DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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CONTROLLED DOCUMENT

DMA Docket No. 4309

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Exploration Project

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To:	700	Date	5/25/56
To:	Oper. Com	Date	6-6-56
To:	F. E. Johnson	Date	6-8-56
To:	C J M	Date	6-8-56
To:	Operating Com.	Date	9-25-56
To:	F. E. Johnson	Date	9-26-56
To:	C J M	Date	9-26-56
To:		Date	
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INT.-DUP. SEC., WASH., D.C.

DMEA

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

1605 Evans Avenue
Reno, Nevada

February 5, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4309 (Uranium)
Bluebird, et al., Claims
Lincoln County, Nevada
(Your letter to Mr. Hulse - February 1, 1957)

Enclosed are two copies of our letter of February 5, 1957, in which we enclosed the maps (eight) and one copy of report by the U. S. Atomic Energy Commission relative to subject docket.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 7 1957

DATE	INITIALS	CODE
2/8	C	220
		225

S. Ricker

Encls.

BUREAU OF FISHERIES
WASHINGTON, D. C.
FEB 7 10 38 AM '57

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

OFFICIAL FILE COPY
DMEA

RECEIVED FEB 7 1957		
DATE	INITIALS	CODE

1605 Evans Avenue
Reno, Nevada

February 5, 1957

Mr. James Hulse
P. O. Box 77
Pioche, Nevada

Re: Docket No. DMEA-4309 (Uranium)
Bluebird, et al., Claims
Lincoln County, Nevada

Dear Mr. Hulse:

Pursuant to advice from our Washington office, we are enclosing a complete set of the maps (eight), which were attached to your application. Also enclosed is a copy of the report by the U. S. Atomic Energy Commission, Salt Lake City Exploration Branch, which was addressed to Mr. L. L. Hezzlewood, 1215 Francis Street, Las Vegas, Nevada.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

Encls.

SRicker:ft
cc: Opr. Com., DMEA' Interior Bldg., Wash., D.C.
R.M.Smith
File

DMEA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1/31/57	Ching	700
"	[illegible]	700
2/1/57	[illegible]	~~120~~ 110
"	[illegible]	100
2/4	C	220
		225

FEB 1 1957

Mr. James G. Hulse
P. O. Box 77
Pioche, Nevada

Re: Docket No. DMEA-4309 (Uranium)
Bluebird, et al., Claims
Lincoln County, Nevada

Dear Mr. Hulse:

In accordance with your request of January 22, we are enclosing a complete set of maps containing radioactivity data which were attached to your application. We are retaining one set for our records and the other two sets are in the hands of our field men.

By a copy of this letter, we are instructing our Field Team at Reno, Nevada, to return another set of the maps to you.

Sincerely yours,

(fw)

Administrator

Enclosures 8
cc to: DMEA Field Team, Region II (2)
Mr. Ricker:

Please return a complete set of the maps (8), attached to your copy of the application, to Mr. Hulse. If you have the copy of the Report by U. S. Atomic Energy Commission, Division of Raw Materials, Salt Lake Exploration Branch, please return it also, as requested in the application.

MChing/gla
1-31-57
cc to: Admr.'s Reading File
Code 700, Mr. Ching

R.C.G.
8623

Pioche Nev.
Jan. 22, 1956

United States Dept. of the Interior
Defense Mineral Exploration Administration
Washington, 25, D.C.

Dear Sir.

In regards to Docket No. DMEA-4309 uranium BlueBird claims Lincoln County Nevada.

Will you please return my maps & sample data that I furnished.

Very Truly Yours
James G. Hulse

address
James G. Hulse
Pioche Nev.
P.O. Box 77

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 28 1957

DATE	INITIALS	CODE
1-29	C	220
1-29	Cheng	700
		225

cw

700

FILE COPY
Surname: Ching

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

OCT 26 1956

Hon. Cliff Young, M. C.
Post Office Box 147
Reno, Nevada

Re: Docket No. DMEA-4309 (Uranium)
Hulse-Park-Hazzelwood Mine
Bluebird, et al., Claims
Lincoln County, Nevada

My dear Mr. Young:

Reference is made to your letter of October 15, 1956, with enclosed letter, dated October 9, 1956, from James W. Hulse, regarding the captioned application for aid in an exploration project.

The application was received in this office on May 25, 1956, and after being reviewed by the Washington organization, it was referred to the DMEA Field Team at Reno, Nevada for further investigation.

An examination of the property by our examining team disclosed that pod-like uranium ore bodies are found along and near flat-dipping bedding faults at their juncture with brecciated and silicified areas. However, the ore bodies are very small and widely scattered and do not offer suitable exploration targets. It was concluded that the potential of the property is quite limited and that the probability of finding significant ore reserves is not sufficiently promising to justify Government participation in an exploration project. Accordingly, the subject application was denied in a letter, dated September 26, 1956, to the Applicant.

With respect to Mr. Hulse's question as to whether the chances of getting Government help are reduced because of the fact that a property is located off the Colorado Plateau, or because the operation is not a big business, I assure you that every application is considered on its merits alone and that neither location nor size influences our decisions.

If you require additional information on this matter, please call upon me.

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/izm 10-19-56
cc to: Docket
Mr. Ching
Admr.'s Reading File
DMEA Field Team, Reg. II (2) w/2cc each of incoming letters.
rs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.S.

10-18-56

700

CLIFF YOUNG
REPRESENTATIVE AT LARGE
NEVADA

WASHINGTON ADDRESS:
421 HOUSE OFFICE BUILDING

P. O. Box 147
Reno, Nevada

Congress of the United States
House of Representatives
Washington, D. C.

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS

SUBCOMMITTEES:
INDIAN AFFAIRS
PUBLIC LANDS
MINES AND MINING
IRRIGATION AND RECLAMATION
TERRITORIES AND INSULAR AFFAIRS

October 15, 1956

RECEIVED
OCT 18 1956

DMEA-4309

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

Dear Mr. Mittendorf:

Enclosed is a copy of a letter I recently received from Mr. James W. Hulse of Reno, Nevada, with reference to the application of the Hulse-Park-Hezzelwood Mine for assistance in developing this property.

I would very much appreciate receiving any information that is available regarding this application and also in answer to the questions raised by Mr. Hulse in his letter.

Sincerely,

Cliff Young

Cliff Young, M. C.

CY:ja
Enclosure

C O P Y

Reno, Nevada
October 9, 1956

RECEIVED
OCT 18 1956

Congressman Clifton Young
Reno, Nevada

Dear Mr. Young:

Mr father, James G. Hulse of Pioche, has asked me to contact you relative to difficulties that he has been having in getting government assistance for his uranium mine. As you may know, he is a partner in the Hulse-Park-Hezzelwood Mine in the Atlanta District of Lincoln County. This mine produced 100 tons of commercial uranium ore last year, and another 50 tons have been mined this year.

On the basis of this production and the examination of competent engineers, including those of the U. S. Bureau of Mines, the owners were led to believe that they have a highly promising uranium prospect. However, their application for a DMEA loan has recently been rejected, with the explanation that the probability of finding significant ore reserves is not great enough to justify government help. This conclusion is surprising in view of the examinations of qualified engineers in the past.

This development revives the question of whether the chances to get a government loan are reduced because of the fact that this property is located off the Colorado Plateau, or because this is not a big business operation.

Any information or assistance that you can provide in this matter will be appreciated.

Yours truly,

/S/

James W. Hulse

cc James G. Hulse

Surname copy

700

Ching
Kizzonde
Lamb
Kilsgaard
Selfridge
Johnson

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

Hulse-Park-Hemelwood Mine
c/o James Hulse
Box 77
Pioche, Nevada

SEP 28

Re: Docket No. DMEA-4309 (Uranium)
Bluebird, et al., Claims
Lincoln County, Nevada

Gentlemen:

Your application for aid in an exploration project and other information available to us in Washington concerning your above-named property have been reviewed.

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

Careful study of all our information, although noting some uranium mineralization on your property, indicates that the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/gla
9-25-56
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, 3643
THKiilsgaard, 5224
JOHosted, 3210, GSA
Code 700
Mr. Ching
DMEA Field Team, Region II (2)

700
Ching

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WASHINGTON 25, D. C.

September 25, 1956

Summary of Proposed Project

Object: Denial of application for an exploration project

Docket No.: DMEA-4309

Commodity: Uranium

Applicant: Hulse-Park-Hezzelwood Mine, a partnership
Box 77
Pioche, Nevada

Property: Blue Bird, et al. claims, a group of 21 unpatented mining claims in secs. 20, 21, and 22, T. 7 N., R. 68E. , M. D. B. M., Atlanta mining district, Lincoln County, Nevada. Applicant is the owner.

Date of Application: May 7, 1956

Amount of Application: $40,400.00

Work proposed: Extend present inclined shaft 100 feet. From present 50-foot level drift 50 feet to the northeast and crosscut 100 feet to the southeast. From the bottom of the shaft, or 150-foot level, crosscut a total of 100 feet to the northwest and southeast and drift a total of 550 feet to the northeast and southwest.

Estimated Cost:

100 ft.	shaft sinking @ $100.00/ft.	$10,000.00
200 ft.	crosscutting @ $38.00/ft.	7,600.00
600 ft.	drifting @ $38.00/ft.	22,800.00
	Total	$40,400.00
	Government participation @ 75%	$30,300.00

Field Team Report: September 7, 1956 - G. G. Gentry, USBM
R. G. Reeves, USGS

Sedimentary rocks of Ordovician age have been subjected to brecciation and silicification on the subject property to form breccia pipes and silicified areas. Pod-like ore bodies are found along and near flat-dipping bedding faults where the faults cut the breccia pipes. Most of the ore bodies are 1 to 3 feet

thick, 5 to 10 feet wide, and 10 to 20 feet long. The known ore bodies are widely scattered. The ore is a mixture of primary and secondary minerals. The primary ore mineral was identified as uraninite.

Samples were cut from all of the radioactive areas found in the existing workings. Nineteen samples averaged 0.21% U_3O_8 by radiometric determination. However, the radioactive areas were quite narrow and no radioactivity was noted in large areas between the samples. About 40 tons of indicated ore averaging 0.3% U_3O_8 and 20 tons of inferred ore of the same grade might be found in the present workings. 98 tons of 0.30% U_3O_8 ore have been shipped from the property and an additional 30 tons stockpiled. Workings consist of 80 feet of inclined shaft and 200 feet of drifts and cross-cuts.

The sporadic distribution of ore in very small lenses or pods indicates that suitable exploration targets do not exist and it is unlikely that a significant discovery could be made. Three diamond drill holes totaling 608 feet were drilled for the A. E. C. by the Bureau of Mines on the property. No ore was developed by the drilling. It is recommended that the application be denied.

Commodity Group Comments:

Geological Survey - W. P. Williams - September 18, 1956:

"The expected size of the scattered ore deposits is too small to serve as objectives for DMEA exploration work. Concurs with the examining team's recommendation for denial".

Bureau of Mines - John E. Crawford - September 20, 1956:

Reviewed the Report of Examination with the A. E. C. representative. Agrees with the Field Team that denial of the application is in order.

Rare and Miscellaneous Metals Division - Michael Ching - September 25, 1956:

Some 280 feet of underground workings have resulted in exposing possibly 190 tons of 0.30% U_3O_8 ore to date. The small size and scattered occurence of the ore bodies do not encourage further exploratory work.

Conclusions and Recommendations:

Work done by the Applicant has demonstrated the limited potential of this property. It is recommended that the application be denied.

For - Ernest Wm. Ellis

9/21/56 gla

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

Date 9/20/56

DMEA Docket No. 4309
DMEA Contract No.
Commodity Uranium
Name of applicant Hulse-Park-Hezzelwood
Name of property Blue Bird Mine
Location of property Lincoln County, Nevada
Estimated cost of project

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee
From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee
Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 9/7/56. 2. Date received by reviewer: 9/17/56.

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

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

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

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

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SEP 20 1956

7. Explain items marked yes above:

8. Factors needing special consideration:
a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs ☐
h. ☐

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

10. Remarks: (Use back of page if necessary)
Mr. Joseph O. Hosted, Washington representative of the Atomic Energy Commission, assisted in the review.

9/19/56 gla

IN REPLY REFER TO:

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

RECEIVED
SEP 19 1956

September 18, 1956

Memorandum

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

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

Subject: Review of field examination report, DMEA 4309, Hulse-Park-Hezzelwood Mine, Bluebird claims, Lincoln County, Nevada (uranium).

The examining team reports that ore grade mineralization is present on the applicant's property. Ninety-eight tons of ore have been shipped, about 30 tons are stockpiled for shipment, and about 40 tons of indicated ore and 20 tons of inferred ore are known in the mine.

In spite of the favorable features noted above, the field examiners point out that the uranium ore is sporadically distributed in very small lenses or pods. The dimensions of the ore bodies, as given in the field report, indicate that the maximum average size of the lenses would be about 50 tons each.

The field report does not summarize the applicant's proposed exploration work, but the expected size of the scattered ore deposits is too small to serve as objectives for DMEA exploration work. I concur, therefore, with the examining team's recommendation for denial of the application.

W P Williams

W. P. Williams

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

RECEIVED
SEP 14 1956

1605 Evans Avenue
Reno, Nevada

September 12, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4309 (Uranium)
Hulse-Park-Hezzelwood Mine
Bluebird, et al claims
Lincoln County, Nevada
(Your letter dated June 11, 1956)

Enclosed are four copies of a report by R. G. Reeves, Geological Survey and G. G. Gentry, Bureau of Mines on subject property recommending denial of application for a DMEA exploration loan.

Roscoe Smith and I concur in the recommendation.

B. H. Shahan
for S. Ricker

Encl.

Reviewed by
DMEA OPERATING COMMITTEE
9-17-56
(date)

BUREAU OF MINES
WASHINGTON, D. C.

SEP 14 8 47 AM '56

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

RECEIVED
SEP 14 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-4309 (Uranium)
Hulse-Park-Hezzelwood Mine (Partnership)
Blue Bird mine, Lincoln County, Nevada

by

G. G. Gentry
U. S. Bureau of Mines

R. G. Reeves
U. S. Geological Survey

Released by
DMEA [illegible]
9-17-56
(date)

September 7, 1956

James G. Hulse, Phillip Hulse, Edwin Park, and L. L. Hezzelwood, a partnership, applied to the Defense Minerals Exploration Administration for assistance to explore the Blue Bird mine (docket DMEA-4309) for uranium. The Blue Bird group of 21 unpatented mining claims are in secs. 20, 21, and 22, T. 7 N., R. 68 E., M.D.B.&M., Atlanta mining district, Lincoln County, Nevada, 44 miles northeast of Pioche. The claims are owned by the applicants.

The mine was examined on July 14 and 15, 1956 by G. G. Gentry, Bureau of Mines, and R. G. Reeves, Geological Survey, accompanied by James G. Hulse. An inspection was made using a Detectron, Model DG-2, geiger counter and samples taken from all radioactive areas. Nineteen samples from the workings averaged 0.21 percent U_3O_8 by radiometric determination. The radiometric analysis of one sample from 30 tons of selected ore, stockpiled for shipment, was 0.33 percent U_3O_8. A small additional tonnage may be obtained by selective mining and careful sorting but it is doubtful that any significant discovery could be made.

The sporadic distribution of uranium, in very small lenses or pods, indicates that no suitable exploration target exists. It is recommended that the application be denied.

Development consists of an inclined shaft sunk to a depth of 80 feet and 200 feet of drifting and crosscutting on three levels. Production is 98 tons of selected ore which averaged 0.30 percent U_3O_8 and was shipped to the Vitro Chemical Company in Salt Lake City, Utah.

Three diamond drill holes totaling 608 feet were drilled for the Atomic Energy Commission by the U. S. Bureau of Mines. The AEC report, RME 2048, states in part: "No ore was developed by the drilling although a better understanding of the geologic relationship was obtained."

The geology of the Atlanta district was mapped by Hill[1/] and Sharp and Myerson[2/]. These reports, particularly that of

---

1/ Hill, J. M., 1916, Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 114-120.

2/ Sharp, B. F., and Myerson, B. L., 1956, Preliminary report on a uranium occurrence and regional geology in the Atlanta area, Lincoln County, Nevada: U. S. Atomic Energy Commission RME-2048.

Sharp and Myerson, are the basis for the geology and ore deposits sections of this report.

Rocks in the Atlanta district consist of sedimentary rocks of Ordovician age, in places overlain by volcanic rocks of Tertiary age.

The Ordivician sedimentary rocks, which are tentatively correlated with rocks in the Pioche district by lithology and fossil content, are from oldest to youngest, Tank Hill limestone, Eureka quartzite, and Ely Springs dolomite. The regional dip is about 15 degrees to the northeast. The sedimentary rocks are unconformably overlain by Tertiary volcanic rocks.

Major structural features in the area include numerous near-vertical normal and reverse faults cutting the moderately folded and tilted Ordivician rocks, and bedding faults of unknown displacement. A shallow syncline plunging about 15 degrees northeast occurs in the eastern part of the district.

Two major fault systems are recognized in the district. One trends nearly east-west, and the other generally northwest. Numerous near-vertical faults of the northwest set cut the Blue Bird deposit. These structures are probably late in the history of the deposit, and some of them have resulted in minor vertical displacement of the ore zone.

In the Atlanta district, brecciation and silicification of the sedimentary rocks has taken place. The brecciation is considered to be explosive in origin, resulting in breccia pipes

containing fragments of Eureka quartzite and silicified dolomite and limestone. The breccia pipes and silicified areas show a linear arrangement along the two major fault systems. The breccia pipes contain gold, silver, and some uranium along faults and fractures. These pipes appear to be the best targets for uranium prospecting, as most of them are abnormally radioactive.

On the Blue Bird claim, lens- and pod-like uranium ore bodies are along and near a flat-dipping bedding fault, where this fault cuts the breccia pipe. Ore bodies along the fault are tabular, and are generally in silicified gouge 1 to 4 feet thick; those near the fault in the breccia are generally irregular in shape. Most of the bodies are 1 to 3 feet thick, 5 to 10 feet wide, and 10 to 20 feet long. In the area already opened up by the underground workings, the ore bodies are widely scattered and only a tenth or less of the ore zone is ore.

The primary ore mineral was identified as uraninite. It occurs in a black cryptocrystalline silica matrix cementing fragements of limestone, dolomite, and quartzite. Some limestone fragments have been metasomatically replaced by non-uraniferous silica. Fine grained pyrite is abundant in the ore bodies, and some radioactive opal is also present. Yellow secondary uranium minerals are found as coatings on the fracture planes, where the later

northwest-trending fractures cut the ore bodies. The ore is a mixture of primary and secondary minerals; both that already mined and that remaining averages about 0.3 percent U_3O_8.

Samples were cut from all of the radioactive areas and represent both the length and widths of the mineralized zones. No radioactivity was noted in the areas between the samples.

USBM Sample No.	Width, feet	MR/HR Back-ground	MR/HR Count	eU_3O_8	Location
2021	1.3	0.1	0.4-0.45	0.11	X-cut off bottom of shaft.
2022	2.0	0.1-0.2	0.4-0.5	0.18	X-cut off bottom of shaft.
2023	2.0	0.1-0.2	0.3-0.5	0.12	X-cut off bottom of shaft.
2024	1.7	0.1-0.2	0.3-0.6	0.23	X-cut off bottom of shaft.
2025	2.35	0.1-0.2	0.3-0.4	0.06	X-cut off bottom of shaft.
2026	1.2	0.1-0.3	1.0-1.7	0.60	Shaft.
2027	1.8	0.1-0.2	0.8-1.5	0.16	8' south of shaft.
2028	2.0	0.15-0.2	0.4-0.5	0.08	Collar of winze.
2029	1.2	0.2	0.5-0.6	0.36	Collar of winze.
2030	2.35	0.3	0.7-1.3	0.29	In winze, 6' below No. 2029.
2031	2.4	0.3-0.4	0.7-1.4	0.29	Same place as 2030 and after blasting short round.
2032	2.7	0.2	0.4-1.7	0.22	Across back of shaft at 44' level.
2033	1.9	0.2-0.4	0.8-1.2	0.09	South side of shaft 14' above the 44' level.
2034	1.6	0.4	0.6-1.0	0.18	FW in shaft 14' above the 44' level.
2035	4.8	0.2-0.4	0.6-1.5	0.36	N. wall of shaft 12' above the first level.
2036	2.7	0.0	0.2-0.4	0.06	Across back, first level, 34' E. of shaft.

USBM Sample No.	Width, feet	MR/HR Back-ground	MR/HR Count	eU_3O_8	Location
2037	3.0	0.0-0.1	0.2-0.4	0.14	Same drift as No.2036. West side, 22' E. of centerline of shaft. Ore was shipped from this area.
2038	2.8	0.4	0.8-1.5	0.17	At collar of shaft, south side.
2039	2.7	0.4	0.8-1.4	0.25	6' S. of shaft and 10' above No.2034.
2040	grab and chip	0.1	0.6-1.1	0.33	From 30 tons of sorted ore stockpiled for shipment.

About 40 tons of indicated ore averaging 0.3 percent U_3O_8 is contained in a shaft pillar 10 feet wide down dip along the shaft, 3 feet thick, and extending 20 feet along the strike beyond the shaft. Inferred ore in the underground workings may aggregate 20 tons of the same grade.

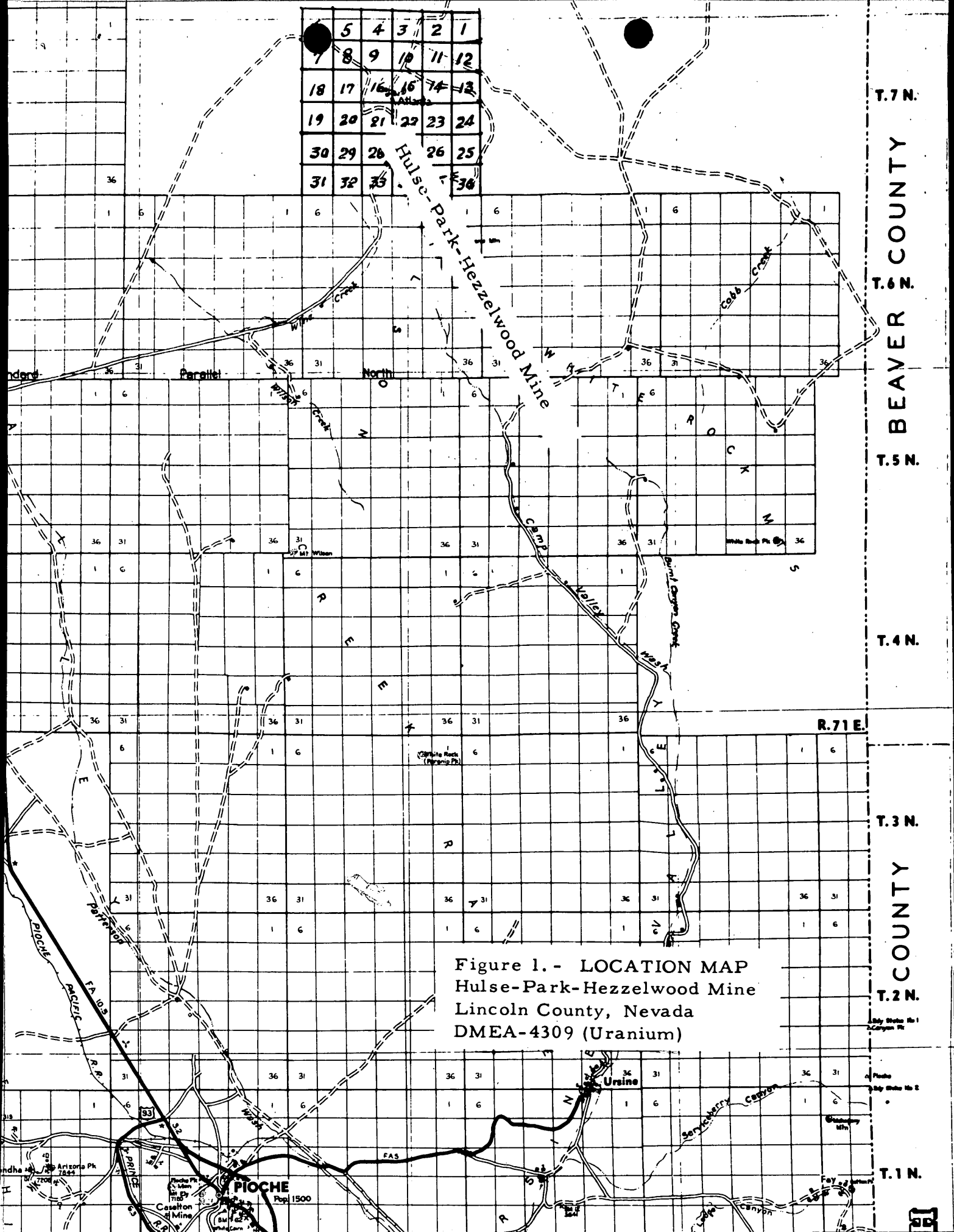
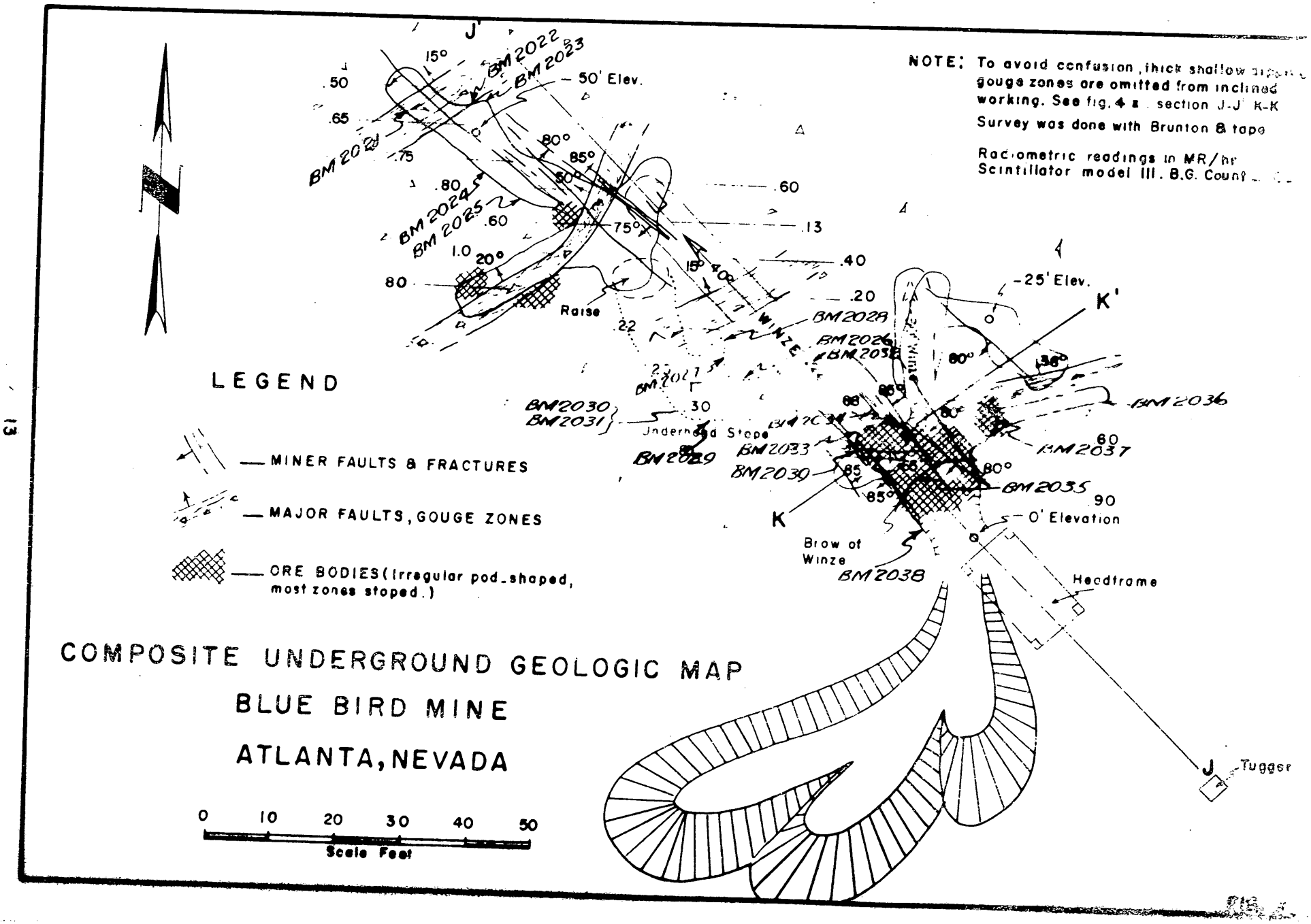
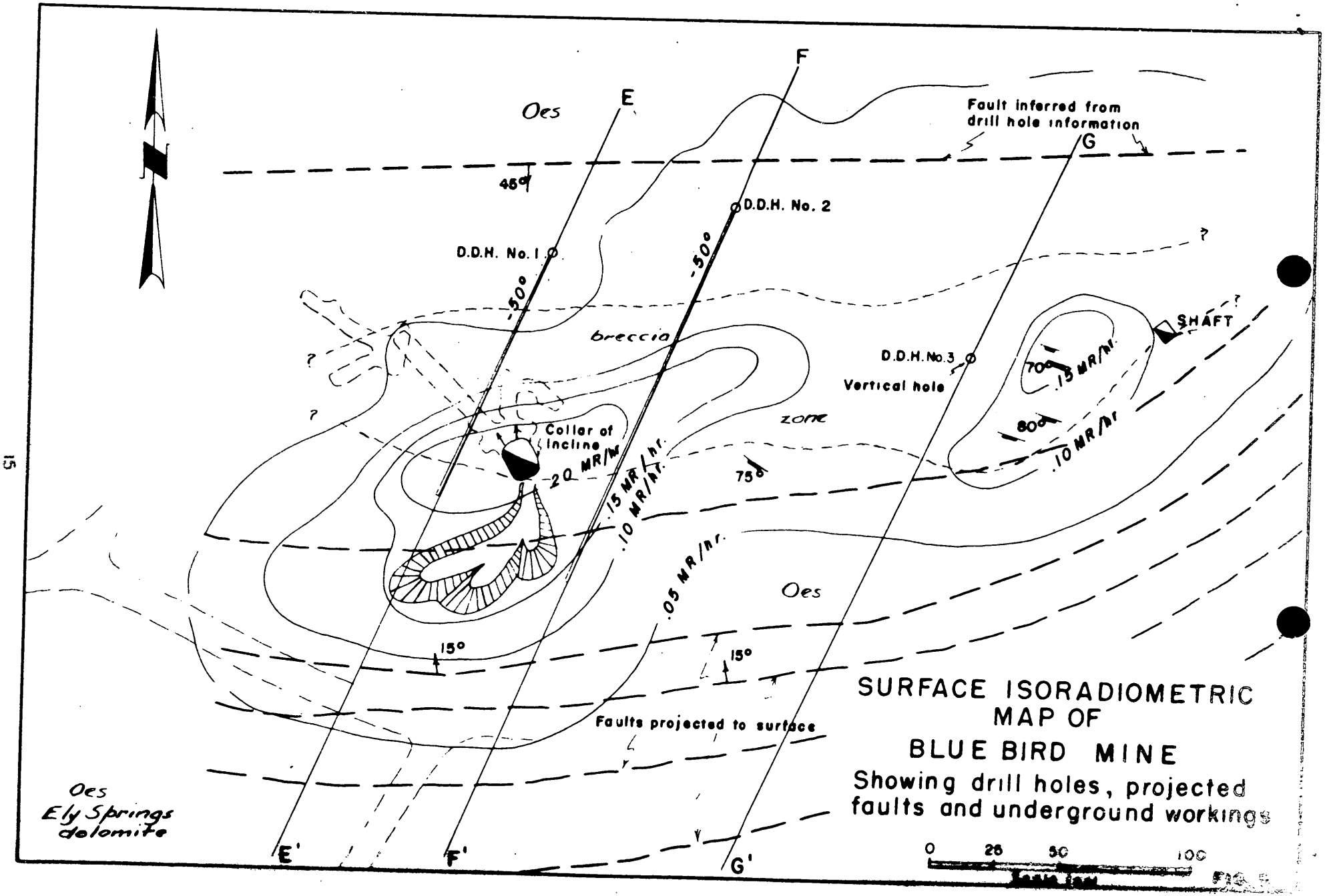


Figure 1.- LOCATION MAP
Hulse-Park-Hezzelwood Mine
Lincoln County, Nevada
DMEA-4309 (Uranium)

RECEIVED
SEP 14 1956


NOTE: To avoid confusion, thick shallow gouge zones are omitted from inclined working. See fig. 4 & section J-J' K-K'
Survey was done with Brunton & tape
Radiometric readings in MR/hr
Scintillator model III. B.G. Count
LEGEND
MINER FAULTS & FRACTURES
MAJOR FAULTS, GOUGE ZONES
ORE BODIES (irregular pod-shaped, most zones stoped.)
COMPOSITE UNDERGROUND GEOLOGIC MAP
BLUE BIRD MINE
ATLANTA, NEVADA
0 10 20 30 40 50
Scale Feet
J'
J
K
K'
50' Elev.
-25' Elev.
0' Elevation
Raise
WINZE
Underhand Stope
Brow of Winze
Headframe
Tugger
BM 2022
BM 2023
BM 2024
BM 2025
BM 2026
BM 2027
BM 2028
BM 2029
BM 2030
BM 2031
BM 2033
BM 2035
BM 2036
BM 2037
BM 2038



SURFACE ISORADIOMETRIC MAP OF BLUE BIRD MINE

Showing drill holes, projected faults and underground workings

RECEIV
SEP 14

9/14/56 gla

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

RECEIVED
SEP 14 1956

1605 Evans Avenue
Reno, Nevada

September 12, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D.C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4309 (Uranium)
Hulse-Park-Hezzelwood Mine
Bluebird, et al claims
Lincoln County, Nevada
(Your letter dated June 11, 1956)

Enclosed are four copies of a report by R. G. Reeves, Geological Survey and G. G. Gentry, Bureau of Mines on subject property recommending denial of application for a DMEA exploration loan.

Roscoe Smith and I concur in the recommendation.

S. Ricker

Encl.

SRicker:gh
cc: R. M. Smith
File

Reviewed by
DMEA OPERATING COMMITTEE
9-17-56
(date)

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

RECEIVED

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-4309 (Uranium)
Hulse-Park-Hazzelwood Mine (Partnership)
Blue Bird mine, Lincoln County, Nevada

by

G. G. Gentry
U. S. Bureau of Mines

R. G. Reeves
U. S. Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
9-17-56
(Date)

September 7, 1956

RECEIVED
SEP 14 1956

James G. Hulse, Phillip Hulse, Edwin Park, and L. L. Hazzelwood, a partnership, applied to the Defense Minerals Exploration Administration for assistance to explore the Blue Bird mine (docket DMEA-4309) for uranium. The Blue Bird group of 21 unpatented mining claims are in secs. 20, 21, and 22, T. 7 N., R. 68 E., M.D.B.&M., Atlanta mining district, Lincoln County, Nevada, 44 miles northeast of Pioche. The claims are owned by the applicants.

The mine was examined on July 14 and 15, 1956 by G. G. Gentry, Bureau of Mines, and R. G. Reeves, Geological Survey, accompanied by James G. Hulse. An inspection was made using a Detectron, Model DG-2, geiger counter and samples taken from all radioactive areas. Nineteen samples from the workings averaged 0.21 percent U_3O_8 by radiometric determination. The radiometric analysis of one sample from 30 tons of selected ore, stockpiled for shipment, was 0.33 percent U_3O_8. A small additional tonnage may be obtained by selective mining and careful sorting but it is doubtful that any significant discovery could be made.

The sporadic distribution of uranium, in very small lenses or pods, indicates that no suitable exploration target exists. It is recommended that the application be denied.

Development consists of an inclined shaft sunk to a depth of 80 feet and 200 feet of drifting and crosscutting on three levels. Production is 98 tons of selected ore which averaged 0.30 percent U_3O_8 and was shipped to the Vitro Chemical Company in Salt Lake City, Utah.

Three diamond drill holes totaling 608 feet were drilled for the Atomic Energy Commission by the U. S. Bureau of Mines. The AEC report, RME 2048, states in part: "No ore was developed by the drilling although a better understanding of the geologic relationship was obtained."

The geology of the Atlanta district was mapped by Hill[1/] and Sharp and Myerson[2/]. These reports, particularly that of

---

1/ Hill, J. M., 1916, Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 114-120.

2/ Sharp, B. F., and Myerson, B. L., 1956, Preliminary report on a uranium occurrence and regional geology in the Atlanta area, Lincoln County, Nevada: U. S. Atomic Energy Commission RME-2048.

Sharp and Myerson, are the basis for the geology and ore deposits sections of this report.

Rocks in the Atlanta district consist of sedimentary rocks of Ordovician age, in places overlain by volcanic rocks of Tertiary age.

The Ordivician sedimentary rocks, which are tentatively correlated with rocks in the Pioche district by lithology and fossil content, are from oldest to youngest, Tank Hill limestone, Eureka quartzite, and Ely Springs dolomite. The regional dip is about 15 degrees to the northeast. The sedimentary rocks are unconformably overlain by Tertiary volcanic rocks.

Major structural features in the area include numerous near-vertical normal and reverse faults cutting the moderately folded and tilted Ordivician rocks, and bedding faults of unknown displacement. A shallow syncline plunging about 15 degrees northeast occurs in the eastern part of the district.

Two major fault systems are recognised in the district. One trends nearly east-west, and the other generally northwest. Numerous near-vertical faults of the northwest set cut the Blue Bird deposit. These structures are probably late in the history of the deposit, and some of them have resulted in minor vertical displacement of the ore zone.

In the Atlanta district, brecciation and silicification of the sedimentary rocks has taken place. The brecciation is considered to be explosive in origin, resulting in breccia pipes

containing fragments of Eureka quartzite and silicified dolomite and limestone. The breccia pipes and silicified areas show a linear arrangement along the two major fault systems. The breccia pipes contain gold, silver, and some uranium along faults and fractures. These pipes appear to be the best targets for uranium prospecting, as most of them are abnormally radioactive.

On the Blue Bird claim, lens- and pod-like uranium ore bodies are along and near a flat-dipping bedding fault, where this fault cuts the breccia pipe. Ore bodies along the fault are tabular, and are generally in silicified gouge 1 to 4 feet thick; those near the fault in the breccia are generally irregular in shape. Most of the bodies are 1 to 3 feet thick, 5 to 10 feet wide, and 10 to 20 feet long. In the area already opened up by the underground workings, the ore bodies are widely scattered and only a tenth or less of the ore zone is ore.

The primary ore mineral was identified as uraninite. It occurs in a black cryptocrystalline silica matrix cementing fragements of limestone, dolomite, and quartzite. Some limestone fragments have been metasomatically replaced by non-uraniferous silica. Fine grained pyrite is abundant in the ore bodies, and some radioactive opal is also present. Yellow secondary uranium minerals are found as coatings on the fracture planes, where the later

northwest-trending fractures cut the ore bodies. The ore is a mixture of primary and secondary minerals; both that already mined and that remaining averages about 0.3 percent U_3O_8.

Samples were cut from all of the radioactive areas and represent both the length and widths of the mineralized zones. No radioactivity was noted in the areas between the samples.

USBM Sample No.	Width, feet	MR/HR Back-ground	MR/HR Count	eU_3O_8	Location
2021	1.3	0.1	0.4-0.45	0.11	X-cut off bottom of shaft.
2022	2.0	0.1-0.2	0.4-0.5	0.18	X-cut off bottom of shaft.
2023	2.0	0.1-0.2	0.3-0.5	0.12	X-cut off bottom of shaft.
2024	1.7	0.1-0.2	0.3-0.6	0.23	X-cut off bottom of shaft.
2025	2.35	0.1-0.2	0.3-0.4	0.06	X-cut off bottom of shaft.
2026	1.2	0.1-0.3	1.0-1.7	0.60	Shaft.
2027	1.8	0.1-0.2	0.8-1.5	0.16	8' south of shaft.
2028	2.0	0.15-0.2	0.4-0.5	0.08	Collar of winze.
2029	1.2	0.2	0.5-0.6	0.36	Collar of winze.
2030	2.35	0.3	0.7-1.3	0.29	In winze, 6' below No. 2029.
2031	2.4	0.3-0.4	0.7-1.4	0.29	Same place as 2030 and after blasting short round.
2032	2.7	0.2	0.4-1.7	0.22	Across back of shaft at 44' level.
2033	1.9	0.2-0.4	0.8-1.2	0.09	South side of shaft 14' above the 44' level.
2034	1.6	0.4	0.6-1.0	0.18	FW in shaft 14' above the 44' level.
2035	4.8	0.2-0.4	0.6-1.5	0.36	N. wall of shaft 12' above the first level.
2036	2.7	0.0	0.2-0.4	0.06	Across back, first level, 34' E. of shaft.

USBM Sample No.	Width, feet	MR/HR Back-ground	MR/HR Count	eU_3O_8	Location
2037	3.0	0.0-0.1	0.2-0.4	0.14	Same drift as No.2036. West side, 22' E. of centerline of shaft. Ore was shipped from this area.
2038	2.8	0.4	0.8-1.5	0.17	At collar of shaft, south side.
2039	2.7	0.4	0.8-1.4	0.23	6' E. of shaft and 10' above No.2036.
2040	grab and chip	0.1	0.6-1.1	0.33	From 30 tons of sorted ore stockpiled for shipment.

About 40 tons of indicated ore averaging 0.3 percent U_3O_8 is contained in a shaft pillar 10 feet wide down dip along the shaft, 3 feet thick, and extending 20 feet along the strike beyond the shaft. Inferred ore in the underground workings may aggregate 20 tons of the same grade.

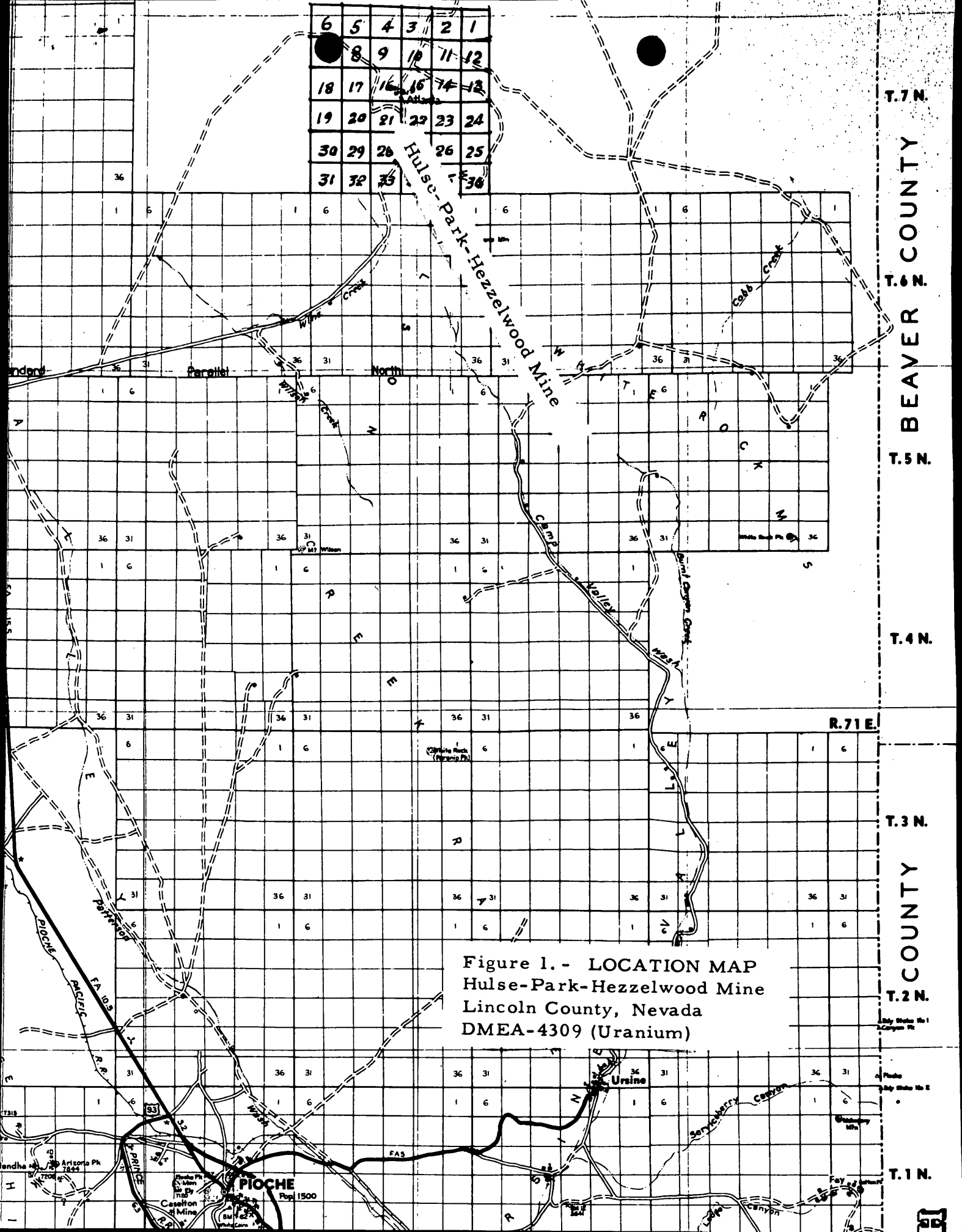


Figure 1.- LOCATION MAP
Hulse-Park-Hezzelwood Mine
Lincoln County, Nevada
DMEA-4309 (Uranium)

RECEIVED
SEP 14

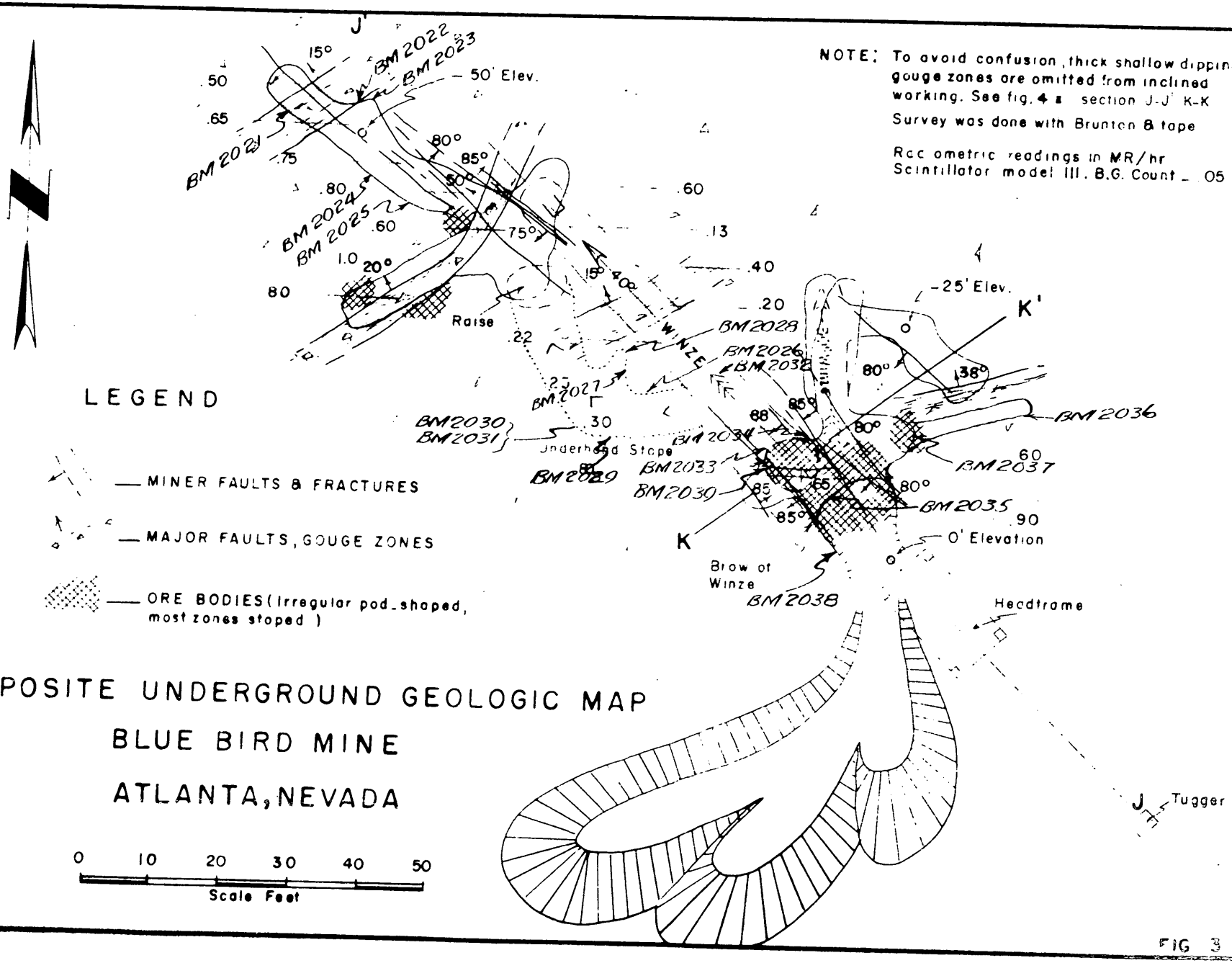
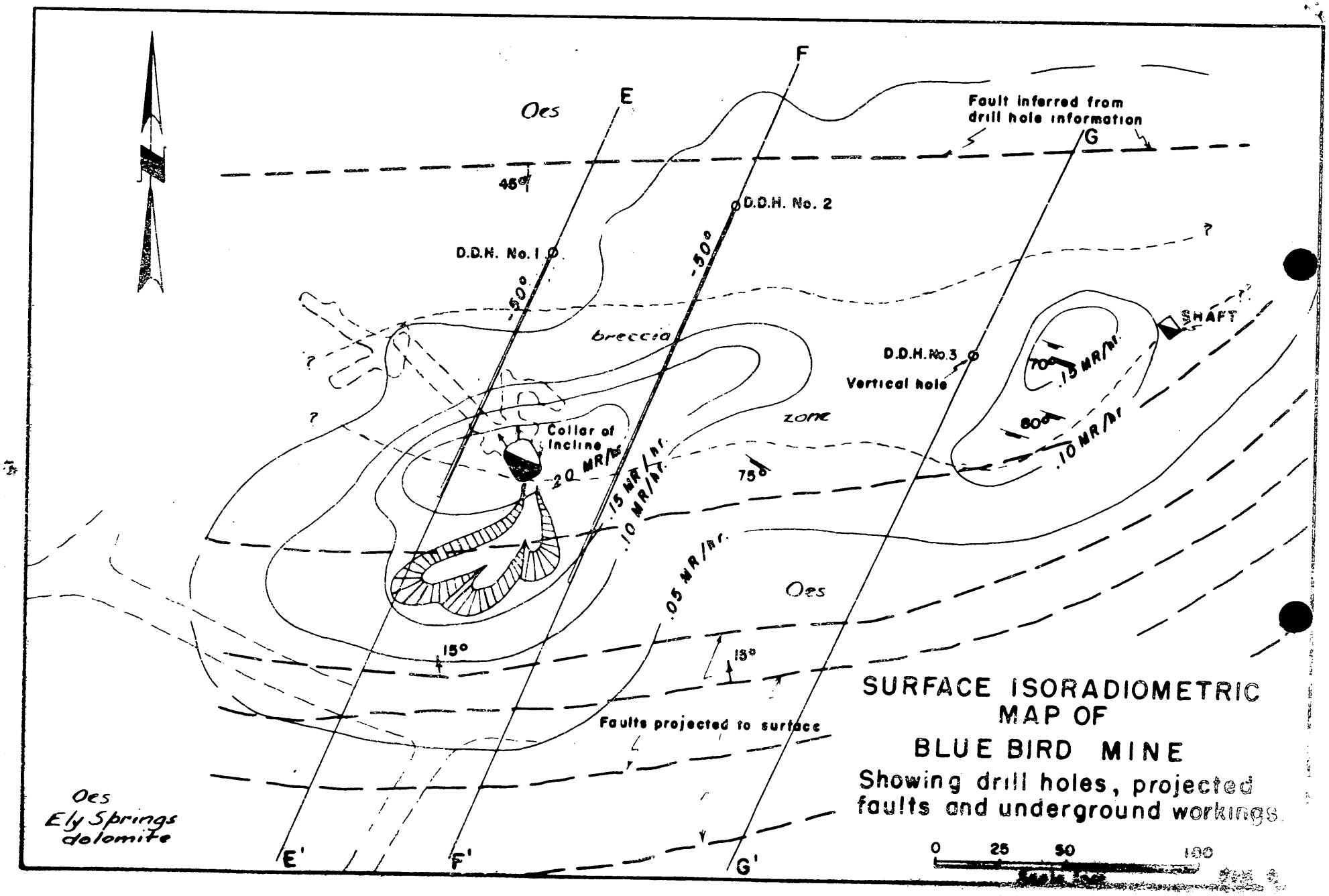

NOTE: To avoid confusion, thick shallow dipping gouge zones are omitted from inclined working. See fig. 4 & section J-J' K-K
Survey was done with Brunton & tape
Radiometric readings in MR/hr
Scintillator model III. B.G. Count - 05
LEGEND
MINER FAULTS & FRACTURES
MAJOR FAULTS, GOUGE ZONES
ORE BODIES (Irregular pod-shaped, most zones stoped)
COMPOSITE UNDERGROUND GEOLOGIC MAP
BLUE BIRD MINE
ATLANTA, NEVADA
0 10 20 30 40 50
Scale Feet
J
J'
K
K'
BM 2022
BM 2023
BM 2024
BM 2025
BM 2026
BM 2027
BM 2028
BM 2029
BM 2030
BM 2031
BM 2032
BM 2033
BM 2034
BM 2035
BM 2036
BM 2037
BM 2038
BM 2039
50' Elev.
-25' Elev.
0' Elevation
Raise
WINZE
Underhand Stope
Brow of Winze
Headframe
Tugger

FIG 3



SURFACE ISORADIOMETRIC MAP OF BLUE BIRD MINE

Showing drill holes, projected faults and underground workings

RECEIVED

700
FILE COPY
Surname:
Chiappa
Ellis
Kalgaard
Nelson
Martin
Johnson

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

JUN 11 1956

Mr. James Hulse, Partner
Hulse-Park-Hesselwood Mine
Box 77
Pioche, Nevada

Re: Docket No. DMEA-4309 (Uranium)
Bluebird, et.al., Claims
Lincoln County, Nevada

Dear Mr. Hulse:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to:

Mr. Spangler Richer
Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

The Regional Office will contact you in regard to your project if additional information is required.

Sincerely yours,

C. O. Mittendorf

Administrator

MChing/izm 6-6-56
cc to: Docket
Code 700
Mr. Ching
Admr.'s Reading File
DMEA Field Team, Reg. II (2)

R.C.S.

700

FILE COPY
Surname:
Ching
Martin
Jefferson

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

Mr. Spangler Ricker
Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

JUN 11 1956

Re: Docket No. DMEA-4309 (Uranium)
Hulse-Park-Hazzelwood Mine
Bluebird, et.al., Claims
Lincoln County, Nevada

Dear Mr. Ricker:

The subject application is being referred to you for investigation, a field examination if warranted, and recommendations. A copy of the application was retained by your office.

Copies of memoranda, dated May 29 and 31, 1956, by John E. Crawford, USBM, and N. E. Nelson, USGS, respectively, relating to the application, are enclosed for your information.

The report by the AEC Division of Raw Materials, Salt Lake Exploration Branch, referred to in 4(e) of the application, was not received in this office and it is presumed that the single copy submitted was retained in your office.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

Enclosures

MChing/izm 6-6-56
cc to: Docket
Code 700
Mr. Ching
~~DMEA~~ Admr.'s Reading File
Operating Committee
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

APPROVED:

/s/ Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

R.A.7.

IN REPLY REFER TO:

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

RECEIVED
JUN - 1 1956

May 31, 1956

re: DMA 4319
James Hulse, et al.
Hulse-Park-Hennivood Mine
Lincoln Co., Nev.
40,400 - Uranium

Memorandum

To: [illegible] Ellis, Defense Minerals Exploration Administration

From: N. [illegible] Nelson, U. S. Geological Survey

Subject: Review of application

The applicants request assistance in exploring by further shaft sinking, drifting and crosscutting, breccia zones from which small pods of uranium bearing material have been taken. One 275 feet of underground work has been done, and 91 tons of $0.30U_3O_8$ ore are recovered and sold.

In the course of the work three or four small bunches of ore grade material were encountered and probably already gouged out, so no reserves are claimed. Most, if not all, of the ore shipped came from a pocket at the surface under which the 100 foot 4x2 shaft was sunk. Therefore the 275 feet of work was productive of little ore.

Three AQ diamond drill holes have prospected the area near the shaft.

The log of Hole #1 shows two anomalous conditions one of 1.25 MR/hr, the other 0.75 MR/hr. To investigate the higher (1.25), 50 feet of work is proposed.

Slight radioactivity was registered by Holes 2 and 3.

No theory is advanced for the localization of the small bunches of ore grade material, one of which yielded 2 small shipments.

The work proposed appears to be designed to more or less supplement the almost fruitless work already done. In the light of the unfavorable results obtained to date the prospects look dim.

Referral of the application to the Field Team for appropriate treatment is recommended.

N. E. Nelson

cc: J. [illegible] Crawford, [illegible] 3641
J. C. Hosted, [illegible] 3210
Director's reading file 4212
Branch reading file
DMEA(3)
Chron File Pocket File

NENelson:btr
C 5/31/56
N. E. Nelson

5/31/56

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

May 29, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: John E. Crawford, Bureau of Mines Member
Uranium Commodity Committee

Subject: Application for Assistance, DMEA Docket 4309, Hulse-Park-Hezzelwood Mine, Lincoln County, Nevada

I have reviewed the attached application for assistance, DMEA Docket 4309, Hulse-Park-Hezzelwood Mines, Lincoln County, Nevada, dated May 7 and received in this office May 25, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The applicant is desirous of exploring for uranium by extending the existing 275 feet of underground workings. The proposed work consists of 100 feet of inclined shaft sinking at $100 per foot, 200 feet of crosscutting at $38 per foot, and 600 feet of drifting at $38. The total estimated cost of the project is $40,400.

It is stated that two carloads of ore assaying 0.30 percent U_3O_8 were shipped from the subject property but little supporting information is presented which would make the property appear promising.

It would be desirable to have for review the AEC report mentioned on page 1 of the application. Should the Commission's report indicate that the property is favorable, then a field examination would be warranted; otherwise denial without prejudice would be in order.

John E. Crawford
John E. Crawford

Attachment

RECEIVED
MAY 31 1956

6-4-56

IN REPLY REFER TO:

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

RECEIVED
JUN - 1 1956

May 31, 1956

Re: DMEA 4309
James Hulse, et al.
Hulse-Park-Hezzelwood Mine
Lincoln Co., Nev.
$40,400 - Uranium

Memorandum

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

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

Subject: Review of application

The applicants request assistance in exploring by further shaft sinking, drifting and crosscutting, breccia zones from which small pods of uranium bearing material have been taken. Some 275 feet of underground work has been done, and 98 tons of $0.30U_3O_8$ ore recovered and sold.

In the course of the work three or four small bunches of ore grade material were encountered and probably largely gouged out, as no reserves are claimed. Most, if not all, of the ore shipped came from a pocket at the surface under which the 100 foot 40° shaft was sunk. Therefore the 275 feet of work was productive of little ore.

Three AEC diamond drill holes have prospected the area near the shaft.

The log of Hole #1 shows two anomalous conditions one of 1.25 MR/hr, the other 0.75 MR/hr. To investigate the higher (1.25), 50 feet of work is proposed.

Slight radioactivity was registered by Holes 2 and 3.

No theory is advanced for the localization of the small bunches of ore grade material, one of which yielded 2 small shipments.

The work proposed appears to be designed to more or less duplicate the almost fruitless work already done. In the light of the unfavorable results obtained to date the prospects look dim.

Referral of the application to the Field Team for appropriate treatment is recommended.

N. E. Nelson

N. E. Nelson

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

RECEIVED
MAY 25 1956

1605 Evans Avenue
Reno, Nevada

May 23, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Uranium)
James Hulse
Hulse-Park-Hezzelwood Mine
Lincoln County, Nevada

Attached are three sets of MF-103, Application for Aid forms, relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attach.

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

RECEIVED
MAY 25 1956

1605 Evans Avenue
Reno, Nevada

May 23, 1956

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Uranium)
James Hulse
Hulse-Park-Hezzelwood Mine
Lincoln County, Nevada

Attached are three sets of MF-103, Application for Aid forms, relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
File

May 25, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region II.

DMEA - 4309 James Hulse

Robert E. Adams
Chief, Operation's Control
and Statistics Division

May 25, 1956

Mr. James G. Hulse
Box 77
Pioche, Nevada

Subject: DMEA-4309
Re: Exploration Assistance
Hulse-Park-Hezzelwood Mine

Dear Mr. Hulse

The receipt of your application dated May 7, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4309 and referred to the Rare & Misc. Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
MAY 25 1956

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

Not to be filled in by applicant

Docket No. DMEA-4309
Metal or Mineral URANIUM
Date Received 5/25/56
Estimated Cost $ 40,400.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Hulse-Park-Hezzelwood Mine. (A partnership) Nevada. James Hulse, Box 77, Pioche, Nevada; Phillip Hulse, Box 77, Pioche, Nevada; Edwin Park, 214 Nebraska St., Henderson, Nevada; and L.L. Hezzelwood, 1215 Francis St., Las Vegas, Nevada.

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Bluebird, Ella, Lucky Dog, Lucky Dog #1, Lucky Dog #2, Lucky Dog #3, Tip Top, Berene, Sima, Sima Fraction, Nell, Delora, Deanne, Pamela, Billie, Liala, Agnes, Winnie, Alice Nonanza No.2, projected as being in Section 20, 21 & 22, T. 7 N., R. 68 E., M.D.B.M.

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

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

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

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

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

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

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

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Uraninite, as shown in Paragraph 2 of AEC report.

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

(*c*) The work will start within 20 days and be completed within 8 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

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

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

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated May 7, 1956

Hulse-Park-Hezzelwood Mine
(Applicant)

By James G. Hulse, Partner

James G. Hulse

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

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

3 (F) Unpatented Claims:

Claim	B ook	Page
Liala	Q-1	486-488
Billie	"	"
Pamela	"	"
Deanne	"	"
Nell	"	486
Berene	"	489
Sima	"	"
Delora	"	490
Tip Top	R-1	91
Lucky Dog	O-1	230-231
Lucky Dog #1	R-1	94
Lucky Dog #2	"	"
Lucky Dog #3	"	90
Winnie	"	310
Agnes	"	"
Alice	"	"
Sima Fraction	"	413
Bonanza #2	"	416
Bluebird	O-1	230
Ella	"	229
Minnie	"	230

The Bluebird and Ella claims have been surveyed for patent.

4 (A) The Bluebird claim has been developed by about 275 feet of underground workings including winzes, crosscuts and drifts.
All work has been done by present partners.
Mine Workings are accessible at all times for examination.

(B) Two carloads of ore were mined and shipped to Vitro Uranium Company in Salt Lake City, Utah. Settlement was made on 98 tons of ore, which ran slightly more than 0.30%--U_3O_8 in 1955.

(C) Additional ore grade material is exposed in lenticular masses in the mine. Similar ore bodies may be found by drifting in the more favorable breccia zones bounded by the silicified gouge. Enclosed-Report by U. S. Atomic Energy Commission, Division of Raw Materials, Salt Lake Exploration Branch. "Please return"

(D) Access to the property is over 29 miles of oiled surfaced U. S. and Nevada Highway 93--North to Pony Springs from Pioche, Nevada. Then 20 miles East on the graded maintained County road to the Atlanta Mining District. The main workings 1500 feet off County road. Pioche is the nearest supply center and is located on a spur line on the Union Pacific Railroad.

(E) Men are available in Pioche due to lack of work at the Pioche mines at present.

5 (B) Sketch of proposed shaft sinking of 100 feet of incline is attached. Also shown is 100 feet of crosscutting on bottom, or 150' level. Also a drift is proposed on present 50 foot level of incline to check anomally found in D.D.H.#1 by AEC. A 100 foot crosscut to southeast to check south contact beneath collar of incline where two (2) carloads of ore were mined.
550 feet of drifting to S.W. and N.E. after crosscutting is done on bottom, or 150 foot level.

(D) Operator has had 25 years of experience as miner, foreman and superintendent of mines in Nevada. Six years as superintendent at Ely Valley Mine at Pioche, Nevada from 1942 to 1948, which included sinking a new 1200 foot vertical shaft and developing a large sulphide ore body, and also producing a large tonnage from the old incline shaft and a winze during the sinking of the 1200 foot shaft. Three years as foreman at Pan American Mine producing ore and new 550 foot shaft at Comet Mine and producing ore at Black Metals Mine, all of which is in Pioche Mining District for Combined Metals Reduction Company. Paul Gemmill is Manager. This was through 1951 to 1953. At present time is superintendent of MIA Mine at

Minerva Mining District, White Pine County, Nevada. R. L. Brittain is manager. From November, 1953 to May, 1956. Exploration, development and production.

6 Estimate of costs:

100 ft. of shaft sinking	$100.00 per ft.	=	$10,000.00
200 ft. of crosscutting	@ $38.00 " "	=	7,600.00
600 ft. of drifting	@ $38.00 " "	=	22,800.00
	Total cost		$40,400.00

(a) At present time contract work is not planned.

(b) Wages--Miners rate is $2.0125 per hour or $16.10 per eight hour day.
Muckers--$1.75 per hour, or $14.00 per eight hour day.
Hoistman--$1.9375 per hour, or $15.50 per eight hour day.
Supervision--
Engineering--

(c) Gasoline--Compressor---29.6¢ per gallon.
2--Mine Cars
1--Wheel barrow
Small tools, picks, shovels, axes and hoses.

(d) Equipment owned by operator:
GR-125 Gyro-flow compressor, Ingersoll Rand
$112.00 per month on rental purchase

JR-40 Ingersoll Rand Jackhammer & jack leg.
$35.00 per month.

5 H.P. Fairbanks Morse gasoline hoist
No rent.

Wooden head frame on shaft & 12 cubic foot incline skip. No rent.

I.R. 5 H.P. single drum air hoist. No rent.

6 (E) Rehabilitation and repairs--None

(F) New Buildings, improvements, installations--None

(G) Miscellaneous
Workman's compensation:
Industrial insurance-$6.83 per $100.00 payroll.
Employment Security Department--2.7% rate.

(H) Contingencies:
Mileage estimate--900 miles per month at 8¢ per mile.

7 (A) At present time we are planning to sell an interest in the property to get necessary capital for exploration and development.

(B) Several persons have been interested in the property and would be willing to invest for development.

James G. Hulal

SOUTH 157 HOWARD ST.
SPOKANE 4, WASHINGTON

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Explor. Admin.
Department of the Interior
Washington 25, D. C.

Extra Copy 5/25/56 Crawford

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
MAY 25 1956

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

Not to be filled in by applicant

Docket No. DMEA-4309
Metal or Mineral URANIUM
Date Received 5/25/56
Estimated Cost $40,400.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Hulse-Park-Heszelwood Mine. (A partnership) Nevada. James Hulse, Box 77, Pioche, Nevada; Phillip Hulse, Box 77, Pioche, Nevada; Edwin Park, 214 Nebraska St., Henderson, Nevada; and L.L. Heszelwood, 1215 Francis St., Las Vegas, Nevada.

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Bluebird, Ella, Lucky Dog, Lucky Dog #1, Lucky Dog #2, Lucky Dog #3, Tip Top, Berene, Sima, Sima Fraction, Nell, Delora, Deanne, Pamela, Billie, Liala, Agnes, Minnie, Alice Nonanza No.2, projected as being in Section 20, 21 & 22, T. 7 N., R. 68 E., M.D.B.M. (Lincoln Co, Nev.)

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

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

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

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

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

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

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

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

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

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

16—66551-1

Maps detached for returning to applicant
mc.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Uraninite, as shown in Paragraph 2 of AEC report.

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

(*c*) The work will start within 20 days and be completed within 8 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

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

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

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

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

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

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(Applicant)

By James G. Hulse, Partner

James G. Hulse

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

RECEIVED
MAY 2 5 1956

3 (F) Unpatented Claims:

Claim	Book	Page
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Billie	"	"
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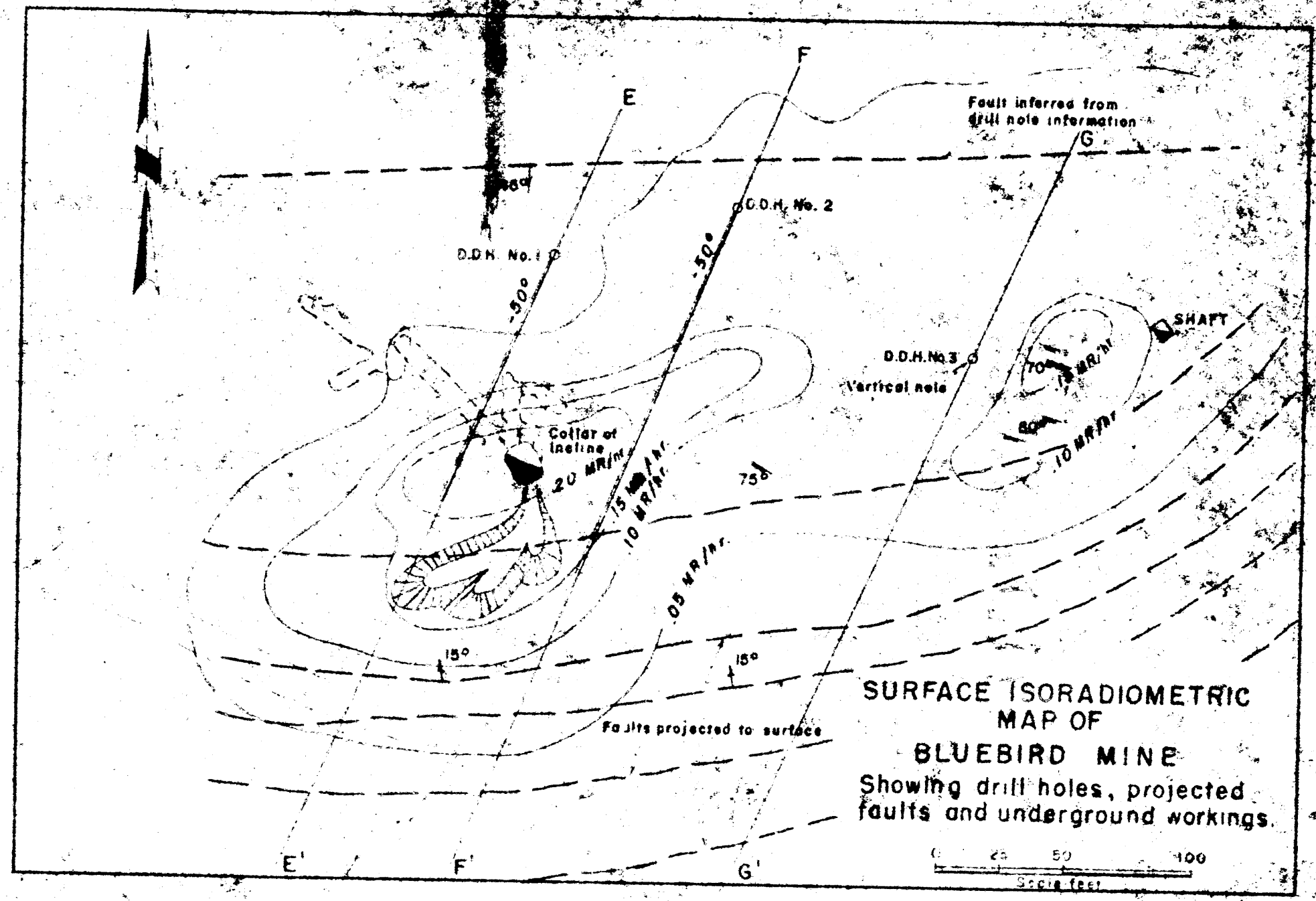
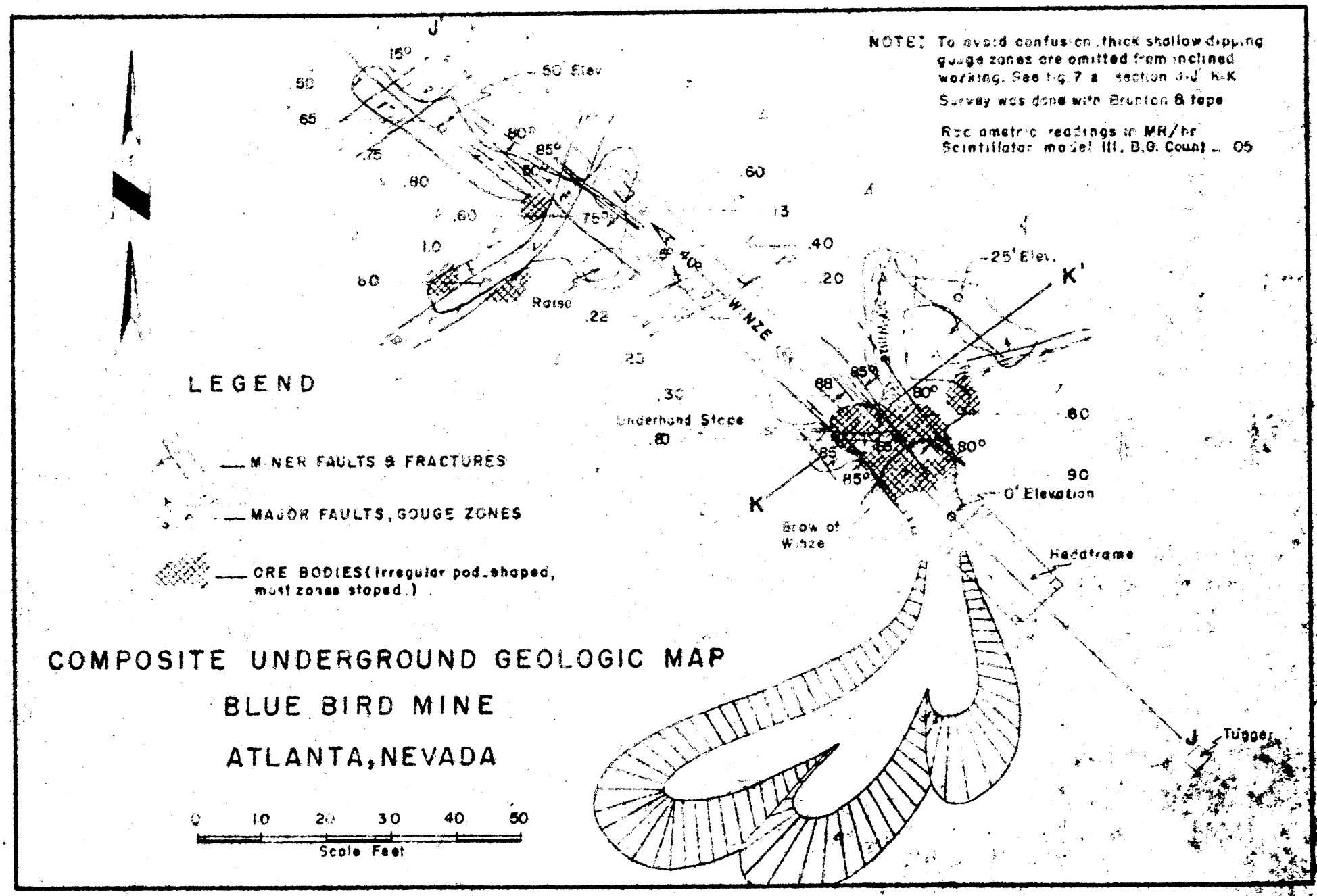


SURFACE ISORADIOMETRIC MAP OF BLUEBIRD MINE

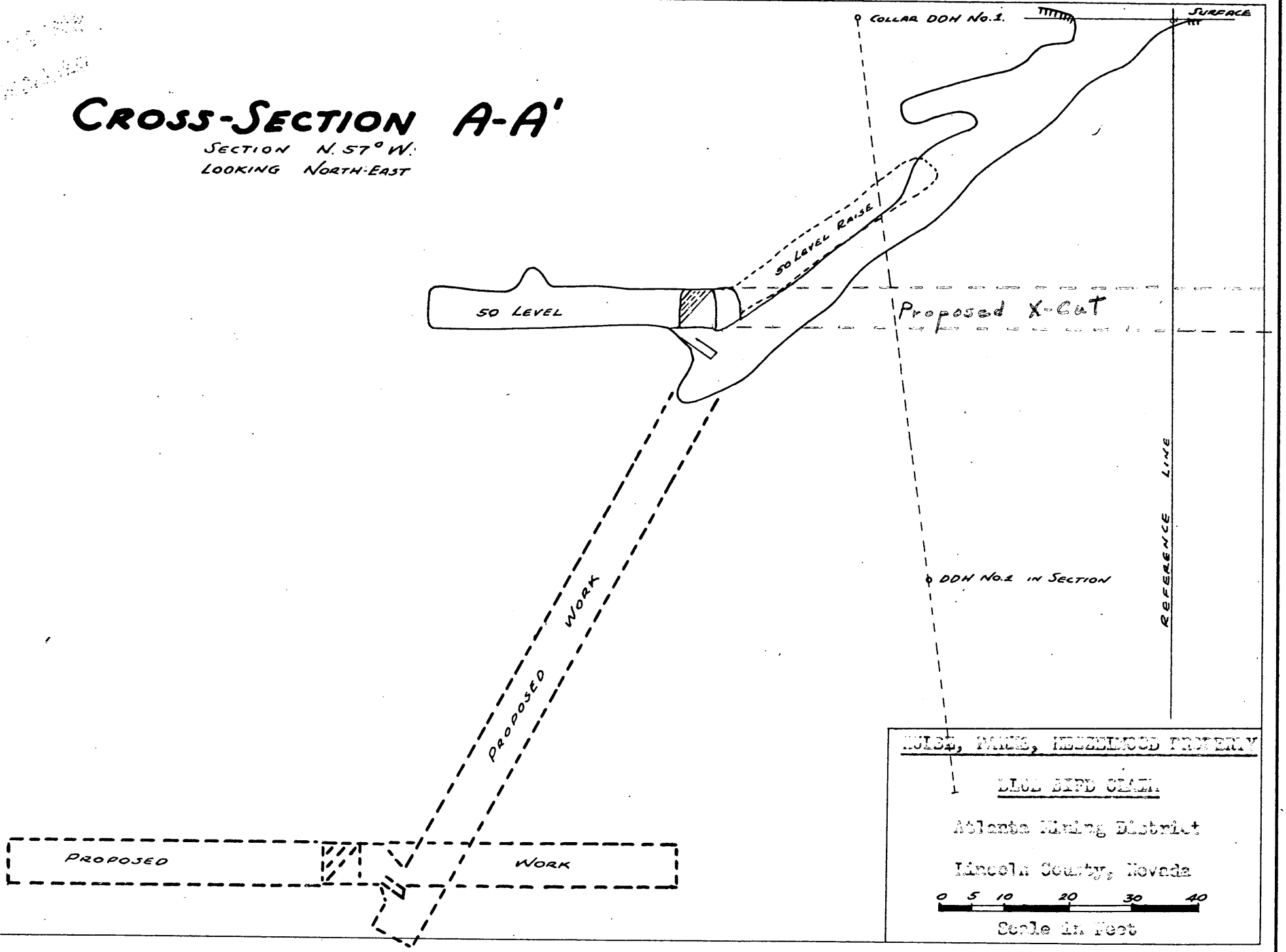
Showing drill holes, projected faults and underground workings.


NOTE: To avoid confusion, thick shallow dipping gouge zones are omitted from inclined working. See fig 7 & section J-J' & K-K'
Survey was done with Brunton & tape
Radiometric readings in MR/hr
Scintillator model III, B.G. Count _ 05
LEGEND
MINER FAULTS & FRACTURES
MAJOR FAULTS, GOUGE ZONES
ORE BODIES (irregular pod-shaped, most zones stoped.)
COMPOSITE UNDERGROUND GEOLOGIC MAP
BLUE BIRD MINE
ATLANTA, NEVADA
0 10 20 30 40 50
Scale Feet
J
J'
K
K'
50' Elev
-25' Elev.
0' Elevation
Raise
Winze
Underhand Stope
Brow of Winze
Headframe
Tugger

RECEIVED
MAY 25 1956

CROSS-SECTION A-A'

SECTION N. 57° W.
LOOKING NORTH-EAST



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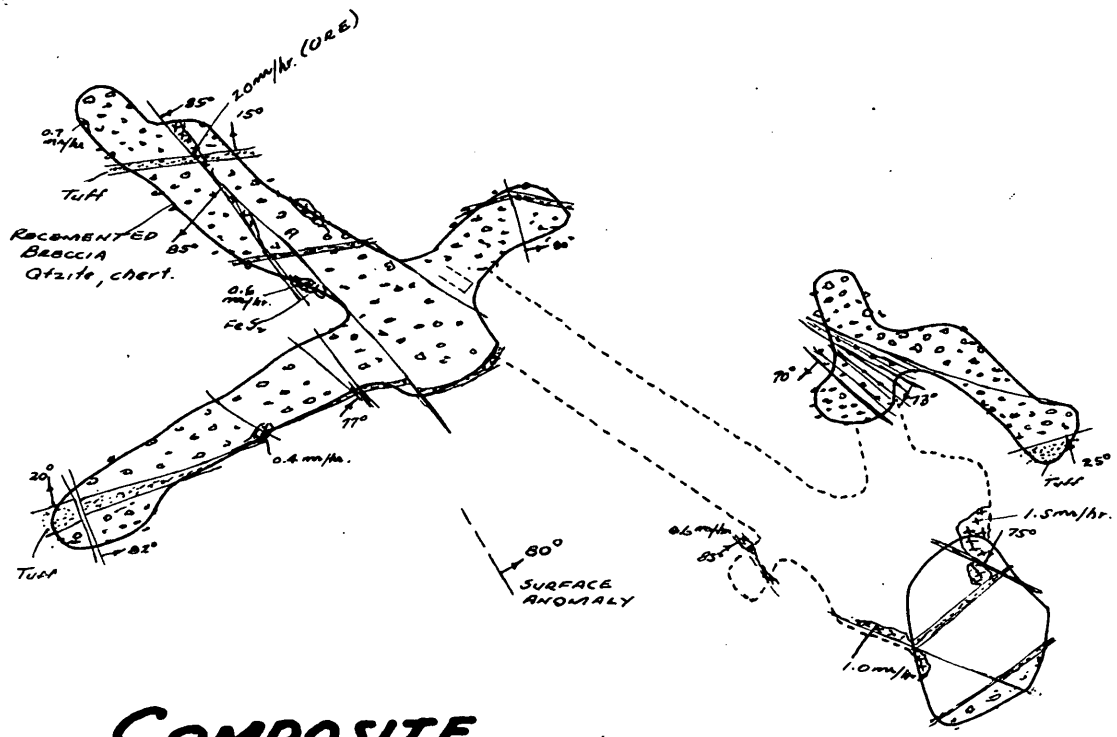
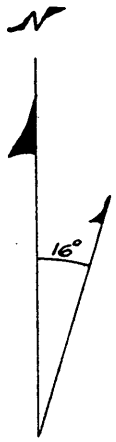


COMPOSITE MINE WORK



MILLER, PARKS, HERRELWOOD PROPERTY

BLUE BIRD CLAIM

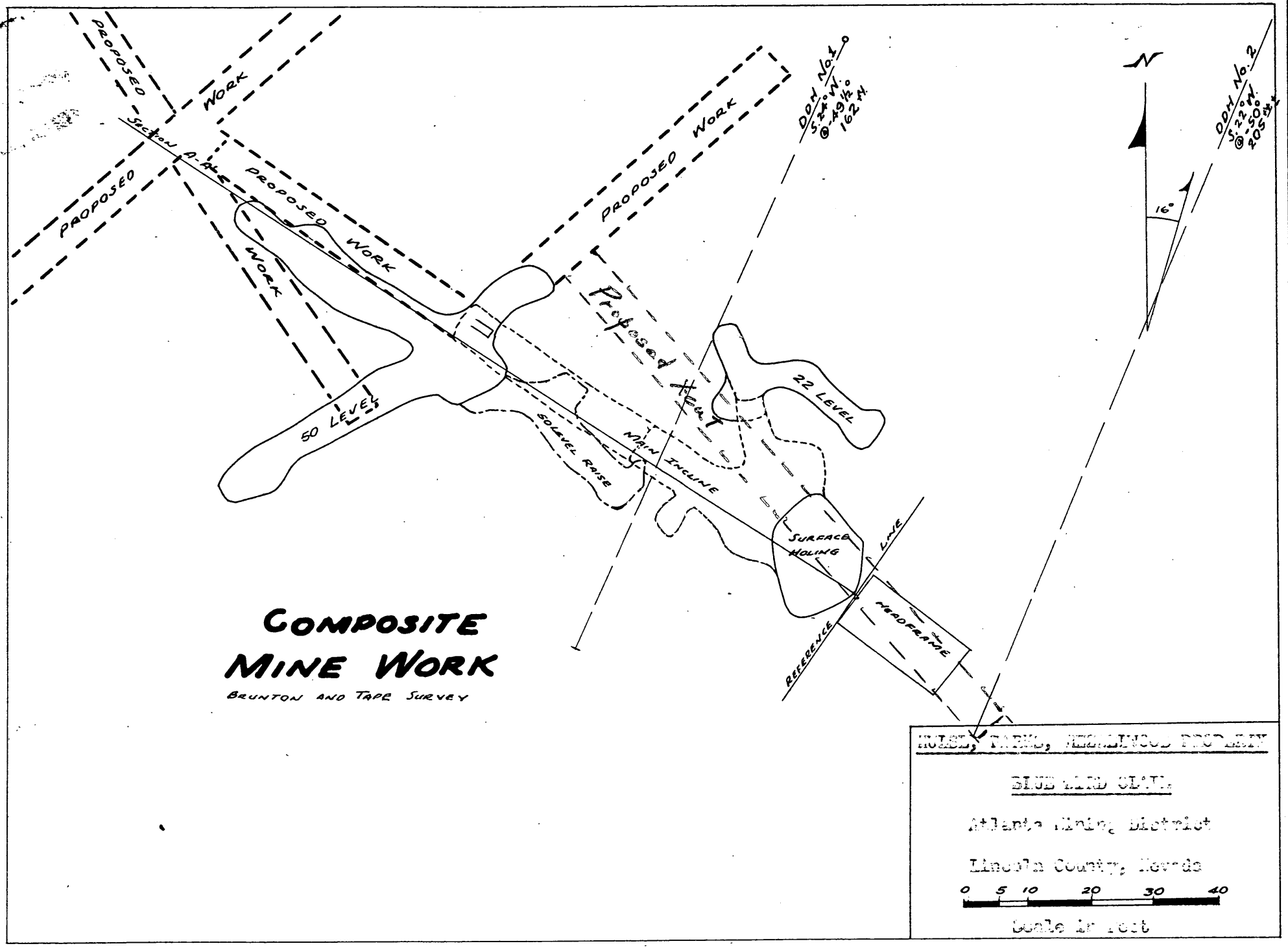
Atlanta Mining District

Lincoln County, Nevada

0 5 10 20 30 40

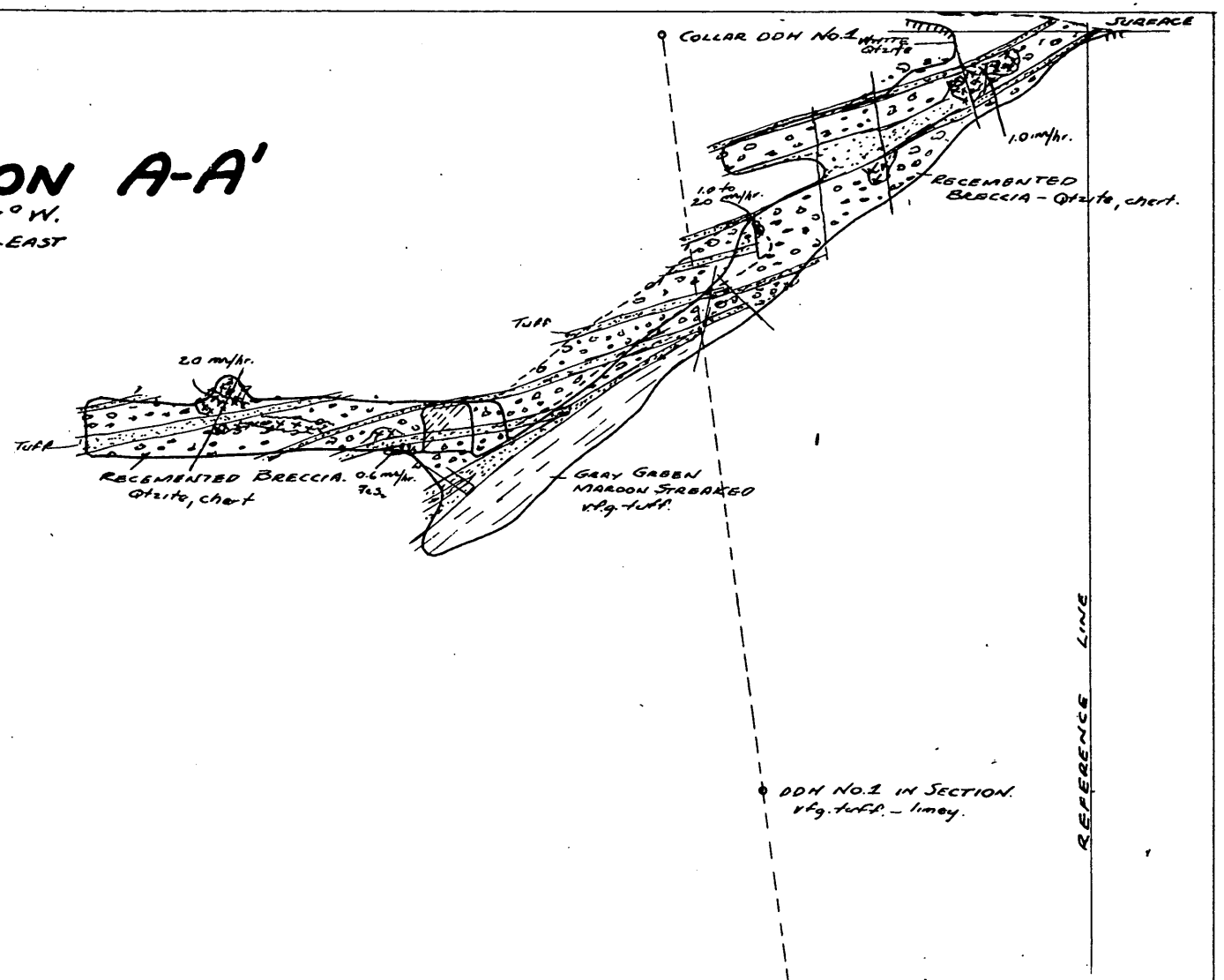
Scale in Feet

RECEIVED
MAY 25 1956


PROPOSED WORK
PROPOSED WORK
PROPOSED WORK
PROPOSED WORK
Section A-A
DDH No. 1
S 24° W.
@ -49 ft.
162 ft.
DDH No. 2
S 22° W.
@ -50°
205 ft.
N
16°
Proposed Fault
22 LEVEL
50 LEVEL
SOLEVEL RAISE
MAIN INCLINE
SURFACE HOLING
LINE
HEADFRAME
REFERENCE
COMPOSITE
MINE WORK
BRUNTON AND TAPE SURVEY
HUBBS, PARKS, HEGLEWOOD PROPERTY
BIND LAND CO'TS
Atlanta Mining District
Lincoln County, Nevada
0 5 10 20 30 40
Scale in feet

CROSS-SECTION A-A'

SECTION N. 57° W.
LOOKING NORTH-EAST



WILLIE, FARNS, LEGGELWOOD PROPERTY

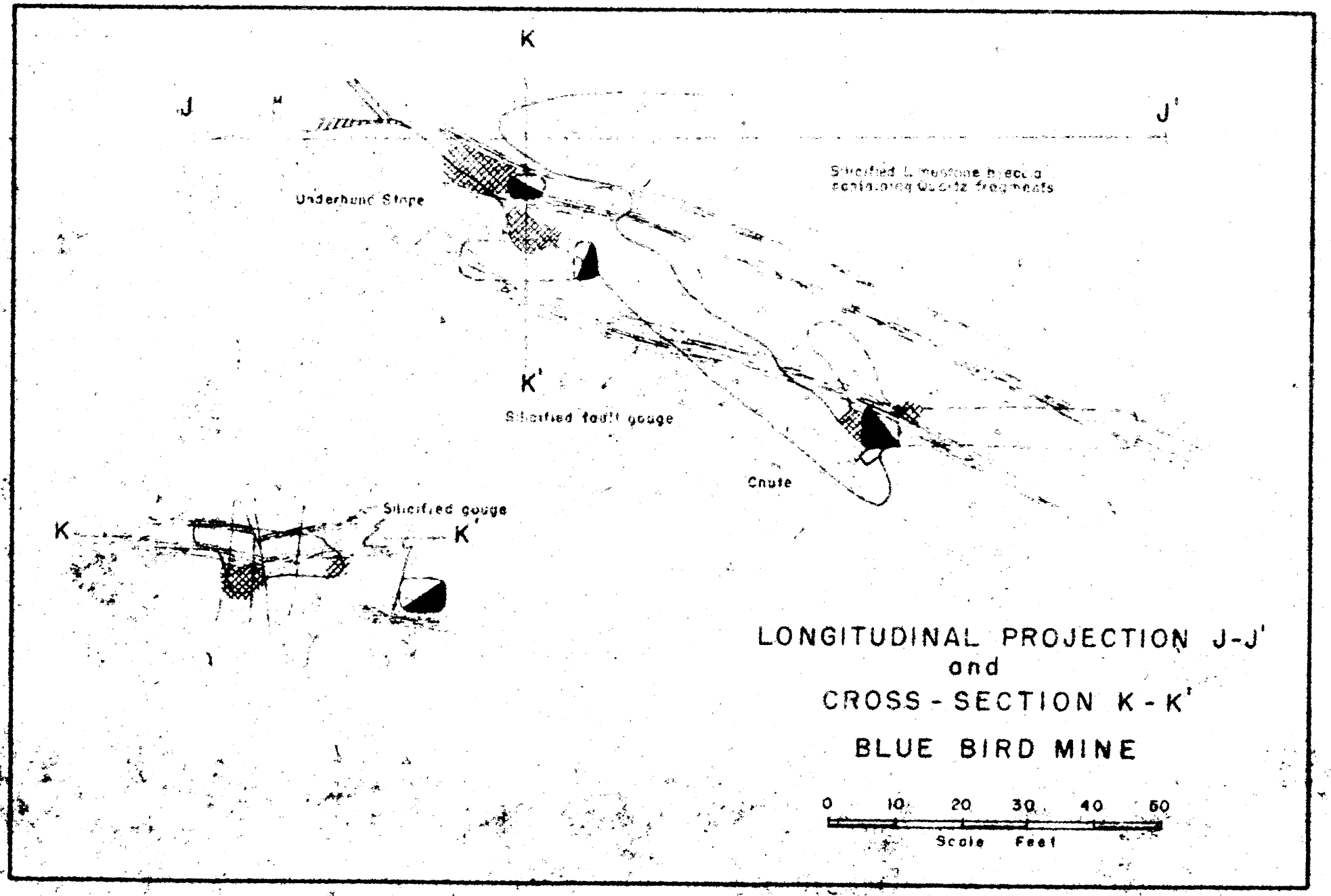
BLUE BIRD CLAIM

Atlanta Mining District

Lincoln County, Nevada

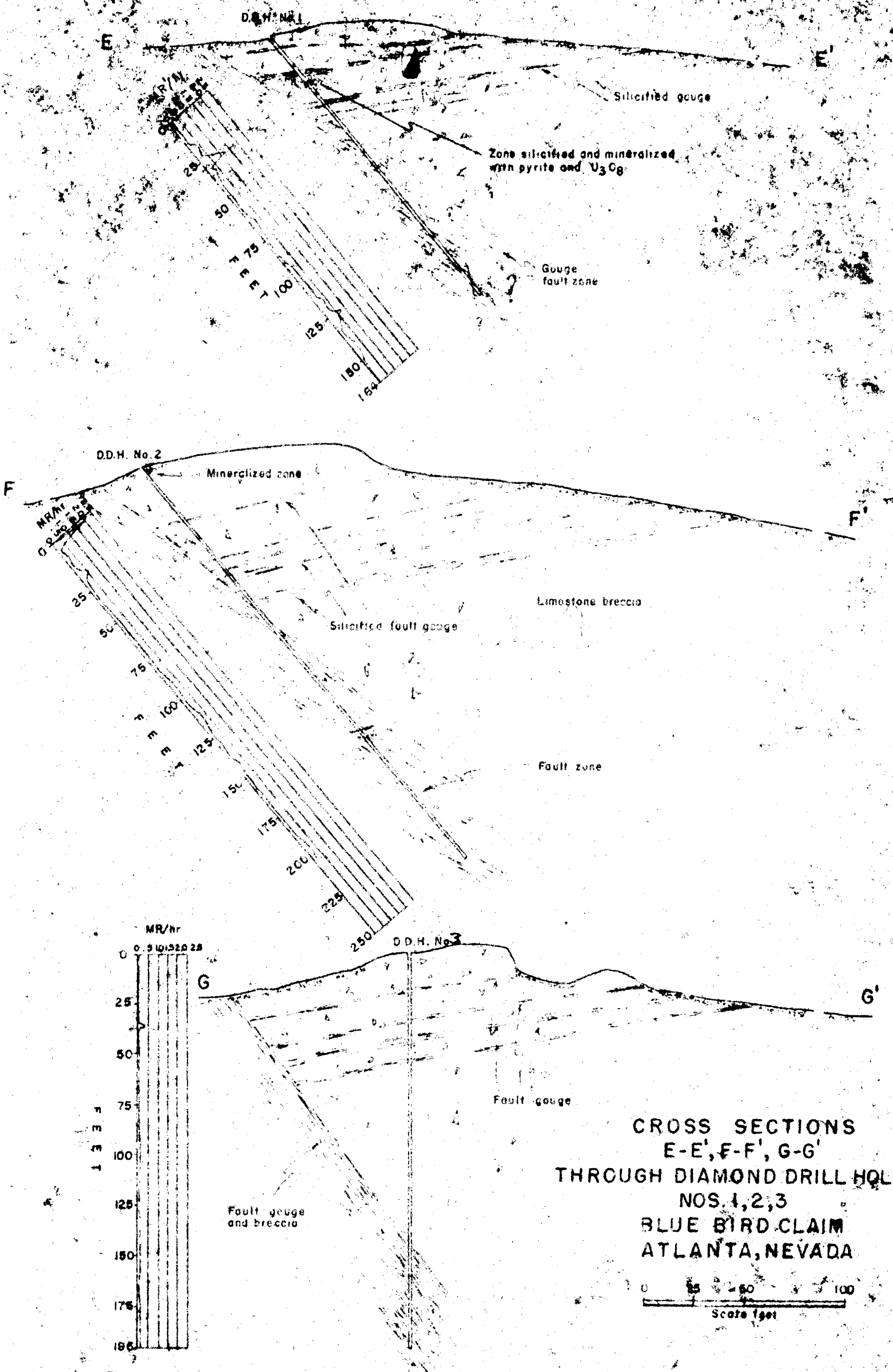
0 5 10 20 30 40

Scale in feet

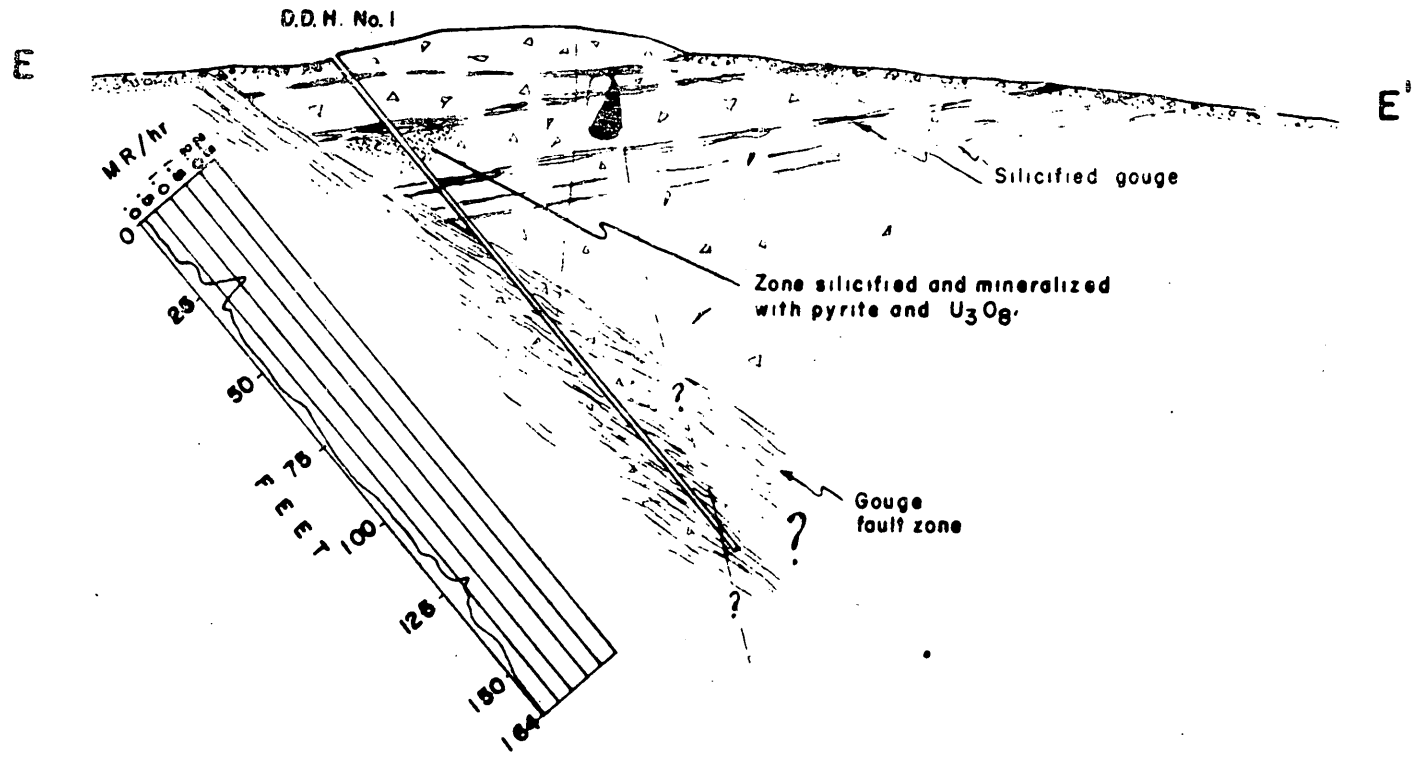


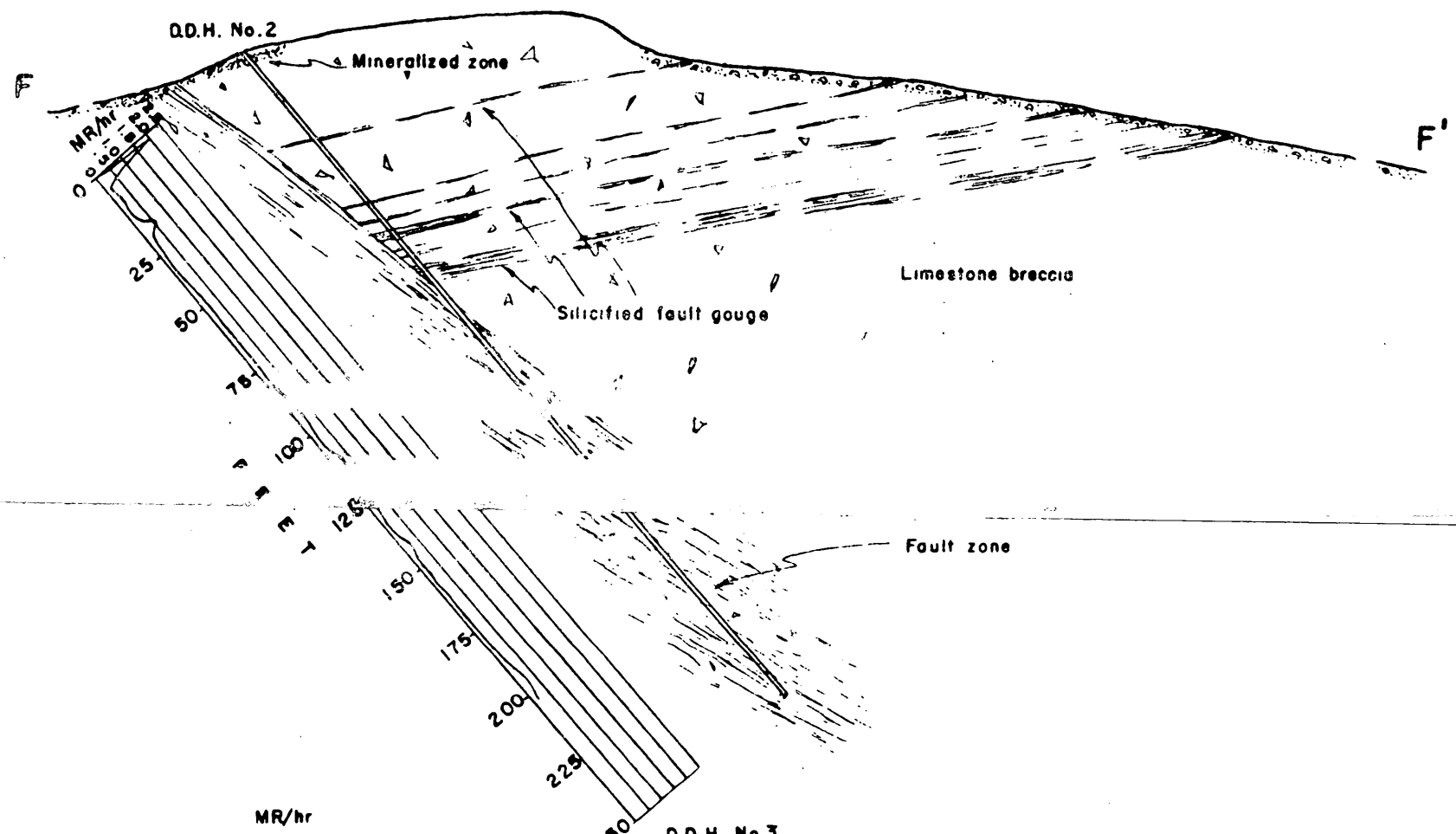
LONGITUDINAL PROJECTION J-J'
and
CROSS - SECTION K - K'
BLUE BIRD MINE

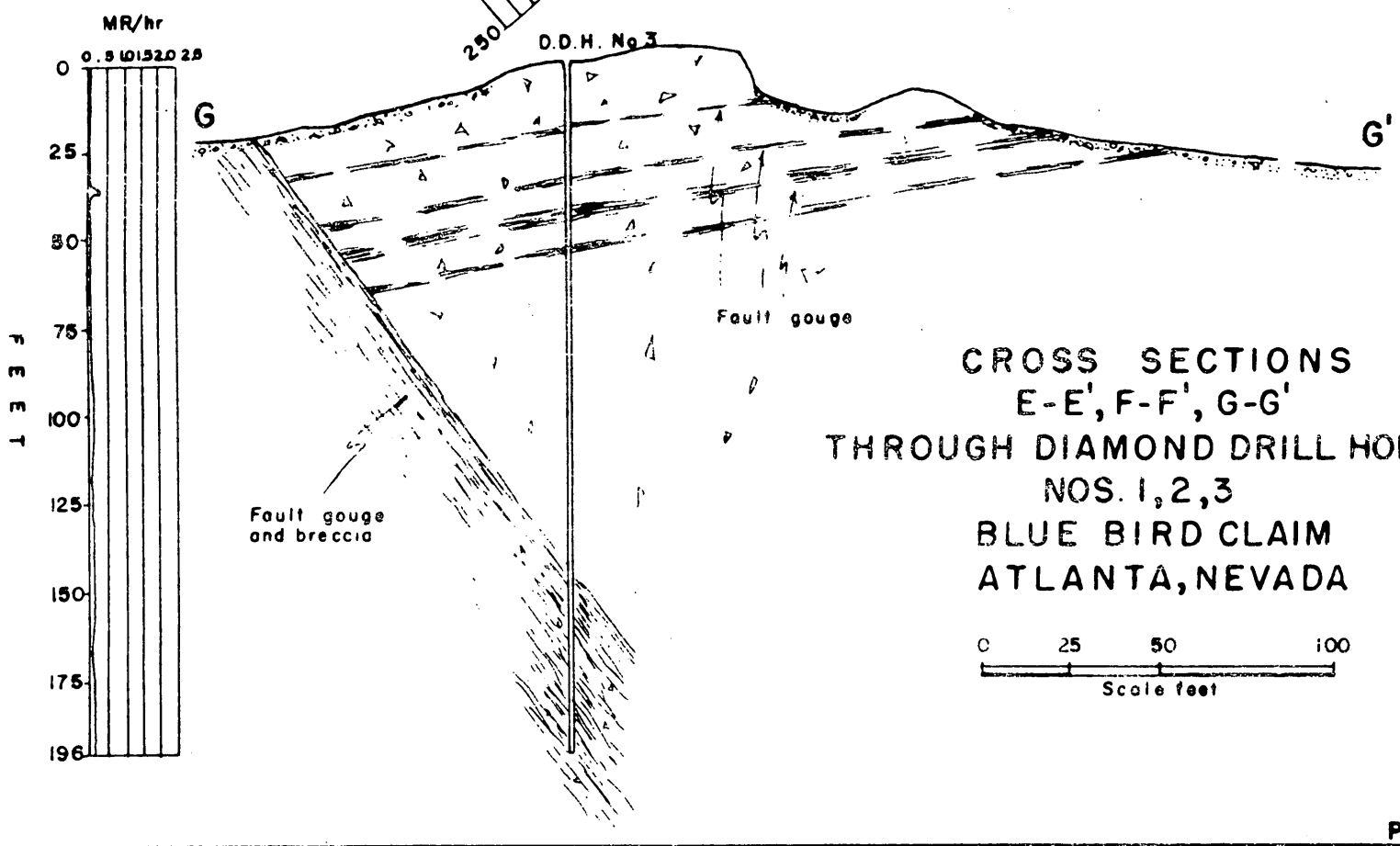
RECEIVED
MAY 8 5 1966



CROSS SECTIONS
E-E', F-F', G-G'
THROUGH DIAMOND DRILL HOLES
NOS. 1, 2, 3
BLUE BIRD CLAIM
ATLANTA, NEVADA



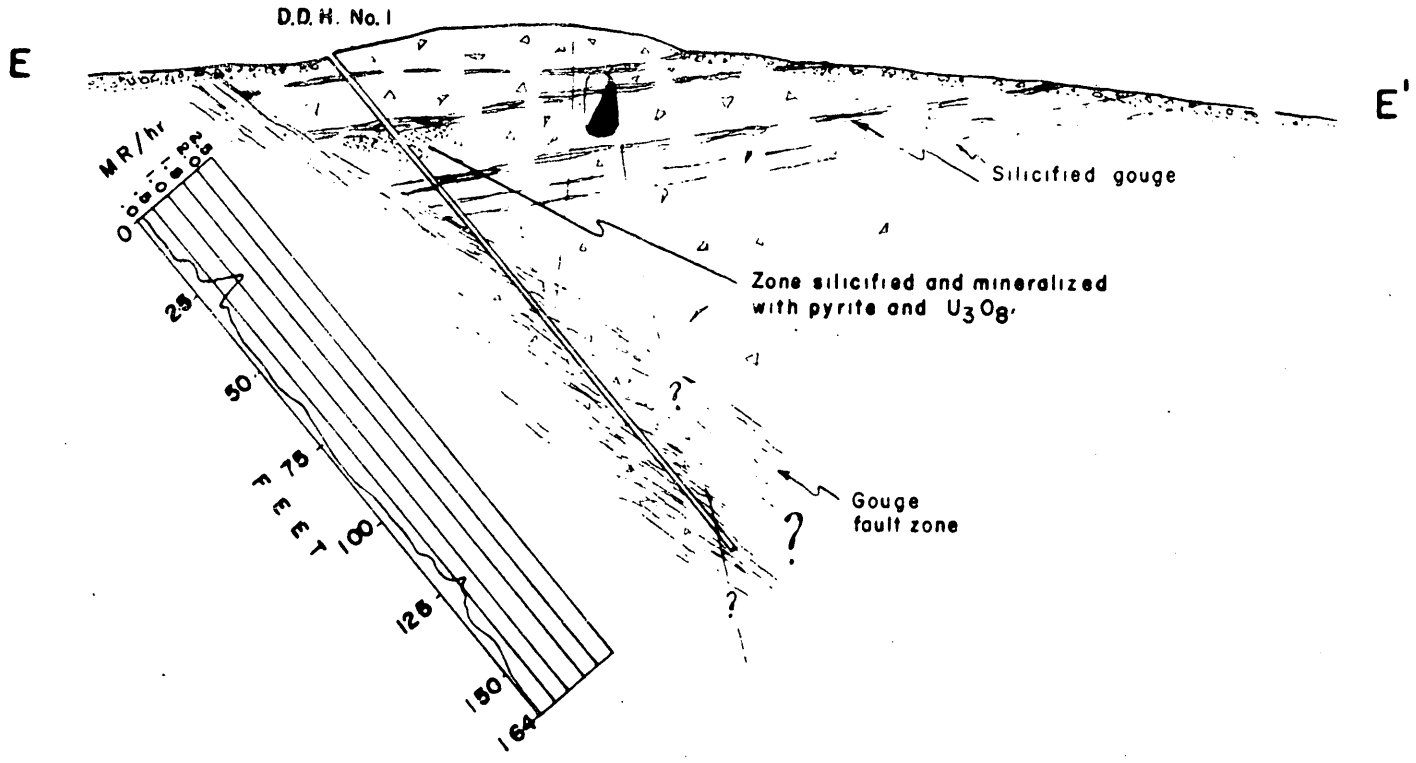


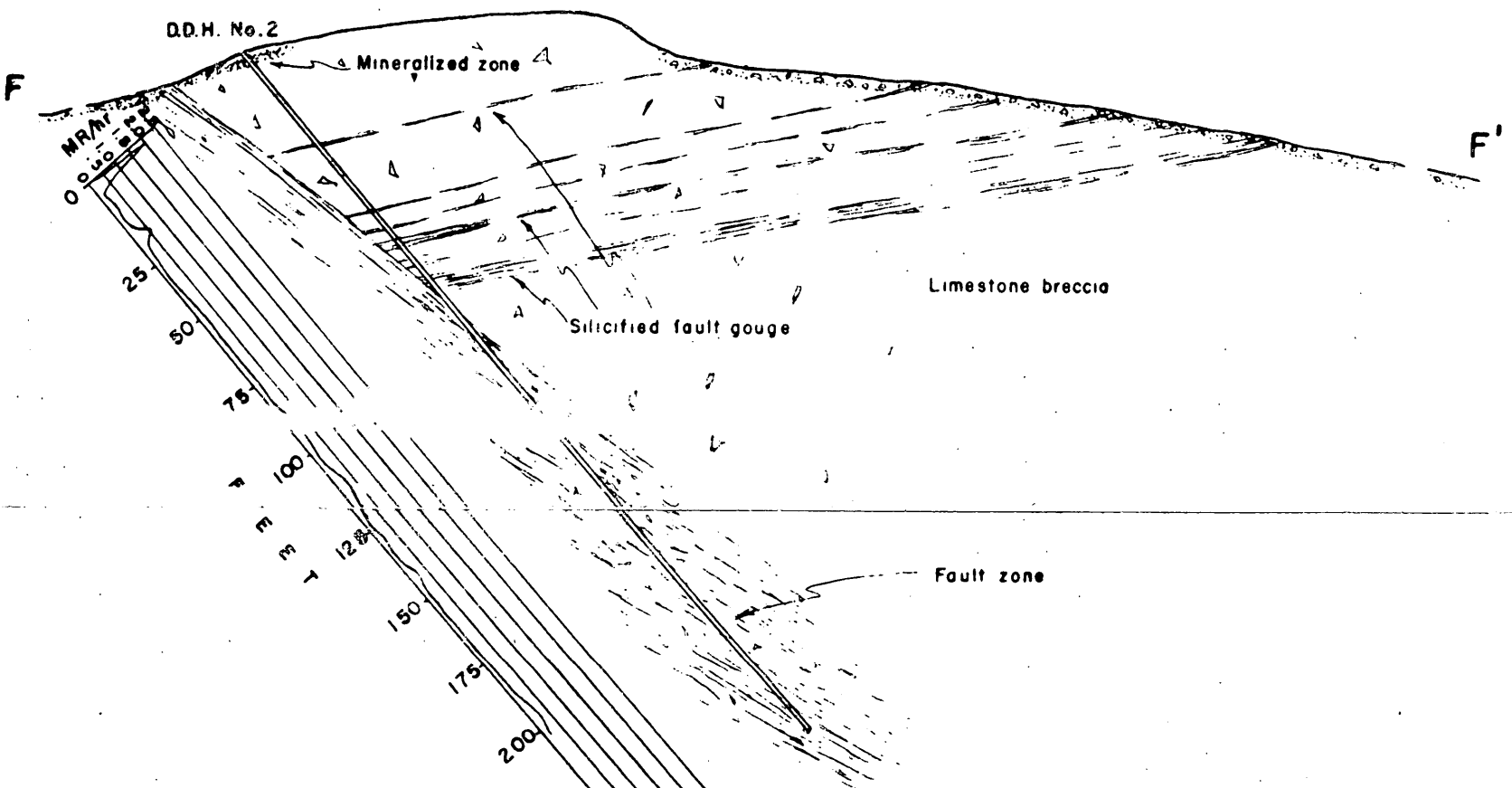


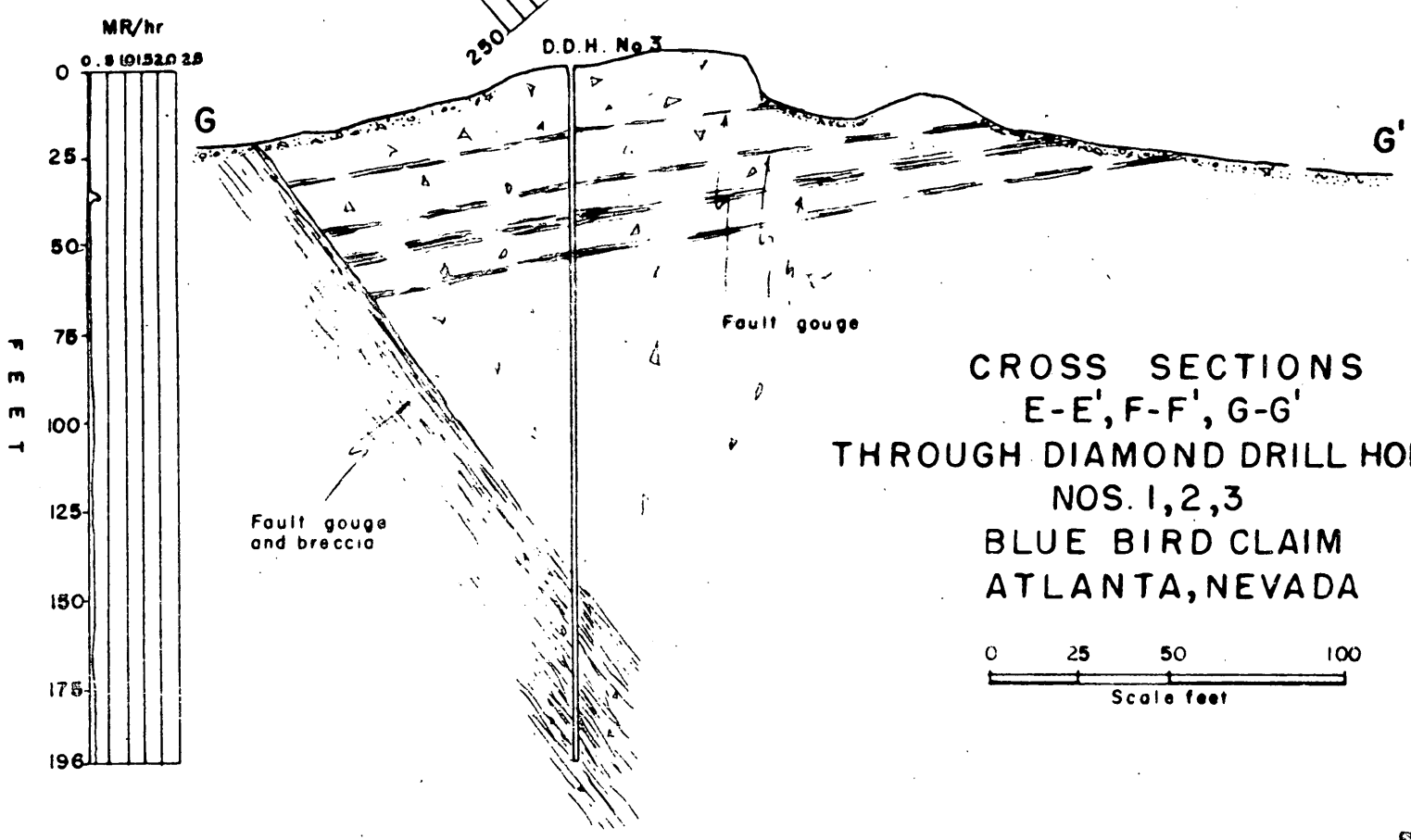
CROSS SECTIONS
E-E', F-F', G-G'
THROUGH DIAMOND DRILL HOLES
NOS. 1, 2, 3
BLUE BIRD CLAIM
ATLANTA, NEVADA

0 25 50 100
Scale feet

RECEIVED
1 4 1989







CROSS SECTIONS
E-E', F-F', G-G'
THROUGH DIAMOND DRILL HOLES
NOS. 1, 2, 3
BLUE BIRD CLAIM
ATLANTA, NEVADA

0 25 50 100
Scale feet

RECEIVED