5/17/55 gfa

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

224 New Customhouse
Denver 2, Colorado

May 12, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Report of Examination, DMEA Docket 3697 (Uranium), Surplus Uranium Co., Inc. (Glenwood and Dixie groups), San Juan County, Utah

Enclosed are the original and three copies of the report pertaining to the above application.

We concur in the recommendation of the field examiners that the application be denied.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

TRANSMITTED

MAY 12 1955

Region III

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
May 3, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: John F. Shaw, Supervising Mining Engineer

Subject: Docket DMEA 3697, (Uranium), Glenwood and Dixie groups, Surplus Uranium Company, Inc., San Juan County, Utah

Enclosed are the original and ten copies of a "Summary, Conclusions, and Recommendations" by Randall T. Chew III, geologist, and Carl Balser, mining engineer, and the original and ten copies of an engineering report by Carl Balser covering docket DMEA 3697.

The Surplus Uranium Company, Inc., applied for exploration assistance in the amount of $27,109.21, to explore the Glenwood and Dixie groups by 6,600 feet of rotary drilling. The field examination was made on April 5, 1955, by an examining team from the Geological Survey and the Bureau of Mines. The examining team concluded that there was little likelihood of a significant amount of uranium being discovered by the proposed exploration.

It is recommended that the application be denied.

John F. Shaw

John F. Shaw

Enclosures

cc 10
DMEA 3697
Chron

JFS/em

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3697, Glenwood and Dixie Groups

Surplus Uranium Company, Inc.

San Juan County, Utah

Uranium

Randall T. Chew III, Geologist
Geological Survey

Carl Belser, Mining Engineer
Bureau of Mines

April 27, 1955

DMEA 3697

GLENWOOD AND DIXIE GROUPS
SURPLUS URANIUM COMPANY, INC.
SAN JUAN COUNTY, UTAH

Summary, Conclusions, and Recommendations

By Randall T. Chew III
Geologist
Geological Survey

Carl Belzer
Mining Engineer
Bureau of Mines

TRANSMITTED
MAY 12 1955

DMEA 3697

GLENWOOD AND DIXIE GROUPS
SURPLUS URANIUM COMPANY, INC.
SAN JUAN COUNTY, UTAH

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Randall T. Chew III and Carl Belser

Surplus Uranium Company, Inc., Ray C. Clark, president, Box 267, Graham, Texas, has applied for Defense Minerals Exploration Administration aid in a project estimated to cost $27,109.21, to explore the Glenwood and Dixie groups by 6,600 feet of rotary drilling.

A field investigation was made on April 5, 1955, by an examining team from the Geological Survey and the Bureau of Mines. Ray C. Clark, president of the Surplus Uranium Company, Inc., accompanied the team and represented the applicant.

The Glenwood and Dixie groups are in Montezuma Canyon in secs. 24 and 25, T. 37 S., R. 24 E., Salt Lake meridian, and secs. 19 and 30, T. 37 S., R. 25 E., Salt Lake meridian, San Juan County, Utah.

The exposed rocks on the property consist mostly of the Salt Wash member of the Morrison formation of the Upper Jurassic with some of the overlying Westwater Canyon member outcropping on the extreme east end of the claim group.

Sandstone forms about 50 percent of the Salt Wash member in the Montezuma Canyon area. In areas where minable ore deposits occur, the sandstone lenses thicken and may coalesce to form from 70 to 90 percent of the Salt Wash. There are hundreds of vanadium occurrences known in the Montezuma Canyon area, but none appear to contain large

tonnages of uranium ore or to be exceptionally high in grade. They occur scattered at random throughout the Salt Wash sandstone. The Salt Wash member on the Diamond-Dixie claims appears to be about average for the area. About 7 tons of low grade uranium ore have been shipped from the 4 short adits on the claims.

Because sandstone lenses are thin, and because the history of the entire Monticello Canyon area has been adverse to the discovery of substantial ore bodies, the examining team recommended that the application be denied.

DMRA 3497

GLENWOOD AND DIXIE GRANTS
SUNPLUS URANIUM COMPANY, INC.
SAN JUAN COUNTY, UTAH

Engineering Report

By Carl Palmer
Mining Engineer
Bureau of Mines

DMEA 3697

GLENWOOD AND DIXIE GROUPS
SURPLUS URANIUM COMPANY, INC.
SAN JUAN COUNTY, UTAH

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2. Claim map, showing proposed exploration, Glenwood and Dixie groups, Surplus Uranium Company, Inc., San Juan County, Utah..... 2

DMEA 3697

GLENWOOD AND DIXIE GROUPS
SURPLUS URANIUM COMPANY, INC.
SAN JUAN COUNTY, UTAH

ENGINEERING REPORT

By

Carl Belser

INTRODUCTION

Surplus Uranium Company, Inc., Box 267, Graham, Texas, on February 15, 1955, submitted an application for Defense Minerals Exploration Administration assistance on the Glenwood and Dixie groups of claims in San Juan County, Utah. The application, DMEA 3697, requested aid in completing 6,600 feet of rotary drilling at an estimated cost of $27,109.21. This proposed exploration was to test the Salt Wash member of the Morrison formation for uranium mineralization.

A joint field inspection was made by a Geological Survey and Bureau of Mines examining team on April 5, 1955. The examining team, as a result of their investigations, recommended that the application be denied.

ACKNOWLEDGMENTS

Ray C. Clark, president of Surplus Uranium Company, Inc., accompanied the examining team and represented the applicant.

W. P. Williams, geologist, Colorado Plateau District, Geological Survey, Grand Junction, Colorado, assigned Randall T. Chew III,

geologist, to make the examination as the Geological Survey member of the team.

The Atomic Energy Commission was consulted regarding the area before the examination was made.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Glenwood and Dixie groups consist of seventeen 600- by 1500-feet unpatented claims and 3 unpatented fractions in secs. 24 and 25, T. 37 S., R. 24 E., Salt Lake meridian and secs. 19 and 30, T. 37 S., R. 25 E., Salt Lake meridian, San Juan County, Utah (figs. 1 and 2).

The claims are near the confluence of Monument and Montezuma canyons at estimated altitudes of from 4,700 feet to 5,100 feet.

Monticello, Utah, is 35 miles northwesterly from the claims and is reached over a winding road which is graded for the first 20 miles, graveled for the next 10, and paved for the last 5 miles. Moab and Thompson, Utah, are, respectively, 58 and 94 miles north of Monticello over U. S. Highway 160.

Labor, supplies, and light equipment can be obtained in Monticello and Moab. The nearest railroad is the Denver and Rio Grande Western at Thompson. Native timber and dimension lumber can be purchased at Moab and Monticello. Water for drilling purposes can be hauled from a nearby well, and water for domestic purposes can be trucked from Monticello. Ore buying depots are at Monticello and Moab.

Rainfall is light and the country is classed as semi-arid. Mining can be carried on throughout the year, but traffic on dirt and access roads becomes disrupted with heavy rains and spring thaws.

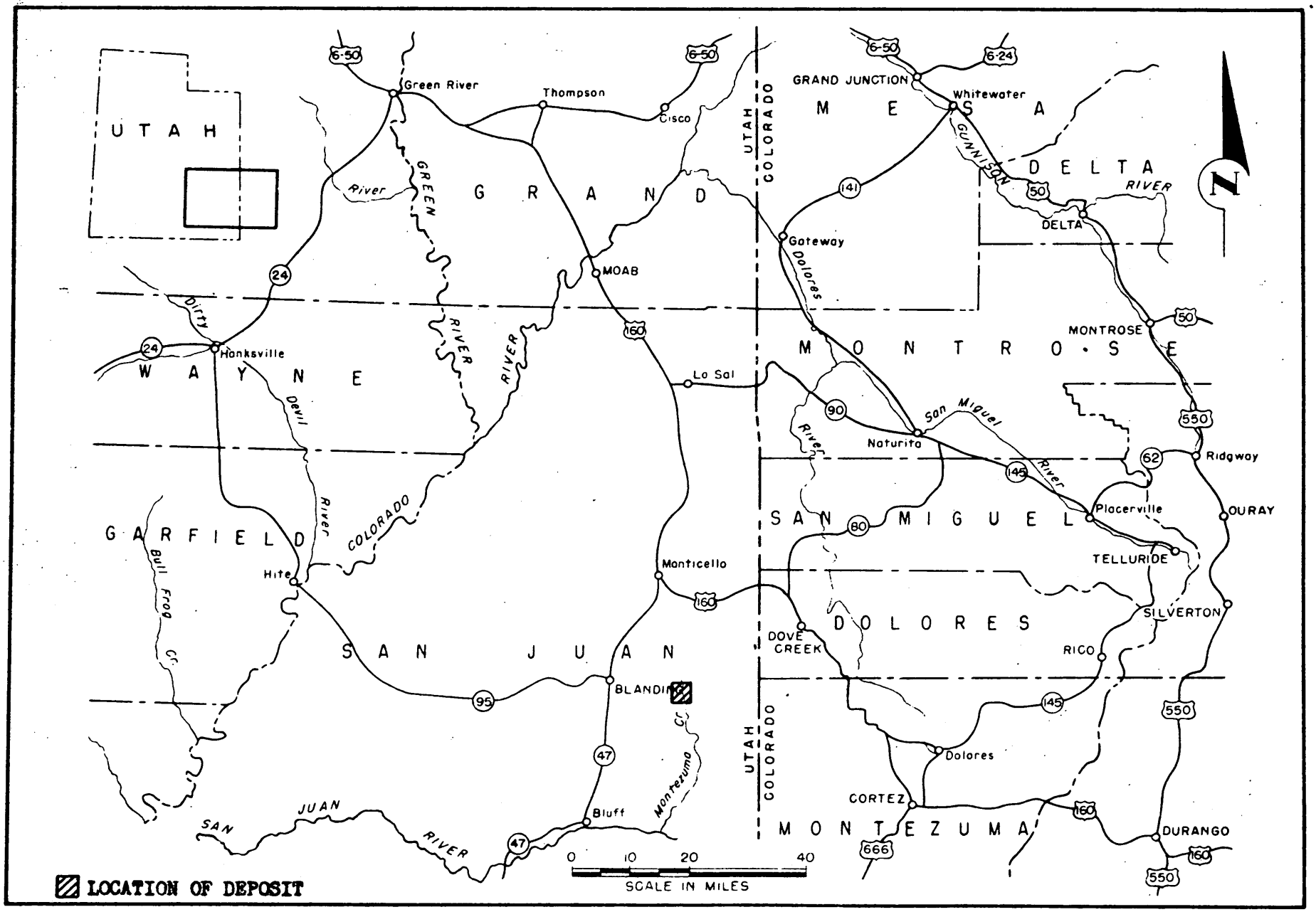


FIGURE 1 - LOCATION MAP, GLENWOOD AND DIXIE GROUPS, SURPLUS URANIUM COMPANY, INC., SAN JUAN COUNTY, UTAH. DMEA 3697

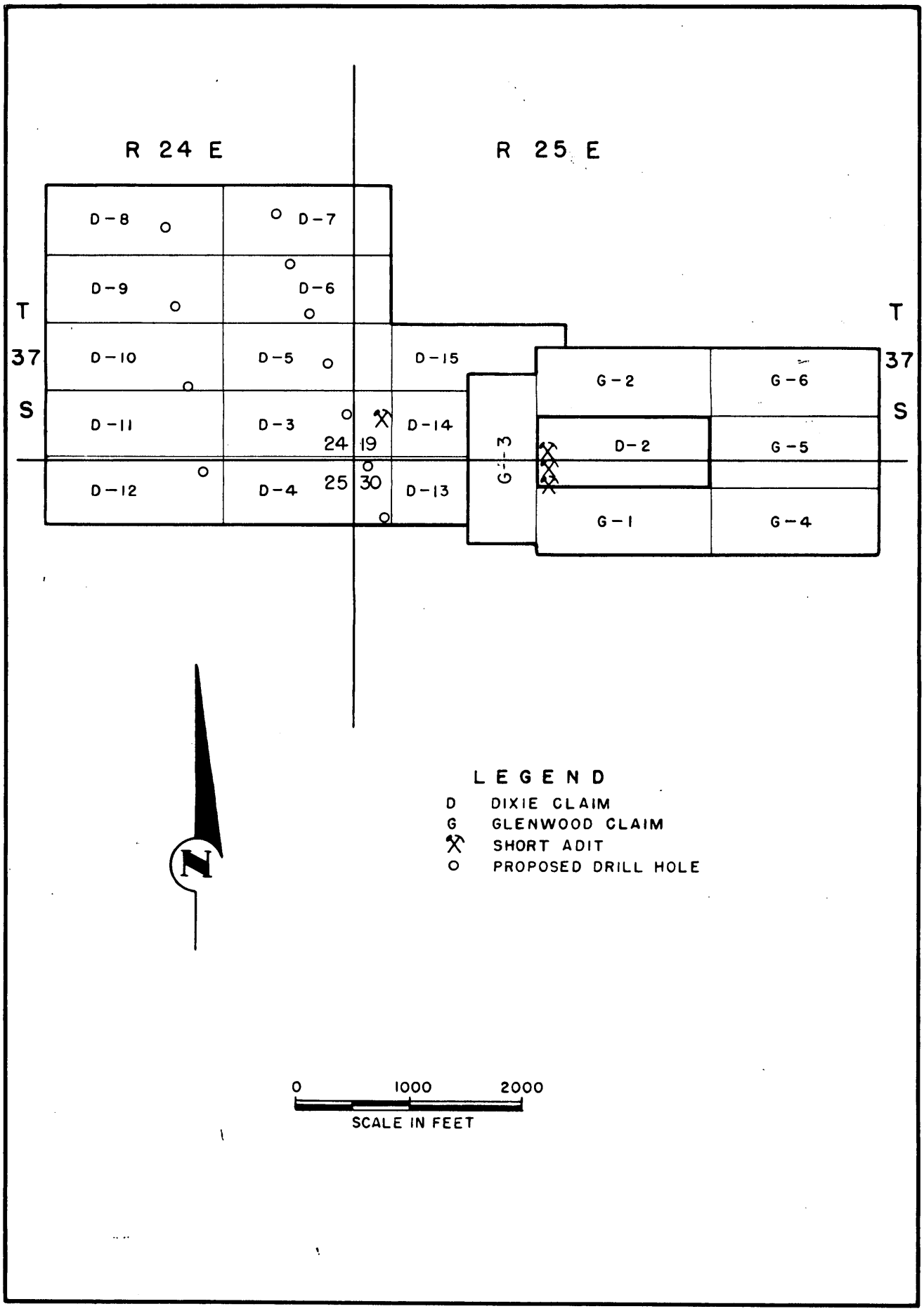


FIGURE 2 – CLAM MAP, SHOWING PROPOSED EXPLORATION, GLENWOOD AND DIXIE GROUPS, SURPLUS URANIUM COMPANY, INC., SAN JUAN COUNTY, UTAH. DMEA 3697

HISTORY AND PRODUCTION

Prospecting for vanadium became active in Montezuma Canyon after the road was built during World War II and again following the introduction of the Government buying schedules in 1948. The Glenwood and Dixie claims were bought from Ray Vogeley by Wright, Clark, and Senkel, Inc., (Surplus Uranium Company, Inc.) in 1954, and some access roads, a small amount of long-hole drilling, and four short adits, aggregating 100 feet in length, have been completed by the present owners. In driving these adits, 13,960 dry pounds of ore containing 0.100 percent U_3O_8 and 1.50 percent V_2O_5, were saved and shipped. The ore contained 6.2 percent $CaCO_3$. The best uranium mineralization is in the three small adits on the Dixie No. 2 claim. Just to the east of these adits a number of holes have been drilled into the uranium-mineralized sandstone lens, but only one hole penetrated uranium mineralization.

OWNERSHIP AND EXTENT

The property consists of 20 unpatented claims in a solid block in secs. 24 and 25, T. 37 S., R. 24 E., Salt Lake meridian and secs. 19 and 30, T. 37 S., R. 25 E., Salt Lake meridian, San Juan County, Utah (fig. 2).

The claims were purchased from Ray Vogeley by the present owners in 1954, surveyed by the San Juan Surveying Service in July 1954, and recorded in the office of the County Recorder of San Juan County, Utah, as follows:

Claim	Book	Page	Date Recorded	Date Discovered	Locator
Dixie No. 2	253	411	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 3	253	417	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 4	253	418	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 5	253	418	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 6	253	412	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 7	253	412	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 8	253	419	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 9	253	419	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 10	253	420	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 11	253	420	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 12	253	421	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 13 Fr.	253	413	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 14 Fr.	253	413	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Dixie No. 15 Fr.	253	414	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 1	253	414	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 2	253	415	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 3	253	415	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 4	253	416	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 5	253	416	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.
Glenwood No. 6	253	417	12/11/54	11/15/54	Wright, Clark, and Senkel, Inc.

Ownership of the claims is stated by the applicant to be:

Surplus Uranium Company, Inc. - 50 percent.
Wright, Clark, and Senkel, Inc. - 50 percent.

DESCRIPTION OF DEPOSITS

The exposed rocks on the Glenwood and Dixie claim groups are mostly of the Salt Wash member of the Morrison formation of Jurassic age with some rocks of the overlying Westwater Canyon member on the extreme eastern portion of the claim block.

The known uranium mineralization occurs near the bottom of a flat-dipping sandstone lens from 20 to 30 feet thick. The best exposure is in the adits on the Dixie No. 2 claim where the vanadium-uranium mineralization ranges from zero to 16 inches in thickness and is underlain by a green mudstone. Cover over the adits is light and the area to the

east has been drilled from surface. Only one hole is reported to have penetrated uranium mineralization.

MINABLE ORE RESERVES

There are no known minable ore reserves on the property.

PRESENT STATUS

Exploration and Development

Exploration and development consists of four short adits aggregating about 100 feet in length and a number of short wagon-drill holes.

Mining and Milling Equipment and Other Facilities

There is no mining or milling equipment on the property. Facilities consist of three access roads.

PROPOSED EXPLORATION

The applicant proposed to explore the Salt Wash member with 6,600 feet (16 holes) of rotary drilling.

The total overall cost was estimated at $27,109.21.

ESTIMATED COST OF PROJECT

The application, as submitted, included the following estimated costs:

Estimated Cost of Rotary Drilling

Independent contracts

Building roads and drill sites - 200 hours at $12.00/hr. and $300.00 transportation	$ 2,700.00	
Plug-bit drilling - 5,600 feet at $2.00/ft.	11,200.00	
Core drilling - 1,000 feet at $4.00/ft.	4,000.00	
Stand-by time - 16 hours at $7.50/hr.	120.00	
Reconditioning holes, pulling cores, reaming - 32 hours at $10.00/hr.	320.00	
Total independent contracts		$18,340.00

Labor and supervision

Labor		
Operator for drilling and shooting equipment - 96 hours at $2.10/hr.	$ 201.60	
Operator's helper - 96 hours at $1.85/hr.	177.60	
Supervision		
Superintendent - 320 hours at $4.00/hr.	1,280.00	
Geologist - 30 days at $125.00/day	3,750.00	
Engineer - 10 days at $125.00/day	1,250.00	
Total labor and supervision		$6,859.20

Operating materials and supplies

Dynamite - 10 cases at $10.42/case	104.20	
Drill bits - 100 at $0.21/each	21.00	
Electric detonators - 100 at $0.24/each	24.00	
Jackhammer oil - 5 gallons at $2.00/gal.	10.00	
Motor oil - 24 quarts at $0.40/quart	9.60	
Total operating materials and supplies		168.80

Operating equipment

Rental		
1 - 125-c. f. m. Leroi air compressor, 1 - 45-pound Cleveland jackhammer, and 1 - 30-shot electric detonator, fuel, replacements to equipment, etc. - 96 hours at $5.90/hr., plus $35.00 transportation	601.40	
1 - 1954 Willys 1-ton truck - 40 days at $16.00/day	640.00	
1 - 18-foot house trailer - 40 days at $1.00/day, plus $25.00 transportation	65.00	
Total operating equipment		1,306.40

Initial rehabilitation and repairs

None

New buildings, improvements, etc.

None

Miscellaneous

Analytical work (shown under engineering and geological supervision)		
Accounting - (estimated)	100.00	
Liability and compensation insurance and payroll taxes	34.81	
Total miscellaneous		134.81

Contingencies (estimated)	500.00
Total estimated cost for 6,600 feet of rotary drilling	$27,109.21
Average cost per foot of drilling	$ 4.11

Many of the applicant's costs are too high and total costs could be reduced by about $6,000.00. Moreover, it is doubtfull if the entire Salt Wash formation would need to be drilled in each hole.

SUMMARY COST OF PROJECT

(Applicant's estimate)

6,600 feet of rotary drilling at $4.11 per foot - $27,126.00
Government participation, 75 percent - 20,344.50

CONCLUSIONS

The grade of the 7 tons of ore shipped from the adits (0.11 percent U_3O_8) is low, the sandstone lens in which it occurred is thin, and good channels are not discernible. The history of mining in Montezuma Canyon is not conducive for the expectation of substantial deposits of uranium ore.

RECOMMENDATIONS

It is recommended that the application be denied.

/em

Defense Minerals Administration
MAY 1 6 1955
Date Rec'd.

IN REPLY REFER TO:
DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

MAY 6 1955
BUREAU OF MINES
Denver, Colorado

May 5, 1955

TRANSMITTED
MAY 12 1955

Memorandum

To: Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 3697 (Uranium), The Surplus Uranium Company, Dixie and Glenwood claim groups, San Juan County, Utah

Enclosed herewith are 10 copies of a geologic report by R. T. Chew, III, covering a field examination of the subject property.

Located in the vicinity of Montezuma Canyon, the claims are in an area of many small, scattered deposits of marginal to submarginal grade ore. Chew concludes that the lithologic conditions on the property appear to be unfavorable for the occurrence of a significant amount of uranium ore and, therefore, recommends that the application be denied.

I concur.

for D R MacLaren
E. N. Harshman
Member, Field Team

Enclosures (10)

DRMacLaren:arh

MINERAL DEPOSITS
DMEA
RECEIVED
MAY 4 1955
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STAGES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
Grand Junction, Colorado

April 25, 1955

Memorandum

To: E. N. Harshman

From: W. P. Williams

Subject: DMEA 3697, The Surplus Uranium Company, Dixie and Glenwood claim groups, San Juan County, Utah

Transmitted herewith are eleven copies of a geologic report by R. T. Chew III covering a field examination of the above referenced property.

The property is located in the vicinity of Montezuma Canyon. The Montezuma Canyon region is noted for small scattered uranium deposits of marginal or low grade. Lithologic conditions on the property appear unfavorable for the occurrence of significant uranium ore body. Chew recommends that the application for DMEA assistance be denied. I concur with Chew's recommendation.

Mr. Louis Garbrecht in the Atomic Energy Commission, Grand Junction Operations Office was asked for advice in evaluating the property.

We are returning to you herewith the brochure covering this application.

WPWilliams

W. P. Williams
Geologist

Enclosures

Defense Minerals Administration
RECEIVED
MAY 16 1955

UNITED STATES DEPARTMENT OF THE INTERIOR

DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 3697, The Surplus Uranium Company, Dixie and Glenwood claim groups, San Juan County, Utah

Uranium

Geologic Report

by

R. T. Chew III
U. S. Geological Survey

April 1955

Minerals Administration
RECEIVED
MAY 1 6 1955

DMEA 3697

INTRODUCTION AND SUMMARY

The Surplus Uranium Co., P. O. Box 267, Graham, Texas, requested DMEA aid in an exploration program on the Dixie-Glenwood group (Dixie Nos. 2-15, Glenwood Nos. 1-6) located in secs. 19 and 30, T. 37 S., R. 25 E., and secs. 24 and 25, T. 37 S., R. 24 E., San Juan County, 31 miles southeast of Monticello, Utah. The property is in Monument Canyon about one mile above the junction with Montezuma Canyon (figs. 1 and 2). The proposed project consisted of about 16 diamond-drill holes totaling about 6,600 feet and the necessary bulldozer work and other expenses. The project would cost $27,109.21 of which the Government's share would be $20,331.90.

The property was inspected on April 5, 1955, by R. T. Chew III and Carl Belser representing the U. S. Geological Survey and the U. S. Bureau of Mines respectively and Ray Clark representing the applicants.

Literally hundreds of uranium-vanadium occurrences are known in the Montezuma Canyon area where these claims are located. Most of these occurrences contain a few tons of marginal or sub-ore grade uranium and low-grade vanadium ore. Several small uranium shows exist on the Dixie-Glenwood group. About 7 tons of ore blended from three adits have been shipped that contained 0.10 percent U_3O_8, 1.50 percent V_2O_5, and 6.2 percent lime. However, lithologic conditions appear unfavorable for the occurrence of an economic ore body and it is recommended that the application be denied.

GEOLOGY AND ORE DEPOSITS

The Dixie-Glenwood claims are very near or at the top of the Salt Wash member of the Morrison formation. In the Montezuma Canyon area the Salt Wash is over 300 feet thick and thickens to the north and east to over 400 feet thick in Cross Canyon. It consists of a series of sandstone lenses separated by reddish-brown siltstones. The sandstone lenses are gray-white to buff. They average about 30 feet thick but range in thickness from a knife edge to over 100 feet thick and are more persistent in the Montezuma Canyon area than elsewhere on the Colorado Plateau.

In lower Monument Canyon the Salt Wash is overlain by at least 250 feet of the Westwater Canyon member of the Morrison. This sand is essentially similar to the Salt Wash but can be differentiated by its more yellow color on the weathered outcrop.

The Dixie-Glenwood group is located in what appears to be the top Salt Wash lens. The lens is about 15 feet thick, several thousand feet long and does not form an obvious channel on the claims. The sandstone is medium-grained, is composed of about 95 percent quartz and 5 percent orange chert and contains abundant limonite specks. The upper 5 feet is poorly bedded and crossbedded sand. The lower 10 feet contains abundant interbedded siltstone seams and galls and a few conglomerate lenses less than 5 feet long and 1 foot thick. The sandstone lens is underlain by red thin-bedded siltstone about 20 feet thick. The top 1 foot of the siltstone is altered to a green color.

The D-1 and D-2 "mines" and the original discovery adit on the Dixie No. 2 claim are all in the same mineralized zone, and are only about 30 feet apart. Each adit is 10 to 20 feet long. The mineralized zone is about 75 feet long and ranges in thickness from a knife edge to about 10 inches. It is apparently localized along and below a diastem. Black vanadium minerals impregnate the sandstone immediately under the diastem and some yellow uranium minerals occur along fracture surfaces. The mineralized zone is thickest for about four feet under a siltstone pebble conglomerate; and it is sub-ore grade throughout most of its length as tested in the field with a scintillometer. In the D-2 adit, the mineralized zone fades and disappears about 4 feet in from the portal. A mineralized tree more than 8 feet long occurs in the sandstone above the mineralized horizon, and some vanadium minerals impregnate the sandstone adjacent to the tree. At the portal of the D-1 "mine" the mineralized zone is 1 to 2 feet thick but of sub-ore grade. The drift, which was driven below the mineralized zone, shows no radioactivity.

Coalified and charcoal wood and bone are common in the sand below the mineralized zone but are rarely mineralized.

The D-3 "mine" an adit about 10 feet long contains a 1-foot-thick zone about 75 feet long which contains black and gray vanadium minerals at the same horizon as the D-1 and D-2. This zone is not sufficiently radioactive to indicate the presence of uranium ore. It is underlain by 5 feet of limonite-impregnated sandstone which is in turn underlain by 1 to 2 feet of limonite-impregnated siltstone. Below the limonite-impregnated zone the siltstone is red though about 1 foot is altered to green immediately under the limonitic zone. Away from the mineralized area the Salt Wash sand is red.

Other similar but smaller vanadium occurrences are reported to occur on the Dixie-Glenwood group. A few of these were visited but none appear to be significant.

About 7 tons of ore containing 0.10 percent U_3O_8, 1.50 percent V_2O_5 and 6.2 percent lime have been shipped from this property. The shipment represented a blending of material from all three "mines". About 5 tons of ore are stockpiled at the D-2. Less than 10 more tons are in sight in the D-1 and D-2 together and no uranium ore is in sight at the D-3. The ore zone appears to pinch out within a few feet of the surface in all the adits. The applicant has drilled a line of about 10 jackhammer holes 20 feet deep about 50 feet behind the workings. The holes are deep enough to test the mineralized zone exposed in the adits, but none of the holes showed mineralization except one on the north end of the line which showed 14 inches of ore grade radioactivity.

Uranium ore occurs in many zones in the Salt Wash in the Montezuma Canyon area but most of the ore is concentrated in the upper third of the unit. This concentration in the upper third is also typical for many Salt Wash deposits elsewhere on the Colorado Plateau. Less than a hundred feet of the upper Salt Wash is exposed at the Dixie-Glenwood claims. Farther south down Montezuma Canyon erosion has cut less and less into the Morrison until in most places the lowest unit exposed is the Brushy Basin member.

The Salt Wash of Montezuma Canyon has been thoroughly explored in recent years and exploration activity in the area is intense at the present. No discoveries of important size have recently been made; the best mines of the area have all been known and operated during and since World War II. The best deposits in the Montezuma Canyon area All occur in sandstone lenses 80 to 100 feet thick, though all thick lenses do not contain large deposits. The largest group of mines in the area, in middle Montezuma Canyon about 20 miles north of the subject claims has produced about 4,600 tons of ore. The Bradford Canyon group of mines about 5 miles northwest of the subject claims has produced slightly over 1,000 tons of ore. Nearly all of the uranium deposits in the Montezuma Canyon area have have contained only a few tons of low grade or sub-ore grade material concentrated along diastems within the Salt Wash lenses and also concentrated by wood and trashy material.

The top of the mineralized sand lens at the D-1 and D-2 "mines" forms a bench for several hundred feet behind the adits. This bench forms a good site for a jackhammer drilling project which could adequately test the possible occurrence of one or more ore bodies which, though small, might be minable because of the shallow depth and economy, with which they could be explored. A small program of this type would adequately test the uranium potential of the property.

PROPOSED EXPLORATION

The applicant proposed a drilling program consisting of about 16 diamond-drill holes in three irregular lines with the holes about 400 feet apart covering all the claims listed in the Application for Aid. The project would consist of about 6,600 feet of drilling along with the necessary bulldozer work and other expenses. The project would cost $27,109.21 of which the Governments share would be $20,331.90. Some of the access roads are already built but more bulldozer work and blasting would be necessary to reach some of the proposed sites on the Westwater Canyon sandstone.

CONCLUSIONS AND RECOMMENDATIONS

The mineralized outcrops on the Dixie-Glenwood group appear to be similar to most of the mineralized outcrops in the Montezuma Canyon area and therefore probably do not represent an economic ore body. Also, the sandstone lens which is only about 15 feet thick and is underlain by 20 feet of red siltstone appears too thin to be considered favorable for the occurrence of a major ore body. Thus it appears that little or no possibility exists that there is a significant ore body on the property and it is recommended that the application be denied.

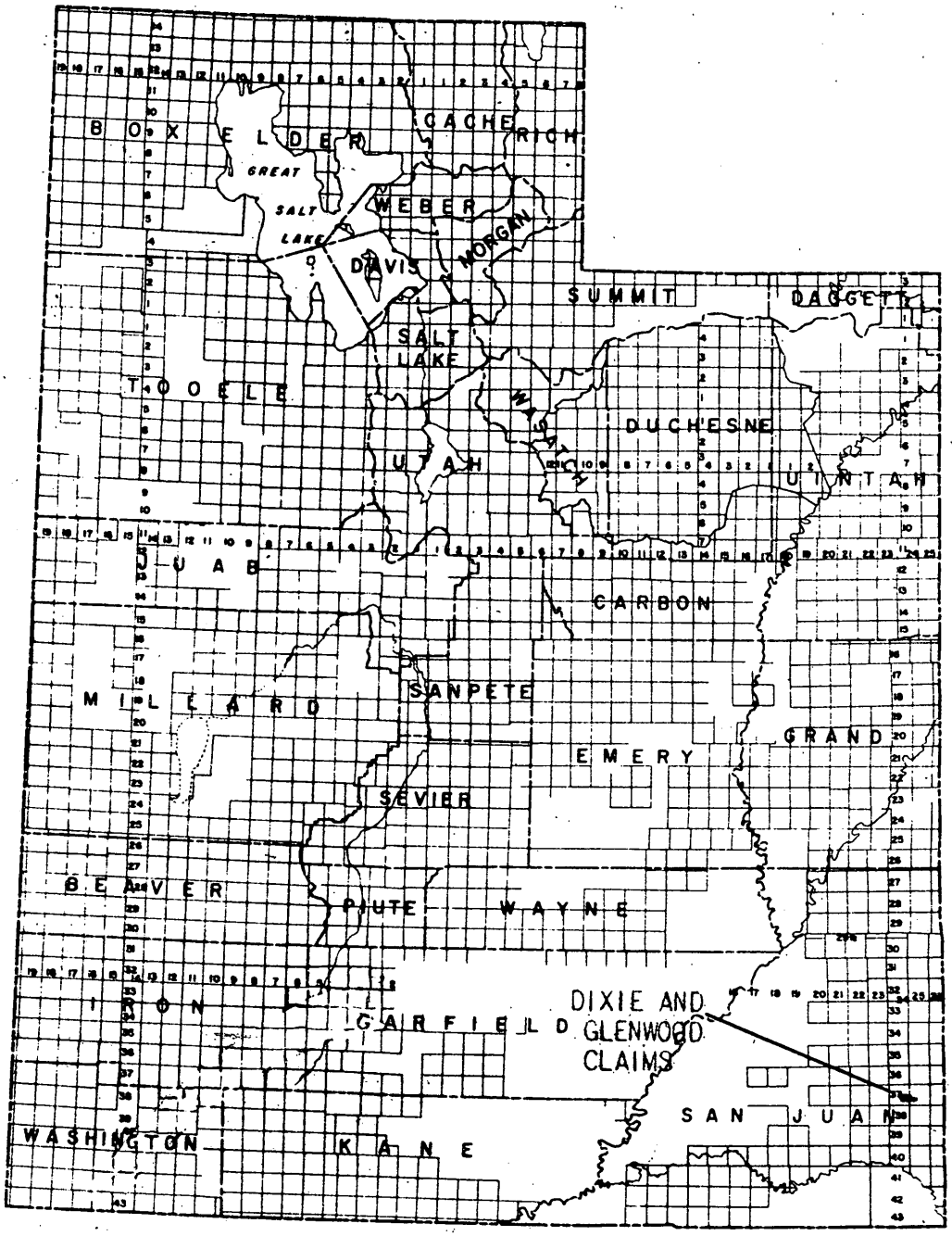
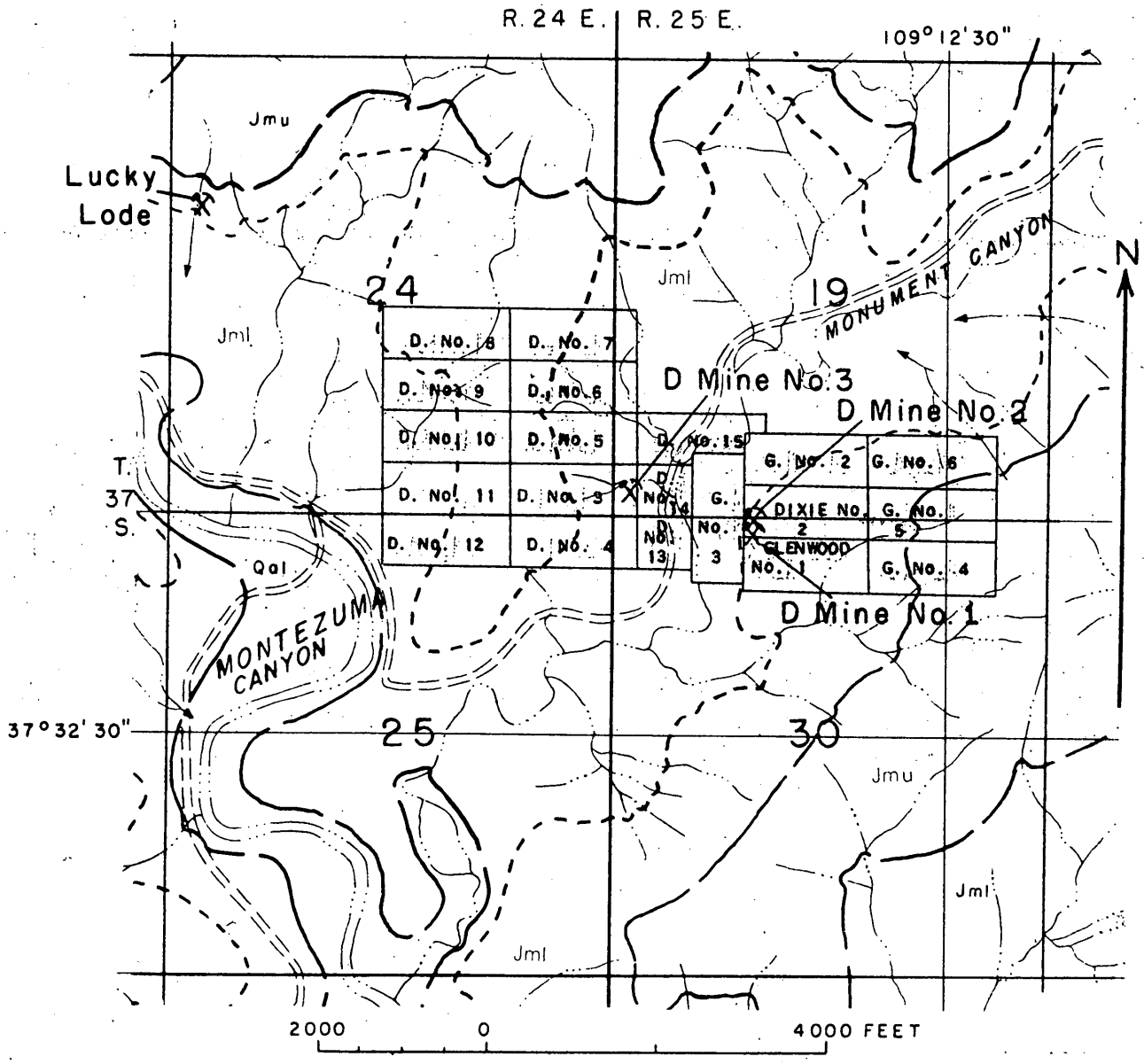


Figure 1. INDEX MAP OF UTAH SHOWING LOCATION OF THE DIXIE AND GLENWOOD CLAIMS, SURPLUS URANIUM COMPANY, AND WRIGHT, CLARK AND SENKEL, INC., SAN JUAN COUNTY, UTAH



EXPLANATION

Qal — ALLUVIUM

Jmu / Jml — JURASSIC MORRISON FORMATION
BRUSHY BASIN SHALE MEMBER (Jmu). WESTWATER CANYON MEMBER, RECAPTURE MEMBER, AND SALT WASH SANDSTONE MEMBER UNDIVIDED (Jml). DASHED LINE IN Jml SHOWS POSITION OF CARNOTITE-BEARING SANDSTONE

FORMATION CONTACT

Note: BASE FROM U.S. GEOLOGICAL SURVEY PHOTOGEOLOGIC QUADRANGLE MAP VERDURE 15

Figure 2. GEOLOGIC MAP OF THE DIXIE AND GLENWOOD CLAIMS AND VICINITY, SURPLUS URANIUM COMPANY, AND WRIGHT, CLARK AND SENKEL, INC., SAN JUAN COUNTY, UTAH