINE FORM 606 L.W.

S T A T E M E N T

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

As of
June 30, 1951

A S S E T S & L I A B I L I T I E S

Cash,		150.00		
Las Vegas Office	100.00			
Marysvale Office	50.00			
Bank,		254.52		
First National Bank of Nevada, Las Vegas, Nevada.				
Accounts Receivable,		150.00		
Walter R. Collins				
Mining Property		45,000.00		
Mineral Hills Lease	42,000.00			
Entry Fee (Bonus)	3,000.00			
Machinery, Tools & Equipment		1,820.13		
Compressor, Jackhammers, Cars, Rails & Miscellaneous Equipment.				
Truck,		750.00		
3/4 Ton "Army Type"				
Development,		4,254.00		
Timbering & Reconditioning	250.00			
Roads	104.00			
260' Tunnel	3,900.00			
Discounts Allowed,		1,546.25		
Stock Sales				
Accounts Payable,				3,455.00
Chell Dalton, Contractor			1,700.00	
Mineral Hills Uranium Co., Advance Royalty			1,750.00	
Leon A. Nichols			5.00	
Capital Stock,				55,972.55
Authorized 5,000,000m Shares @ $.10 per share			500,000.00	
Un-Issued 4,440,274.5			-444,027.45	
Profit & Loss				5,502.65
As of December 31st, 1950			1,672.82	
January 1st, 1951 to date			3,829.83	
		53,924.90		53,924.90

SERVICE LINE FORM 606 L.W.

S T A T E M E N T

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
As of
June 30, 1951

P R O F I T & L O S S

Operating Loss as of December 31st, 1950			1,672.82
Operating Loss period January 1st, 1951, to June 30th, 1951			3,829.83
Detail,			
Office Rent		378.00	
Professional Services		589.70	
Legal	293.16		
Engineering	295.04		
Miscellaneous	1.50		
Office Supplies		33.17	
Postage		10.00	
Telephone & Telegraph		106.82	
Traveling Expense		886.56	
Taxes		36.80	
Advertising		22.77	
Miscellaneous General Administrative Expense		1,766.01	
Thomas H. Berry	582.83		
William T. Berry	839.44		
Miscellaneous	343.74		
TOTAL OPERATING LOSS TO DATE, June 30th, 1951			5,502.65

SERVICE LINE FORM 606 L.W.

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION, COLORADO

ADDRESS REPLY TO:

MANAGER,
COLORADO RAW MATERIALS OPERATIONS
U. S. ATOMIC ENERGY COMMISSION
P. O. BOX 270
GRAND JUNCTION, COLORADO

AND REFER TO MI:CAR

December 5, 1950

Mr. Thomas H. Berry
Mr. William T. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTHWEST FACE OF 1ST LEVEL) HOLE)
(UPPER ADIT)

Gentlemen:

Your sample marked "Mineral Hills No. 10" has been assayed for uranium. The amount is 0.02% U_3O_8.

Very truly yours,

Charles A. Rasor

Charles A. Rasor,
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

November 29, 1950

Mr. Thomas H. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTH*
WEST FACE 132' LEVEL)
(Upper Adit)

Dear Mr. Berry:

MINERAL HILLS MINE

This is in reply to your letter of November 15, 1950, concerning a sample submitted for examination.

Microscopic study of the sample shows it is composed of quartz, feldspars, calcite, muscovite mica, and considerable magnetite. A small amount of uranium as an unidentified mineral was also detected in the sample. A radiometric analysis indicated that the uranium content was about 0.14 percent U_3O_8.

Sincerely yours,

C. H. Schack

C. H. Schack, Acting for
S. R. Zimmerley, Chief
Metallurgical Division
Region IV

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 328893 *Date* November 9, 1950

Sample Pulp

Received 11-6-50 *Marked* "Sample 1158-A #8"

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

(THIS SAMPLE TAKEN FROM NORTH-WEST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

REPORT OF DETERMINATIONS

Uranium Oxide (U_3O_8) ---------- 0.08%

Respectfully submitted,

Smith-Emery Co

CHEMISTS AND ENGINEERS

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR, EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 329284-85

Date November 18, 1950

Sample Pulp

Received 11-6-50

Marked (THESE SAMPLES TAKEN FROM NORTH-EAST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

REPORT OF DETERMINATIONS

"Sample #7 (1157-A)"

Uranium Oxide (U_3O_8) ---------- 0.03%

"Sample #9 (1159-A)

Uranium Oxide (U_3O_8) ---------- 0.04%

Respectfully submitted,

Smith-Emery Co.
CHEMISTS AND ENGINEERS
G.L.C.

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GEOLOGICAL REPORT

on

THE HOLDINGS OF

THE MINERAL HILLS URANIUM CO. PROPERTY

near

MARYSVALE, UTAH

F. W. CHRISTIANSEN, Geologist

S. R. MAHONEY, Geologist

INTRODUCTION

The examination of the Mineral Hills Uranium Company property was made at the re quest of the Company and Mr. Thomas H. Berry, President of the Ancient River Channels Gold Mining Company., lessee.

It was undertaken primarily for the purpose of determining the relationship of the property and areas at present being explored by the company, to the general geology of the Antelope Range and operating uranium mines in the western part of the area.

The field study was made on July 7, 8, and 9, 1950, and on three short trips totaling 7 days in the summer of 1951.

LOCATION

The property consists of the Mineral Hills group, located in Sec. 4, T. 27 S., R. 3 W., S. L. B. M., about three miles north-east of Marys vale, Utah.

PHYSICAL FEATURES

The property is s erved by dirt roads which are passable by truck, except in heavy snow or rain. No timber is available on the property, but an abundant supply of suitable mine timber can be obtained from nearby hills. Water is not available within the property, but the moderate amounts required for development may be obtained nearby by tank truck.

The topography is generally rolling, and is not sufficiently rugged as to pres ent difficulties for year round operation. The property is located in the Antelope Range, a low range of mountains that connect the high Tushar Mountains on the wes t with the high Sevier Plateau on the eas t.

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GEOLOGY

The rocks in the area covered by the claims are chiefly flows of dacite, latite, and rhyolite interbedded with tuff and tuff-breccia and some obsidian.

This s equence of volcanic flows has been intruded by a coarse-grained monzonite stock, which locally is expos ed by erosion in the northwestern and southwestern part of the area (See Fig. 1). The igneous geology has not been worked out in detail, and some evidence indicates the presence of a later, fine-grained monzonite intrusive in parts of the area.

The extrusive rocks are considered early Tertiary (post-Wasatch) in age. The age of the coarse-grained monzonite can be estimated only as post-extrusive, but probably is middle or late Tertiary in age. A younger phase of granite intrusions are present in adjacent areas however none have been discovered on the Mineral Hills claims. There is some evidence that indicates the uranium mineralization may be associated with granite.

Extensive silicification, alunitization, kaolinization, and other types of alteration are characteristic of the contact zone, and of extensive zones away from the intrusive. Highly-altered zones of this type occur in several places within the Mineral Hills claims particularly in and near the glory hole (Fig. 5), and in a generally north-south zone west of the glory hole. It is in this zone west of the glory hole that autunite crystals have reportedly been found and in which the highest radiometric count was obtained. (See Fig. 2) Isorad maps were obtained from the Atomic Energy Commission. A later (late-Tertiary) extrusion of rhyolite and rhyolite tuff-breccia is known to truncate earlier eroded flows in the northwestern part of the Antelope Range, but is not known to be present in the area investigated.

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Extensive alteration is not pre sent in this later flow.

Alteration ovvurs around the margins of the monzonite, and in irregular masses in the extrusives at considerable distances from exposures of the intrusive. Localization of altered masses appears to be controlled by strong northeasterly and northwesterly zones of fracturing.

Alunite deposits of the Antelope Range consists largely of irregular bodies in highly-altered portions of the extrusive rocks. Large tonnages of high-grade alunite were developed by the U. S. Geological Survey and the Bureau of Mines in cooperation with the operators, to supply the Kalunite Corporation plant in Salt Lake City during World War 2. Operations are at present discontinued. Commercial alunite deposits have not been developed within the claims sonsidered in this report.

The first uranium prospect was discovered in 1949 on part of the Seegmiller property, now operated as the Bullion-Monarch open pit mine. Mr. Seegmiller acquired the claims, which had previously been prospected for fluorspar, when he discovered the yellowish mineral autunite (calcium uranium phosphate). A greenish mineral found associated with it was identified as torbernite (hydrous copper uranium phosphate). Present mining operations in the pit are exclusively on autunite and torbernite ore.

The Vanadium Corporation of America (V. C. A. hereinafter) have developed two properties, both underground operations (See Fig. 1). The largest and most promising mine of the two and presently the most promising one is located about 3,000 feet northwest of the Mineral Hills glory hole and is similarly located near the contact of the flows and the monzonite intrusive. The V. C. A. mine was discovered by bulldozer cut. Autunite and torbernite were found in quantity in an east-west fissure zone, striking into the monzonite at about right angles to the contact.

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Development by incline disclosed a well-defined fissure zone with high values in autunite and torbernite at the surface and at depth, pitch-blende. Approximately 100 feet beneath the surface, primary uraninite (pitch-blende) was encountered, which locally assayed very high. At present this mine, the Bullion-Monarch mines and the Bertelson mine are the only ones which have penetrated the pitchblende zone, but it is believed that most of the mines will reach the primary zone of mineralization at depth.

The discovery of the pitch-blende has greatly enhanced the future promise of the district for uranium production.

The Seegmiller and Bertelson mines (See Fig. 1) occur along the contact between the monzonite and the flows. The ore occurs in the monzonite, with rhyolite tuff and tuff-breccia forming the hanging wall. Values are in autunite and torbernite.

Several other prospects, within the monzonite and along the contact, have exposed good showings of autunite and torbernite. The Papsy Hope prospect (See Fig. 1) lies 2,000 feet east of the monzonite contact, and shows autunite and torbernite mineralization in a steeply-dipping, east-west broken and altered zone in dacite-porphyry flow. It is reported that assays of 0.26 percent U_2O_3 have been obtained from channel samples in the incline. (This assay was determined by a calibrated Geiger Counter). Comarable radioactive count and mineralization is present in the adjoining P. L. No. 4 prospect (See Fig. 1).

The most intense radioactivity known on company property is found in the glory hole of the old Krotski iron mine, now known as the Mineral Hills prospect (See Fig. 1). The workings thereon consist of three adits, and a surface open pit glory hole.

Magnetite and hematite iron ore were mined about 35 years ago for use as flux in Salt Lake Valley smelters.

The iron mineralization and uranium mineralization is partly a replacement and partly fissure filling, deposited at high temperatures adjacent to the zone of contact between the coars e monzonite intrusive and the finer grained igneous rocks. The surface contact is located 1,000 feet north of the glory hole. The contact is irregular, at one point essentially horizontal, but steeply-dipping nearby. In the lower adit (See Fig. 3) a finer grained monzonite (?) body is in fault contact with the extrusives. A similar fault contact between the intrusive and extrusive rock is present at the portal at the upper adit (See Fig.4). The fault zone in both levels is dipping steeply to the north and probably represents a zone of high angle reverse faulting.

A quartz-phlogopite mica-feldspar pegmatite dike cuts through the glory hole and impregnates the monzonite in a wide zone exposed on the upper adit. Some radioactivity was detected in the dike. A 2 foot zone of porphyry alongside the dike is intensely radioactive, and has yielded assays of 0.26 percent U_2O_3 (Chemical assay from Smith Laboratory, at Moab, Utah). The exact nature of the uranium mineral has not been determined, but since no secondary uranium minerals have been observed it is believed that the radioactivity is at least partly due to uranium oxides.

Two zones of intense radioactivity are known in the glory hole. The first, described above, is in the east face, and the second occurs in the northwestern face (See Fig. 5).

The dimensions and attitudes of the radioactive zones are not as yet known. Present exposures indicate a somewhat irregular occurrence, controlled by intersecting fracture systems.

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Additional excavation will be necess ary to define the mineralization. The comparatively strong mineraliz ation of this property, and its proximity to the major producing mines of the district, are favorable to the Mineral Hills prospect.

The preliminary geologic study that has been made, both on the surface and underground, has proved inconclusive regarding the probable potentialities of the prospect. It is therefore recommended that a detailed study be made of the Mineral Hills claims and that this study be closely coordinated with a program of surface trenching, diamond drilling and extension of underground workings.

The radiometric high shown on the Isorad Map (See Fig. 2) lies in essentially virgin territory. This area should be systematically examined and trenched so as to reveal the nature of the alteration of bedrock in the covered areas. This would also expose any fracture system that may be present within this area of high count. It is suggested that from 20 to 25 days work with a D 8 or equivalent equipment would be sufficient to trench this area.

Expos ed in the glory hole, (See Fig. 5) are several rather definite mineralized fracture zones. These zones are also present in slightly modified form in the upper level (See Fig. 4). Figures 6, 7 and 8 are projections of the mineralized fissures of the glory hole to the lower level (See Fig. 3). Examinations of these sections reveal that if the mineralized "shoots" are continuous at depth and do not change their attitude they have not been intersected completely by the lower adit and exploration drifts and cross-cuts. Approximately 200 feet of diamond drilling or cross-cutting would be sufficient to prove or disprove the projections. In the event the relatively strong zones of mineralization present in the glory hole and on the upper level are not encountered at dept h

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additional structural and mineralogical work, in addition to a detailed study of petrology, will be necessary. This should be accompanied with and followed by additional diamond drilling and underground work, in accordance with the results of the study as it progresses. Perhaps three to four thousand feet of diamond drilling may be sufficient although this is only a very rough estimate. It may also be found necessary to extend some of the cross-cuts and drifts of the lower level and to connect the shaft shown in Figs. 4 and 6 with the lower level. The amount of work that may be necessary for this type of development cannot be estimated, but provision should be made for perhaps 800 to 1,000 feet of underground work.

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CONCLUSIONS

Secondary autunite mineralization is reported to be present in northwest part of the Mineral Hills claims. Areas remote from the monzonite intrusive have as yet not proved commercial, but the development of uranium in the district is comparatively recent, consequently little is as yet known about occurrences of commercial ore.

The Mineral Hills prospect shows mineralization of probable commercial grade. Size and continuity of the ore is not at present known. Proximity to the monzonite contact and to producing mines of the district suggests favorable conditions for development of ore at depth on the property.

Ore localizations appear to be related to the monzonite intrusive and to copper (?) granite intrusions. Commercial occurences at present developed are localized in the monzonite along the contact, in fissures extending into the intrusive and in acidic dikes. Favorable showings in fissure zones in the altered extrusives at distances from the monzonite indicate that conditions were favorable for deposition of uranium minerals.

Intensive exploration will probably disclose concentrations of ore within the intrusive rocks of the area.

F. W. Christiansen, Geologist

Stanford R. Mahoney, Geologist

536 Atlas Building
Salt Lake City, Utah

July 10th, 1951

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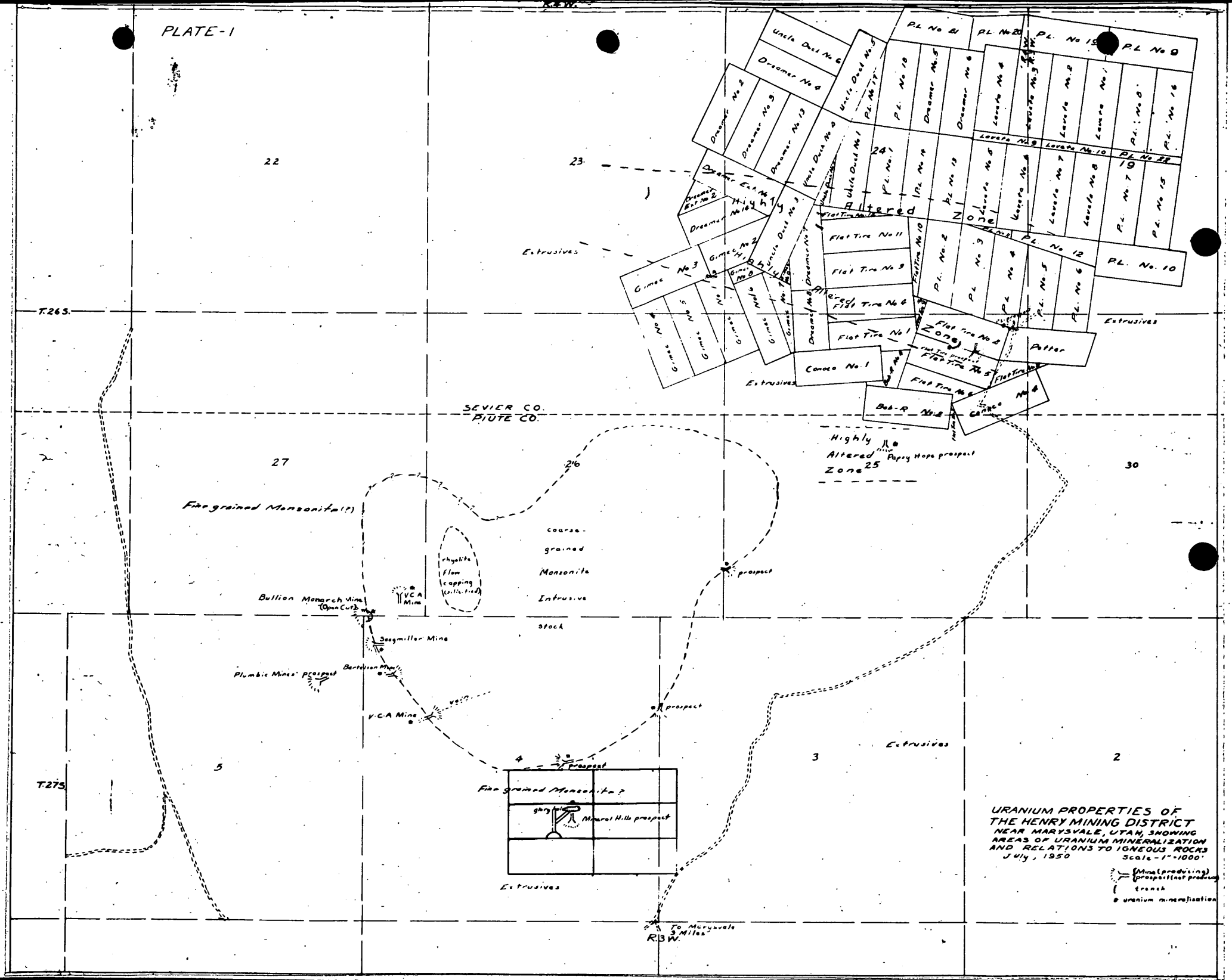
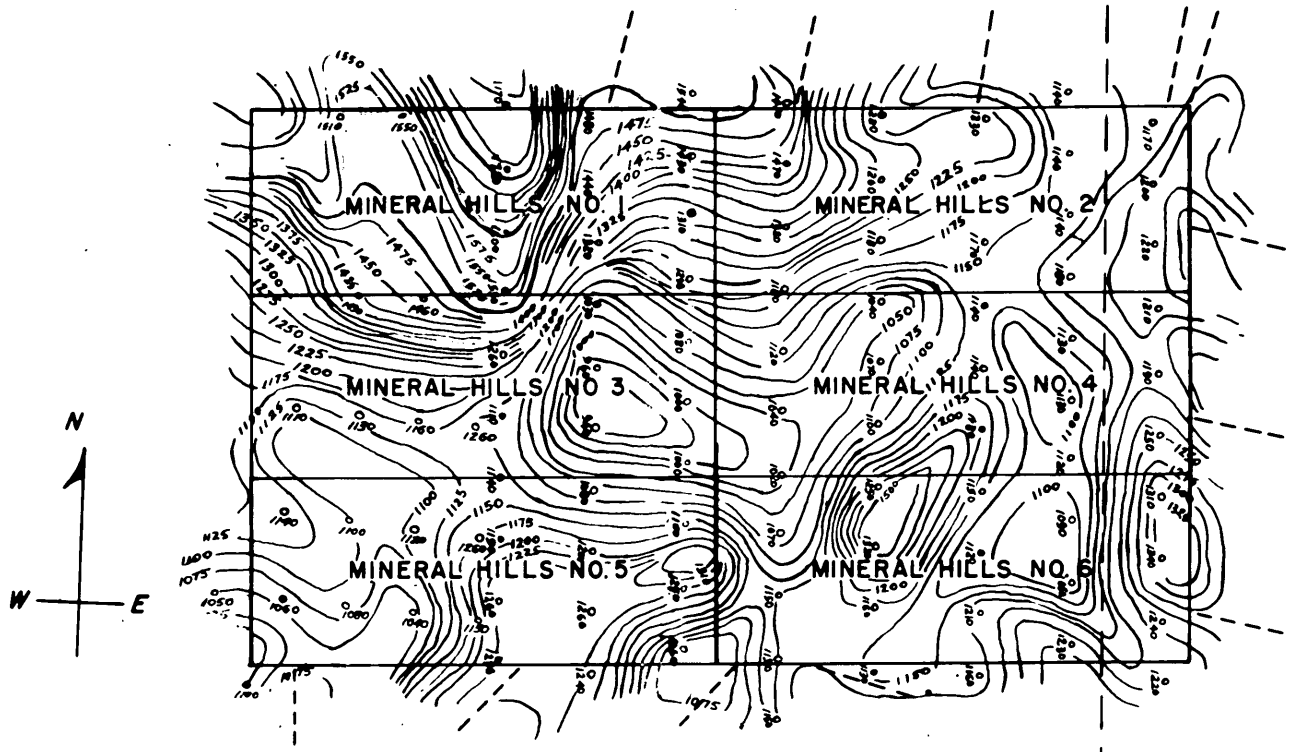
PLATE-1


22
23
24
19
27
26
25
30
5
4
3
2
T.26S.
T.27S.
R.3W.
Extrusives
Altered Zone
Highly Altered Zone
Papsy Hope prospect
Fine grained Monzonite (?)
coarse-grained Monzonite Intrusive stock
rhyolite flow capping (silicified)
Bullion Monarch Mine (Open Cut)
V.C.A. Mine
Seegmiller Mine
Plumbic Mines prospect
Bartelson Mine
vein
prospect
Fine grained Monzonite ?
shaft
Mineral Hills prospect
SEVIER CO.
PIUTE CO.
To Marysvale 3 Miles
Uncle Dud No 6
Dreamer No 9
Dreamer No 2
Dreamer No 5
Dreamer No 13
Dreamer Ext. No 1
Dreamer Ext. No 2
Uncle Dud No 5
Uncle Dud No 1
Uncle Dud No 3
Uncle Dud No 4
Gimec No 3
Gimec No 2
Gimec No 5
Gimec No 8
Flat Tire No 11
Flat Tire No 9
Flat Tire No 4
Flat Tire No 1
Flat Tire No 2
Flat Tire No 5
Flat Tire No 6
Flat Tire No 10
Flat Tire No 8
Flat Tire prospect
Conoco No 1
Bob-R No 2
Potter
P.L. No 21
P.L. No 20
P.L. No 19
P.L. No 9
P.L. No 18
P.L. No 17
P.L. No 16
P.L. No 10
P.L. No 12
P.L. No 11
P.L. No 2
P.L. No 3
P.L. No 4
P.L. No 5
P.L. No 6
P.L. No 7
P.L. No 15
P.L. No 22
Lavata No 1
Lavata No 2
Lavata No 3
Lavata No 4
Lavata No 5
Lavata No 6
Lavata No 7
Lavata No 8
Lavata No 9
Lavata No 10
Lavata No 11
Lavata No 12
Lavata No 13
Lavata No



1700

1500

1400

12

ISORAD MAP OF MINERAL HILLS CLAIM GROUP

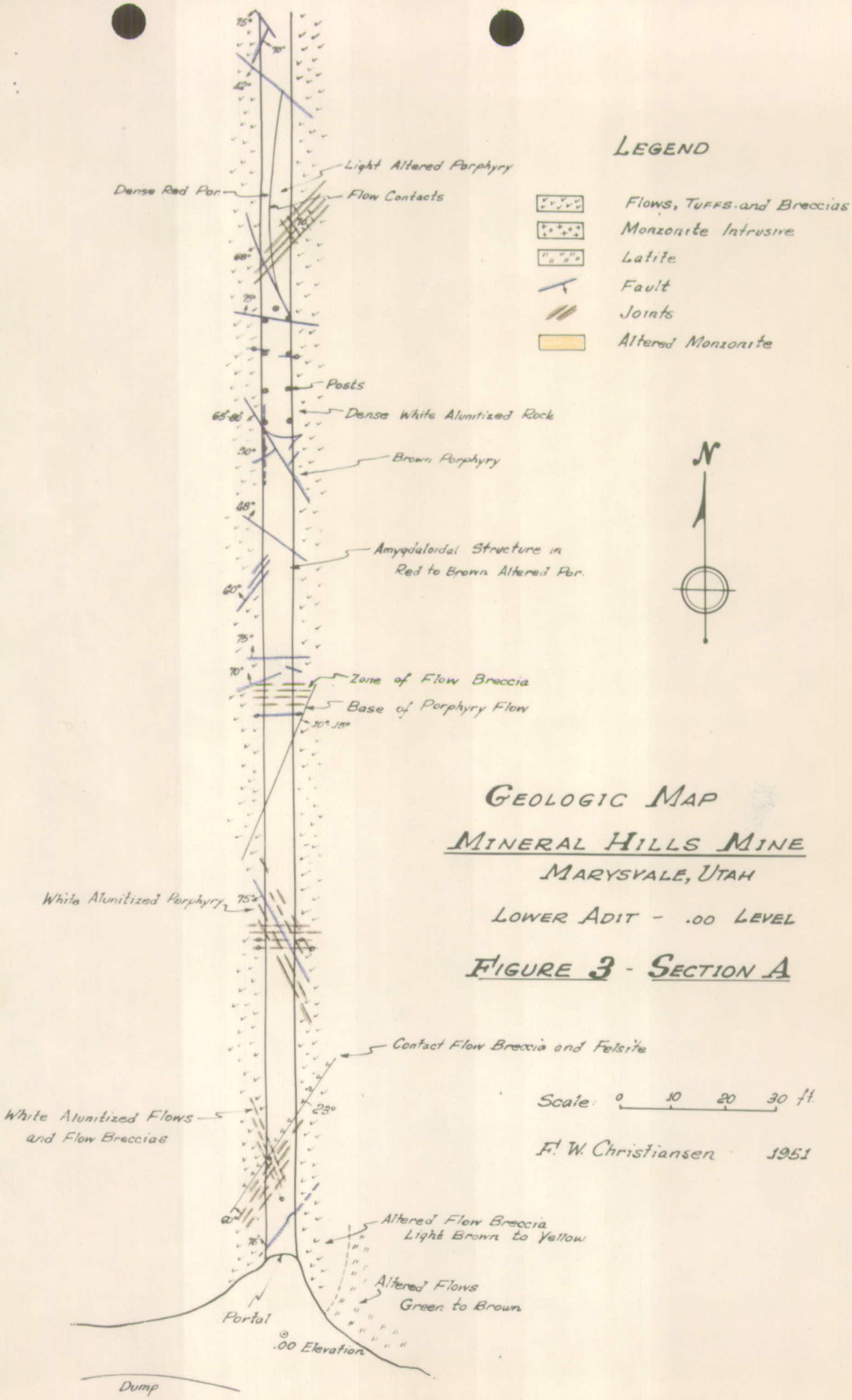
ISORAD CONTOURS IN COUNTS PER SECOND

1 INCH = 400 FEET

APPROXIMATE AREAL BACKGROUND = 600 COUNTS PER SECOND

SECTION 4 / SECTION 9 | SECTION 3 / SECTION 10

T-27-S | R-3-W



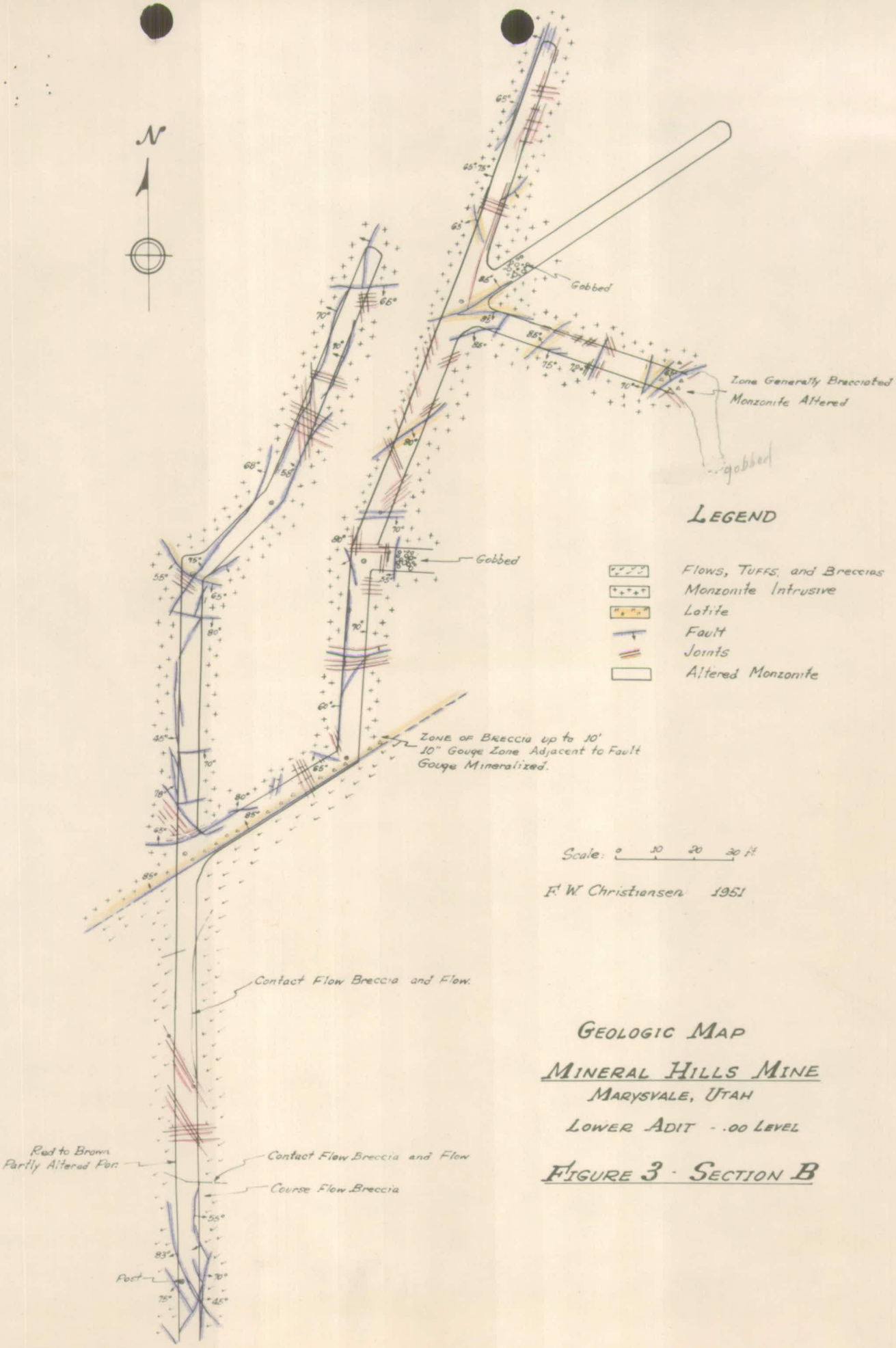
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 - SECTION A



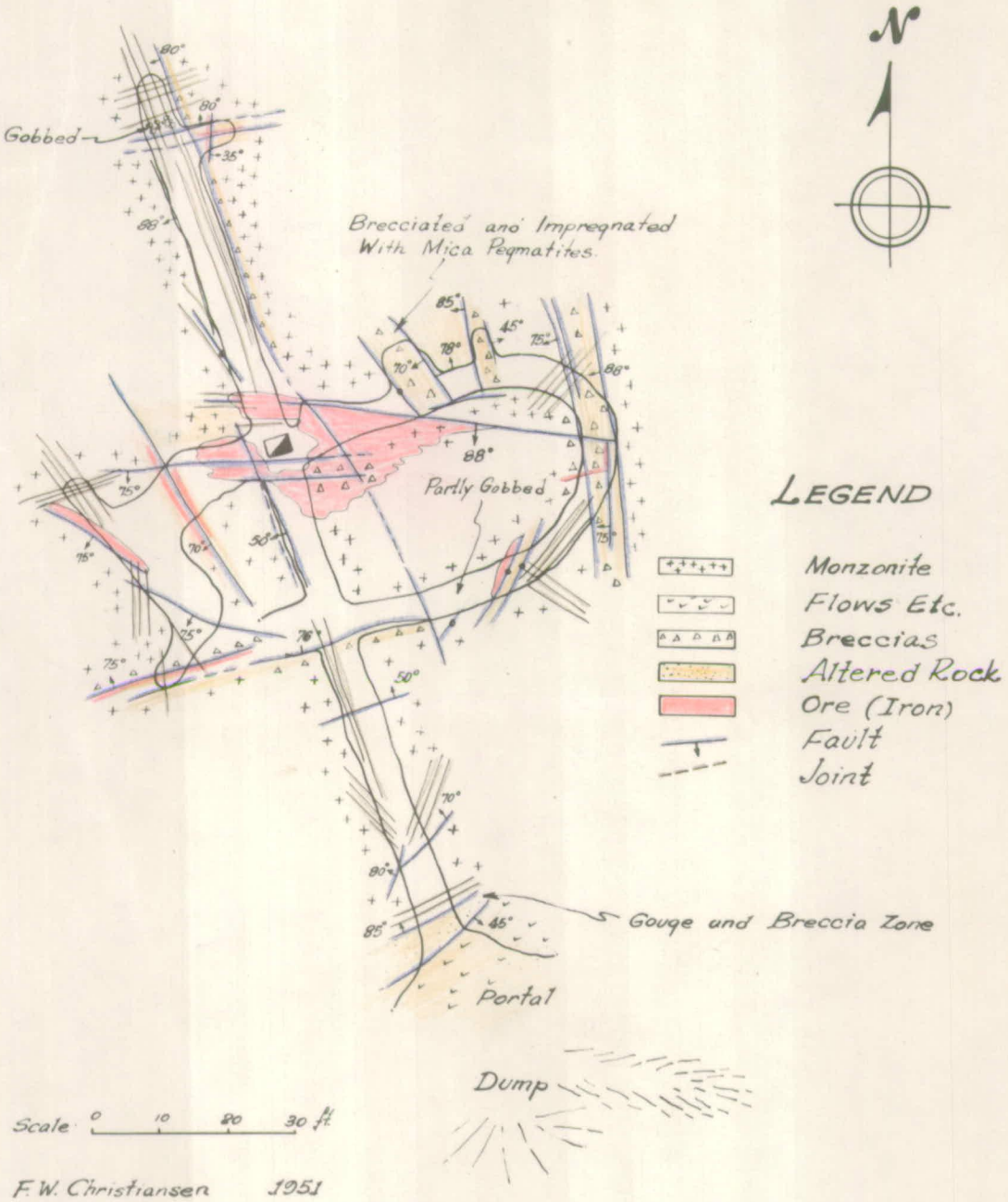
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 - SECTION B



F. W. Christiansen 1951

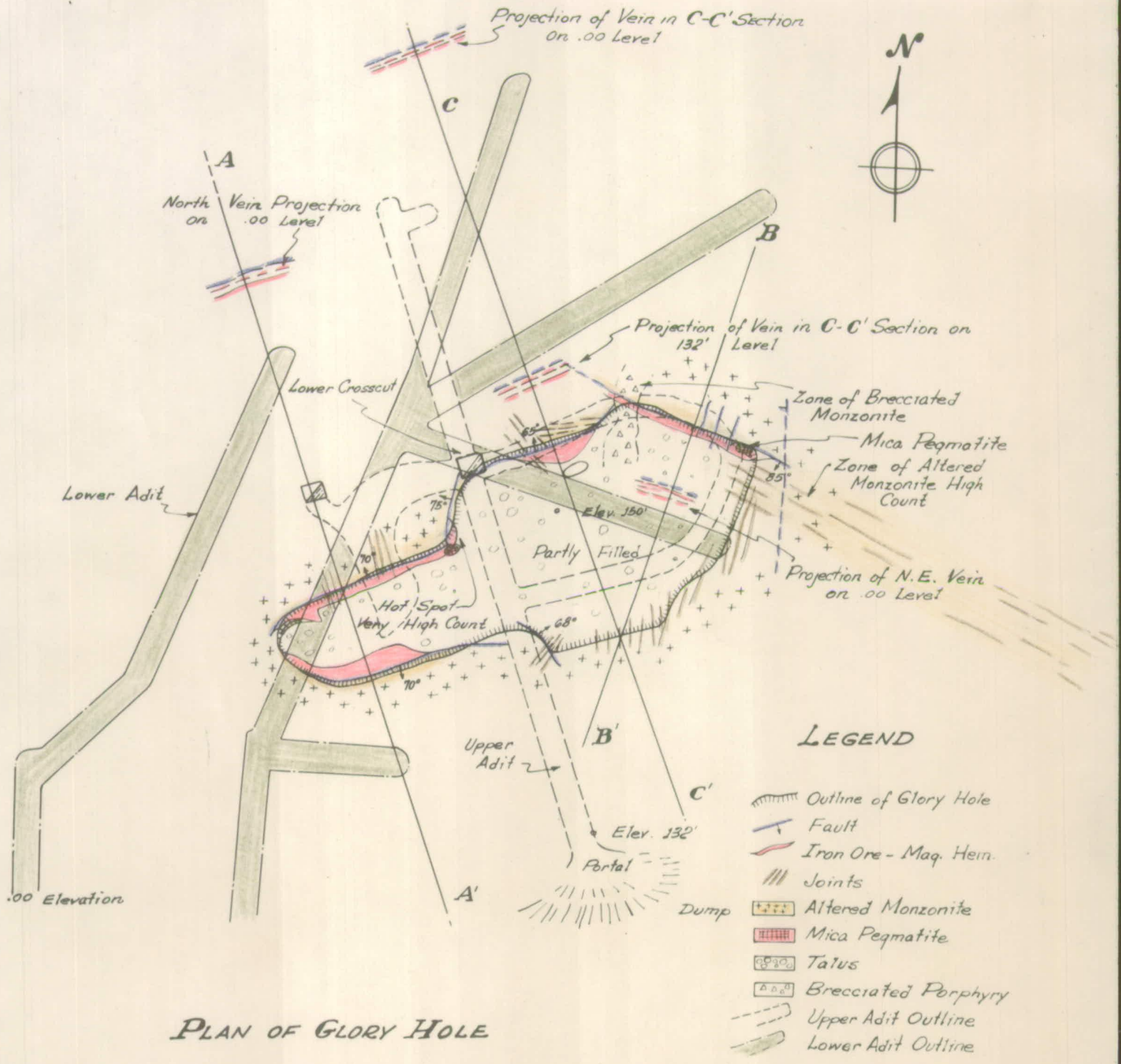
GEOLOGICAL MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

UPPER ADIT - 132' LEVEL

FIGURE 4

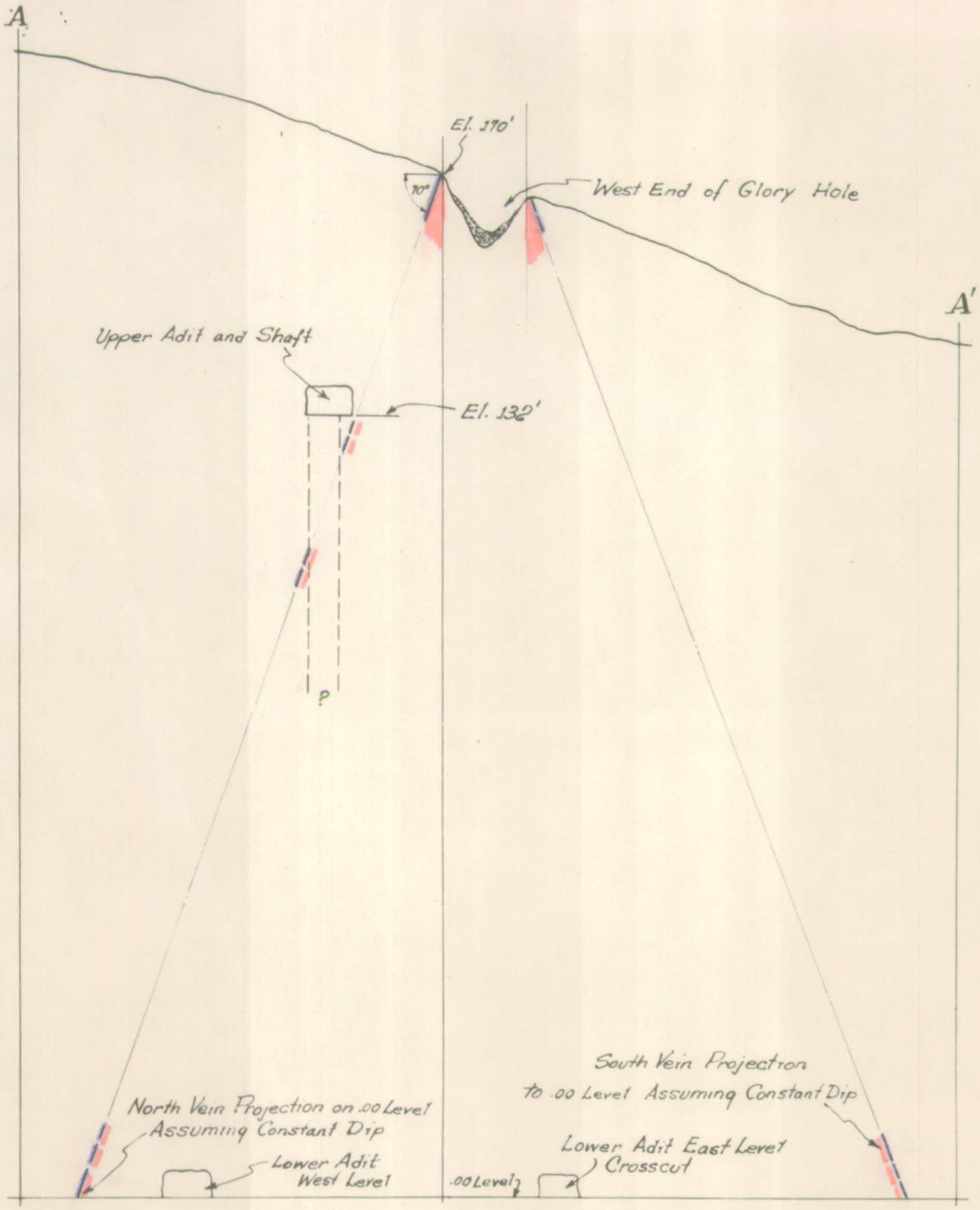


PLAN OF GLORY HOLE

MINERAL HILLS MINE

MARYSVALE, UTAH

FIGURE 5



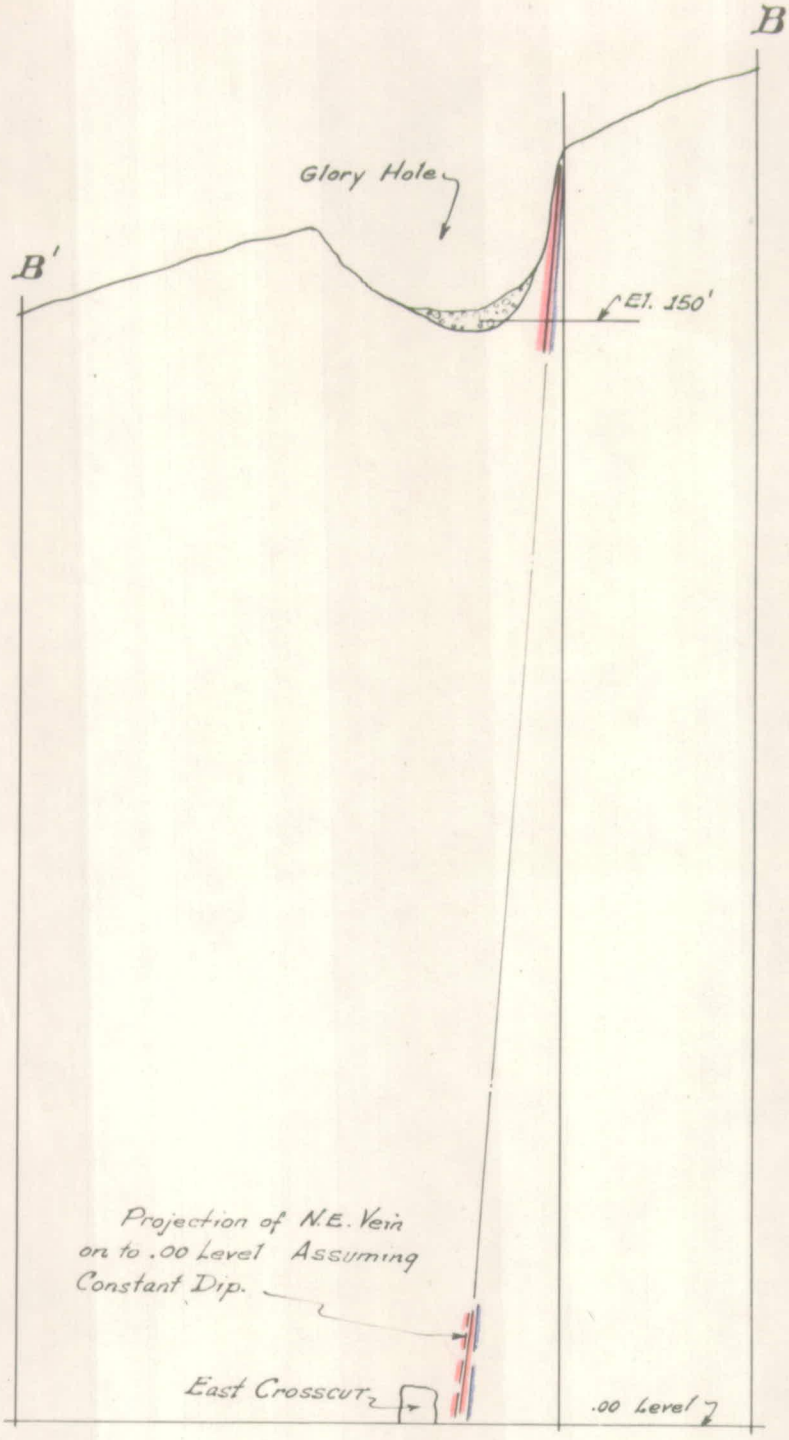
PROJECTION OF FISSURE ZONE ALONG LINE A-A prime

MINERAL HILLS MINE
MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 6



PROJECTION OF FISSURE ZONES ALONG LINE B-B prime

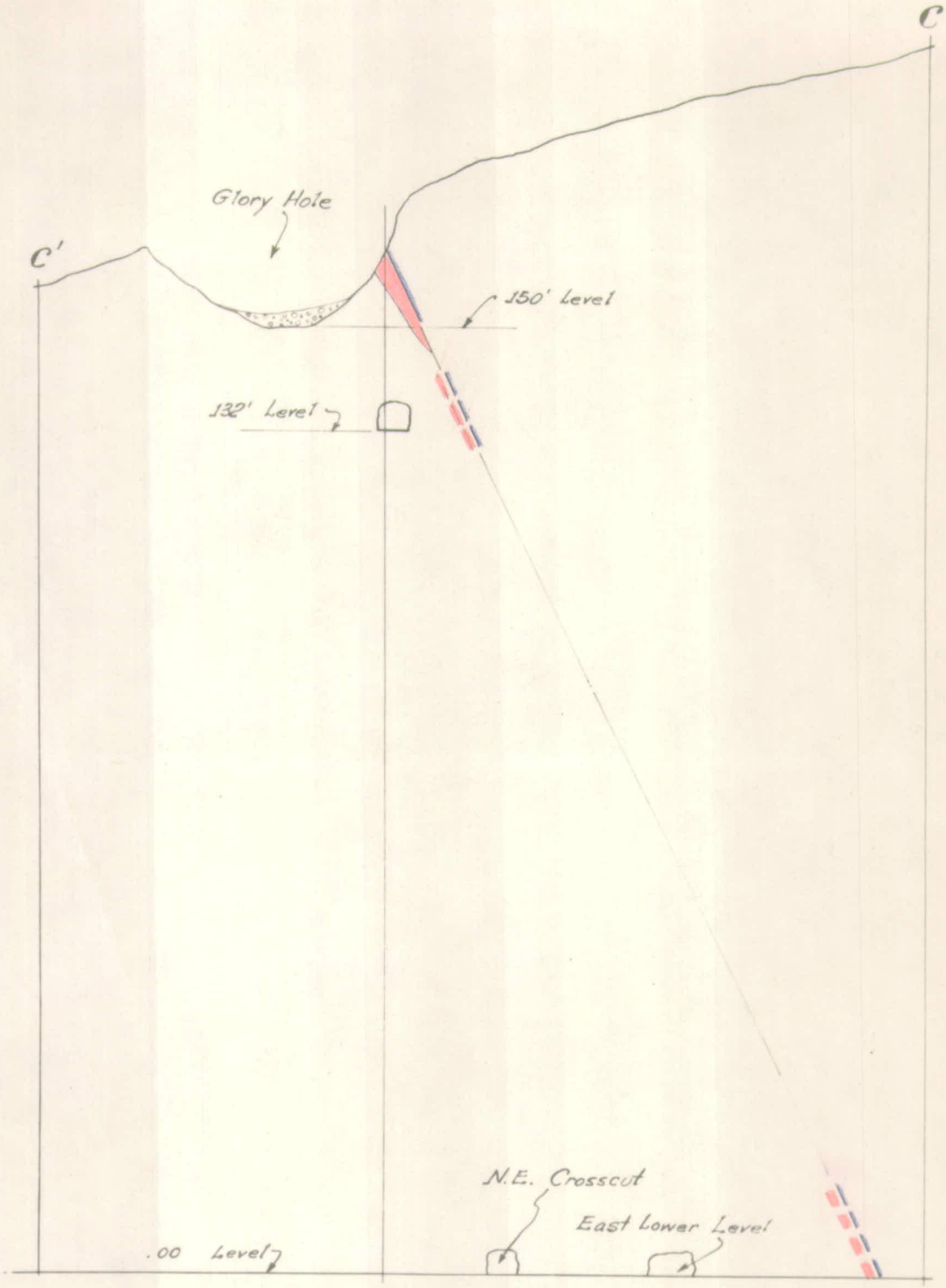
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 7



PROJECTION OF FISSURE ZONES ALONG LINE C-C prime

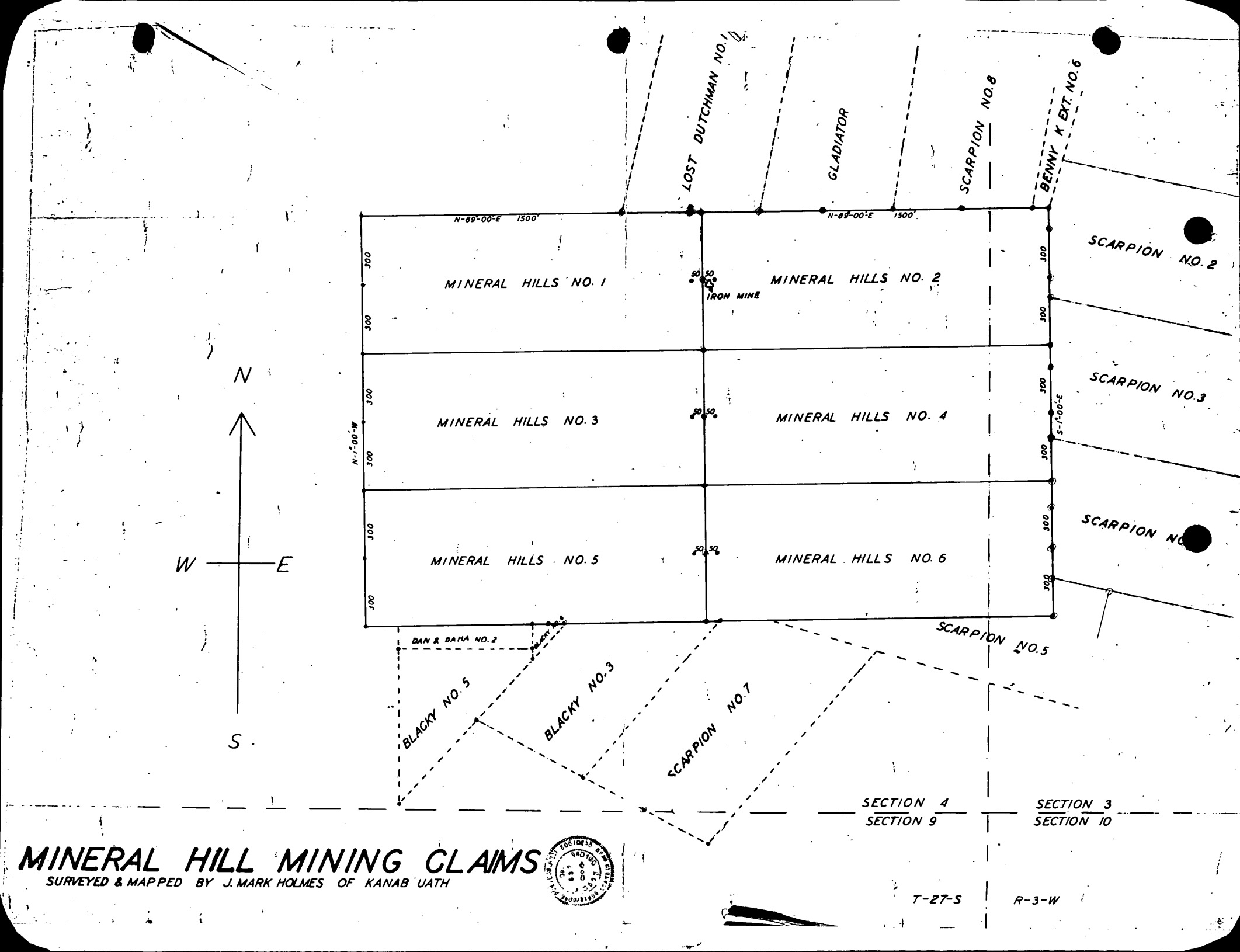
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale 0 10 20 30 ft

F. W. Christiansen 1951

FIGURE 8



MINERAL HILL MINING CLAIMS

SURVEYED & MAPPED BY J. MARK HOLMES OF KANAB UATH

MINERAL HILLS URANIUM CO.
1012 Boston Building

Salt Lake City 1, Utah
July 6, 1951

Ancient River Channels Gold Mining Company.
Suite 1, Cornet Building
Las Vegas, Nevada.

Gentlemen:

At your request, we are writing to advise that our claim to ownership of the Mineral Hills Mining Claims numbered 1 through 6, Durkee Mining District, Piute County, State of Utah, arises from their purchase outright from Ford T. Frost. He represented that he had the right to give us complete ownership.

There is no outstanding balance owing to the said Ford T. Frost for the purchase of said claims nor is there any further obligation owing to him with respect to the same. Since the time of purchase the property has not been encumbered.

We trust this information will be of assistance to you.

Sincerely yours,

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon
President

AJA:sm

EXHIBIT 1.

"SERVICE" LINE FORM 606 L.W.

MINING LEASE

THIS AGREEMENT OF LEASE made and entered into this 15th day of November, 1950, by and between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, hereinafter termed the lessor, and Thomas H. Berry, and William T. Berry, hereinafter termed the lessee;

W I T N E S S E T H :

That the said lessor, for and in consideration of the rents, covenants, agreements, and royalties hereinafter reserved by the said lessor to be paid, kept, and performed, has granted, let, and demised, and by these presents does grant, let, and demise unto the said lessee the following-described mining property situate in the Durkee Mining District, Piute County, State of Utah, known as the Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, No.6, as recorded in the office of the County Recorder of Piute County, State of Utah.
There are expressly excluded from the above-described premises any portion thereof which have been or may be deeded, relinquished, or lost to the lessor in the settlement of conflicts or otherwise, insofar as any present claimants of record are concerned, including Spencer W. Gibbs, and those claiming by or through them.

The rights hereby granted to the above claims are to include all dips, spurs, and minerals therein contained and appertaining, together with a ny and all other property and rights, real, personal, or mixed, in or upon or appertaining to the claims above-mentioned; to have and to hold the said demised premises for the purpose of mining and for no other purpose for the term of ten years from the date hereof to expire at noon on the 15th day of November, 1960, with the privilege to renew the lease for ten years upon the same terms as herein contained, unless sooner forfeited or determined through violation of any agreement, covenant, or condition hereinafter contained, to be kept or performed by the said lessee.

In consideration of said lease, the said lessee does hereby covenant and agree severally and jointly with said lessor as follows:

1. To enter upon siad premises, and to commence work thereon within twelve days from the date of this lease, and to work the same mine-fashion in the manner necessary and appropiate to good and economical mining, so as to take out the greatest amount of ore possible with due regard to the safety, development and preservation of the same as a workable mine; all work, timbering, construction and installation of improvements to be subject to the inspection and approval of the general manager, superintendent or other representative of the lessor.

2. To work and mine the said premises as aforesaid steadily and continuously during the term of this lease, with not less than sixty shifts of work during each and every calendar month of the term of this lease. No excess above the required number of shifts in any one month to apply on any other month, and failure on the part of the said lessee to work said premises with at least said number of shifts each calendar month, or failure to work said premises at all for twenty-one consecutive days, may be considered by the lessor a violation of this lease, at the option of the lessor, upon fifteen day's written demand or notice, within which time a correction of the violation alleged must be made. If correction is not made, it shall work a forfeiture of this lease. The word "shift" is taken and accepted to mean the labor of one man for one day of at least eight hours.

SERVICE LINE FORM 606 L.W.

[illegible]

[illegible]

[illegible]

3. To keep at all times all drifts, tunnels, shafts, winzes and other workings in said premises thoroughly drained and clear of loose rock and rubbish, and in absolutely safe and secure condition, unless prevented by riots, strikes, war, acts of God, or other conditions over which lessee has no control, and to maintain at all times and leave the floors of all drifts, crosscuts and other workings in good, even, unobstructed condition, and to stow no waste underground, noe fill any stopes, without the written consent of the lessor, its manager or any duly authorized agent.

4. To well and sufficiently timber with strong, well fitted and durable timbers, all the workings on the premises hereby leased at all points where proper, in accordance with good mining, and for ventilation, and to promptly repair or replace all timbering which may be rendered insufficient by any cause whatsoever; to keep the timbering of said workings at all times in good, safe and serviceable condition, and to remove none of the same without the written consent of the lessor, its manager or any duly authorized agent.

5. To allow the lessor, its manager or any duly authorized agent or representative at any and all times: (a) to enter and visit all parts of said leased premises and the workings thereon for the purpose of inspection and taking of assay samples; (b) to take samples fromany ores awaiting shipment; (c) to have surveys made of the workings by the lessor's surveyor and assistants whether under or above ground, or both, as often as the lessor, its manager or any duly authorized agent shall so order, and also furnish to lessor copies of blueprints of all surveys or maps made by the lessee; and generall to facilitate in every way such inspection, surveys and sampling, as above provided, as long as it can be done without inconvenience or cost to lessee.

6. There is expressly reserved to the lessor rights of way through the premises hereby leased for the more convenient working or examination of adjacent ground, but such rights-of-way shall be so excercised as not to interfere, more than necessary, with the operations of the lessee therein and there is also expressly reserved to the lessor the right and privilege to do any and all development work upon the premises hereby leased which may be rendered desirable by reason of any litigation or controversy which may arise and which may effect said leased premises or other adjacent property in which the lessor is interested, and to use the workings of the lessee herein in prosecuting such development work, providing that the same shall not interfere more than is necessary with the mining operations of the lessee and that all ore mined in the prosecution of such development work shall belong to the lessee herein (insofar as the same shall be taken from ground hereby leased) subject to the royalty here inafter provided.

7. The lessee agrees to render to the lessor, on or before the 30th day of each month, a written statement showing the number of shifts worked, the wages therefor, amount of salaries, value of supplies and all other expenses of operating this lease incurred during the preceding month, and to afford the lessor, its manager or any duly authorized agent, every facility, at all times, for the inspection and copying of all books, assay journals, assay certificates, accounts, pay-rolls, vouchers, correspondence and papers generally of said lessee insofar only as they may relate to indebtedness or liabilities incurred or claimed for work, services, or materials in respect to said premises, or the development of other workings thereon, or shipment of ore therefrom.

8. To keep said premises and every part thereof at all times free and clear of all mechanic's or miners' liens or other liens, encumberances or liabilities; to settle, pay and discharge on or before the 30th day of each cal-

SERVICE LINE FORM 606 L.W.

4. Damage to all tools, dies, fixtures, furnishings, machinery and other equipment in which reasonable care and diligence of loss or damage shall be exercised, and in absolutely safe and secure condition, unless accompanied by manual, rail, road, water or air, or other conditions that will be in the interest of the Employer; and in particular, all which are left therein or in the vicinity, overnight or during other periods of time, even, unauthorized conditions, and to which the Employer, not full by chance, without the relative consent of the Employer, in any way contributed upon.

5. To all and particular other labor laws, all rights and privileges, in the workings on the premises from time to time of all points therein proper, in reasonable working order and condition, and for availability, and to supply or provide all therefor rights and to transport therefrom, by or other reasonable; to keep the timekeeping of such workings in all times in work and reasonable condition, and to remove some of the same therefrom upon request of the Employer, the reasonable or any other rights of the Employer.

6. To allow the Employer, the manager or any duly authorized agent or representative of any and all times: (a) to enter individually or in said areas wherever and the workings therein for the purpose of inspection or testing of heavy machinery; (b) to take regular measures or conditions therein; (c) to have access made of the workings by the proper authorities and employees under or above ground, or both, in order to the Employer, the manager or any authorized agent shall be correct, and also furnish or have access of all measures or map made by the Employer; and provided to facilitate in every way such inspection, analysis and examination, to have provided, as and as it can be done without inconvenience or cost to Employer.

6. Where is exceedingly necessary to the Employer rights or any loss of the workers hereby leased for the more accurate, certain or reasonable of different ground, but such rights-of-way shall be as recommended as not to hinder work, more than necessary. If the conditions of the Employer and there is also expressly reserved to the Employer the right or any and all development work upon the premises hereby leased which may be necessary or desirable by reason of any difficulties or accidents; which may cause and which may affect said leased premises or other adjacent property in which the Employer is interested, and to use the workings of the Employer hereby leased in such development work, provided that the same shall not interfere with the mining operations of the Lessee and shall be done in the prosecution of such development work shall belong to the Lessee herein; (d) to the mine shall be taken from ground hereby leased, subject to the terms and the Employer provided.

7. The lessee agrees to render to the Lessee, on or before the 10th day of each month, a written statement showing the number of miners employed, the number of hours, annual or monthly, value of tonnage, in all other respects, or otherwise, and to furnish to the Employer, and to furnish the Employer, the manager or any duly authorized agent, any or all other information, the inspection and copying of all books, payroll, time cards, payroll, accounts, pay-rolls, vouchers, accounts and payroll, and all books of the Lessee therein only as they may relate to workmen or individual earnings or other work, records, or as needed to respond to such requirements, or the performance of other reasonable duties, or efficiency or performance.

8. To keep said premises and every part thereof at all times free of all rubbish or debris, or other items, conditions or liabilities; to safely, pay and discharge on or before the 10th day of each

endar month, all indebetedness and liabilities incurred by the said lessee prior to the expiration of the preceding calendar month for work done, services rendered or material furnished in respect of said premises, and to forthwith post, and at all times keep posted in some conspicuous place upon the premises hereby leased a notice, to be provided by lessor, that said premises are leased to the lessee and that the interest of the lessor therein shall not be subject to any lien for services, labor or material furnised upon or used in connection with this lease, or said leased premises, said notice to be on behalf and in the name of the lessor company with the signature of the lessee also attached.

9. To furnish to the lessor, its manager or any duly authorized agent, full, true, and accurate information with regard to the condition of said workings or any part thereof or the quality or character of the mineral therein, and to immediately give the lessor notice of any discovery of any mineral. The lessee agrees to furnish the lessor with a copy of any information, maps, and/or reports made from geological, metallurgical, drilling, sampling, and/or other data relating to said premises secured by and in the possession of the lessee in connection with its prospecting, mining, and development of said premises.

10. To allow no persons not in privity with the parties hereto to take or hold possession of said premises or any part thereof under any claim or pretense whatsoever. To assign no portion or all of this lease to any third party without the lessor's written consent.

11. To assume all responsibility for and save the lessor harmless from any and all accidents to himself or any of his employees, sublessees, licensees, agents, associates, or visitors, upon the property of the lessor, as herein leased and to forthwith post and at all times keep posted at the main working upon the premises hereby leased, a conspicuous notice in the name and on behalf of the lessor, with the name of the lessee also attached in substance that the premises are leased to the lessee and that the lessee will not be liable for damages on account of any such accident. The lessor shall under no circumstances be liable to the lessee or his agents, servants, employees, licensees, sublessees, associates, visitors or any other person on account of any such accident.

12. To ship all ore with reasonable diligence after mining, with the right reserved to the lessor to take and remove all ores not so shipped with reasonable diligence and to apply the proceeds under the directions of this lease; to notify the lessor, its manager or any duly authorized agent, whenever ore is ready for shipment, giving the estimated tonnage and value thereof, also the intended purchaser, but it is expressly understood and agreed that all ore extracted from said leased premises shall be shipped in the name of the lessor and lessee and shall be routed and sent to and treated at the mill, smelter, sampler, or reduction works satisfactory to both parties.

13. It is expressly understood and agreed that the lessor reserves the property and rights of property in and to all ores extracted or to be extracted from said premises and in and to all ores not shipped within ten days after the expiration or other termination of this lease; that all ores which are of too low grade for profitable shipment shall remain on the premises, subject to the sole control and disposition of the lessor, and that any loss or expense resulting from or incident to any shipment of such low grade ore shall be borne and paid by the lessee; that all low grade ore not shipped shall be kept separate from and not mixed with waste, so that it may be available for shipment at any time by the lessor, and said low gradw ore shall be deposited on the premises herein leased as directed by the lessor, its manager or any duly authorized agent.

SERVICE LINE FORM 606 L.W.

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[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

14. The lessee agrees that in the event any fractions of property shall be found to be subject to a location within the exterior boundaries or group of claims covered by this agreement, at or adjoining said group of claims, that the lessee will either locate the same in the name of the lessor or will advise the lessor to locate the same. It is understood and agreed that upon such locations said claims shall be included within and subject to the terms and conditions of this agreement.

15. At the date of the execution of this lease to make immediate payment of the balance promised to be paid under the attached contract and option.

16. To pay and deliver, or cause to be paid and delivered to said lessor, as a rental or royalty upon all ores extracted and shipped or sold from said premises, the following roylaty, the rate of which is to be determined in each case by the gross value of the ore, which shall be the price paid at the smelter, mill, or purchasing depot of the United States Government and/or such other purchaser as may offer a higher price, without any deductions, to-wit:

(a) 10% royalty on all ores computed on the gross price as above-defined on gross production for the first year;

(b) 12½% royalty on the gross price as above-defined on gross production of uranium ore up to and including 1% grade for all production after the first year; and 12½% royalty on all other ores on the gross price as defined above for all production after the first year;

(c) 14% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 1% grade and up to and including 5% grade uranium ore for all production after the first year;

(d) 16% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 5% grade uranium ore for all production after the first year;

17. Any amount due and payable to the lessors as rpyalties on ore extracted, shipped, and sold during any month shall be paid by the lessee to the lessor on or before the 15th day of the next succeeding month during which the lessee shall have received payment therefor by the deposit thereof to the credit of the lessor or assigns in a bank of the lessor's written designation, subject, however, to the right of the lessor to request of the purchaser of the ore shipped that a check be made payable to the lessor hereunder in conformity with the royalty schedule hereinabove set out, making direct payment to the said lessor for his per cent interest in said purchase price computed as above set out.

18. The lessor reserves the right at all times to keep its manager or any duly authorized agent at said leased premises, in whose presence all ore shall be classed, graded, sorted and shipped and said manager or agent shall be permitted to take samples from all ores mined or sorted for examination or assay. In case any dispute shall arise between the lessor and the lessee or between the agents of the parties hereto, in regard to the classing, sorting, grading, or shipping of any of said ores, then in that case all shipments of said ore in

SERVICE LINE FORM 606 L.W.

14. The lessee agrees that in the event any provision of paragraph 13 shall be found to be invalid in a judicial action, either by court order or decree of any other competent jurisdiction, or by this agreement, or by the lessee with the lessor, or the lessee will either lessee has given to the lessor or the lessor obtains certain the lessor to lease the same. If the unexpired and expired term of said clause shall be treated within and subject to the terms and conditions of this agreement.

15. At the time of the execution of this lease, it is impossible ascertain the income proposed to be paid under the statutes contained and cited.

16. In any and deficiency, or cause to be paid any deficiency to said lessor, as a result of or arising upon all rent collected and income, or said property, the lessee is obliged, the rate of which is to be determined by lessor by the gross value of the area, which shall be the value said of the lessee, all, or remaining part of the leased premises covered by such rental payment at any other a higher rate, without any deductions, to-wit:

(a) 10% royalty in all case computed on the gross value as above-defined on gross production for the first year;

(b) 12½% royalty on the gross value as above-defined on gross production or revenue one to and including the fifth year all wonderers after the third year; and 15% royalty on all other oil on the gross value as defined above for all production after the third year;

(c) 15% royalty on the gross value as above-defined on the gross production of revenue one to and including the fifth year all wonderers after the third year;

(d) 15% royalty on the gross value as above-defined on the gross production or revenue one to and including the fifth year all wonderers after the third year;

17. Any amount due and payable to the lessors or royalties on or connected, shipped, and sold during any month shall be paid by the lessee to the lessors on or before the 15th day of the month succeeding month during which the lessee shall have received payment therefor in the amount due the owner of the lessor or assigns thereof. Upon the lessee's certified statement, made at monthly, to the right of the lessors to receive of the lessee or the one and the royalty collectible hereinabove set out, nothing herein agreed to be a lien for the lessor herein to be paid under the lease in said wells or other equipment in place and used.

18. The lessee reserves the right at all times to long its property for any authorized agent at such lessee's premises, by about reasons all are which is closed, granted, noted and shipped and to the lessor or agent which. He certified to take or pipe from all over stated or rental for production or other in case any dispute shall arise between the lessor and the lessee or between the owners of the premises herein, in regard to the payment, contract, or rental, or delivery of any of such case, then in that case all payments of such one in

question shall cease until the controversy is settled by arbitration, as hereinafter provided, to-wit: The lessor and the lessee shall each choose one representative and the two so chosen shall choose a third, and the three so chosen shall pass upon said difficulty, and their decision shall be final; and the cost of arbitration, as above provided, is to be borne equally by the parties hereto.

19. It is expressly covenanted and agreed between the parties hereto that, should any legal proceedings be instituted, such as injunction, apex suits or any other proceedings whatsoever, which would interfere with the possession and enjoyment of the said demised premises, that the lessee shall under no circumstances attempt to hold the lessor liable for damage or otherwise to the lessee therefor on account of such disturbed and interrupted possession and enjoyment. It is nevertheless understood that if neces sary the lessor will undertake to defend title to the above claims.

20. It is furthermore agreed and understood that the lessor reser ves the right of property to all dumps located upon said demised premises.

21. Said lessee does hereby furthermore covenant and agree that in case he fails to commence work on said premises as aforesaid, or to work and mine the same continuously, with diligence and in workmanlike manner, or to keep the same securely timbered, drained, clear and in safe condition, or to allow inspection, sampling or survey thereof, or to furnish true information regarding the same according to the conditions herein, or to render monthly statements as provided herein; or to keep the same free from liens, or to keep notices posted upon the leased premises in manner provided herein, or to make regular settle ment for work, services and materials or assign or sublet any interest in the lease or said premises without written consent of lessor, or shall in these or any other respect fail to keep and fulfil any and all conditions, covenants or agreements herein express ed or implied, then and in that case the term of this lease at the option of the lessor, expire, and it shall be lawful for the lessor, its manager, attorney, or other duly authorized agent, to declare this lease void and of no effect thereafter, and with or without process of law and after fifteen days' written notice without correction of the violation, to enter upon and take possession of said premises, and disposess all persons occupying the same; and in such case, and also at the expiration of this lease by limitation, to-wit, at noon of the last day of the term hereby granted as aforesaid, said lessee agrees to surrender, yield and deliver to the lessor, its successors or assigns, quiet and peacable possession and enjoyment of said premises and all buildings and other improvements thereon and therein, excepting the tracks, rails, pipelines, and machinery belonging to lessee. All dumps, ores or other materials detached or broken down from said premises, but still remaining thereon shall remain the property of the lessor, together with the appurtenances, in good order and condition, with all drifts, shafts, tunnels, winzes and other passages and workings, thoroughly clear of loose rock and rubbish, and drained, and the mine ready for immediate continued working without demand or further notice.

22. Time is the essence of this contract in all particulars.

23. All of the operations of the lessee under this lease shall be so conducted as to fully comply in every respect with the laws of the State of Utah.

24. The lessee shall not mix any ores from said premises with the ores, minerals, products, etc. derived from any other property.

25. The lessor shall pay any federal, state, and county tax assess-

SERVICE LINE FORM 606 L.W.

[illegible] shall cease until the controversy is settled by public vote, as herein provided, so-with: The lessee and the lessee shall upon closure one year according and the two-no shower shall choose a third, and the three to endeavor to [illegible] upon [illegible] distribution, and make conclusion [illegible] by [illegible] and the [illegible] of arbitration, as above provided, is to be borne equally by the [illegible] parties.

[illegible]

[illegible]. If an appropriate government and [illegible] [illegible] among the [illegible] county any legal [illegible] be instituted, such as injunction, mandamus [illegible] or other proceeding whatever, which shall interfere with the [illegible] and [illegible] of the said [illegible] provided, then the lessee shall notify the [illegible] [illegible] to cease the Lessee liable for damage or otherwise to the lessee [illegible] [illegible] of such [illegible] and [illegible] [illegible] and [illegible] [illegible] [illegible]

ments based solely on ownership of mining property and the lessee shall pay all taxes assessed because of any operations thereon, including the Utah mine occupation tax and personal property tax. The lessee shall pay and/or perform all federal, state, and county assessments of whatever nature necessary to maintain the interest of the lessor in said property. The lessee likewise agrees to pay all federal, state, and county assessments upon any and all structures and other improvements, machinery, equipment, tools, supplies, and personal property whatsoever placed upon said premises by the lessee.

26. The lessee, in the operation and development of the said property shall be subject to all applicable Federal enactments and regulations, laws of the State of Utah, and all Federal or State rules and regulations regarding Employee's Liability, Workman's Compensation and Workman's Old Age and Unemployment Insurance, and said lessee covenants and agrees to indemnify and hold harmless the lessor from and against the payment of any and all damages, claims, costs, and expenses due to the existence of such enactments, and of any and all claims, cost, and expenses in connection therewith under any claim of subrogation provided for by said enactments or otherwise; and the lessee shall further indemnify and hold harmless the lessor from and against any and all damages, claims, costs, and expenses arising out of damage to the property or any injury or death of the employees of the lessee, or any other person whomsoever other than the lessors and those acting under them where such injury, death, or damage occurs because of or in connection with the use, operation, or development in any manner, of the property hereby sold, whether such claims are based upon right conferred by the common law or by statute.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals this 15th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

LESSOR

THOMAS H. BERRY

WILLIAM T. BERRY

LESSEE

SERVICE LINE FORM 606 L.W.

OPTION AND LEASE

THIS AGREEMENT, made and entered into by and between the Mineral Hills Uranium Co., a corporation of the State of Utah, hereinafter called the optionor, and Thomas H. Berry and William T. Berry, hereinafter called the optionee,

W I T N E S S E T H:

WHEREAS, the optionor is the owner and in possession of certain lode mining claims hereinafter more particularly mentioned and described; and

WHEREAS, the optionor represents that there is a possibility that said claims have a potential development as great ore bodies; and

WHEREAS, the proper development of such ore bodies, both present and in expectancy, and proper reduction and treatment thereof will necessitate large sums of money, and

WHEREAS, optionee is able to furnish money for such development work, but only under and in accordance with the terms and subject to the conditions hereinafter set forth;

NOW THEREFORE, for and in consideration of the payment by the optionee to the optionor of the sum of Fifteen Hundred ($1,500.00) Dollars, the receipt whereof is hereby acknowledged, and for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto agree as follows:

1. The optionor grants to the optionee, for the period from date to and including January 2, 1951, an option upon the terms and conditions in this agreement hereinafter set forth, to receive a mining lease in the form hereto annexed and hereby referred to and made a part hereof of certain properties being all those certain lode mining claims situate, lying, and being in the Durkee Mining District, in the County of Piute, State of Utah, more particularly described as follows:

Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6, as recorded in the office of the County Recorder of Piute County, State of Utah.

2. That immediately upon the execution of this option agreement the optionee agrees to enter into and to take exclusive possession of all and singular the above-described property and, as consideration for this option, shall prospect and explore, test, develop, and work, at its own discretion and at its own proper charge and expense, said lode mining claims, and any one or more of them, provided all work done and all improvements made by said optionee upon said property, or any part thereof, under the terms hereof during the period hereof shall be done in a minerlike manner to enable said premises and all thereof to be carefully operated, and so that the minerals therein contained may be extracted in an economical and minerlike manner. All equipment, tools, structures, and personal property of every nature and description brought or placed upon said premises prior to the excercise of said option by the optionee for use in said work shall not become a fixture but shall remain the property of the optionee and subject to removal by the optionee at its discretion.

SERVICE LINE FORM 606 L.W.

In the event the optionee does not excercise this option, it should be entitled to remove said equipment and personal property from said premises and shall have the same removed on or before January 1, 1951.

3. The optionee agrees that in the event the optionee is on the property and still conducting exploration and development work as of the 1st day of December, 1950, then and in that event the optionee will pay to the optionor the sum of One Thousand ($1,000.00) Dollars as a further consideration for said option and in the event the optionee is on the property and still conducting exploration and development workas of the 1st day of January, 1951, then and in that event the optionee will pay to the optionor the sum of Five Hundred ($500.00) Dollars.

4. It is understood and agreed by the parties hereto that if the optionee as principal, or by or through its agents, is still on the property or has its equipment on or is operating the same on the property as of January 1, 1951, that said presence, at the election of the optionor, activates the lease and the parties hereto thereupon agree to be bound by the terms of the lease hereunto attached and agree to execute the same at said time.

5. All ores extracted by the optionee during the aforesaid time shall be and remain the property of the optionor; provided, that the optionee is entitled to take and have as its own necessary and reasonable assay samples and mill test from said mining claims.

6. If , on or before the expiration of the option period, the optionee shall elect to excercise the above-mentioned option and receive a mining lease in accordance with the hereunto attached, it shall notify the optionor and it shall, upon such notice, and upon the payment of the entire consideration above-designated at the time of said excercise, rather than at the times specified for payment of said consideration, be entitled to receive in accordance with and subject to the terms of this contract a lease in the form of the lease hereunto attached and by reference made a part hereof, and the optionor hereby agrees upon such notice to make, execute, and deliver such lease to the optionee. Whether or not the optionee elects to excercise such option, the consideration promised and paid hereunder shall belong to the optionor without any claim for return thereof remaining with the optionee. In addition, if the option is not excercised the optionee shall peacefully surrender and turn over said properties to the optionor in as good condition as they now are in, reason able wear and tear excepted, and free and clear of any and all liens and incumbrances incurred by the optionee in its operation on or about the same. The optionee shall likewise turn over the copies of all data, plans, analysis, photographs, and otherdeterminations and reports that the optionee shall have made or caused to be made or otherwise obtained in and about said premises during its possession of the same under the option.

7. The optionee during its possession of said property and all thereof, agrees to protect said property and all thereof against all claims of labor and materialmen and against all liens and liabilities arising out of the acts of the optionee upon said property, and to permit the optionor to place and maintain such notices thereon as shall be lawfully necessary to protect said optionor against claims; and the optionee further sgrees to hold harmless the said optionor against any and all claims for damages for injury incurred by workmen in its employ at said properties, or any other person or persons.

SERVICE LINE FORM 606 L.W.

8. It is understood during the possession of said property by the optionee the optionee shall permit any authorized representative of the optionor to be, remain on, or visit the property hereinafter leased to represent the optinor and observe the performance by the optionee of each and all the terms of this agreement.

IN WITNESS WHEREOF, the parties hereto have respectively caused their names to be hereunto subscribed this 20th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

OPTIONOR

WITNESSED BY

THOMAS H. BERRY

BEN J. DIERINGER

WILLIAM T. BERRY

OPTIONEE

****

Marysvale, Utah
November 30th, 1950

Thomas H. Berry

Dear Sir:

We hereby agree to amend the option agreement to provide as follows:

* $500.00 Cash
$500.00 January 15th, 1951
$500.00 March 1st, 1951

which will constitute the down payment, and the balance of $1,500.00 is to be deferred for a period of 6 months and paid as advanced royalty.

Yours very truly

ADRIAN W. CANNON

* Subject to receipt of initial $500.00 within five days

ADRIAN W. CANNON

THOMAS H. BERRY

SERVICE LINE FORM 606 L.W.

ASSIGNMENT OF OPTION AND LEASE

(To be attached to Option and Lease dated the 20th day of November, 1950, between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, optionor, and Thomas H. Berry and William T. Berry, optionee; said option covering the period from November 20, 1950, to January 2, 1951, inclusive, and said lease for a term of ten (10) years, commencing on the 15th day of November, 1950 and ending at noon on the 15th day of November, 1960.)

THIS AGREEMENT, made and entered into this 2nd, day of January, 1951, by and between THOMAS H. BERRY and WILLIAM T. BERRY, Parties of the First Part, hereinafter called "Assignors", and the ANCIENT RIVER CHANNELS GOLD MINING COMPANY, a corporation, Party of the Second Part, hereinafter called "Assignee."

W I T N E S S E T H :

It is mutually covenanted and agreed by and between the parties hereto as follows:

1. The Assignors, for a valuable consideration, do hereby sell, assign, transfer and set over to the Assignee, all of the Assignors' right, title and interest in and to the option and lease above described.

2. The Assignee hereby accepts the above assignment and agrees to be bound by and to perform and observe fully and faithfully all of the covenants, stipulations and conditions contained in said option and lease, to be performed and observed by the Assignors, and assumes all liabilities mentioned in said option and lease, to be assumed by the Assignors, hereby indemnifying the Assignors therefor.

3. This agreement shall be considered as taking effect as of the 31st, day of December, 1950.

THOMAS H. BERRY

WILLIAM T. BERRY

ASSIGNORS

ATTEST:

W. T. BERRY
Secretary

(CORPORATE SEAL)

ANCIENT RIVER CHANNELS
GOLD MINING COMPANY

By Thomas H. Berry
Its President - ASSIGNEE

Service Line Form 606 L.W.

SATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, Thomas H. Berry and William T. Berry, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said
County and State

(S E A L)

My Commission expires
September 11th, 1954

****

SATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, THOMAS H. BERRY, known to me to be the President of the corporation that executed the foregoing instrument, and upon oath did depose that he is the officer of said corporation as above designated; that he is acquainted with the seal of said copporation, and that the seal affixed to said instrument is the corporate seal of said corporation; that the signatures to said instruments were made by the officers of said copporation as indicated after said signatures, and that the said corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate sirst above written.

NELLIE G. KEY
Notary Public in and for said
County and State

(S E A L)

My Commission Expires:
September 11th, 1954.

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

CONSENT OF ASSIGNMENT

Adrian W. Cannon, President of the Mineral Hills Uranium Co., a corporation of the State of Utah, does herewith, as President of the said corporation, consent to the assignment by the lessees to the Ancient River Channels Gols Mining Company., a corporation of the State of Nevada, all of their rights in and under that certain lease dated November 15, 1950, by and between Mineral Hills Uranium Co., a corporation if the State of Utah, the lessor therein and Thomas H. Berry and William T. Berry, therein designated as lessees; provided, however, that the said copporation does not waive any of the claims which it may have against the lessees designated therein.

Dates this 6th day of July, 1951.

Mineral Hills Uranium Co.

By Adrian W. Cannon

President

KEUFFEL & ESSER CO., N. Y. NO. 358-1
4 × 4 to the inch.
MADE IN U. S. A.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1874

Date received 7-23-51

Participation

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
SUITE 1, COMPIT BUILDING,
LAS VEGAS, NEVADA.

Name and address of applicant

Date July 16th 1951

FILL IN THIS BLOCK

Date of application July 16th, 1951

Estimated cost $53,500.00

Mineral or metal URANIUM

Percentage of Government participation 90%

Location of mine Sec. 4, Twp. 27 S., R. 3 W., S. L. B. M.
GRYSVALE, PIUTE COUNTY, UTAH.

Date of filing MF-100

DMA Docket Number, if available 1874

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
(Name of company)

By Thomas D. Perry
(Signature of authorized official)

July 16th, 1951
(Date)

President
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

THE APPLICANT

1. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation organized and existing under the laws of the State of Nevada, with an authorized capital stock of Five Hundred Thousand & No/100 ($500,000.00) Dollars, divided into 5,000,000 shares of all common, fully paid and non-assessable stock with a par value of Ten ($.10) cents per share.

2. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation

OFFICERS & DIRECTORS

3. Thomas H. Berry, President & Director
830 West 6th, Street,
Los Angeles 17, California

William T. Berry, Vice-President, Secretary, Treasurer and Director
5016 Novgored Street,
Los Angeles 32, California

Edgar G. Mason, Director
740½ Mountain View Avenue
Monrovia, California

FIVE LARGEST STOCKHOLDERS

Thomas H. Berry 830 West 6th Street, Los Angeles 17, California	53,000 Shares
William T. Berry 5016 Novgored Street, Los Angeles 32, California	103,625 "
John M. Berry 586 Eaton Drive, Pasadena 8, California	104,125 "
Harry E. Baker 729 South Bonnie Brae Avenue, Los Angeles, California	60,000 "
Edgar G. Mason, 740½ Mountain View Avenue, Monrovia, California	50,000 "

4. The management of the project is vested in Thomas H. Berry, who has had wide experience in mining and other general business enterprises.

SERVICE LINE FORM 606 L.W.

5. LESSEE, Ancient River Channels Gold Mining Company

6. OWNER, Mineral Hills Uranium Co.,
1012 Boston Building,
Salt Lake City 1, Utah.

See EXHIBIT "A" for owners statement.

7. Copy of Lease together with Assignment and Owner's Consent to said assignment herewith attached.

8. Statement of Assets & Liabilities, and Profit & Loss Statement as of June 30th, 1951, herewith attached.

9. Applicant is prepared to further invest Five Thousand ($5,000.00) Dollars, which is considered to be more than sufficient to pay our part of the cost of the project, as detailed in question 23, of this application form, in accordance with the regulations of Government participation (Section 9 of Mineral Order 5.)

THE PROPERTY

10. (a) The only property to be involved in this exploration project is the Mineral Hills Group of six mining claims, as per property map herewith attached.

(b) The property consists of six unpatented mining claims, located in Section 4, Township 27, South., Range 5, West., Salt Lake Base Meridian., in the Durkee Mining District, Piute County, Utah.

11. The property is known as the Mineral Hills Mine, but, is sometimes referred to as the Old Krotski Mine, or the Iron Mine.

12. The property is located about two miles northeast of Marysvale, Utah., and is served by good, well kept country roads.

Marysvale is the terminus of the Denver & Rio Grand Railroad; and in addition thereto is served by the "Trailways Bus System" of the A. T. & S. F., operating over United States (paved) Highway No. 89, and is about 175 miles south of Salt Lake City.

13. An unlimited supply of water is available at all times from the Sevier River, about one mile distant; very little water is required however, other than for drilling purposes.

14. The Utah Power Co., serves the district, and power is available at reasonable rates, if and when required. Present operations are conducted through the use of gasoline powered equipment.

14. The mine is presently equipped with 1-105' Ingersol-Rand portable air compressor, 1-J 49 Ingersol-Rand Jackhammer, complete with air and water hose, column, arm, cradle and all attachments., about 1,500' 12# mine rail, 500' 2" iron water pipe, 1-27 Cu. Ft. steel mine car, 2-3/4 ton Army Type truck and all necessary small tools and equipment.

SERVICE LINE FORM 606 L.W.

15. The ore is to be delivered by truck, to the American Smelting & Refining Co., at their purchasing depot at Marysvale, for the account of the United States Atomic Energy Commission.

16. The history of the property is as follows:

(a) This property was developed and operated as an Iron Mine during the first World War; the product (as rumor has it) was shipped to the smelters at Salt Lake City, and used as flux; operations were suspended at the close of the war and the property lay idle until the recent discovery of Uranium in the district.

(b) There are a number of immediately adjoing properties in the process of exploration and development. The neighboring properties of the Vanadium Corporation of America., the Bullion-Monarch Mine and the Bertelson Mine are all producing; the quantity and quality of the ore is however, unknown to the applicant, but is well known to the Marysvale office of the Atomic Energy Commission.

(c) We have no private reports that may apply to this application other than the reports submitted herewith. The Atomic Energy Commission, at Marysvale does however, have complete information on all of the properties in the district.

17. There is no production, prospecting only.

18. There are no mineral reserves developed.

(a) Prospecting for primary or secondary Uranium ores.

(b) Maps and assay data herewith.

(c) No estimate of tonnage or class of ore can be compiled as of this date.

19. There are no conditions or circumstances regarding the property not brought out in the foregoing.

THE EXPLORATION

20. The exploration is to be conducted for the purpose of developing and producing primary and secondary uranium ores.

21. The proposed work, consisting of drifting, crosscutting, raising, sinking and generally extending the present workings.

Core drilling and otherwise generally prospecting the property.

It is estimated that the maximum time required to complete the proposed work will not exceed two years.

22. The factors leading the applicant to expect the finding of commercial ore bodies is based upon herewith attached Geological Reportand supporting maps and data.

SERVICE LINE FORM 606 L.W.

THE REQUIREMENTS AND COST

25. Itemized statement of estimated requirements and cost of the project in which the Government will participate.

(a) Underground work estimated to be about 1,200 feet of drifting, crosscutting, raising and sinking will be contracted to Mr. Chell Dalton, a recognized and highly responsible Independent Mining Contractor, of Marysvale, Utah., on an overall cost basis of mining of $25.00 per lineal foot. 30,000.00

About 200 lineal feet underground and 300 lineal feet surface core drilling at an average estimated cost of about $15.00 per lineal foot 7,500.00

(b) Supervision and management of the project is to be vested in Mr. Thomas H. Berry, President of the corporation and Mr. William T. Berry, Vice-President, Secretary and Treasurer of the corporation at salaries of $300.00 per month each 6,000.00

(c) Estimated cost of necessary repairs to existing facilities, structures and buildings 500.00

(d) No additional facilities, structures or buildings required

(e) No equipment required not now owned by operator

(f) Operator proposes to rent no additional equipment

(g) Operator now owns equipment valued in excess of $2,500.00 for the use of which no rental charge is to be made.

(h) All materials and supplies including items of equipment costing less than $50.00 each is to be furnished and paid for by the contractor

(i) Cost of power, water, utilities and other items not provided for above

1. Cost of power, water and utilities to be furnished and paid for by contractor

2. Cost of other items not provided for above 8,500.00
(See following page for detail)

53,500.00

SERVICE LINE FORM 606 L.W.

Detail from page four:

Office Rent,	10 Mos @	$ 50.00	per Mo.		500.00
Office Supplies	"	25.00	"		250.00
Telephone & Telegraph	"	25.00	"		250.00
Miscellaneous General Exp.	"	100.00	"		1,000.00
Traveling Expenses	"	150.00	"		1,500.00
Professional Services	"	500.00	"		5,000.00
Legal Expenses	"	50.00		$ 5000.00	
Accounting	"	50.00		500.00	
Engineering	"	400.00		4,000000	
TOTAL OF ITEM (1) 2.					8,500.00

The estimated time required to complete the project is about ten months after the project is approved.

The progress expected to be accomplished is a minimum of ten per cent of the total program as outlined above, at an average cost of about $5,350.00 per month.

SERVICE LINE FORM 606 L.W.

STATEMENT

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
As of
June 30, 1951

ASSETS & LIABILITIES

Cash,		150.00		
Las Vegas Office	100.00			
Marysvale Office	50.00			
Bank,		254.52		
First National Bank of Nevada, Las Vegas, Nevada.				
Accounts Receivable,		150.00		
Walter R. Collins				
Mining Property		45,000.00		
Mineral Hills Lease	42,000.00			
Entry Fee (Bonus)	3,000.00			
Machinery, Tools & Equipment		1,820.13		
Compressor, Jackhammers, Cars, Rails & Miscellaneous Equipment.				
Truck,		750.00		
3/4 Ton "Army Type"				
Development,		4,254.00		
Timbering & Reconditioning	250.00			
Roads	104.00			
260' Tunnel	3,900.00			
Discounts Allowed,		1,546.25		
Stock Sales				
Accounts Payable,				3,455.00
Chall Dalton, Contractor			1,700.00	
Mineral Hills Uranium Co., Advance Royalty			1,750.00	
Leon A. Nichols			5.00	
Capital Stock,				55,972.55
Authorized 5,000,000 Shares @ $.10 per share			500,000.00	
Un-Issued 4,440,274.5			-444,027.45	
Profit & Loss				5,502.65
As of December 31st, 1950			1,672.82	
January 1st, 1951 to date			3,829.83	
		53,924.90		53,924.90

SERVICE LINE FORM 606 L.W.

STATEMENT

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
As of
June 30, 1951

PROFIT & LOSS

Operating Loss as of December 31st, 1950			1,472.83
Operating Loss period January 1st, 1951, to June 30th, 1951			3,829.83
Detail,			
Office Rent		375.00	
Professional Services		589.70	
Legal	253.16		
Engineering	295.04		
Miscellaneous	1.50		
Office Supplies		33.17	
Postage		10.00	
Telephone & Telegraph		196.82	
Traveling Expense		884.56	
Taxes		36.80	
Advertising		22.77	
Miscellaneous General Administrative Expense		1,760.01	
Thomas H. Berry	582.83		
William T. Berry	339.44		
Miscellaneous	343.74		
TOTAL OPERATING LOSS TO DATE, June 30th, 1951			5,302.65

SERVICE LINE FORM 606 L.W.

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION, COLORADO

ADDRESS REPLY TO:

MANAGER,
COLORADO RAW MATERIALS OPERATIONS
U. S. ATOMIC ENERGY COMMISSION
P. O. BOX 270
GRAND JUNCTION, COLORADO

AND REFER TO MI:CAR

December 5, 1950

Mr. Thomas H. Berry
Mr. William T. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTHWEST FACE OF THE LEVEL) HOLE)
(UPPER ADIT)

Gentlemen:

Your sample marked "Mineral Hills No. 10" has been assayed for uranium. The amount is 0.02% U_3O_8.

Very truly yours,

Charles A. Rasor

Charles A. Rasor,
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

November 29, 1950

Mr. Thomas H. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTH*
WEST FACE 132' LEVEL)
(Upper Adit)

Dear Mr. Berry:

MINERAL HILLS MINE

This is in reply to your letter of November 15, 1950, concerning a sample submitted for examination.

Microscopic study of the sample shows it is composed of quartz, feldspars, calcite, muscovite mica, and considerable magnetite. A small amount of uranium as an unidentified mineral was also detected in the sample. A radiometric analysis indicated that the uranium content was about 0.14 percent U_3O_8.

Sincerely yours,

C. H. Schack

C. H. Schack, Acting for
S. R. Zimmerley, Chief
Metallurgical Division
Region IV

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS

METALLURGICAL AND TESTING ENGINEERS

930 SANTEE STREET

LOS ANGELES 15

LABORATORY No. 328893

Date November 9, 1950

Sample Pulp

Received 11-6-50

Marked "Sample 1158-A #8"

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

(THIS SAMPLE TAKEN FROM NORTH-WEST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

REPORT OF DETERMINATIONS

Uranium Oxide (U_3O_8) ---------- 0.08%

Respectfully submitted,

SMITH-EMERY CO

CHEMISTS AND ENGINEERS

No 'N'

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR, EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 329284-85

Date November 18, 1950

Sample Pulp

Received 11-6-50

Marked (THESE SAMPLES TAKEN FROM NORTH-EAST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

REPORT OF DETERMINATIONS

"Sample #7 (1157-A)"

Uranium Oxide (U_3O_8) ---------- 0.03%

"Sample #9 (1159-A)

Uranium Oxide (U_3O_8) ---------- 0.04%

Respectfully submitted,

Smith-Emery Co.
CHEMISTS AND ENGINEERS
G.L.C.

N.E

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SERVICE LINE FORM 606 L.W.

GEOLOGICAL REPORT

ON

THE HOLDINGS OF

THE MINERAL HILLS URANIUM CO. PROPERTY

NEAR

MARYSVALE, UTAH

F. W. CHRISTIANSEN, Geologist

S. R. MAHONEY, Geologist

INTRODUCTION

The examination of the Mineral Hills Uranium Company property was made at the re quest of the Company and Mr. Thomas H. Berry, President of the Ancient River Channels Gold Mining Company., lessee.

It was undertaken primarily for the purpose of determining the relationship of the property and areas at present being explored by the company, to the general geology of the Antelope Range and operating uranium mines in the western part of the area.

The field study was made on July 7, 8, and 9, 1950, and on three short trips totaling 7 days in the summer of 1951.

LOCATION

The property consists of the Mineral Hills group, located in Sec. 4, T. 27 S., R. 3 W., S. L. B. M., about three miles north-east of Marys vale, Utah.

PHYSICAL FEATURES

The property is s erved by dirt roads which are passable by truck, except in heavy snow or rain. No timber is available on the property, but an abundant supply of suitable mine timber can be obtained from nearby hills. Water is not available within the property, but the moderate amounts required for development may be obtained nearby by tank truck.

The topography is generally rolling, and is not sufficiently rugged as to pres ent difficulties for year round operation. The property is located in the Antelope Range, a low range of mountains that connect the high Tushar Mountains on the wes t with the high Sevier Plateau on the eas t.

SERVICE LINE FORM 606 L.W.

GEOLOGY

The rocks in the area covered by the claims are chiefly flows of dacite, latite, and rhyolite interbedded with tuff and tuff-breccia and some obsidian.

This s equence of volcanic flows has been intruded by a coarse-grained monzonite stock, which locally is expos ed by erosion in the northwestern and southwestern part of the area (See Fig. 1). The igneous geology has not been worked out in detail, and some evidence indicates the presence of a later, fine-grained monzonite intrusive in parts of the area.

The extrusive rocks are considered early Tertiary (post-Wasatch) in age. The age of the coarse-grained monzonite can be estimated only as post-extrusive, but probably is middle or late Tertiary in age. A younger phase of granite intrusions are present in adjacent areas however none have been discovered on the Mineral Hills claims. There is some evidence that indicates the uranium mineralization may be associated with granite.

Extensive silicification, alunitization, kaolinization, and other types of alteration are characteristic of the contact zone, and of extensive zones away from the intrusive. Highly-altered zones of this type occur in several places within the Mineral Hills claims particularly in and near the glory hole (Fig. 3), and in a generally north-south zone west of the glory hole. It is in this zone west of the glory hole that autunite crystals have reportedly been found and in which the highest radiometric count was obtained. (See Fig. 2) Isorad maps were obtained from the Atomic Energy Commission. A later (late-Tertiary) extrusion of rhyolite and rhyolite tuff-breccia is known to truncate earlier eroded flows in the northwestern part of the Antelope Range, but is not known to be present in the area investigated.

Extensive alteration is not pre sent in this later flow.

Alteration occurs around the margins of the monzonite, and in irregular masses in the extrusives at considerable distances from exposures of the intrusive. Localization of altered masses appears to be controlled by strong northeasterly and northwesterly zones of fracturing.

Alunite deposits of the Antelope Range consists largely of irregular bodies in highly-altered portions of the extrusive rocks. Large tonnages of high-grade alunite were developed by the U. S. Geological Survey and the Bureau of Mines in cooperation with the operators, to supply the Kalunite Corporation plant in Salt Lake City during World War II. Operations are at present discontinued. Commercial alunite deposits have not been developed within the claims considered in this report.

The first uranium prospect was discovered in 1949 on part of the Seegmiller property, now operated as the Bullion-Monarch open pit mine. Mr. Seegmiller acquired the claims, which had previously been prospected for fluorspar, when he discovered the yellowish mineral autunite (calcium uranium phosphate). A greenish mineral found associated with it was identified as torbernite (hydrous copper uranium phosphate). Present mining operations in the pit are exclusively on autunite and torbernite ore.

The Vanadium Corporation of America (V. C. A. hereinafter) have developed two properties, both underground operations (See Fig. 1). The largest and most promising mine of the two and presently the most promising one is located about 3,000 feet northwest of the Mineral Hills glory hole and is similarly located near the contact of the flows and the monzonite intrusive. The V. C. A. mine was discovered by bulldozer cut. Autunite and torbernite were found in quantity in an east-west fissure zone, striking into the monzonite at about right angles to the contact.

Development by incline disclosed a well-defined fissure zone with high values in autunite and torbernite at the surface and at depth, pitchblende. Approximately 100 feet beneath the surface, primary uraninite (pitch-blende) was encountered, which locally assayed very high. At present this mine, the Bullion-Monarch mines and the Bertelsen mine are the only ones which have penetrated the pitchblende zone, but it is believed that most of the mines will reach the primary zone of mineralization at depth.

The discovery of the pitch-blende has greatly enhanced the future promise of the district for uranium production.

The Seegmiller and Bertelsen mines (See Fig. 1) occur along the contact between the monzonite and the flows. The ore occurs in the monzonite, with rhyolite tuff and tuff-breccia forming the hanging wall. Values are in autunite and torbernite.

Several other prospects, within the monzonite and along the contact, have exposed good showings of autunite and torbernite. The Papsy Hope prospect (See Fig. 1) lies 2,000 feet east of the monzonite contact, and shows autunite and torbernite mineralization in a steeply-dipping, east-west broken and altered zone in dacite-porphyry flow. It is reported that assays of 0.25 percent U_3O_8 have been obtained from channel samples in the incline. (This assay was determined by a calibrated Geiger Counter). Comparable radioactive count and mineralization is present in the adjoining P. L. No. 4 prospect (See Fig. 1).

The most intense radioactivity known on company property is found in the glory hole of the old Kretski iron mine, now known as the Mineral Hills prospect (See Fig. 1). The workings thereon consist of three adits, and a surface open pit glory hole.

Magnetite and hematite iron ore were mined about 35 years ago for use as flux in Salt Lake Valley smelters.

The iron mineralization and uranium mineralization is partly a replacement and partly fissure filling, deposited at high temperatures adjacent to the zone of contact between the coarse monzonite intrusive and the finer grained igneous rocks. The surface contact is located 1,000 feet north of the glory hole. The contact is irregular, at one point essentially horizontal, but steeply-dipping nearby. In the lower adit (See Fig. 3) a finer grained monzonite (?) body is in fault contact with the extrusives. A similar fault contact between the intrusive and extrusive rock is present at the portal at the upper adit (See Fig.4). The fault zone in both levels is dipping steeply to the north and probably represents a zone of high angle reverse faulting.

A quartz-phlogopite mica-feldspar pegmatite dike cuts through the glory hole and impregnates the monzonite in a wide zone exposed on the upper adit. Some radioactivity was detected in the dike. A 2 foot zone of porphyry alongside the dike is intensely radioactive, and has yielded assays of 0.26 percent U_2O_3 (Chemical assay from Smith Laboratory, at Moab, Utah). The exact nature of the uranium mineral has not been determined, but since no secondary uranium minerals have been observed it is believed that the radioactivity is at least partly due to uranium oxides.

Two zones of intense radioactivity are known in the glory hole. The first, described above, is in the east face, and the second occurs in the northwestern face (See Fig. 5).

The dimensions and attitudes of the radioactive zones are not as yet known. Present exposures indicate a somewhat irregular occurrence, controlled by intersecting fracture systems.

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Additional excavation will be necessary to define the mineralization. The comparatively strong mineralization of this property, and its proximity to the major producing mines of the district, are favorable to the Mineral Hills prospect.

The preliminary geologic study that has been made, both on the surface and underground, has proved inconclusive regarding the probable potentialities of the prospect. It is therefore recommended that a detailed study be made of the Mineral Hills claims and that this study be closely coordinated with a program of surface trenching, diamond drilling and extension of underground workings.

The radiometric high shown on the Isorad Map (See Fig. 2) lies in essentially virgin territory. This area should be systematically examined and trenched so as to reveal the nature of the alteration of bedrock in the covered areas. This would also expose any fracture system that may be present within this area of high count. It is suggested that from 20 to 25 days work with a D 8 or equivalent equipment would be sufficient to trench this area.

Exposed in the glory hole, (See Fig. 3) are several rather definite mineralized fracture zones. These zones are also present in slightly modified form in the upper level (See Fig. 4). Figures 6, 7 and 8 are projections of the mineralized fissures of the glory hole to the lower level (See Fig. 5). Examinations of these sections reveal that if the mineralized "shoots" are continuous at depth and do not change their attitude they have not been intersected completely by the lower adit and exploration drifts and cross-cuts. Approximately 200 feet of diamond drilling or cross-cutting would be sufficient to prove or disprove the projections. In the event the relatively strong zones of mineralization present in the glory hole and on the upper level are not encountered at depth

additional structural and mineralogical work, in addition to a detailed study of petrology, will be necessary. This should be accompanied with and followed by additional diamond drilling and underground work, in accordance with the results of the study as it progresses. Perhaps three to four thousand feet of diamond drilling may be sufficient although this is only a very rough estimate. It may also be found necessary to extend some of the cross-cuts and drifts of the lower level and to connect the shaft shown in Figs. 4 and 6 with the lower level. The amount of work that may be necessary for this type of development cannot be estimated, but provision should be made for perhaps 800 to 1,000 feet of underground work.

CONCLUSIONS

Secondary autunite mineralization is reported to be present in northwest part of the Mineral Hills claims. Areas remote from the monzonite intrusive have as yet not proved commercial, but the development of uranium in the district is comparatively recent, consequently little is as yet known about occurrences of commercial ore.

The Mineral Hills prospect shows mineralization of probable commercial grade. Size and continuity of the ore is not at present known. Proximity to the monzonite contact and to producing mines of the district suggests favorable conditions for development of ore at depth on the property.

Ore localizations appear to be related to the monzonite intrusive and to Upper (?) granite intrusions. Commercial occurrences at present developed are localized in the monzonite along the contact, in fissures extending into the intrusive and in acidic dikes. Favorable showings in fissure zones in the altered extrusives at distances from the monzonite indicate that conditions were favorable for deposition of uranium minerals.

Intensive exploration will probably disclose concentrations of ore within the intrusive rocks of the area.

F. W. Christiansen, Geologist

Stanford R. Mahoney, Geologist

536 Atlas Building
Salt Lake City, Utah

July 10th, 1951

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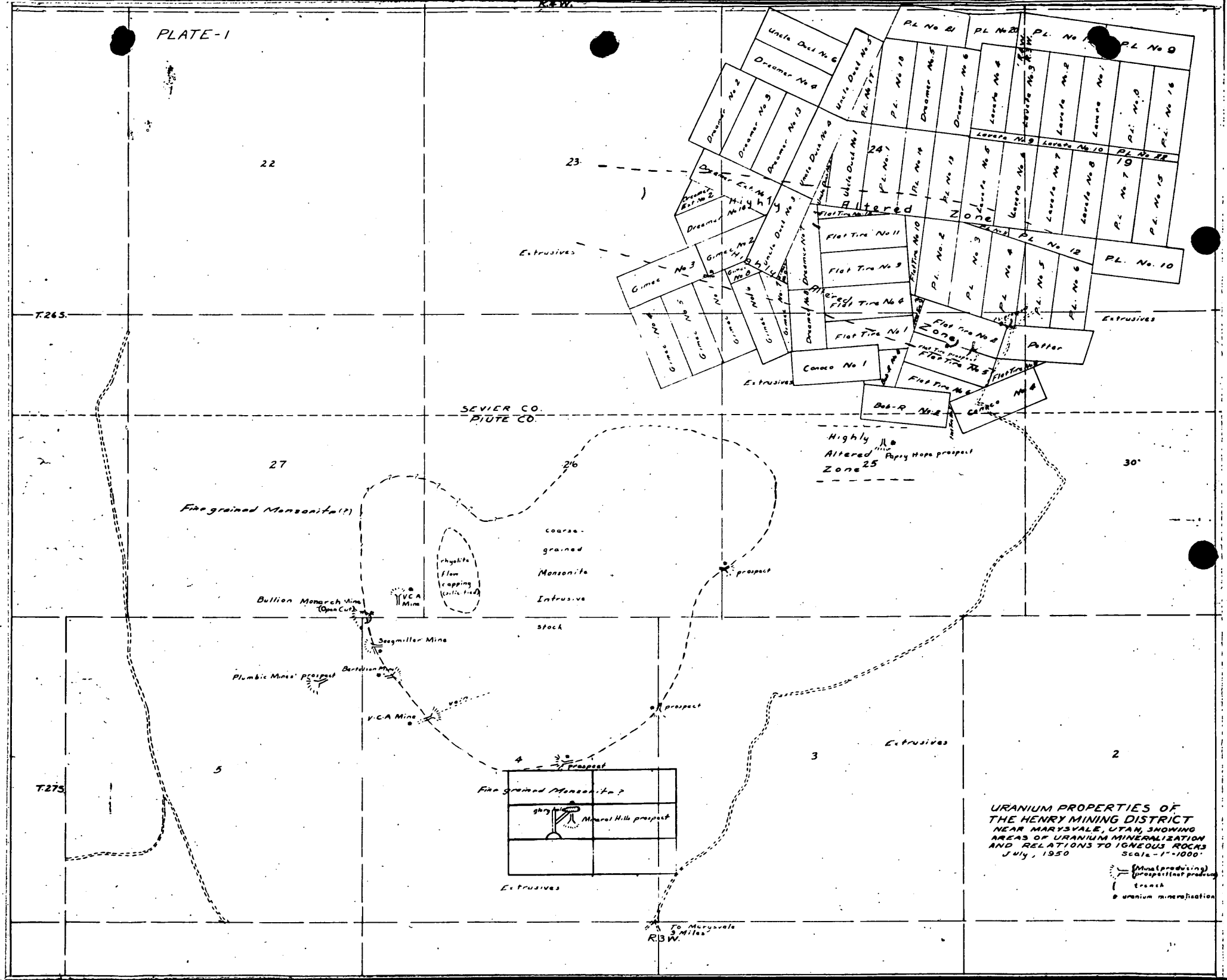
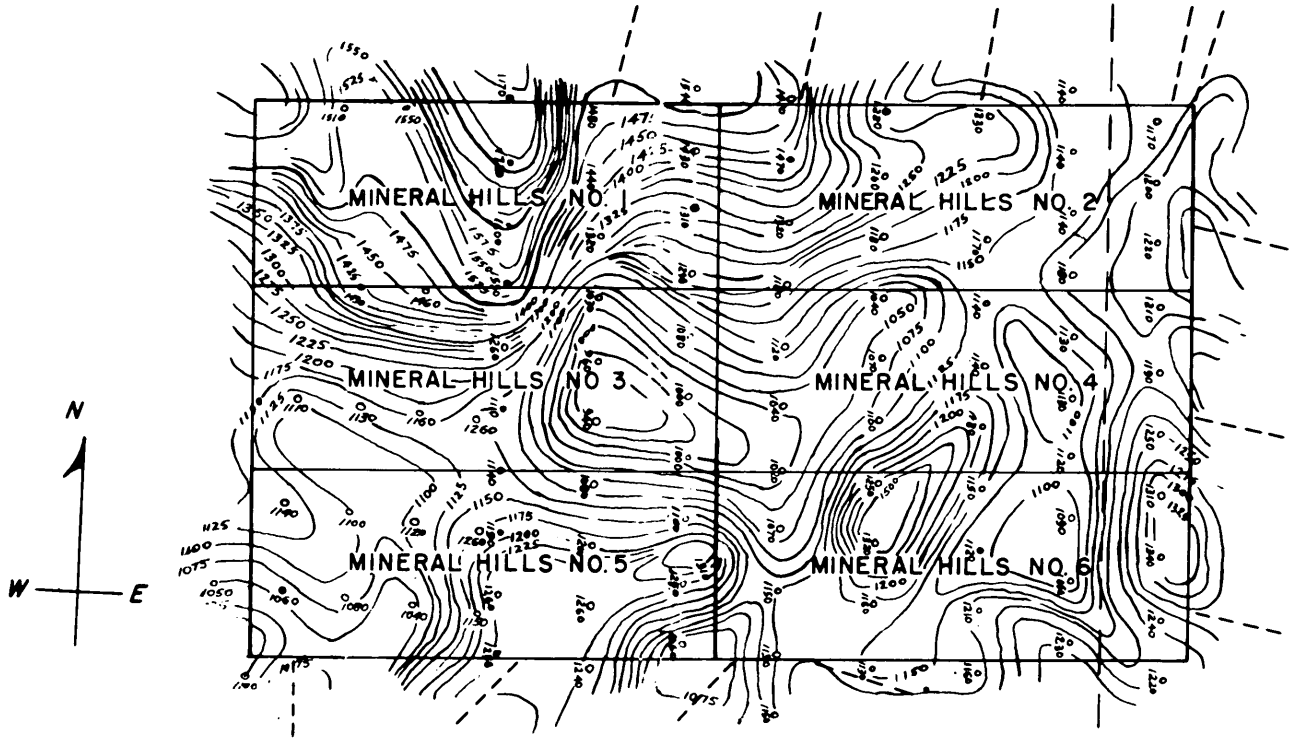


PLATE-1
R.4 W.
22
23
24
19
27
26
25
30
5
4
3
2
T.26 S.
T.27 S.
R.3 W.
Uncle Dust No 6
Dreamer No 8
Dreamer No 2
Dreamer No 3
Dreamer No 13
Uncle Dust No 5
Uncle Dust No 4
Uncle Dust No 1
P.L. No 21
P.L. No 20
P.L. No 9
P.L. No 19
Dreamer No 5
Dreamer No 6
Lavata No 4
Lavata No 2
Lavata No 1
P.L. No 16
Lavata No 9
Lavata No 10
P.L. No 18
P.L. No 7
P.L. No 15
Dreamer Ext No 1
Dreamer Ext No 2
Dreamer No 12
Dreamer No 14
Dreamer No 8
Dreamer No 7
Uncle Dust No 3
Uncle Dust No 2
Gimec No 2
Gimec No 3
Gimec No 8
Gimec No 5
Gimec No 1
Gimec No 7
Gimec No 6
Gimec No 4
Altered Zone
Flat Tire No 10
Flat Tire No 11
Flat Tire No 9
Flat Tire No 4
Flat Tire No 1
Flat Tire No 8
Flat Tire No 5
Flat Tire No 6
Flat Tire No 7
Flat Tire No 2
P.L. No 3
P.L. No 4
P.L. No 5
P.L. No 6
P.L. No. 10
Potter
Conoco No 1
Bob-R No 2
Canada No 4
Estrusives
SEVIER CO.
PIUTE CO.
Highly Altered Zone
Papsy Hope prospect
Fine grained Monzonite (?)
coarse-grained Monzonite Intrusive stock
rhyolite flow capping (altered)
prospect
Bullion Monarch Mine (Open Cut)
V.C.A. Mine
Seegmiller Mine
Plumbic Mines prospect
Bertelson Mine
V.C.A. Mine
vein
Fine grained Monzonite ?
Mineral Hills prospect
To Marysvale 3 Miles
URANIUM PROPERTIES OF THE HENRY MINING DISTRICT
NEAR MARYSVALE, UTAH, SHOWING AREAS OF URANIUM MINERALIZATION AND RELATIONS TO IGNEOUS ROCKS
July, 1950
Scale - 1" = 1000'
Mine (producing)
prospect (not producing)
trench
uranium mineralization



1700

1500

1400

12

ISORAD MAP OF MINERAL HILLS CLAIM GROUP

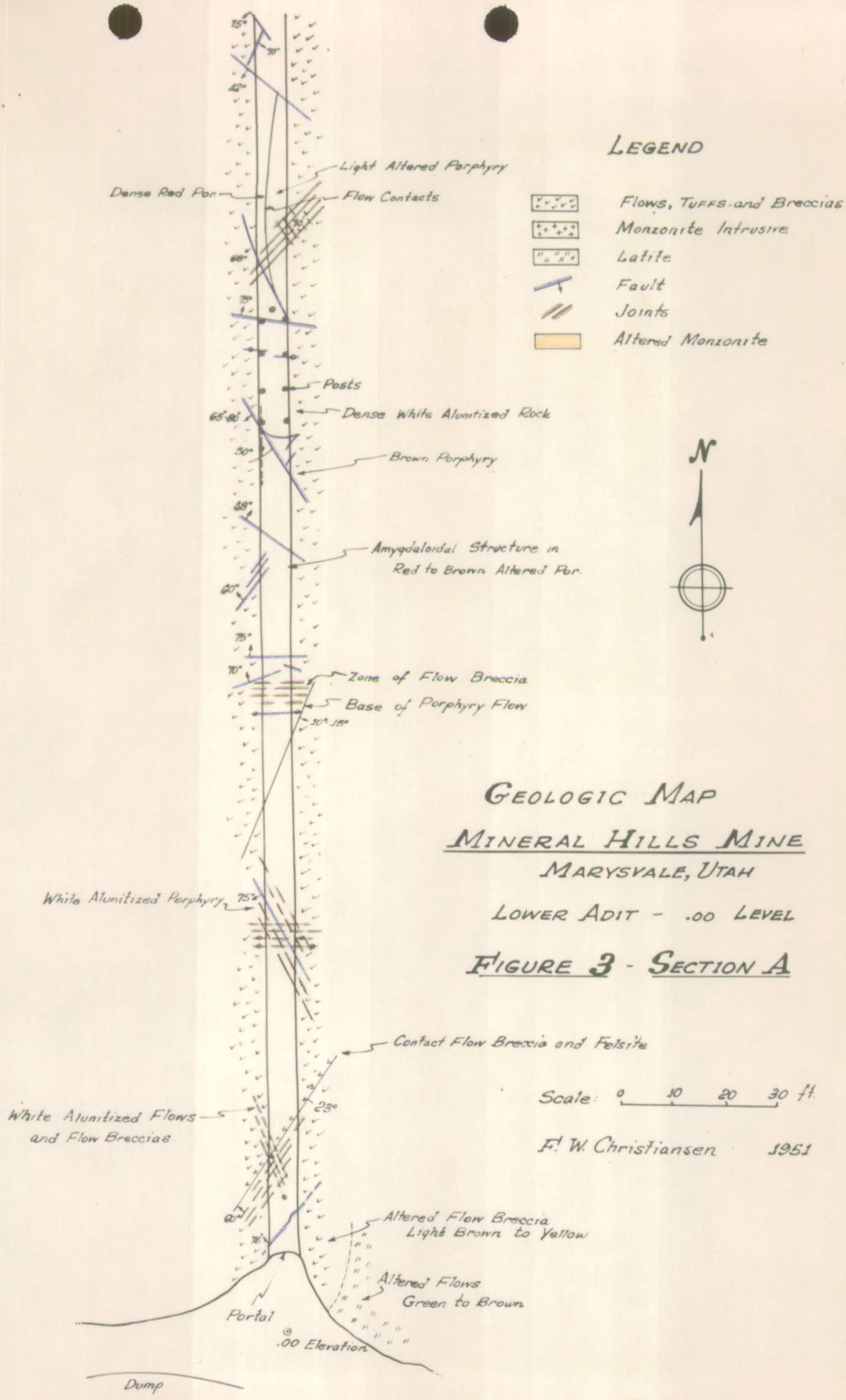
ISORAD CONTOURS IN COUNTS PER SECOND

1 INCH = 400 FEET

APPROXIMATE AREAL BACKGROUND = 600 COUNTS PER SECOND

SECTION 4 / SECTION 9 | SECTION 3 / SECTION 10

T-27-S | R-3-W



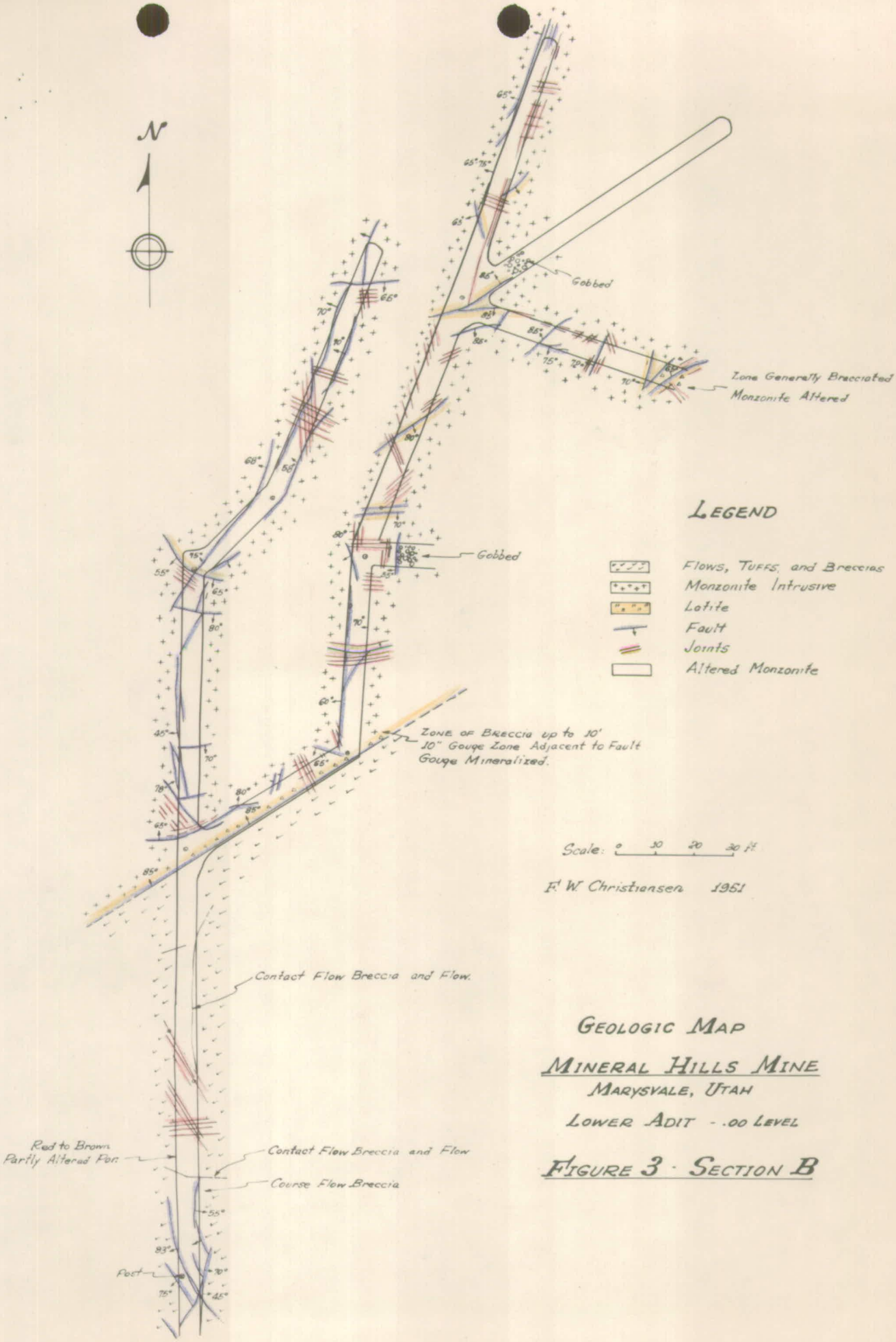
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 - SECTION A



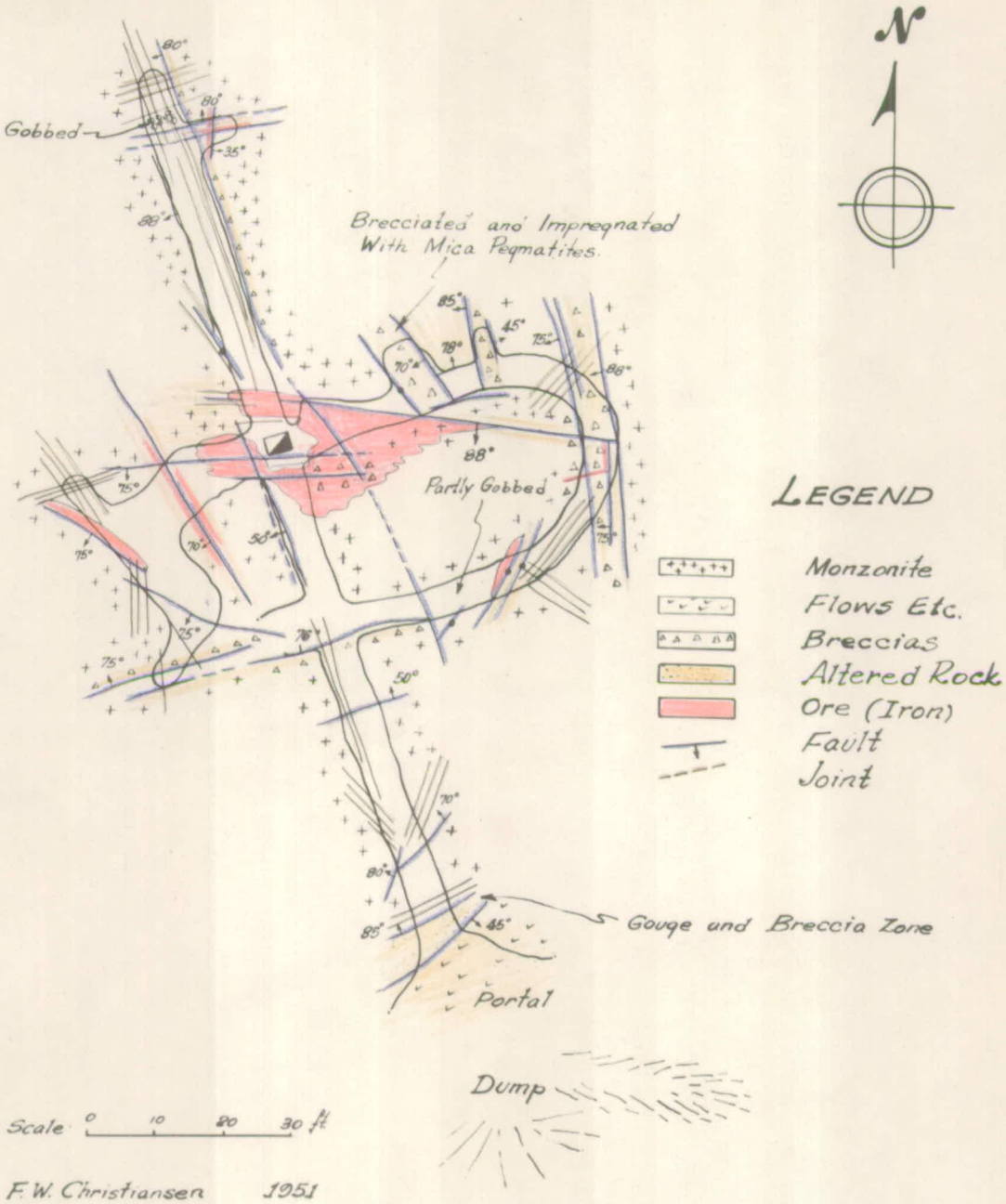
GEOLOGIC MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

LOWER ADIT - .00 LEVEL

FIGURE 3 · SECTION B



F. W. Christiansen 1951

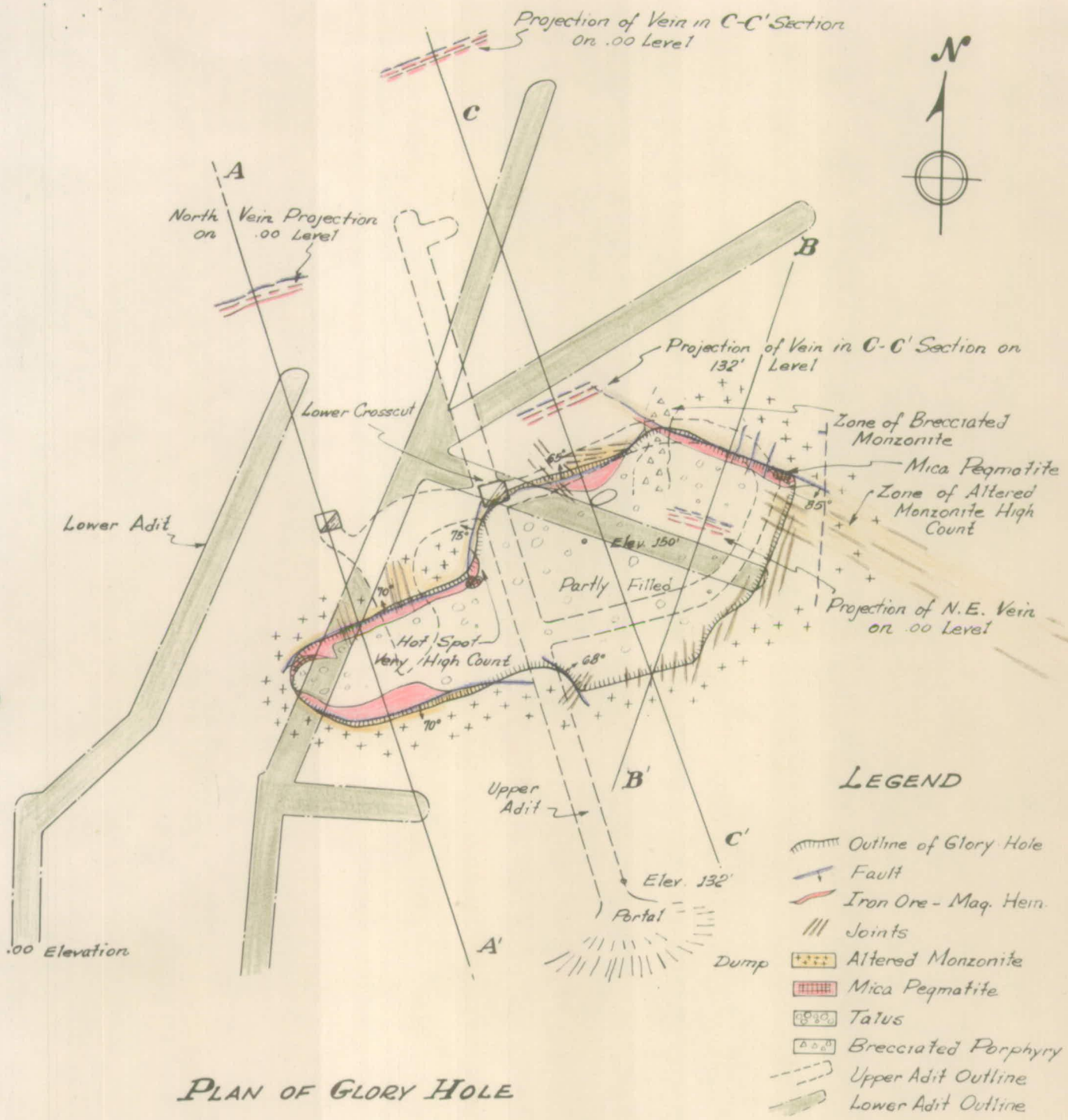
GEOLOGICAL MAP

MINERAL HILLS MINE

MARYSVALE, UTAH

UPPER ADIT - 132' LEVEL

FIGURE 4



PLAN OF GLORY HOLE

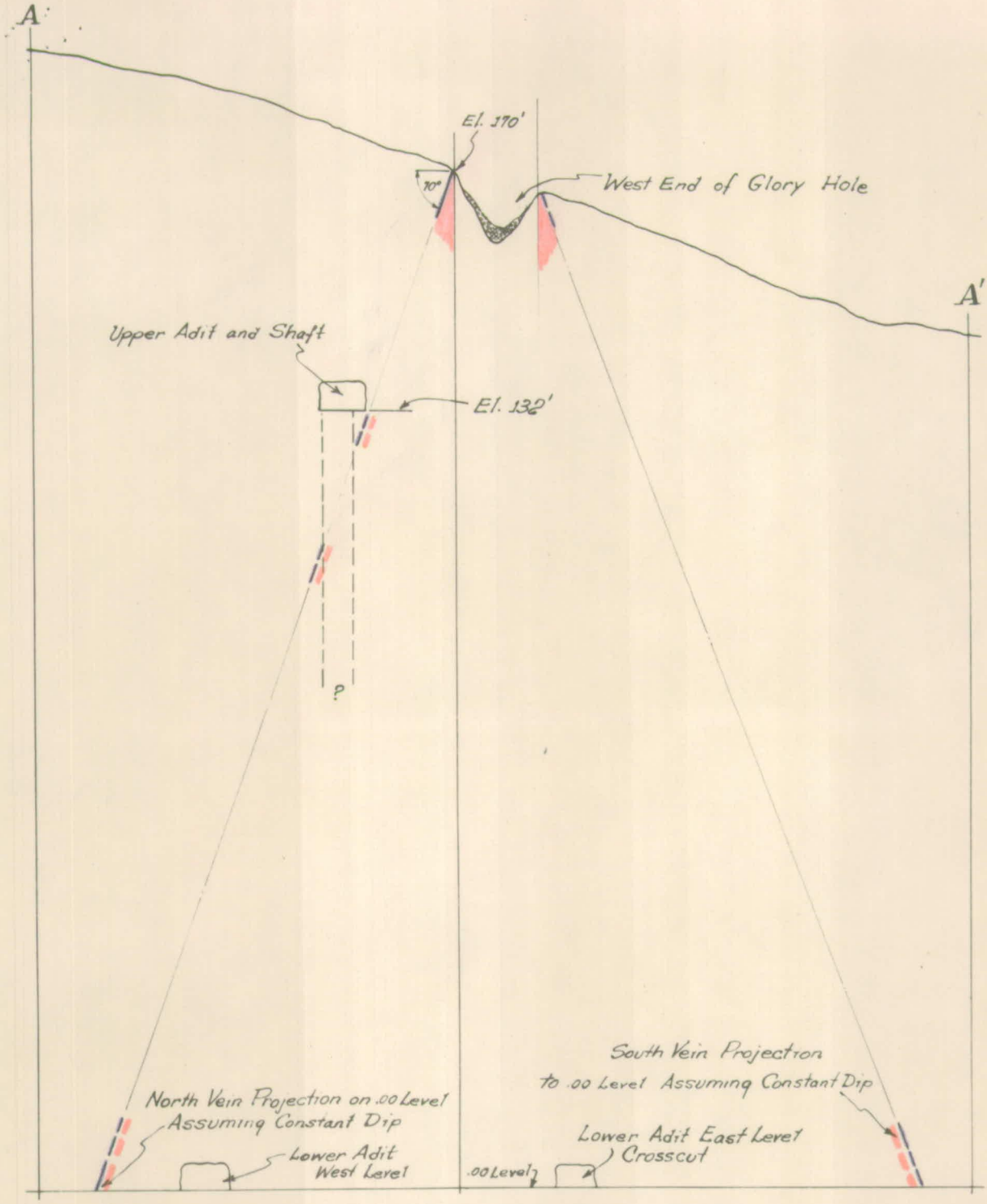
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F.W. Christiansen - 1951

FIGURE 5



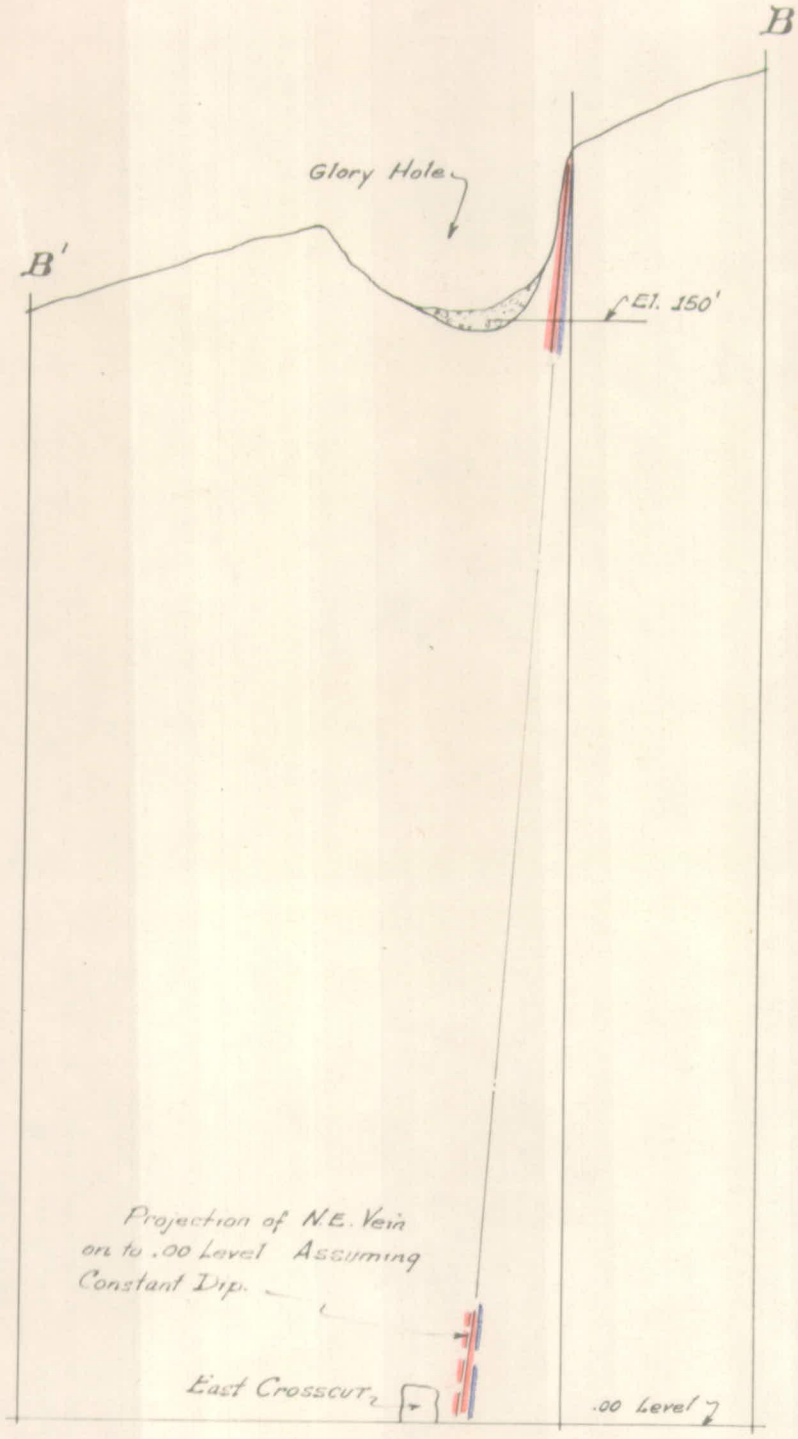
PROJECTION OF FISSURE ZONE ALONG LINE A-A prime

MINERAL HILLS MINE
MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 6



PROJECTION OF FISSURE ZONES ALONG LINE B-B prime

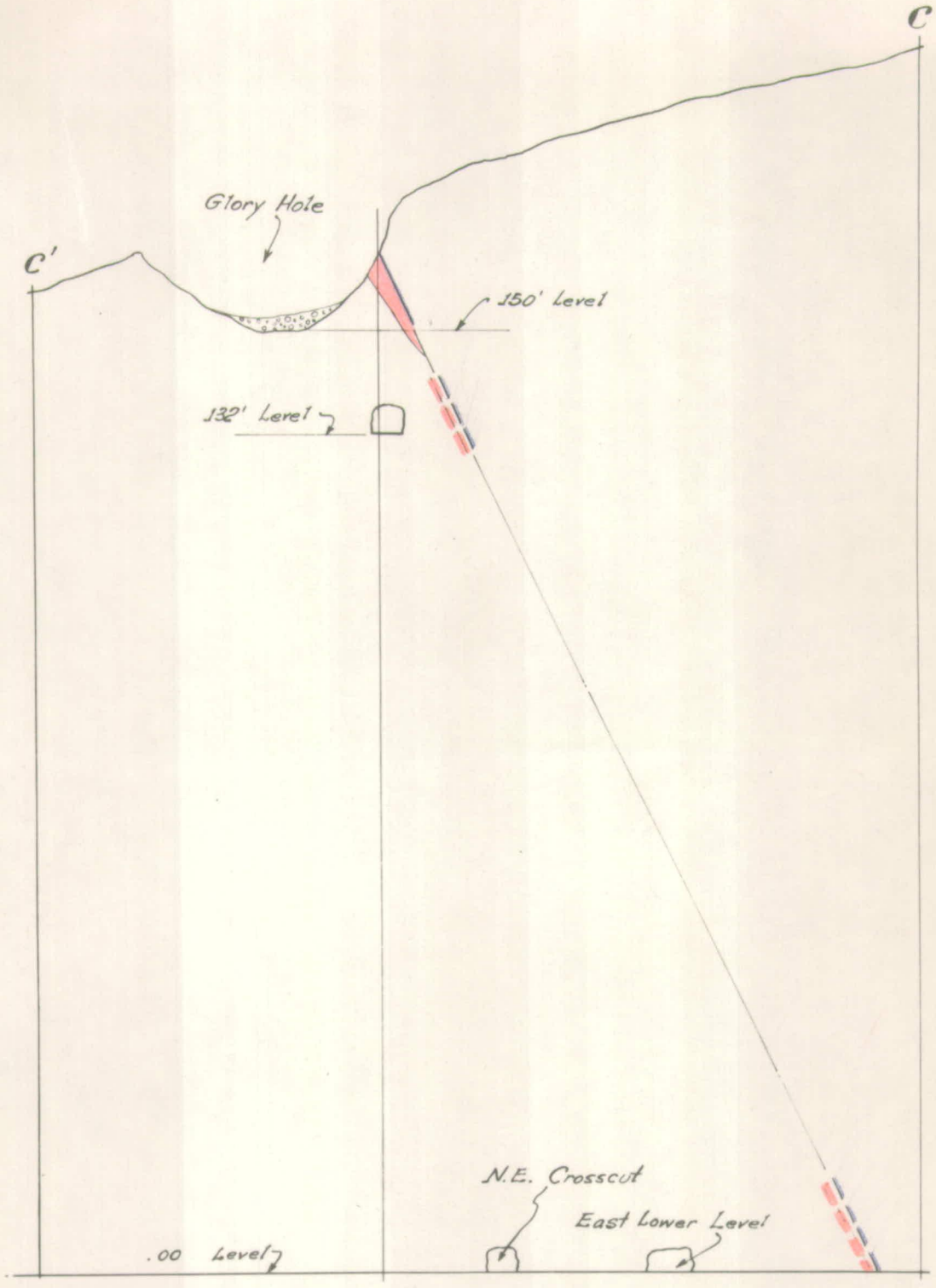
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft.

F. W. Christiansen 1951

FIGURE 7



PROJECTION OF FISSURE ZONES ALONG LINE C-C prime

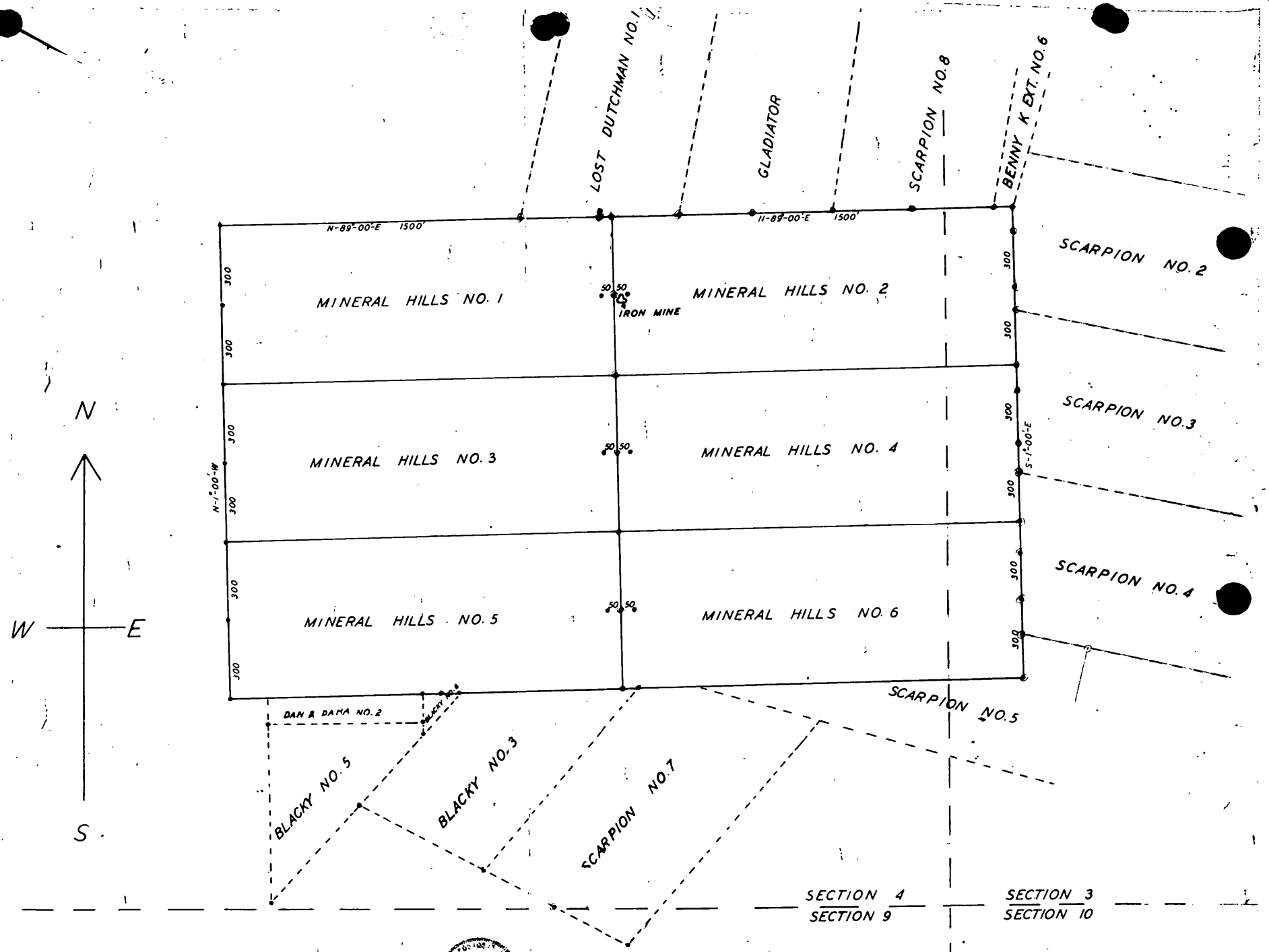
MINERAL HILLS MINE

MARYSVALE, UTAH

Scale: 0 10 20 30 ft

F. W. Christiansen 1951

FIGURE 8



MINERAL HILL MINING CLAIMS

SURVEYED & MAPPED BY J. MARK HOLMES OF KANAB UATH

MINERAL HILLS URANIUM CO.
1012 Boston Building

Salt Lake City 1, Utah
July 6, 1951

Ancient River Channels Gold Mining Company.
Suite 1, Cornet Building
Las Vegas, Nevada.

Gentlemen:

At your request, we are writing to advise that our claim to ownership of the Mineral Hills Mining Claims numbered 1 through 6, Durkee Mining District, Piute County, State of Utah, arises from their purchase outright from Ford T. Frost. He represented that he had the right to give us complete ownership.

There is no outstanding balance owing to the said Ford T. Frost for the purchase of said claims nor is there any further obligation owing to him with respect to the same. Since the time of purchase the property has not been encumbered.

We trust this information will be of assistance to you.

Sincerely yours,

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon
President

AJA:mm

EXHIBIT 1.

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

MINING LEASE

THIS AGREEMENT OF LEASE made and entered into this 15th day of November, 1950, by and between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, hereinafter termed the lessor, and Thomas H. Berry, and William T. Berry, hereinafter termed the lessee;

W I T N E S S E T H :

That the said lessor, for and in consideration of the rents, covenants, agreements, and royalties hereinafter reserved by the said lessee to be paid, kept, and performed, has granted, let, and demised, and by these presents does grant, let, and demise unto the said lessee the following-described mining property situate in the Durkee Mining District, Piute County, State of Utah, known as the Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, No.6, as recorded in the office of the County Recorder of Piute County, State of Utah.
There are expressly excluded from the above-described premises any portion thereof which have been or may be deeded, relinquished, or lost to the lessor in the settlement of conflicts or otherwise, insofar as any present claimants of record are concerned, including Spencer W. Gibbs, and those claiming by or through them.

The rights hereby granted to the above claims are to include all dips, spurs, and minerals therein contained and appertaining, together with any and all other property and rights, real, personal, or mixed, in or upon or appertaining to the claims above-mentioned; to have and to hold the said demised premises for the purpose of mining and for no other purpose for the term of ten years from the date hereof to expire at noon on the 15th day of November, 1960, with the privilege to renew the lease for ten years upon the same terms as herein contained, unless sooner forfeited or determined through violation of any agreement, covenant, or condition hereinafter contained, to be kept or performed by the said lessee.

In consideration of said lease, the said lessee does hereby covenant and agree severally and jointly with said lessor as follows:

1. To enter upon sied premises, and to commence work thereon within twelve days from the date of this lease, and to work the same mine-fashion in the manner necessary and appropiate to good and economical mining, so as to take out the greatest amount of ore possible with due regard to the safety, development and preservation of the same as a workable mine; all work, timbering, construction and installation of improvements to be subject to the inspection and approval of the general manager, superintendent or other representative of the lessor.

2. To work and mine the said premises as aforesaid steadily and continuously during the term of this lease, with not less than sixty shifts of work during each and every calendar month of the term of this lease. No excess above the required number of shifts in any one month to apply on any other month, and failure on the part of the said lessee to work said premises with at least said number of shifts each calendar month, or failure to work said premises at all for twenty-one consecutive days, may be considered by the lessor a violation of this lease, at the option of the lessor, upon fifteen day's written demand or notice, within which time a correction of the violation alleged must be made. If correction is not made, it shall work a forfeiture of this lease. The word "shift" is taken and accepted to mean the labor of one man for one day of at least eight hours.

3. To keep at all times all drifts, tunnels, shafts, winzes and other workings in said premises thoroughly drained and clear of loose rock and rubbish, and in absolutely safe and secure condition, unless prevented by riots, strikes, war, acts of God, or other conditions over which lessee has no control, and to maintain at all times and leave the floors of all drifts, crosscuts and other workings in good, even, unobstructed condition, and to stow no waste underground, nor fill any stopes, without the written consent of the lessor, its manager or any duly authorized agent.

4. To well and sufficiently timber with strong, well fitted and durable timbers, all the workings on the premises hereby leased at all points where proper, in accordance with good mining, and for ventilation, and to promptly repair or replace all timbering which may be rendered insufficient by any cause whatsoever; to keep the timbering of said workings at all times in good, safe and serviceable condition, and to remove none of the same without the written consent of the lessor, its manager or any duly authorized agent.

5. To allow the lessor, its manager or any duly authorized agent or representative at any and all times: (a) to enter and visit all parts of said leased premises and the workings thereon for the purpose of inspection and taking of assay samples; (b) to take samples fromany ores awaiting shipment; (c) to have surveys made of the workings by the lessor's surveyor and assistants whether under or above ground, or both, as often as the lessor, its manager or any duly authorized agent shall so order, and also furnish to lessor copies of blueprints of all surveys or maps made by the lessee; and generall to facilitate in every way such inspection, surveys and sampling, as above provided, as long as it can be done without inconvenience or cost to lessee.

6. There is expressly reserved to the lessor rights of way through the premises hereby leased for the more convenient working or examination of adjacent ground, but such rights-of-way shall be so excercised as not to interfere, more than necessary, with the operations of the lessee therein and there is also expressly reserved to the lessor the right and privilege to do any and all development work upon the premises hereby leased which may be rendered desirable by reason of any litigation or controversy which may arise and which may effect said leased premises or other adjacent property in which the lessor is interested, and to use the workings of the lessee herein in prosecuting such development work, providing that the same shall not interfere more than is necessary with the mining operations of the lessee and that all ore mined in the prosecution of such development work shall belong to the lessee herein (insofar as the same shall be taken from ground hereby leased) subject to the royalty hereinafter provided.

7. The lessee agrees to render to the lessor, on or before the 30th day of each month, a written statement showing the number of shifts worked, the wages therefor, amount of salaries, value of supplies and all other expenses of operating this lease incurred during the preceding month, and to afford the lessor, its manager or any duly authorized agent, every facility, at all times, for the inspection and copying of all books, assay journals, assay certificates, accounts, pay-rolls, vouchers, correspondence and papers generally of said lessee insofar only as they may relate to indebtdness or liabilities incurred or claimed for work, services, or materials in respect to said premises, or the development of other workings thereon, or shipment of ore therefrom.

8. To keep said premises and every part thereof at all times free and clear of all mechanic's or miners' liens or other liens, encumberances or liabilities; to settle, pay and discharge on or before the 30th day of each cal-

"SERVICE" LINE FORM 606 L.W.

endar month, all indebetedness and liabilities incurred by the said lessee prior to the expiration of the preceding calendar month for work done, services rendered or material furnished in res ect of said premises, and to forthwith post, and at all times keep posted in some conspicuous place upon the premises hereby leased a notice, to be provided by lessor, that said premises are leased to the lessee and that the interest of the lessor therein shall not be subject to any lien for services, labor or material furnised upon or used in connection with this lease, or said leased premises, said notice to be on behalf and in the name of the lessor company with the signature of the lessee also attached.

9. To furnish to the lessor, its manager or any duly authorized agent, full, true, and accurate information with regard to the condition of said workings or any part thereof or the quality or character of the mineral therein, and to immediately give the lessor notice of any discovery of any mineral. The lessee agrees to furnish the lessor with a copy of any information, maps, and/or reports made from geological, metallurgical, drilling, sampling, and/or other data relating to said premises secured by and in the possession of the lessee in connection with its prospecting, mining, and development of said premises.

10. To allow no persons not in privity with the parties hereto to take or hold possession of said premises or any part thereof under any claim or pretense whatsoever. To assign no portion or all of this lease to any third party without the lessor's written consent.

11. To assume all responsibility for and save the lessor harmless from any and all accidents to himself or any of his employees, sublessees, licensees, agents, associates, or visitors, upon the property of the lessor, as herein leased and to forthwith post and at all times keep posted at the main working upon the premises hereby leased, a conspicuous notice in the name and on behalf of the lessor, with the name of the lessee also attached in substance that the premises are leased to the lessee and that the lessee will not be liable for damages on account of any such accident. The lessor shall under no circumstances be liable to the lessee or his agents, servents, employees, licensees, sublessees, associates, visitors or any other person on account of any such accident.

12. To ship all ore with reasonable diligence after mining, with the right reserved to the lessor to take and remove all ores not so shipped with reasonable diligence and to apply the proceeds under the directions of this lease; to notify the lessor, its manager or any duly authorized agent, whenever ore is ready for shipment, giving the estimated tonnage and value thereof, also the intended purchaser, but it is expressly understood and agreed that all ore extracted from said leased premises shall be shipped in the name of the lessor and lessee and shall be routed and sent to and treated at the mill, smelter, sampler, or reduction works satisfactory to both parties.

13. It is expressly understood and agreed that the lessor reserves the property and rights of property in and to all ores extracted or to be extracted from said premises and in and to all ores not shipped within ten days after the expiration or other termination of this lease; that all ores which are of too low grade for profitable shipment shall remain on the premises, subject to the sole control and disposition of the lessor, and that any loss or expense resulting from or incident to any shipment of such low grade ore shall be borne and paid by the lessee; that all low grade ore not shipped shall be kept separate from and not mixed with waste, so that it may be available for shipment at any time by the lessor, and said low gradw ore shall be deposited on the premises herein leased as directed by the lessor, its manager or any duly authorized agent.

SERVICE LINE FORM 606 L.W.

14. The lessee agrees that in the event any fractions of property shall be found to be subject to a location within the exterior boundaries or group of claims covered by this agreement, at or adjoining said group of claims, that the lessee will either locate the same in the name of the lessor or will advise the lessor to locate the same. It is understood and agreed that upon such locations said claims shall be included within and subject to the terms and conditions of this agreement.

15. At the date of the execution of this lease to make immediate payment of the balance promised to be paid under the attached contract and option.

16. To pay and deliver, or cause to be paid and delivered to said lessor, as a rental or royalty upon all ores extracted and shipped or sold from said premises, the following roylaty, the rate of which is to be determined in each case by the gross value of the ore, which shall be the price paid at the smelter, mill, or purchasing depot of the United States Government and/or such other purchaser as may offer a higher price, without any deductions, to-wit:

(a) 10% royalty on all ores computed on the gross price as above-defined on gross production for the first year;

(b) 12½% royalty on the gross price as above-defined on gross production of uranium ore up to and including 1% grade for all production after the first year; and 12½% royalty on all other ores on the gross price as defined above for all production after the first year;

(c) 14% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 1% grade and up to and including 5% grade uranium ore for all production after the first year;

(d) 16% royalty on the gross price as above-defined on the gross production of uranium ore in excess of 5% grade uranium ore for all production after the first year;

17. Any amount due and payable to the lessors as royalties on ore extracted, shipped, and sold during any month shall be paid by the lessee to the lessor on or before the 15th day of the next succeeding month during which the lessee shall have received payment therefor by the deposit thereof to the credit of the lessor or assigns in a bank of the lessor's written designation, subje ct, however, to the right of the lessor to request of the purchaser of the ore shipped that a check be made payable to the lessor hereunder in conformity with the royalty schedule hereinabove set out, making direct payment to the said lessor for his per cent interest in said purchase price computed as above set out.

18. The lessor reserves the right at all times to keep its manager or any duly authorized agent at said leased premises, in whose presence all ore shall be classed, graded, sorted and shipped and said manager or agent shall be permitted to take samples from all ores mined or sorted for examination or assay. In case any dispute shall arise between the lessor and the lessee or between the agents of the parties hereto, in regard to the classing, sorting, grading, or shipping of any of said ores, then in that case all shipments of said ore in

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question shall cease until the controversy is settled by arbitration, as hereinafter provided, to-wit: The lessor and the lessee shall each choose one representative and the two so chosen shall choose a third, and the three so chosen shall pass upon said difficulty, and their decision shall be final; and the cost of arbitration, as above provided, is to be borne equally by the parties hereto.

19. It is expressly covenanted and agreed between the parties hereto that, should any legal proceedings be instituted, such as injunction, apex suits or any other proceedings whatsoever, which would interfere with the possession and enjoyment of the said demised premises, that the lessee shall under no circumstances attempt to hold the lessor liable for damage or otherwise to the lessee therefor on account of such disturbed and interrupted possession and enjoyment. It is nevertheless understood that if necessary the lessor will undertake to defend title to the above claims.

20. It is furthermore agreed and understood that the lessor reserves the right of property to all dumps located upon said demised premises.

21. Said lessee does hereby furthermore covenant and agree that in case he fails to commence work on said premises as aforesaid, or to work and mine the same continuously, with diligence and in workmanlike manner, or to keep the same securely timbered, drained, clear and in safe condition, or to allow inspection, sampling or survey thereof, or to furnish true information regarding the same according to the conditions herein, or to render monthly statements as provided herein; or to keep the same free from liens, or to keep notices posted upon the leased premises in manner provided herein, or to make regular settlement for work, services and materials or assign or sublet any interest in the lease or said premises without written consent of lessor, or shall in these or any other respect fail to keep and fulfil any and all conditions, covenants or agreements herein expressed or implied, then and in that case the term of this lease at the option of the lessor, expire, and it shall be lawful for the lessor, its manager, attorney, or other duly authorized agent, to declare this lease void and of no effect thereafter, and with or without process of law and after fifteen days' written notice without correction of the violation, to enter upon and take possession of said premises, and dispossess all persons occupying the same; and in such case, and also at the expiration of this lease by limitation, to-wit, at noon of the last day of the term hereby granted as aforesaid, said lessee agrees to surrender, yield and deliver to the lessor, its successors or assigns, quiet and peaceable possession and enjoyment of said premises and all buildings and other improvements thereon and therein, excepting the tracks, rails, pipelines, and machinery belonging to lessee. All dumps, ores or other materials detached or broken down from said premises, but still remaining thereon shall remain the property of the lessor, together with the appurtenances, in good order and condition, with all drifts, shafts, tunnels, winzes and other passages and workings, thoroughly clear of loose rock and rubbish, and drained, and the mine ready for immediate continued working without demand or further notice.

22. Time is the essence of this contract in all particulars.

23. All of the operations of the lessee under this lease shall be so conducted as to fully comply in every respect with the laws of the State of Utah.

24. The lessee shall not mix any ores from said premises with the ores, minerals, products, etc. derived from any other property.

25. The lessor shall pay any federal, state, and county tax assess-

SERVICE LINE FORM 606 L.W.

ments based solely on ownership of mining property and the lessee shall pay all taxes assessed because of any operations thereon, including the Utah mine occupation tax and personal property tax. The lessee shall pay and/or perform all federal, state, and county assessments of whatever nature necessary to maintain the interest of the lessor in said property. The lessee likewise agrees to pay all federal, state, and county assessments upon any and all structures and other improvements, machinery, equipment, tools, supplies, and personal property whatsoever placed upon said premises by the lessee.

26. The lessee, in the operation and development of the said property shall be subject to all applicable Federal enactments and regulations, laws of the State of Utah, and all Federal or State rules and regulations regarding Employee's Liability, Workman's Compensation and Workman's Old Age and Unemployment Insurance, and said lessee covenants and agrees to indemnify and hold harmless the lessor from and against the payment of any and all damages, claims, costs, and expenses due to the existence of such enactments, and of any and all claims, cost, and expenses in connection therewith under any claim of subrogation provided for by said enactments or otherwise; and the lessee shall further indemnify and hold harmless the lessor from and against any and all damages, claims, costs, and expenses arising out of damage to the property or any injury or death of the employees of the lessee, or any other person whomsoever other than the lessors and those acting under them where such injury, death, or damage occurs because of or in connection with the use, operation, or development in any manner, of the property hereby sold, whether such claims are based upon right conferred by the common law or by statute.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals this 15th day of November, 1950.

MINERAL HILLS URANIUM CO.

By Adrian W. Cannon

LESSOR

THOMAS H. BERRY

WILLIAM T. BERRY

LESSEE

SERVICE LINE FORM 606 L.W.

SERVICE LAW FORM 606 L.W.

OPTION AND LEASE

THIS AGREEMENT, made and entered into by and between the Mineral Hills Uranium Co., a corporation of the State of Utah, hereinafter called the optionor, and Thomas H. Berry and William T. Berry, hereinafter called the optionee,

W I T N E S S E T H:

WHEREAS, the optionor is the owner and in possession of certain lode mining claims hereinafter more particularly mentioned and described; and

WHEREAS, the optionor represents that there is a possibility that said claims have a potential development as great ore bodies; and

WHEREAS, the proper development of such ore bodies, both present and in expectancy, and proper reduction and treatment thereof will necessitate large sums of money, and

WHEREAS, optionee is able to furnish money for such development work, but only under and in accordance with the terms and subject to the conditions hereinafter set forth;

NOW THEREFORE, for and in consideration of the payment by the optionee to the optionor of the sum of Fifteen hundred ($1,500.00) Dollars, the receipt whereof is hereby acknowledged, and for and in consideration of the mutual covenants of the parties by each to the other made and herein contained, the parties hereto agree as follows:

1. The optionor grants to the optionee, for the period from date to and including January 2, 1951, an option upon the terms and conditions in this agreement hereinafter set forth, to receive a mining lease in the form hereto annexed and hereby referred to and made a part hereof of certain properties being all those certain lode mining claims situate, lying, and being in the Durkee Mining District, in the County of Piute, State of Utah, more particularly described as follows:

> Mineral Hills No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6, as recorded in the office of the County Recorder of Piute County, State of Utah.

2. That immediately upon the execution of this option agreement the optionee agrees to enter into and to take exclusive possession of all and singular the above-described property and, as consideration for this option, shall prospect and explore, test, develop, and work, at its own discretion and at its own proper charge and expense, said lode mining claims, and any one or more of them, provided all work done and all improvements made by said optionee upon said property, or any part thereof, under the terms hereof during the period hereof shall be done in a minerlike manner to enable said premises and all thereof to be carefully operated, and so that the minerals therein contained may be extracted in an economical and minerlike manner. All equipment, tools, structures, and personal property of every nature and description brought or placed upon said premises prior to the excercise of said option by the optionee for use in said work shall not become a fixture but shall remain the property of the optionee and subject to removal by the optionee at its discretion.

In the event the optionee does not excercise this option, it should be entitled to remove said equipment and personal property from said premises and shall have the same removed on or before January 1, 1951.

3. The optionee agrees that in the event the optionee is on the property and still conducting exploration and development work as of the 1st day of December, 1950, then and in that event the optionee will pay to the optionor the sum of One Thousand ($1,000.00) Dollars as a further consideration for said option and in the event the optionee is on the property and still conducting exploration and development works as of the 1st day of January, 1951, then and in that event the optionee will pay to the optionor the sum of Five Hundred ($500.00) Dollars.

4. It is understood and agreed by the parties hereto that if the optionee as principal, or by or through its agents, is still on the property or has its equipment on or is operating the same on the property as of January 1, 1951, that said presence, at the election of the optionor, activates the lease and the parties hereto thereupon agree to be bound by the terms of the lease hereunto attached and agree to execute the same at said time.

5. All ores extracted by the optionee during the aforesaid time shall be and remain the property of the optionor; provided, that the optionee is entitled to take and have as its own necessary and reasonable assay samples and mill test from said mining claims.

6. If , on or before the expiration of the option period, the optionee shall elect to excercise the above-mentioned option and receive a mining lease in accordance with the hereunto attached, it shall notify the optionor and it shall, upon such notice, and upon the payment of the entire consideration above-designated at the time of said excercise, rather than at the times specified for payment of said consideration, be entitled to receive in accordance with and subject to the terms of this contract a lease in the form of the lease hereunto attached and by reference made a part hereof, and the optionor hereby agrees upon such notice to make, execute, and deliver such lease to the optionee. Whether or not the optionee elects to excercise such option, the consideration promised and paid hereunder shall belong to the optionor without any claim for return thereof remaining with the optionee. In addition, if the option is not excercised the optionee shall peacefully surrender and turn over said properties to the optionor in as good condition as they now are in, reasonable wear and tear excepted, and free and clear of any and all liens and incumbrances incurred by the optionee in its operation on or about the same. The optionee shall likewise turn over the copies of all data, plans, analysis, photographs, and otherdeterminations and reports that the optionee shall have made or caused to be made or otherwise obtained in and about said premises during its possession of the same under the option.

7. The optionee during its possession of said property and all thereof, agrees to protect said property and all thereof against all claims of labor and materialmen and against all liens and liabilities arising out of the acts of the optionee upon said property, and to permit the optionor to place and maintain such notices thereon as shall be lawfully necessary to protect said optionor against claims; and the optionee further agrees to hold harmless the said optionor against any and all claims for damages for injury incurred by workmen in its employ at said properties, or any other person or persons.

SERVICE LINE FORM 606 L.W.

8. It is understood during the possession of said property by the optionee the optionee shall permit any authorized representative of the optionor to be, remain on, or visit the property hereinafter leased to represent the optinor and observe the performance by the optionee of each and all the terms of this agreement.

IN WITNESS THEREOF, the parties hereto have respectively caused their names to be hereunto subscribed this 10th day of November, 1950.

MINERAL HILL URANIUM CO.

By Adrian W. Cannon

OPTIONOR

WITNESSED BY

THOMAS H. BERRY

BEN J. TIEDEMAN

WILLIAM T. BERRY

OPTIONEE

****

Marysvale, Utah
November 10th, 1950

Thomas H. Berry

Dear Sir:

We hereby agree to amend the option agreement to provide as follows:

* $500.00 Cash
$500.00 January 15th, 1951
$500.00 March 1st, 1951

which will constitute the down payment, and the balance of $1,500.00 is to be deferred for a period of 6 months and paid as advanced royalty.

Yours very truly

ADRIAN W. CANNON

* Subject to receipt of initial $500.00 within five days

ADRIAN W. CANNON

THOMAS H. BERRY

ASSIGNMENT OF OPTION AND LEASE

(To be attached to Option and Lease dated the 15th day of November, 1950, between the MINERAL HILLS URANIUM CO., a corporation of the State of Utah, optionor, and Thomas H. Berry and William T. Berry, optionee; said option covering the period from November 20, 1950, to January 2, 1951, inclusive, and said lease for a term of ten (10) years, commencing on the 15th day of November, 1950 and ending at noon on the 15th day of November, 1960.)

THIS AGREEMENT, made and entered into this 2nd, day of January, 1951, by and between THOMAS H. BERRY and WILLIAM T. BERRY, Parties of the First Part, hereinafter called "Assignors", and the ANCIENT RIVER CHANNELS GOLD MINING COMPANY, a corporation, Party of the Second Part, hereinafter called "Assignee."

W I T N E S S E T H :

It is mutually covenented and agreed by and between the parties hereto as follows:

1. The Assignors, for a valuable consideration, do hereby sell, assign, transfer and set over to the Assignee, all of the Assignors' right, title and interest in and to the option and lease above described.

2. The Assignee hereby accepts the above assignment and agrees to be bound by and to perform and observe fully and faithfully all of the covenants, stipulations and conditions contained in said option and lease, to be performed and observed by the Assignors, and assumes all liabilities mentioned in said option and lease, to be assumed by the Assignors, hereby indemnifying the Assignors therefor.

3. This agreement shall be considered as taking effect as of the 31st, day of December, 1950.

THOMAS H. BERRY

WILLIAM T. BERRY

ASSIGNORS

ATTEST:

T. T. BERRY
Secretary

(CORPORATE SEAL)

ANCIENT RIVER CHANNELS
GOLD MINING COMPANY

By Thomas H. Berry
Its President - ASSIGNEE

SERVICE LINE FORM 606 L.W.

STATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, Thomas H. Berry and William T. Berry, known to me to be the persons described in and who executed the foregoing instrument, who acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said County and State

(S E A L)

My Commission expires
September 11th, 1954

****

STATE OF CALIFORNIA
: SS
COUNTY OF LOS ANGELES

On this 14th day of March, 1951, personally appeared before me, the undersigned, a Notary Public in and for said County and State, THOMAS H. BERRY, known to me to be the President of the corporation that executed the foregoing instrument, and upon oath did depose that he is the officer of said corporation as above designated; that he is acquainted with the seal of said corporation, and that the seal affixed to said instrument is the corporate seal of said corporation; that the signatures to said instruments were made by the officers of said corporation as indicated after said signatures, and that the said corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of my office the day and year in this certificate first above written.

NELLIE G. KEY
Notary Public in and for said County and State

(S E A L)

My Commission Expires:
September 11th, 1954.

SERVICE LINE FORM 606 L.W.

SERVICE LINE FORM 606 L.W.

CONSENT OF ASSIGNMENT

Adrian W. Cannon, President of the Mineral Hills Uranium Co., a corporation of the State of Utah, does herewith, as President of the said corporation, consent to the assignment by the lessees to the Ancient River Channels Gold Mining Company., a corporation of the State of Nevada, all of their rights in and under that certain lease dated November 13, 1950, by and between Mineral Hills Uranium Co., a corporation if the State of Utah, the lessor therein and Thomas H. Berry and William T. Berry, therein designated as lessees; provided, however, that the said corporation does not waive any of the claims which it may have against the lessees designated therein.

Dated this 6th day of July, 1971.

Mineral Hills Uranium Co.

By Adrian W. Cannon

President

THOMAS H. BERRY
PRESIDENT

WILLIAM T. BERRY
SEC'Y & TREASURER

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

SUITE 211, 206 NORTH VIRGINIA STREET
[redacted]
RENO, NEVADA
[redacted]

[redacted]

BRANCH OFFICE
SUITE 1 CORNET BLD'G
LAS VEGAS, NEVADA

DmA
1874

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 23 1951
LANDON F. STROBEL
Executive Secretary

July 16th, 1951

United States
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

ATTENTION:

Mr. Teston Bourret, Chief
Minor and Rare Metals

Dear Mr. Bourret:

We transmit herewith 4 copies of Form MP-103, "APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO EXECUTIVE ORDER 9, UNDER DEFENSE PRODUCTION ACT OF 1950" duly executed and including geological report together with maps, assays and all other required supporting data.

It is our hope that you will find our application in perfect order; that you will act upon the same at your earliest possible convenience and grant our request without un-necessary delay.

Please believe us to be,

Yours very truly

Ancient River Channels
Gold Mining Company

By

President

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1874

Date received 7-23-51

Participation

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
SUITE 1, COHNET BUILDING,
LAS VEGAS, NEVADA.

Name and address of applicant

Date July 16th, 1951

FILL IN THIS BLOCK

Date of application July 16th, 1951

Estimated cost $53,500.00

Mineral or metal URANIUM

Percentage of Government participation 90%

Location of mine Sec. 4, Twp. 27 S., R. 3 W., S. L. B. M.
KESVALE, PIUTE COUNTY, UTAH.

Date of filing MF-100

DMA Docket Number, if available 1874

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
(Name of company)

By Thomas H. Berry
(Signature of authorized official)

July 16th, 1951
(Date)

President
(Title)

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.

*Same as footnote on page 1.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1874

Date received 7-23-51

Participation

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
SUITE 1, COMET BUILDING,
LAS VEGAS, NEVADA.

Name and address of applicant

Date July. 16th 1951

FILL IN THIS BLOCK

Date of application July. 16th 1951

Estimated cost $53,500.00

Mineral or metal URANIUM

Percentage of Government participation 90%

Location of mine Sec. 4, Twp. 27 S., R. 3 W., S. L. B. M.
MARYSVALE, PIUTE COUNTY, UTAH.

Date of filing MF-100

DMA Docket Number, if available 1874

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THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
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*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

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9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

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16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
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    (*a*) Describe the ore or mineral deposits briefly.
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20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

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

ANCIENT RIVER CHANNELS G OLD MINING COMPANY
(Name of company)

By Thomas H. Berry
(Signature of authorized official)

July 16 1951
(Date)

President
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

THE APPLICANT

1. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation organized and existing under the laws of the State of Nevada, with an authoriz ed capital stock of Five Hundred Thousand & No/100 D$500,000.00) Dollars, divided into 5,000,000 shares of all common, fully paid and non-assessable stock with a par value of Ten ($.10) cents per share.

2. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation

OFFICERS & DIRECTORS

3. Thomas H. Berry, President & Director
830 West 6th, Street,
Los Angeles 17, California

William T. Berry, Vice-President, Secretary, Treasurer and Director
5016 Novgorod Street,
Los Angeles 32, California

Edgar G. Mason, Director
740½ Mountain View Avenue
Monrovia, California

FIVE LARGEST STOCKHOLDERS

Thomas H. Berry 830 West 6th Street, Los Angeles 17, California	53,000 Shares
William T. Berry 5016 Novgorod Street, Los Angeles 32, California	103,625 "
John M. Berry 586 Eaton Drive, Pasadena 8, California	104,125 "
Harry E. Baker 729 South Bonnie Brae Avenue, Los Angeles, California	60,000 "
Edgar G. Mason, 740½ Mountain View Avenue, Monrovia, California	50,000 "

4. The management of the project is vested in Thomas H. Berry, who has had wide experience in mining and other general business enterprises.

SERVICE LINE FORM 606 L.W.

5. LESSEE, Ancient River Channels Gold Mining Company

6. OWNER, Mineral Hills Uranium Co.,
1012 Boston Building,
Salt Lake City 1, Utah.

See EXHIBIT "A" for owners statement.

7. Copy of Lease together with Assignment and Owner's Consent to said assignment herewith attached.

8. Statement of Assets & Liabilities, and Profit & Loss Statement as of June 30th, 1951, herewith attached.

9. Applicant is prepared to further invest Five Thousand ($5,000.00) Dollars, which is considered to be more than sufficient to pay our part of the cost of the project, as detailed in question 23, of this application form, in accordance with the regulations of Government participation (Section 9 of Mineral Orfer 5.)

THE PROPERTY

10. (a) The only property to be involved in this exploration project is the Mineral Hills Group of six mining claims, as per property map herewith attached.

(b) The property consists of six unpatented mining claims, located in Section 4, Township 27, South., Range 3, West., Salt Lake Base Meridian., in the Durkee Mining District, Piute County, Utah.

11. The property is known as the Mineral Hills Mine, but, is sometimes referred to as the Old Krotski Mine, or the Iron Mine.

12. The property is located about two miles northeast of Marysvale, Utah., and is served by good, well kept country roads.

Marysvale is the terminus of the Denver & Rio Grand Railroad; and in addition thereto is served by the "Trailways Bus System" of the A. T. & S. F., operating over United States (paved) Highway No. 89, and is about 175 miles south of Salt Lake City.

13. An unlimited supply of water is available at all times from the Savier River, about one mile distant; very little water is required however, other than for drilling purposes.

14. The Utah Power Co., serves the district, and power is available at reasonable rates, if and when required. Present operations are conducted through the use of gasoline powered equipment.

14. The mine is presently equipped with 1-105' Ingersol-Rand portable air compressor, 1-J 49 Ingersol-Rand Jackhammer, complete with air and water hose, column, arm, cradle and all attachments., about 1,500' 12# mine rail, 500' 2" iron water pipe, 1-27 Cu. Ft. steel mine car, 1-3/4 ton Army Type truck and all necessary small tools and equipment.

SERVICE LINE FORM 606 L.W.

15. The ore is to be delivered by truck, to the American Smelting & Refining Co., at their purchasing depot at Marysvale, for the account of the United States Atomic Energy Commiss ion.

16. The history of the property is as follows:

(a) This property was developed and operated as an Iron Mine during the first World War; the product (as rumor has it) was shipped to the smelters at Salt Lake City, and used as flux; operations were suspended at the close of the war and the property lay idle until the recent discovery of Uranium in the district.

(b) There are a number of immediately adjoing properties in the process of exploration and development. The neighboring properties of the Vanadium Corporation of America., the Bullion-Monarch Mine and the Bertelson Mine are all producing; the quantity and quality of the ore is however, unknown to the applicant, but is well known to the Marysvale office of the Atomic Energy Commiss ion.

(c) We have no private reports that may apply to this application other than the reports submitted herewith. The Atomic Energy Commission, at Marysvale does however, have complete information on all of the properties in the district.

17. There is no production, prospecting only.

18. There are no mineral reserves developed.

(a) Prospecting for primary or secondary Uranium ores.

(b) Maps and assay data herewith.

(c) No estimate of tonnage or class of ore can be compiled as of this date.

19. There are no conditions or circumstances regarding the property not brought out in the foregoing.

THE EXPLORATION

20. The exploration is to be conducted for the purpose of developing and producing primary and secondary uranium ores.

21. The proposed work, consisting of drifting, crosscutting, raising, sinking and generally extending the present workings.

Core drilling and otherwise generally prospecting the property.

It is estimated that the maximun time required to complete the proposed work will not exceed two years.

22. The factors leading the applicant to expect the finding of commercial ore bodies is based upon herewith attached Geological Reportand supporting maps and data.

SERVICE LINE FORM 606 L.W.

THE REQUIREMENTS AND COST

23. Itemized statement of estimated requirements and cost of the project in which the Government will participate.

(a) Underground work estimated to be about 1,200 feet of drifting, crosscutting, raising and sinking will be contracted to Mr. Chell Dalton, a recognised and highly responsible Independent Mining Contractor, of Marysvale, Utah., on an overall cost basis of mining of $25.00 per lineal foot. 30,000.00

About 200 lineal feet underground and 300 lineal feet surface core drilling at an average estimated cost of about $15,00 per lineal foot 7,500.00

(b) Supervision and management of the project is to be vested in Mr. Thomas H. Berry, President of the corporation and Mr. William T. Berry, Vice-President, Secretary and Treasurer of the corporation at salaries of $300.00 per month each 6,000.00

(c) Estimated cost of necessary repairs to existing facilities, structures and buildings 500.00

(d) No additional facilities, structures or buildings required

(e) No equipment required not now owned by operator

(f) Operator proposes to rent no additional equipment

(g) Operator now owns equipment valued in excess of $2,500.00 for the use of which no rental charge is to be made.

(h) All materials and supplies including items of equipment costing less than $50.00 each is to be furnished and paid for by the contractor

(i) Cost of power, water, utilities and other items not provided for above

1. Cost of power, water and utilities to be furnished and paid for by contractor

2. Cost of other items not provided for above 8,500.00
(See following page for detail)

53,500.00

SERVICE LINE FORM 606 L.W.

Detail from page four:

Office Rent,	10 Mos @	$ 50.00 per Mo.			500.00
Office Supplies	"	25.00	"		250.00
Telephone & Telegraph	"	25.00	"		250.00
Miscellaneous General Exp.	"	100.00	"		1,000.00
Traveling Expenses	"	150.00	"		1,500.00
Professional Services	"	500.00	"		5,000.00
Legal Expenses	"	50.00		$ 5000.00	
Accounting	"	50.00		500.00	
Engineering	"	400.00		4,000000	
TOTAL OF ITEM (1) 2.					8,500.00

The estimated time required to complete the project is about ten months after the project is approved.

The progress expected to be accomplished is a minimum of ten per cent of the total program as outlined above, at an average cost of about $5,350.00 per month.

"SERVICE" LINE FORM 606 L.W.

STATEMENT

ANCIENT RIVER CHANNEL GOLD MINING COMPANY
As of
June 30, 1951

ASSETS & LIABILITIES

Cash,			150.00	
Las Vegas Office	100.00			
Marysvale Office	50.00			
Bank,			254.52	
First National Bank of Nevada, Las Vegas, Nevada.				
Accounts Receivable,			150.00	
Walter R. Collins				
Mining Property			45,000.00	
Mineral Hills Lease	42,000.00			
Entry Fee (Bonus)	3,000.00			
Machinery, Tools & Equipment			1,820.13	
Compressor, Jackhammers, Cars, Rails & Miscellaneous Equipment.				
Truck,			750.00	
3/4 Ton "Army Type"				
Development,			4,254.00	
Timbering & Reconditioning	250.00			
Roads	104.00			
260' Tunnel	3,900.00			
Discounts Allowed,			1,546.25	
Stock Sales				
Accounts Payable,				3,455.00
Chell Dalton, Contractor			1,700.00	
Mineral Hills Uranium Co., Advance Royalty			1,750.00	
Leon A. Nichols			5.00	
Capital Stock,				55,972.55
Authorized 5,000,000 Shares @ $.10 per share			500,000.00	
Un-Issued 4,440,274.5			-444,027.45	
Profit & Loss				5,502.65
As of December 31st, 1950			1,672.82	
January 1st, 1951 to date			3,829.83	
		55,924.90		55,924.90

SERVICE LINE FORM 606 L.W.

S T A T E M E N T

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
As of
June 30, 1951

P R O F I T & L O S S

Operating Loss as of December 31st, 1950			1,672.82
Operating Loss period January 1st, 1951, to June 30th, 1951			3,829.83
Detail,			
Office Rent		378.00	
Professional Services		589.70	
Legal	293.16		
Engineering	295.04		
Miscellaneous	1.50		
Office Supplies		33.17	
Postage		10.00	
Telephone & Telegraph		106.82	
Traveling Expense		886.56	
Taxes		36.80	
Advertising		22.77	
Miscellaneous General Administrative Expense		1,766.01	
Thomas H. Berry	582.83		
William T. Berry	839.44		
Miscellaneous	343.74		
TOTAL OPERATING LOSS TO DATE, June 30th, 1951			5,502.65

SERVICE LINE FORM 606 L.W.

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION, COLORADO

ADDRESS REPLY TO:

MANAGER,
COLORADO RAW MATERIALS OPERATIONS
U. S. ATOMIC ENERGY COMMISSION
P. O. BOX 270
GRAND JUNCTION, COLORADO

AND REFER TO MI:CAR

December 5, 1950

Mr. Thomas H. Berry
Mr. William T. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTHWEST FACE OF 152 LEVEL) HOLE)
(UPPER ADIT)

Gentlemen:

Your sample marked "Mineral Hills No. 10" has been assayed for uranium. The amount is 0.02% U_3O_8.

Very truly yours,

Charles A. Rasor

Charles A. Rasor,
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

November 29, 1950

Mr. Thomas H. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTH*
WEST FACE 132' LEVEL)
(Upper Adit)

Dear Mr. Berry:

MINERAL HILLS MINE

This is in reply to your letter of November 15, 1950, concerning a sample submitted for examination.

Microscopic study of the sample shows it is composed of quartz, feldspars, calcite, muscovite mica, and considerable magnetite. A small amount of uranium as an unidentified mineral was also detected in the sample. A radiometric analysis indicated that the uranium content was about 0.14 percent U_3O_8.

Sincerely yours,

C. H. Schack

C. H. Schack, Acting for
S. R. Zimmerley, Chief
Metallurgical Division
Region IV

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 328893 *Date* November 9, 1950

Sample Pulp

Received 11-6-50 *Marked* "Sample 1158-A #8"

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

(THIS SAMPLE TAKEN FROM NORTH-WEST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

REPORT OF DETERMINATIONS

Uranium Oxide (U_3O_8) ---------- 0.08%

Respectfully submitted,

SMITH-EMERY CO.
CHEMISTS AND ENGINEERS

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR, EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 329284-85

Date November 18, 1950

Sample Pulp

Received 11-6-50

Marked (THESE SAMPLES TAKEN FROM NORTH-EAST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

REPORT OF DETERMINATIONS

"Sample #7 (1157-A)"

Uranium Oxide (U_3O_8) ---------- 0.03%

"Sample #9 (1159-A)

Uranium Oxide (U_3O_8) ---------- 0.04%

Respectfully submitted,

Smith-Emery Co.
CHEMISTS AND ENGINEERS
G.L.C.

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR, EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

SERVICE LINE FORM 606 L.W.

GEOLOGICAL REPORT

on

THE HOLDINGS OF

THE MINERAL HILLS URANIUM CO. PROPERTY

near

MARYSVALE, UTAH

F. W. CHRISTIANSEN, Geologist

S. R. MAHONEY, Geologist

INTRODUCTION

The examination of the Mineral Hills Uranium Company property was made at the re quest of the Company and Mr. Thomas H. Berry, President of the Ancient River Channels Gold Mining Company., lessee.

It was undertaken primarily for the purpose of determining the relationship of the property and areas at present being explored by the company, to the general geology of the Antelope Range and operating uranium mines in the western part of the area.

The field study was made on July 7, 8, and 9, 1950, and on three short trips totaling 7 days in the summer of 1951.

LOCATION

The property consists of the Mineral Hills group, located in Sec. 4, T. 27 S., R. 3 W., S. L. B. M., about three miles north-east of Marys vale, Utah.

PHYSICAL FEATURES

The property is s erved by dirt roads which are passable by truck, except in heavy snow or rain. No timber is available on the property, but an abundant supply of suitable mine timber can be obtained from nearby hills. Water is not available within the property, but the moderate amounts required for development may be obtained nearby by tank truck.

The topography is generally rolling, and is not sufficiently rugged as to pres ent difficulties for year round operation. The property is located in the Antelope Range, a low range of mountains that connect the high Tushar Mountains on the wes t with the high Sevier Plateau on the eas t.

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GEOLOGY

The rocks in the area covered by the claims are chiefly flows of dacite, latite, and rhyolite interbedded with tuff and tuff-breccia and some obsidian.

This s equence of volcanic flows has been intruded by a coarse-grained monzonite stock, which locally is expos ed by erosion in the northwestern and southwestern part of the area (See Fig. 1). The igneous geology has not been worked out in detail, and some evidence indicates the presence of a later, fine-grained monzonite intrusive in parts of the area.

The extrusive rocks are considered early Tertiary (post-Wasatch) in age. The age of the coarse-grained monzonite can be estimated only as post-extrusive, but probably is middle or late Tertiary in age. A younger phase of granite intrusions are present in adjacent areas however none have been discovered on the Mineral Hills claims. There is some evidence that indicates the uranium mineralization may be associated with granite.

Extensive silicification, alunitization, kaolinization, and other types of alteration are characteristic of the contact zone, and of extensive zones away from the intrusive. Highly-altered zones of this type occur in several places within the Mineral Hills claims particularly in and near the glory hole (Fig. 5), and in a generally north-south zone west of the glory hole. It is in this zone west of the glory hole that autunite crystals have reportedly been found and in which the highest radiometric count was obtained. (See Fig. 2) Isorad maps were obtained from the Atomic Energy Commission. A later (late-Tertiary) extrusion of rhyolite and rhyolite tuff-breccia is known to truncate earlier eroded flows in the northwestern part of the Antelope Range, but is not known to be present in the area investigated.

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Extensive alteration is not pre sent in this later flow.

Alteration occurs around the margins of the monzonite, and in irregular masses in the extrusives at considerable distances from exposures of the intrusive. Localization of altered masses appears to be controlled by strong northeasterly and northwesterly zones of fracturing.

Alunite deposits of the Antelope Range consists largely of irregular bodies in highly-altered portions of the extrusive rocks. Large tonnages of high-grade alunite were developed by the U. S. Geological Survey and the Bureau of Mines in cooperation with the operators, to supply the Kalunite Corporation plant in Salt Lake City during World War 2. Operations are at present discontinued. Commercial alunite deposits have not been developed within the claims considered in this report.

The first uranium prospect was discovered in 1949 on part of the Seegmiller property, now operated as the Bullion-Monarch open pit mine. Mr. Seegmiller acquired the claims, which had previously been prospected for fluorspar, when he discovered the yellowish mineral autunite (calcium uranium phosphate). A greenish mineral found associated with it was identified as torbernite (hydrous copper uranium phosphate). Present mining operations in the pit are exclusively on autunite and torbernite ore.

The Vanadium Corporation of America (V. C. A. hereinafter) have developed two properties, both underground operations (See Fig. 1). The largest and most promising mine of the two and presently the most promising one is located about 3,000 feet northwest of the Mineral Hills glory hole and is similarly located near the contact of the flows and the monzonite intrusive. The V. C. A. mine was discovered by bulldozer cut. Autunite and torbernite were found in quantity in an east-west fissure zone, striking into the monzonite at about right angles to the contact.

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Development by incline disclosed a well-defined fissure zone with high values in autunite and torbernite at the surface and at depth, pitch-blende. Approximately 100 feet beneath the surface, primary uraninite (pitch-blende) was encountered, which locally assayed very high. At present this mine, the Bullion-Monarch mines and the Bertelson mine are the only ones which have penetrated the pitchblende zone, but it is believed that most of the mines will reach the primary zone of mineralization at depth.

The discovery of the pitch-blende has greatly enhanced the future promise of the district for uranium production.

The Seegmiller and Bertelson mines (See Fig. 1) occur along the contact between the monzonite and the flows. The ore occurs in the monzonite, with rhyolite tuff and tuff-breccia forming the hanging wall. Values are in autunite and torbernite.

Several other prospects, within the monzonite and along the contact, have exposed good showings of autunite and torbernite. The Papsy Hope prospect (See Fig. 1) lies 2,000 feet east of the monzonite contact, and shows autunite and torbernite mineralization in a steeply-dipping, east-west broken and altered zone in dacite-porphyry flow. It is reported that assays of 0.26 percent U_2O_3 have been obtained from channel samples in the incline. (This assay was determined by a calibrated Geiger Counter). Comarable radioactive count and mineralization is present in the adjoining P. L. No. 4 prospect (See Fig. 1).

The most intens e radioactivity known on company property is fou nd in the glory hole of the old Krotski iron mine, now known as the Mineral Hills prospect (See Fig. 1). The workings thereon consist of three adits, and a surface open pit glory hole.

Magnetite and hematite iron ore were mined about 35 years ago for use as flux in Salt Lake Valley smelters.

The iron mineralization and uranium mineralization is partly a replacement and partly fissure filling, deposited at high temperatures adjacent to the zone of contact between the coars e monzonite intrusive and the finer grained igneous rocks. The surface contact is located 1,000 feet north of the glory hole. The contact is irregular, at one point essentially horizontal, but steeply-dipping nearby. In the lower adit (See Fig. 3) a finer grained monzonite (?) body is in fault contact with the extrusives. A similar fault contact between the intrusive and extrusive rock is present at the portal at the upper adit (See Fig.4). The fault zone in both levels is dipping steeply to the north and probably represents a zone of high angle reverse faulting.

A quartz-phlogopite mica-feldspar pegmatite dike cuts through the glory hole and impregnates the monzonite in a wide zone exposed on the upper adit. Some radioactivity was detected in the dike. A 2 foot zone of porphyry alongside the dike is intensely radioactive, and has yielded assays of 0.26 percent U_2O_3 (Chemical assay from Smith Laboratory, at Moab, Utah). The exact nature of the uranium mineral has not been determined, but since no secondary uranium minerals have been observed it is believed that the radioactivity is at least partly due to uranium oxides.

Two zones of intense radioactivity are known in the glory hole. The first, described above, is in the east face, and the second occurs in the northwestern face (See Fig. 5).

The dimensions and attitudes of the radioactive zones are not as yet known. Present exposures indicate a somewhat irregular occurrence, controlled by intersecting fracture systems.

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Additional excavation will be necess ary to define the mineralization. The comparatively strong mineraliz ation of this property, and its proximity to the major producing mines of the district, are favorable to the Mineral Hills prospect.

The preliminary geologic study that has been made, both on the surface and underground, has proved inconclusive regarding the probable potentialities of the prospect. It is therefore recommended that a detailed study be made of the Mineral Hills claims and that this study be closely coordinated with a program of surface trenching, diamond drilling and extension of underground workings.

The radiometric high shown on the Isorad Map (See Fig. 2) lies in essentially virgin territory. This area should be systematically examined and trenched so as to reveal the nature of the alteration of bedrock in the covered areas. This would also expose any fracture system that may be present within this area of high count. It is suggested that from 20 to 25 days work with a D 8 or equivalent equipment would be sufficient to trench this area.

Expos ed in the glory hole, (See Fig. 5) are several rather definite mineralized fracture zones. These zones are also present in slightly modified form in the upper level (See Fig. 4). Figures 6, 7 and 8 are projections of the mineralized fissures of the glory hole to the lower level (See Fig. 3). Examinations of these sections reveal that if the mineralized "shoots" are continuous at depth and do not change their attitude they have not been intersected completely by the lower adit and exploration drifts and cross-cuts. Approximately 200 feet of diamond drilling or cross-cutting would be sufficient to prove or disprove the projections. In the event the relatively strong zones of mineralization present in the glory hole and on the upper level are not encountered at dept h

additional structural and mineralogical work, in addition to a detailed study of petrology, will be necessary. This should be accompanied with and followed by additional diamond drilling and underground work, in accordance with the results of the study as it progresses. Perhaps three to four thousand feet of diamond drilling may be sufficient although this is only a very rough estimate. It may also be found necessary to extend some of the cross-cuts and drifts of the lower level and to connect the shaft shown in Figs. 4 and 6 with the lower level. The amount of work that may be necessary for this type of development cannot be estimated, but provision should be made for perhaps 800 to 1,000 feet of underground work.

CONCLUSIONS

Secondary autunite mineralization is reported to be present in northwest part of the Mineral Hills claims. Areas remote from the monzonite intrusive have as yet not proved commercial, but the development of uranium in the district is comparatively recent, consequently little is as yet known about occurrences of commercial ore.

The Mineral Hills prospect shows mineralization of probable commercial grade. Size and continuity of the ore is not at present known. Proximity to the monzonite contact and to producing mines of the district suggests favorable conditions for development of ore at depth on the property.

Ore localizations appear to be related to the monzonite intrusive and to deeper (?) granite intrusions. Commercial occurences at present developed are localized in the monzonite along the contact, in fissures extending into the intrusive and in acidic dikes. Favorable showings in fissure zones in the altered extrusives at distances from the monzonite indicate that conditions were favorable for deposition of uranium minerals.

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Intensive exploration will probably disclose concentrations of ore within the intrusive rocks of the area.

F. W. Christiansen, Geologist

Stanford R. Mahoney, Geologist

536 Atlas Building
Salt Lake City, Utah

July 10th, 1951

SERVICE LITHO FORM 606 L.W.

THE APPLICANT

1. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation organized and existing under the laws of the State of Nevada, with an authoriz ed capital stock of Five Hundred Thousand & No/100 ($500,000.00) Dollars, divided into 5,000,000 shares of all common, fully paid and non-assessable stock with a par value of Ten ($.10) cents per share.

2. ANCIENT RIVER CHANNELS GOLD MINING COMPANY., is a corporation

OFFICERS & DIRECTORS

3. Thomas H. Berry, President & Director
830 West 6th, Street,
Los Angeles 17, California

William T. Berry, Vice-President, Secretary, Treasurer and Director
5016 Novgorod Street,
Los Angeles 32, California

Edgar G. Mason, Director
740½ Mountain View Avenue
Monrovia, California

FIVE LARGEST STOCKHOLDERS

Thomas H. Berry 830 West 6th Street, Los Angeles 17, California	53,000	Shares
William T. Berry 5016 Novgorod Street, Los Angeles 32, California	103,625	"
John M. Berry 586 Eaton Drive, Pasadena 8, California	104,125	"
Harry E. Baker 729 South Bonnie Brae Avenue, Los Angeles, California	60,000	"
Edgar G. Mason, 740½ Mountain View Avenue, Monrovia, California	50,000	"

4. The management of the project is vested in Thomas H. Berry, who has had wide experience in mining and other general business enterprises.

SERVICE LINE FORM 606 L.W.

5. LESSEE, Ancient River Channels Gold Mining Company

6. OWNER, Mineral Hills Uranium Co.,
1012 Boston Building,
Salt Lake City 1, Utah.

See EXHIBIT "A" for owners statement.

7. Copy of Lease together with Assignment and Owner's Consent to said assignment herewith attached.

8. Statement of Assets & Liabilities, and Profit & Loss Statement as of June 30th, 1951, herewith attached.

9. Applicant is prepared to further invest Five Thousand ($5,000.00) Dollars, which is considered to be more than sufficient to pay our part of the cost of the project, as detailed in question 23, of this application form, in accordance with the regulations of Government participation (Section 9 of Mineral Order 5.)

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10. (a) The only property to be involved in this exploration project is the Mineral Hills Group of six mining claims, as per property map herewith attached.

(b) The property consists of six unpatented mining claims, located in Section 4, Township 27, South., Range 3, West., Salt Lake Base Meridian., in the Durkee Mining District, Piute County, Utah.

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12. The property is located about two miles northeast of Marysvale, Utah., and is served by good, well kept country roads.

Marysvale is the terminus of the Denver & Rio Grand Railroad; and in addition thereto is served by the "Trailways Bus System" of the A. T. & S. F., operating over United States (paved) Highway No. 89, and is about 175 miles south of Salt Lake City.

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16. The history of the property is as follows:

(a) This property was developed and operated as an Iron Mine during the first World War; the product (as rumor has it) was shipped to the smelters at Salt Lake City, and used as flux; operations were suspended at the close of the war and the property lay idle until the recent discovery of Uranium in the district.

(b) There are a number of immediately adjoing properties in the process of exploration and development. The neighboring properties of the Vanadium Corporation of America., the Bullion-Monarch Mine and the Bertelson Mine are all producing; the quantity and quality of the ore is however, unknown to the applicant, but is well known to the Marysvale office of the Atomic Energy Commiss ion.

(c) We have no private reports that may apply to this application other than the reports submitted herewith. The Atomic Energy Commission, at Marysvale does however, have complete information on all of the properties in the district.

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(b) Maps and assay data herewith.

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Core drilling and otherwise generally prospecting the property.

It is estimated that the maximun time required to complete the proposed work will not exceed two years.

22. The factors leading the applicant to expect the finding of commercial ore bodies is based upon herewith attached Geological Reportand supporting maps and data.

Service line Form 606 L.W.

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23. Itemized statement of estimated requirements and cost of the project in which the Government will participate.

(a) Underground work estimated to be about 1,200 feet of drifting, crosscutting, raising and sinking will be contracted to Mr. Chell Dalton, a recognised and highly responsible Independent Mining Contractor, of Marysvale, Utah., on an overall cost basis of mining of $25.00 per lineal foot. 30,000.00

About 200 lineal feet underground and 500 lineal feet surface core drilling at an average estimated cost of about $15.00 per lineal foot 7,500.00

(b) Supervision and management of the project is to be vested in Mr. Thomas H. Berry, President of the corporation and Mr. William T. Berry, Vice-President, Secretary and Treasurer of the corporation at salaries of $500.00 per month each 6,000.00

(c) Estimated cost of necessary repairs to existing facilities, structures and buildings 500.00

(d) No additional facilities, structures or buildings required

(e) No equipment required not now owned by operator

(f) Operator proposes to rent no additional equipment

(g) Operator now owns equipment valued in excess of $2,500.00 for the use of which no rental charge is to be made.

(h) All materials and supplies including items of equipment costing less than $50.00 each is to be furnished and paid for by the contractor

(i) Cost of power, water, utilities and other items not provided for above

1. Cost of power, water and utilities to be furnished and paid for by contractor

2. Cost of other items not provided for above 8,500.00
(See following page for detail)

53,500.00

SERVICE LINE FORM 606 L.W.

Detail from page four:

Office Rent,	10 Mos @	$ 50.00	per Mo.		500.00
Office Supplies	"	25.00	"		250.00
Telephone & Telegraph	"	25.00	"		250.00
Miscellaneous General Exp.	"	100.00	"		1,000.00
Traveling Expenses	"	150.00	"		1,500.00
Professional Services	"	500.00	"		5,000.00
Legal Expenses	"	50.00		$ 5000.00	
Accounting	"	50.00		500.00	
Engineering	"	400.00		4,000000	
TOTAL OF ITEM (i) 2.					8,500.00

The estimated time required to complete the project is about ten months after the project is approved.

The progress expected to be accomplished is a minimum of ten per cent of the total program as outlined above, at an average cost of about $5,350.00 per month.

SERVICE LINE FORM 606 L.W

STATEMENT

ANCIENT RIVER CHANNELS GOLD MINING COMPANY
As of
June 30, 1951

ASSETS & LIABILITIES

Cash,			150.00	
Las Vegas Office		100.00		
Marysvale Office		50.00		
Bank,			254.52	
First National Bank of Nevada, Las Vegas, Nevada.				
Accounts Receivable,			150.00	
Walter R. Collins				
Mining Property			45,000.00	
Mineral Hills Lease		42,000.00		
Entry Fee (Bonus)		3,000.00		
Machinery, Tools & Equipment			1,519.13	
Compressor, Jackhammers, Cars, Rails & Miscellaneous Equipment.				
Truck,			750.00	
3/4 Ton "Army Type"				
Development,			4,254.00	
Timbering & Reconditioning		250.00		
Roads		104.00		
250' Tunnel		3,900.00		
Discounts Allowed,			1,546.25	
Stock Sales				
Accounts Payable,				3,455.00
Chail Dalton, Contractor			1,700.00	
Mineral Hills Uranium Co., Advance Royalty			1,750.00	
Leon A. Nichols			5.00	
Capital Stock,				55,972.55
Authorized 5,000,000 Shares @ $.10 per share			500,000.00	
Un-Issued 4,440,274.5			-444,027.45	
Profit & Loss				5,502.65
As of December 31st, 1950			1,672.82	
January 1st, 1951 to date			3,829.83	
		55,924.90		55,924.90

STATEMENT

ANCIENT RIVER CHANNELS GOLD MINING COMPANY

As of
June 30, 1951

PROFIT & LOSS

Operating Loss as of December 31st, 1950			1,672.82
Operating Loss period January 1st, 1951, to June 30th, 1951			3,829.83
Detail,			
Office Rent		378.00	
Professional Services		589.70	
Legal	293.16		
Engineering	295.04		
Miscellaneous	1.50		
Office Supplies		33.17	
Postage		10.00	
Telephone & Telegraph		106.82	
Traveling Expense		886.56	
Taxes		36.80	
Advertising		22.77	
Miscellaneous General Administrative Expense		1,766.01	
Thomas H. Berry	582.83		
William T. Berry	839.44		
Miscellaneous	343.74		

TOTAL OPERATING LOSS TO DATE, June 30th, 1951 — 5,502.65

SERVICE LINE FORM 606 L.W.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

November 29, 1950

Mr. Thomas H. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTH*
WEST FACE 132' LEVEL)
(Upper Adit)

Dear Mr. Berry:

MINERAL HILLS MINE

This is in reply to your letter of November 15, 1950, concerning a sample submitted for examination.

Microscopic study of the sample shows it is composed of quartz, feldspars, calcite, muscovite mica, and considerable magnetite. A small amount of uranium as an unidentified mineral was also detected in the sample. A radiometric analysis indicated that the uranium content was about 0.14 percent U_3O_8.

Sincerely yours,

C. H. Schack

C. H. Schack, Acting for
S. R. Zimmerley, Chief
Metallurgical Division
Region IV

UNITED STATES
ATOMIC ENERGY COMMISSION
GRAND JUNCTION, COLORADO

ADDRESS REPLY TO:

MANAGER,
COLORADO RAW MATERIALS OPERATIONS
U. S. ATOMIC ENERGY COMMISSION
P. O. BOX 270
GRAND JUNCTION, COLORADO

AND REFER TO MI:CAR

December 5, 1950

Mr. Thomas H. Berry
Mr. William T. Berry
830 West 6th Street
Los Angeles 17, California

(THIS SAMPLE TAKEN FROM THE NORTHWEST FACE OF 132 LEVEL) HOLE)
(UPPER ADIT)

Gentlemen:

Your sample marked "Mineral Hills No. 10" has been assayed for uranium. The amount is 0.02% U_3O_8.

Very truly yours,

Charles A. Rasor

Charles A. Rasor,
Geologist

TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 328893 *Date* November 9, 1950

Sample Pulp

Received 11-6-50 *Marked* "Sample 1158-A #8"

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

(THIS SAMPLE TAKEN FROM NORTH-WEST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

REPORT OF DETERMINATIONS

Uranium Oxide (U_3O_8) ---------- 0.08%

Respectfully submitted,

Smith-Emery Co

CHEMISTS AND ENGINEERS

No 9

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TRINITY 4791

FORM 1

LABORATORY REPORT

SMITH-EMERY COMPANY

CHEMICAL ENGINEERS AND CHEMISTS
METALLURGICAL AND TESTING ENGINEERS
920 SANTEE STREET
LOS ANGELES 15

LABORATORY No. 329284-85

Date November 18, 1950

Sample Pulp

Received 11-6-50

Marked (THESE SAMPLES TAKEN FROM NORTH-EAST FACE OF THE GLORY HOLE)

MINERAL HILLS MINE

Submitted by W. T. Berry
830 West 6th Street,
Los Angeles, 17, California.

REPORT OF DETERMINATIONS

"Sample #7 (1157-A)"

Uranium Oxide (U_3O_8) ---------- 0.03%

"Sample #9 (1159-A)

Uranium Oxide (U_3O_8) ---------- 0.04%

Respectfully submitted,

Smith-Emery Co.
CHEMISTS AND ENGINEERS
G.L.C.

N.F.

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