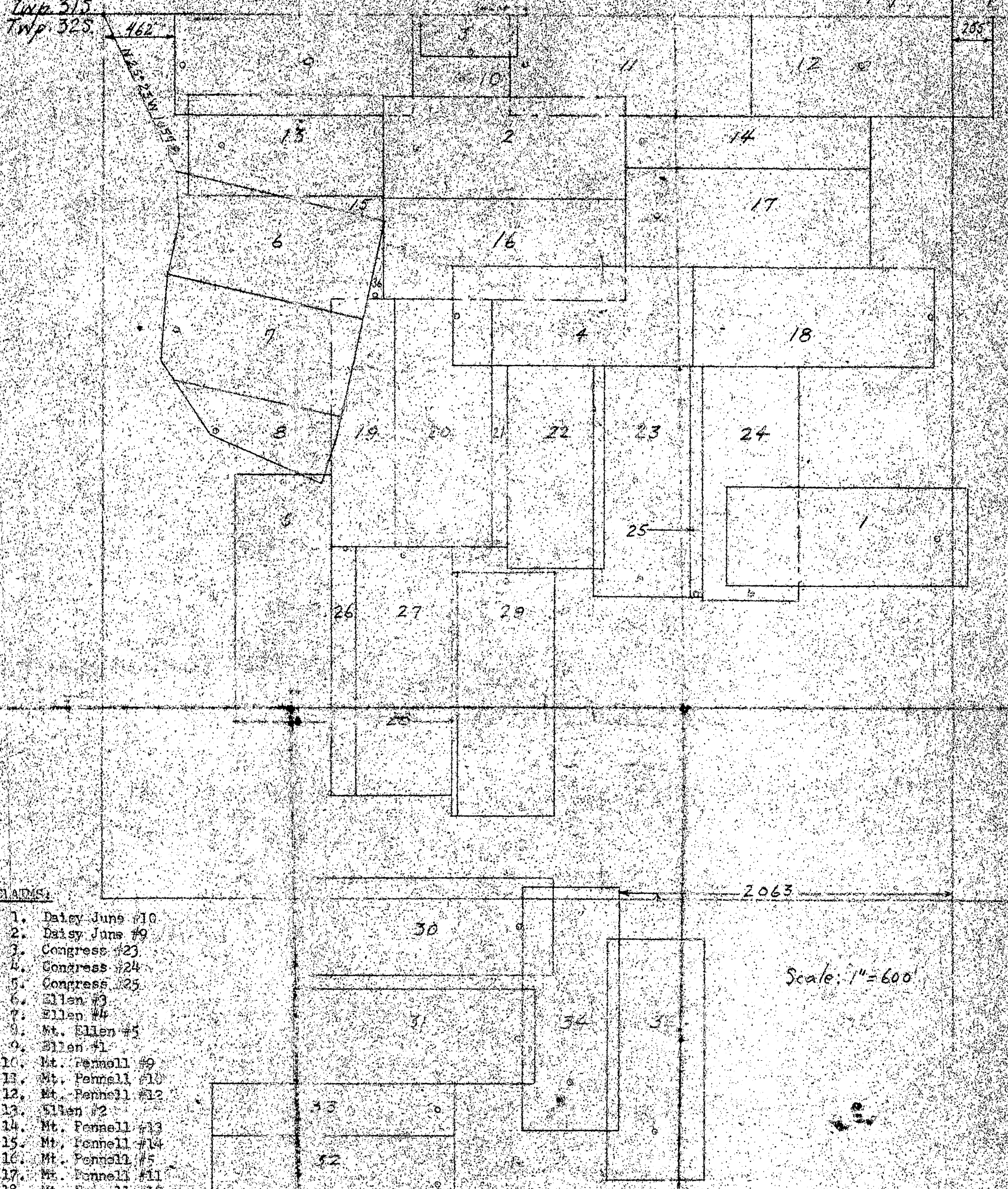
5(b)

Pennell Group of Claims



Scale: 1" = 600'

CLAIMS:

1. Daisy June #10
2. Daisy June #9
3. Congress #23
4. Congress #24
5. Congress #25
6. Ellen #3
7. Ellen #4
8. Mt. Ellen #5
9. Ellen #1
10. Mt. Pennell #9
11. Mt. Pennell #10
12. Mt. Pennell #12
13. Ellen #2
14. Mt. Pennell #13
15. Mt. Pennell #14
16. Mt. Pennell #5
17. Mt. Pennell #11
18. Mt. Pennell #17
19. Mt. Pennell #3
20. Mt. Pennell #4
21. Mt. Pennell #15
22. Mt. Pennell #6
23. Mt. Pennell #7
24. Mt. Pennell #8
25. Mt. Pennell #16
26. Mt. Pennell #18
27. Mt. Pennell #1
28. Mt. Pennell #19
29. Mt. Pennell #2
30. Ellen #5
31. Ellen #6
32. Ellen #7
33. Mt. Pennell #20
34. South Fork #2
35. South Fork #1
36. Mt. Pennell #21

I, EARL KERSHAW, do hereby certify that I have made a correct survey of the Pennell Group Mining Claims, including Congress 23, 24 and 25, and Daisy June 9 and 10, and Ellen 1, 2, 3, 4, 5, 6 and 7, and South Fork 1 and 2, and Mt. Pennell 1, 2, 3, 4, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 18, 19 and 20, in Sections 1 and 12, Township 32, S. (unsurveyed) Range 11 East, in Garfield County, Utah, as shown on plat above.

DATE: May 5, 1955

(Signed) Earl Kershaw

Professional Engineer and Land Surveyor. License No. 107, State of Utah, Salt Lake City, Utah

RECEIVED
SEP - 2 1955

700

FILE COPY
Surname:
Murphy
Ellis
Kilgaard
Durbin
Martin
JLJohnson

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

FEB - 6 1956

Mr. Alva A. Simpson, Jr., President
United Western Minerals Company
136 West Palace Avenue
Santa Fe, New Mexico

Re: Docket No. DMEA-3961 (Uranium)
Ellen and Pennell claim groups
Garfield County, Utah

Dear Mr. Simpson:

Reference is made to your application for Government aid in an exploration project on the above-named claims.

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 a small amount of uranium mineralization on your property, indicates to us that the possibility of disclosing significant ore reserves is not sufficiently promising to justify Government participation in an exploration project. 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 Program and for bringing your property to our attention.

Sincerely yours,

C. D. Mitchell (for)

Administrator

FMMurphy/izm 2-1-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
ld Team, Region III (2)
JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3640, GSA

R.C.R.

Docket Copy

700

Murphy
Ellis

February 1, 1956

SUMMARY OF PROPOSED PROJECT

Object: Denial of application for exploration aid.

Docket No.: DMEA-3961

Commodity: Uranium

Applicant: United Western Minerals Company
Alva A. Simpson, Jr., President
136 West Palace Avenue
Santa Fe, New Mexico

Property: Parts of the Mt. Pennell and Ellen groups consisting of 13 claims situated in Secs. 1 and 12, T. 32 S., R. 11 E., S.L.M., Garfield County, Utah.

Date of Application: August 29, 1955

Grand Junction Memorandum Received: September 28, 1955

Referred for Field Examination: October 12, 1955

Field Team Report Received: January 23, 1955 x 1956 of course

Amount of Application: $107,041.00

Work Proposed:

Drill 400 holes averaging 125 feet in depth.

Estimated Costs:

10,000 feet non-core drilling @ $2.50/ft.	$25,000.00	
40,000 feet core drilling @ $1.25/ft.	50,000.00	
Access roads, 200 hrs bulldozing @ $15/hr.	3,000.00	
Labor, Supervision & Consultants	7,600.00	
Operating materials & supplies	1,210.00	
Depreciation of equipment	750.00	
New Buildings, improvements	2,750.00	
Miscellaneous	7,000.00	
Contingencies	9,731.00	
Total		$107,041.00

Excerpts from Field Team Report:

The Mt. Pennell and Ellen claims lie on the east flank of the Henry Mountains structural basin. The rocks that crop out on the subject claims are, in ascending order; the Jurassic Entrada, Summerville, and Morrison formations.

The area is capped by the Salt Wash member of the Morrison formation, which has a maximum thickness of 200 feet. However, on the subject claims, the upper Salt Wash beds have been eroded. A remnant of a middle Salt Wash sandstone unit caps the higher mesas and what appears to be the most accessable and the best potential ore-bearing horizon is found a few feet below the cap rock.

The AEC drilled 178 holes in areas adjacent to the subject claims, 47 were mineralized and 17 showed ore grade material. Offset holes 10 feet away from ore holes were barren. The AEC report of the above drilling project (RMO 826) shows that only small, scattered ore bodies were indicated by these mineralized holes. Mining of shallow rim deposits, surface stripping, and wagon drilling has been performed by the Applicant on Mt. Pennell No. 5. On Mt. Pennell No. 8 mineralization was found by wagon drilling to a depth of 25 to 80 feet, although, the rim exposures are barren on this claim.

Ore bodies mined to date on the Applicant's property have contained from 10 to 100 tons each. (Note: Not all the Applicant's claims in the immediate area are involved in the subject application). Of the claims listed under the application only two have production records namely, Mt. Pennell, 15.53 tons averaging 0.31% U_3O_8 and Mt. Pennell No. 10, 9.88 tons averaging 0.29% U_3O_8.

The Field Team concludes that, while small ore bodies in discontinuous lenses at several different horizons will be found on the subject claims, the possibility for a significant production of uranium is poor, and that the present system of mining and wagon drilling just ahead of mining faces is the best method of exploring the claims.

A predetermined drill pattern is not feasible as there are no known trends which would permit determination of the more favorable drilling areas.

The Field Team recommends that the subject application should be denied.

Commodity Members' Comments: (excerpts)

USGS, W. P. Williams, January 30, 1956:

"The subject property is located on the east slope of the Henry Mountains in an area that is known for its poor ore production. The ore deposits known to date in the region are small and scattered.

A drilling program on the property would require hole spacing of only a few feet in order to find the small deposits.

"I agree with the examining team's recommendation that the application for DMEA assistance be denied."

USBM, J. E. Crawford, January 30, 1956:

"The drilling proposed by the Applicant could be successful economically only if carried on as an actual part of a mining operation."

~~We~~ Concur in the recommendation to deny the application. This part of the quote "we concur" is right

Rare & Miscellaneous Metals Division, F. M. Murphy, February 1, 1956:

On the subject claims, the upper sandstone unit of the Salt Wash, which is the most favorable horizon for significant uranium deposits in this formation, has been removed by erosion. The intermediate and lower sandstone units of the formation contain small, scattered uranium deposits, but to date no significant ore body has been found in these units.

The Applicant did not specify where the proposed 400 holes were to be drilled. However, to explore for the small, scattered ore bodies known to occur on the subject property would require close spaced drilling, probably on a 25-foot grid, which would mean drilling about 300 holes on each claim.

From results obtained from previous drilling, stripping, and rim mining, in the adjacent and the subject area, it does not appear that the ore which might be found would have a value proportionate to the cost of the proposed project. Therefore, this Division concurs in the Field Team's recommendation to deny the subject application.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

1/30/56 gla

IN REPLY REFER TO:

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

RECEIVED
JAN 30 1956

January 30, 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 3961, United Western Minerals Company, Ellen and Pennell claims, North Wash District, Garfield County, Utah.

The subject property is located on the east slope of the Henry Mountains in an area that is known for its poor ore production history. The ore deposits known to date in the region are small and scattered. A drilling program on the property would require hole spacing of only a few feet in order to find the small deposits.

I agree with the examining team's recommendation that the application for DMEA assistance be denied.

WPWilliams

W. P. Williams

IN REPLY REFER TO:

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

RECEIVED
JAN 30 1956

January 30, 1956

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I agree with the examining team's recommendation that the application for DMEA assistance be denied.

W. P. Williams

MRR

WPWilliams:iml
G-1/30/56

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Hosted, 3210

IN REPLY REFER TO:

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

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JAN 30 1956

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W. F. Williams

XXX

WFWilliams:iml
G-1/30/56

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3641
J. O. Rosted, 3210

IN REPLY REFER TO:

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

RECEIVED
JAN 30 1956

January 30, 1956

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W. P. Williams

WPW

WPWilliams:iml
G-1/30/56

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Crawford, 3541
J. O. Hosted, 3210

1-31-56 dgm

RECEIVED
JAN 31 1956

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

January 30, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

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

Subject: Report of examination, DMEA Docket 3961, United Western Minerals Company, Ellen and Pennell claims, Garfield County, Utah

I have reviewed the report of examination of the United Western Minerals Company, DMEA Docket 3961, dated January 20 and received in this office January 26. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The United Western Minerals Company applied for Federal assistance in exploring for uranium on the Ellen and Pennell groups of claims which lie east of the Henry Mountains, Garfield County, Utah. The program includes 50,000 feet of plug-bit and core drilling in 400 holes averaging 125 feet in depth, at an estimated cost of $107,041.00.

A field examination made on November 11, 1955, by DMEA personnel resulted in a recommendation by the Field Team of denial of the application. Ore bodies on the subject property found to date are small, ranging from 10 to 100 tons; the production which might be obtained as a result of the proposed exploration is not likely to be significant. The drilling proposed by the applicant could be successful economically only if carried on as an actual part of a mining operation.

We concur in the recommendation that the application for exploration assistance be denied.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E Crawford
John E. Crawford

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

RECEIVED
JAN 31 1956

January 30, 1956

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Uranium Commodity Committee, Room 4445

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Uranium Commodity Committee

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

RECEIVED
JAN 31 1956

January 30, 1956

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Uranium Commodity Committee, Room 4445

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We concur in the recommendation that the application for exploration assistance be denied.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

John E. Crawford

1/30/56 gla

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

RECEIVED
JAN 23 1956

January 20, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3961 (Uranium), United Western Minerals Company, Ellen and Pennell claims, Garfield County, Utah

Attached are the original and three copies of the Joint Report of Examination on the subject property.

Even though small ore bodies may exist on the property, they are so small an economical drilling program will fail to make any significant discoveries. The field examiners concur that DMEA assistance is not warranted, and they recommend that the application be denied.

We concur in this recommendation.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-27-56
(date)

DMEA
Date Rec'd.

JAN 18 1956

BUREAU OF MINES
Denver, Colorado

MINERAL DEPOSITS
DMEA
RECEIVED
JAN 3 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

December 30, 1955

TRANSMITTED
JAN 20 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: J. William Hasler

Through: E. N. Harshman
J. F. Shaw

Subject: DMEA 3961 (Uranium), United Western Minerals Company, Ellen and Pennell claims, Garfield County, Utah

Transmitted herewith are 12 copies of a joint report by M. H. Salsbury and H. F. Albee, covering a field examination of the above-referenced property.

Although the subject claims lie in an area favorable for the occurrence of uranium ore bodies, the examining team bases its recommendations for denial upon the following geologic data: The ore bodies occur in thin, discontinuous sandstone lenses. The ore occurs in several stratigraphic horizons. There are no known ore trends on which to base a drilling program. Even though ore bodies may exist on the property, they are so small an economical drilling program would fail to make any significant discoveries. For these and several other reasons contained in their report, Albee and Salsbury recommend that the application for Government assistance be denied. I concur with their recommendations.

We are returning herewith the brochure covering this application.

J. William Hasler
J. William Hasler,
Geologist

DDH/mlr
Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-27-56
(date)

UNITED STATES DEPARTMENT
OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

RECEIVED
JAN 23 1956

TRANSMITTED

JAN 20 1956

DMEA 3961
UNITED WESTERN MINERALS COMPANY
ELLEN AND PENNELL CLAIMS
GARFIELD COUNTY, UTAH

URANIUM

Joint Engineering and Geologic Report

By

Howard F. Albee, Geologist
Geological Survey

M. H. Salsbury, Mining Engineer
Bureau of Mines

January 17, 1956

Reviewed by
DMEA OPERATING COMMITTEE
1-27-56
(date)

DMEA 3961
UNITED WESTERN MINERALS COMPANY
ELLEN AND PENNELL CLAIMS
GARFIELD COUNTY, UTAH

JAN 28 1959

CONTENTS

Joint engineering and geologic report — Page

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Ownership 5
Present Status 6
Exploration and development 6
Mining and milling equipment and other facilities 7
Geology and ore deposits 7
Ore reserves 9
Proposed exploration 9
Conclusions and recommendations 10

ILLUSTRATIONS

Figure — Follows page

1. Location map, Ellen and Pennell claims, United Western Minerals Company, Garfield County, Utah, DMEA 3961 3

2. Geologic map showing United Western Minerals Co. Property, Garfield County, Utah 3

DMEA 3961

UNITED WESTERN MINERALS COMPANY
ELLEN AND PENNELL CLAIMS
GARFIELD COUNTY, UTAH

JAN 23 1956

INTRODUCTION AND SUMMARY

On August 31, 1955, the United Western Minerals Company, 136 West Palace Avenue, Santa Fe, New Mexico, applied for Government assistance in exploration on their claims east of the Henry Mountains, Garfield County, Utah. The proposal called for 50,000 feet of plug-bit and core drilling in 400 holes averaging 125 feet in depth, at an estimated cost of $107,041.00. Government participation at 75 percent would be $80,280.75. A definite drilling plan was not presented.

A field examination was made on November 11, 1955 by a DMEA team in company with H. D. Rhodes, superintendent and engineer, and John Verna, foreman for the applicant.

The Salt Wash member of the Morrison is present at the surface on the property. A remnant of a middle Salt Wash sandstone unit caps the higher mesas and what appears to be the most accessible and the best potential ore-bearing horizon is found a few feet below the cap rock. The Morrison has been explored and mined on the Mt. Pennell No. 5 claim by means of shallow rim workings, surface stripping, and by wagon drilling behind rim exposures. On the Mt. Pennell No. 8 claim, mineralization has been found by wagon drilling at a depth of 25 to 80 feet, although the rim exposures are barren on this claim. The mineralization appears to be in a lower horizon than the shallow mineralization found on Mt. Pennell No. 5 claim. Similar ore occurrences in the shallow horizon have been explored and mined on a small scale on other claims which are in the same group but were not included in the DMEA application.

The Atomic Energy Commission has carried on a drilling program on the adjoining Daisy June and Congress groups. Of 178 holes drilled, 47 were mineralized

and 17 showed material of ore grade. Twenty one of these holes were drilled on Congress No. 25 and Daisy June No. 9 claims, one of which is within, and one contiguous to the applicant's property. Results were comparable to those obtained in drilling the Mt. Pennell No. 5 and No. 8 claims. Six of the 21 holes contained ore grade mineralization which was interpreted to be in four separate small bodies of ore, but offset holes 10 feet away were barren. It was not possible to establish any trends from the results of drilling.

Ore bodies mined on the applicant's property to date have contained from 10 to 100 tons each. The largest production from any one of 14 claims which are listed in AEC records is 400 tons. A total of 1421 tons has been shipped with an average content of 0.19 percent U_3O_8 or 5400 pounds of U_3O_8 with a value, including development allowance and initial production bonus of $38,367.00. The vanadium content of the ore raised the value by an additional $6.00 to $12.00 per ton. A number of other shipments have been made which did not pay their way.

The cost of adequate exploration drilling for such scattered and erratic occurrences is considered to be prohibitive. This would be true even for a program calling for a maximum drilling depth of 50 feet instead of the 125 feet proposed by the applicant.

It is concluded that the production which might be obtained as a result of the proposed exploration is not likely to be significant. Moreover, the type of exploratory drilling which would be likely to be successful economically should be carried on in conjunction with, and actually a part of a mining operation, and not on a predetermined pattern. Such a program does not lend itself to a DMEA project. Consequently an alternate to the applicant's elaborate and unsuitable proposal is not suggested.

Denial of the proposed project under DMEA 3961 is recommended.

ACKNOWLEDGMENTS

The applicant furnished ownership data on the claims included in the proposed project and partial production and exploration records, but did not present a drilling plan based on geological considerations or the known habit of ore occurrence.

The Atomic Energy Commission was consulted, and data on a drilling project in the vicinity (RMO 826 Investigational Wagon Drilling in North Wash Mining District, Henry Mountains, Garfield County, Utah) were utilized in evaluating the proposed project. AEC production records were used.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Ellen and Mt. Pennell claims are in secs. 1 and 12, T. 32 S., R. 11 E., Salt Lake principal meridian, Garfield County, Utah. (Figures 1 and 2). The property is on the east slope of the Henry Mountains, 25 miles northwest of Hite, Utah, on the Colorado River, and 28 miles south of Hanksville, Utah. They are reached from Hanksville over Utah Highway 95, a poor, graded road, and a short connecting access road. Hanksville is 60 miles south of Green River, Utah, over a graded highway now being surfaced. Grand Junction, Colorado, the nearest major source of mining supplies, is 108 miles farther east of Green River, over U. S. Highway 6 - 50.

The nearest buying station for uranium ores is at White Canyon, Utah about 10 miles east of Hite, Utah.

Power, supplies, labor, access roads and drill sites present no particular problems. A drilling contractor would furnish his own labor and equipment for the proposed exploration. Water for mining purposes is scarce, except for intermittent flows at points any nearer than the Colorado River. The applicant proposes, if necessary, to drill a well if local supplies fail. The feasibility of this was not investigated.

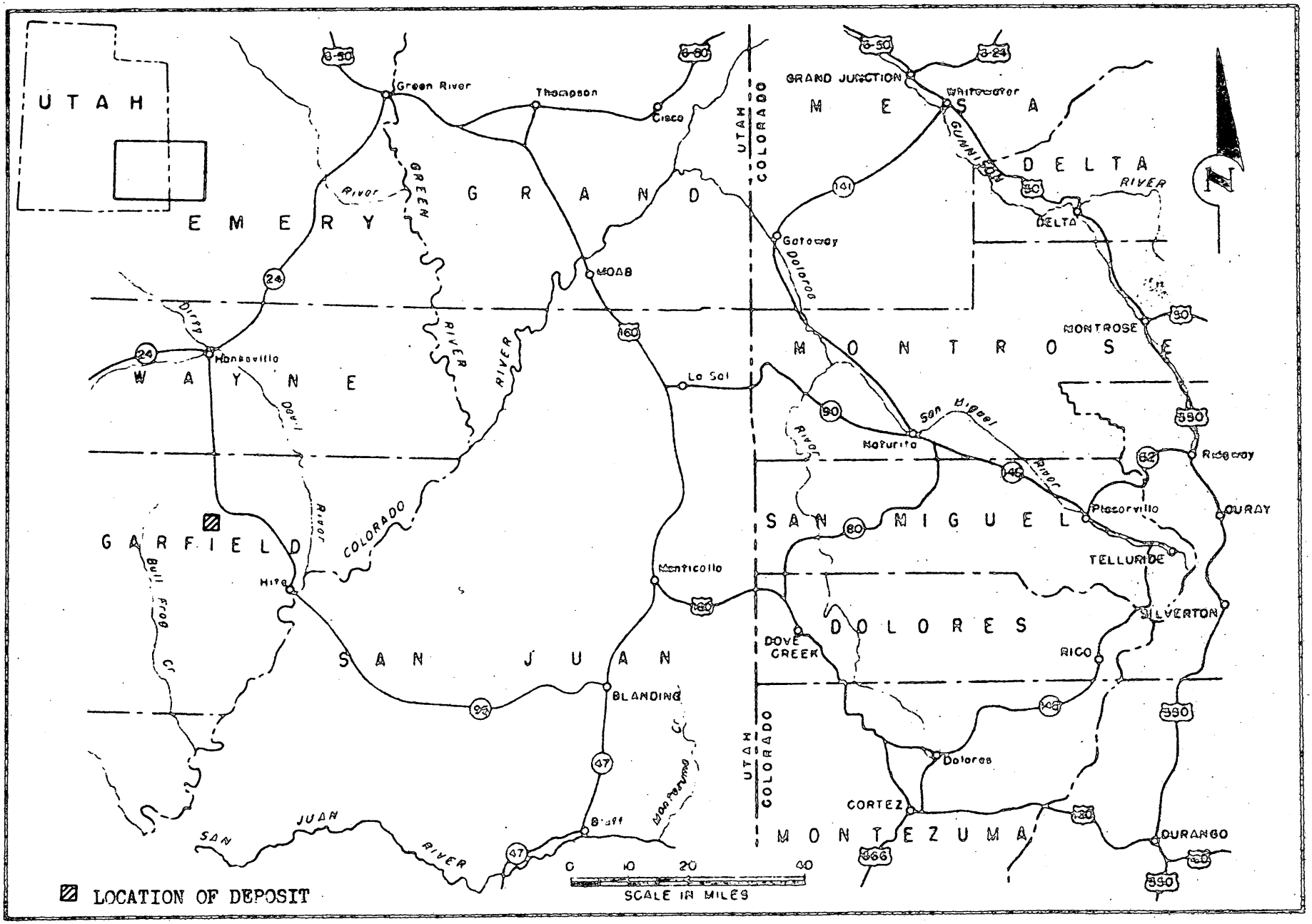

FIGURE 1 - LOCATION MAP, ELLEN AND PENNELL CLAIMS, UNITED WESTERN MINERALS COMPANY, GARFIELD COUNTY, UTAH.
DMEA 3961

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3961
DECEMBER 1955

RECEIVED
JAN 23 1956

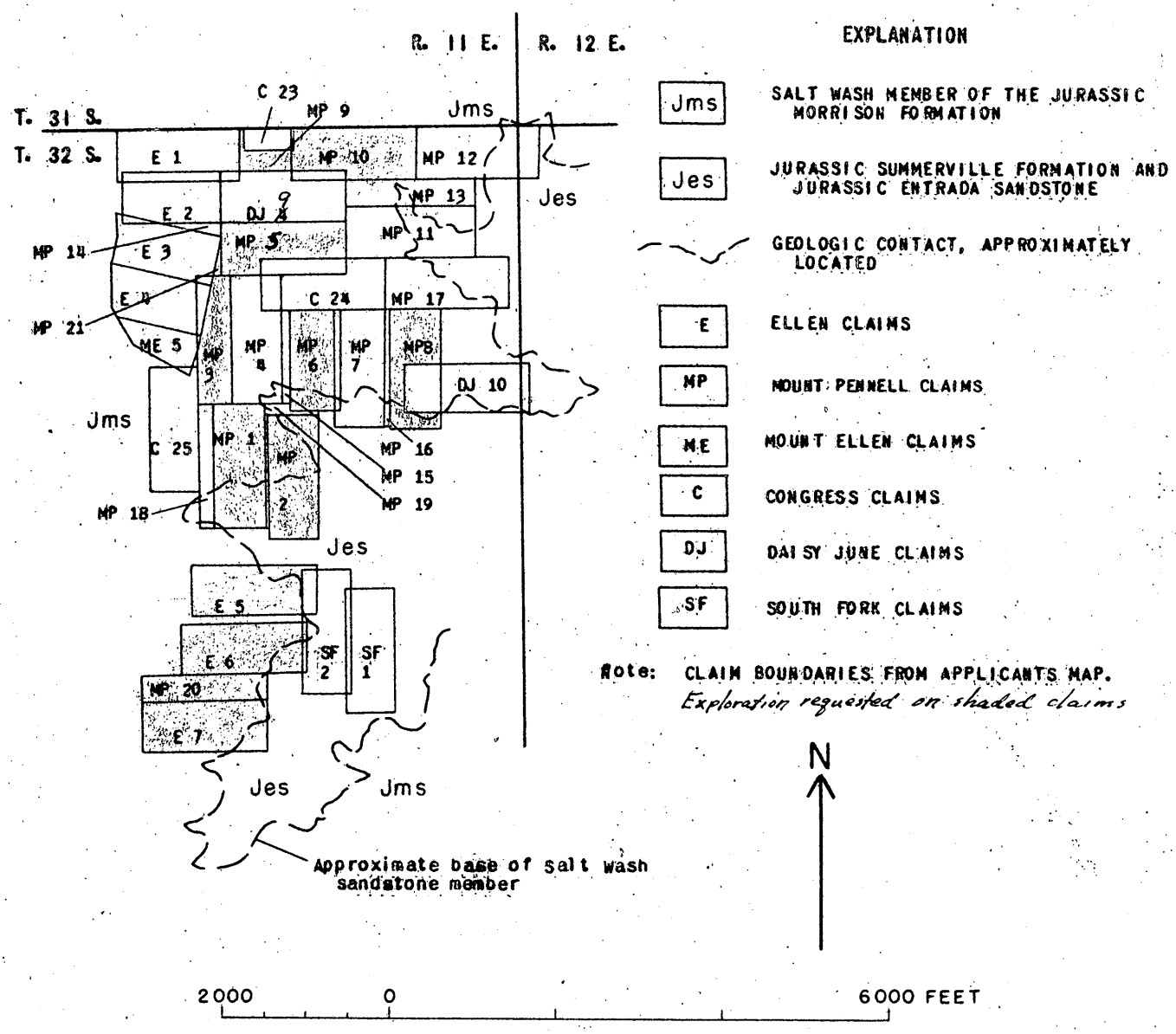

FIGURE 2. GEOLOGIC MAP SHOWING UNITED WESTERN MINERALS COMPANY PROPERTY, GARFIELD COUNTY, UTAH.

HISTORY AND PRODUCTION

There has been mining activity in the Henry Mountains area since pioneer days. Exploration and mining operations for vanadium date from the 1920's. No vanadium-uranium deposits of any notable significance have been found to date. Present activity dates from 1950. In 1952, the Atomic Energy Commission undertook a reconnaisance drilling program in the area without, however, finding any worthwhile deposits.

Recent exploration of the applicant's property dates from June 1954. Operations were carried on by Clifford Smith and other lessees of the Pennell Uranium Corporation, owner of the claims. Rim exposures were investigated by short drifts, and areas behind these rims were first wagon drilled and then stripped where ore was found at a depth of 6 feet or less. Production from the property, including only 2 of the claims listed in the application, as shown by the records of the Atomic Energy Commission, is as follows:

Claim	Tons	Average % U_3O_8
Daisy June No. 1	35.52	0.22
Daisy June No. 5	31.38	0.23
Daisy June No. 6	39.08	0.12
Daisy June No. 7	9.94	0.32
Ellen No. 2	215.98	0.16
Ellen No. 3	95.80	0.12
Mt. Pennell	15.53	0.31
Mt. Pennell 9	19.47	0.19
Mt. Pennell 10	9.88	0.29
Mt. Pennell 11	70.03	0.16
Congress No. 2	399.77	0.21
Congress No. 3	70.15	0.19
Congress No. 11	166.12	0.21
Congress No. 29	242.62	0.18

The total to date is 1421 tons from 14 claims or an average of 100 tons per claim. The average content was 0.19 percent U_3O_8. The vanadium content was from less than 0.50 percent to 2.00 percent V_2O_5 with the average less than 1.00 percent.

The applicant states that the production from claims included in the proposed DMEA project totaled 56,560 pounds (28.3 tons) averaging 0.35 percent U_3O_8

and 1.2 percent V_2O_5. Supporting copies of the settlement sheets furnished do not correspond to these figures. Some of them refer to other claims not in the DMEA proposal.

Assuming that the lessee operations were efficient, employing a minimum of manpower, they would probably have returned a small profit at a reasonable royalty rate. However, the royalty rate in effect is reported to have been 25 percent which is prohibitive.

OWNERSHIP

The claims in the DMEA proposal are the Ellen claims Nos. 5, 6, and 7, and the Mt. Pennell, (or Pennell as shown on the location notices) claims Nos. 1, 2, 3, 5, 6, 8, 9, 10 and 20 (fig. 2). They are part of a larger group held under lease by the applicant. The lease does not use the "Mt." term in the listing of the Pennell claims. The owner of the claims is given as the Pennell Uranium Corporation. All of the claims except Mt. Pennell No. 20 were located by George Ross on June 14, 1954 as shown by copies of the location certificates furnished with the application. Pennell No. 20, described in the location certificate as "Mt. Pennell No. 20" was located by the Pennell Uranium Corporation on May 22, 1955. The location procedures and the lease terms appear to be satisfactory and the claims valid. The original royalty rate has been adjusted to from 12½ to 15 percent of the gross returns, excepting initial production bonus which is subject to a royalty of 25 percent.

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Mining and Milling Equipment and other Facilities

There are on the property at the present time no buildings or equipment.

GEOLOGY AND ORE DEPOSITS

The Ellen and Mt. Pennell claims lie on the east flank of the Henry Mountains structural basin. The rocks that crop out on the subject claims are, in ascending order; the Jurassic Entrada, Summerville, and Morrison formations. The beds strike N. 49° E., and dip 4° northwest.

The area is capped by the Salt Wash member of the Morrison formation. The Salt Wash has a maximum thickness of about 200 feet. However, this is not its total thickness as part of the upper Salt Wash beds have been eroded. The Salt Wash member consists of alternating beds of sandstone and mudstone with the sandstone predominating. The sandstone is commonly cross-bedded.

The ore bearing sandstone is composed of yellowish brown, medium-to coarse-grained, poorly sorted, subangular clear quartz. The yellowish brown color is due to abundant minute specks of limonite. The mineralization is associated with carbonaceous debris and limbs or small logs. No mineralization was seen disseminated in sandstone away from small pods and seams of carbonaceous material.

An ore bearing rim of sandstone, at about the middle of the Salt Wash, is exposed for several thousands of feet on the claims just below the cap rock of

the higher mesas and much of it has been stripped by bulldozer operations. Occurrences of ore bearing material along the stripped rim are all thin and range from a knife-edge to as much as 10 inches thick and only a few feet wide. Two such exposures were seen in about 500 feet of rim. A few other occurrences of ore grade material were seen in the form of limbs or small logs that were about three to four inches in diameter.

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The U. S. Atomic Energy Commission undertook a drilling program in 1952 in the subject area. Of 178 wagon drill holes, 47 were mineralized and 17 penetrated ore grade material. Part of the drilling was done on the Congress No. 25 claim and the Daisy June No. 9 claim, one of which is within, and the other is contiguous to the applicant property. Twenty-one holes were drilled on these two claims, of which six were ore holes. These six ore holes were interpreted to have penetrated four separate, small bodies of ore at shallow depths. The following is quoted from the drill project report (RMO 826, Investigational Wagon Drilling in North Wash Mining

District, Henry Mountains, Garfield County, Utah):

"No trends can be plotted and the ore appears to form small bodies. The size of these bodies is exemplified by drill hole No. 12. One and one-half feet of ore was found in this hole, and four offset holes 10 feet away were barren. A similar example is hole No. 63, in which 2 feet of ore was found, but the four offset holes were barren."

The list of shipments from the claims since July 1953 and shown under Production, will give examples of size and grade of ore bodies found in this area.

The list represents 14 claims from which there was produced approximately 1,421 tons of uranium ore that averaged about 0.19 percent U_3O_8.

Undoubtedly, similar undiscovered ore bodies exist and the area will probably continue to produce ore in small amounts. It is not considered economical, however, to drill for these ore bodies on a closer spacing than 50 feet, and such a spacing is too wide for this type of mineralization.

ORE RESERVES

Data on ore grade material encountered in exploration to date are not sufficient for use in computing any reserves.

No samples were taken. Outcrops and shallow mineralization in several holes were checked radiometrically.

PROPOSED EXPLORATION

The applicant has proposed a drilling program totaling 50,000 feet of core and non-core drilling in 400 holes averaging 125 feet in depth at an estimated cost of $107,041.00. Government participation at 75 percent would be $80,280.75. The estimated unit costs of drilling alone, $1.25 per foot for non-core drilling, and $2.50 per foot for core drilling, are reasonable, but overhead costs, averaging $0.58 per foot, are some what high.

No drilling sites were suggested by the applicant. A program for drilling

400 holes to a depth of 125 feet is not justified either geologically or economically by conditions on the property. While drilling done to date indicates that there is mineralization in several different horizons, only the topmost could be explored or mined economically for the type of deposit discovered to date. It would not be feasible to mine deeper occurrences unless they could be followed in from rim exposures. The probable returns from production would not pay for development in barren ground. There will undoubtedly be more ore found and mined on the property but it is not likely to be profitable except on a very small scale. The total production to be expected is not likely to be enough to be considered significant. A mining enterprise with the best chance of success would be a small project employing two or three men. In such an operation, mineralization exposed in rim outcrops could be followed by underground or surface workings, with supplementary wagon drilling ahead of the mining operation to guide the advance of underground or surface work when ore pinches out in the working faces. This type of work would actually be a combination of exploration and development which would be impractical to set up as a DMEA project. For this reason an alternate plan of DMEA exploration to take the place of the elaborate and uneconomic proposal of the applicant is not suggested by the examining team.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that, while small ore bodies in discontinuous lenses at several different horizons will be found on the Ellen and Mt. Pennell claims, the possibility for a significant production of uranium is poor. Because an efficient type of exploration for a deposit of this type would combine wagon drilling with actual mining operations, it is not believed that a feasible DMEA project could be devised. Wagon drilling should be done just ahead of mining faces and not on a predetermined pattern. There are no known ore trends which would permit determination of the more favorable drilling areas.

It is further concluded that the only horizon which is likely to furnish any production is at a very shallow depth, and there is no evidence to support the applicant's proposal to test the formation down to 125 feet in depth.

The Commodity Committee reviewers based their recommendations for a field examination on the fact that AEC drilling on adjoining property found ore-grade mineralization in 17 out of 147 holes. The Atomic Energy Commission report on this project (RMO 826) shows that only small, scattered ore bodies were indicated by these mineralized holes. Exploration on two claims in the proposed DMEA project by the applicant shows very similar results.

Denial of the application for Government assisted exploration under DMEA 3961 is recommended.

1-24-56 dgm

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

January 20, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 3961 (Uranium), United Western Minerals Company, Ellen and Pennall claims, Garfield County, Utah

Attached are the original and three copies of the Joint Report of Examination on the subject property.

Even though small ore bodies may exist on the property, they are so small an economical drilling program will fail to make any significant discoveries. The field examiners concur that DMEA assistance is not warranted, and they recommend that the application be denied.

We concur in this recommendation.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-27-56
(date)

DMEA
Date Rec'd
JAN 18 1956
BUREAU OF MINES
Denver, Colorado

JAN 28 1956

MINERAL DEPOSITS
DMEA
RECEIVED
JAN 3 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P. O. BOX 360
GRAND JUNCTION, COLORADO

December 30, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

TRANSMITTED
JAN 20 1956

From: J. William Hasler

Through: E. N. Harshman
J. F. Shaw

Subject: DMEA 3961 (Uranium), United Western Minerals Company, Ellen and Pennell claims, Garfield County, Utah

Transmitted herewith are 12 copies of a joint report by M. H. Salsbury and H. F. Albee, covering a field examination of the above-referenced property.

Although the subject claims lie in an area favorable for the occurrence of uranium ore bodies, the examining team bases its recommendations for denial upon the following geologic data: The ore bodies occur in thin, discontinuous sandstone lenses. The ore occurs in several stratigraphic horizons. There are no known ore trends on which to base a drilling program. Even though ore bodies may exist on the property, they are so small an economical drilling program would fail to make any significant discoveries. For these and several other reasons contained in their report, Albee and Salsbury recommend that the application for Government assistance be denied. I concur with their recommendations.

We are returning herewith the brochure covering this application.

J. William Hasler
J. William Hasler,
Geologist

DDH/mlr
Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
1-27-56
(date)

UNITED STATES DEPARTMENT
OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT REPORT OF EXAMINATION BY EXAMINING TEAM
REGION III

TRANSMITTED

JAN 20 1956

DMEA 3961
UNITED WESTERN MINERALS COMPANY
KLEIN AND FERRELL CLAIMS
GARFIELD COUNTY, UTAH

URANIUM

Joint Engineering and Geologic Report

By

Howard F. Albee, Geologist
Geological Survey

M. K. Salsbury, Mining Engineer
Bureau of Mines

January 17, 1956

Reviewed by
DMEA OPERATING COMMITTEE

1-27-56
(date)

DMEA 3961
UNITED WESTERN MINERALS COMPANY
ELLEN AND PENNELL CLAIMS
GARFIELD COUNTY, UTAH

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Present Status 6
Exploration and development 6
Mining and milling equipment and other facilities 7
Geology and ore deposits 7
Ore reserves 9
Proposed exploration 9
Conclusions and recommendations 10

ILLUSTRATIONS

Figure — Follows page

1. Location map, Ellen and Pennell claims, United Western Minerals Company, Garfield County, Utah, DMEA 3961 3

2. Geologic map showing United Western Minerals Co. Property, Garfield County, Utah 3

DMEA 3961

UNITED WESTERN MINERALS COMPANY
KLLEN AND PENNELL CLAIMS
GARFIELD COUNTY, UTAH

INTRODUCTION AND SUMMARY

On August 31, 1955, the United Western Minerals Company, 136 West Palace Avenue, Santa Fe, New Mexico, applied for Government assistance in exploration on their claims east of the Henry Mountains, Garfield County, Utah. The proposal called for 50,000 feet of plug-bit and core drilling in 400 holes averaging 125 feet in depth, at an estimated cost of $107,041.00. Government participation at 75 percent would be $80,280.75. A definite drilling plan was not presented.

A field examination was made on November 11, 1955 by a DMEA team in company with M. D. Rhodes, superintendent and engineer, and John Verna, foreman for the applicant.

The Salt Wash member of the Morrison is present at the surface on the property. A remnant of a middle Salt Wash sandstone unit caps the higher mesas and what appears to be the most accessible and the best potential ore-bearing horizon is found a few feet below the cap rock. The Morrison has been explored and mined on the Mt. Pennell No. 5 claim by means of shallow rim workings, surface stripping, and by wagon drilling behind rim exposures. On the Mt. Pennell No. 8 claim, mineralization has been found by wagon drilling at a depth of 25 to 80 feet, although the rim exposures are barren on this claim. The mineralization appears to be in a lower horizon than the shallow mineralization found on Mt. Pennell No. 5 claim. Similar ore occurrences in the shallow horizon have been explored and mined on a small scale on other claims which are in the same group but were not included in the DMEA application.

The Atomic Energy Commission has carried on a drilling program on the adjoining Daisy June and Congress groups. Of 178 holes drilled, 47 were mineralized

and 17 showed material of ore grade. Twenty one of these holes were drilled on Congress No. 25 and Daisy June No. 9 claims, one of which is within, and one contiguous to the applicant's property. Results were comparable to those obtained in drilling the Mt. Pennell No. 5 and No. 8 claims. Six of the 21 holes contained ore grade mineralization which was interpreted to be in four separate small bodies of ore, but offset holes 10 feet away were barren. It was not possible to establish any trends from the results of drilling.

Ore bodies mined on the applicant's property to date have contained from 10 to 100 tons each. The largest production from any one of 14 claims which are listed in AEC records is 400 tons. A total of 1421 tons has been shipped with an average content of 0.19 percent U_3O_8 or 5400 pounds of U_3O_8 with a value, including development allowance and initial production bonus of $38,367.00. The vanadium content of the ore raised the value by an additional $6.00 to $12.00 per ton. A number of other shipments have been made which did not pay their way.

The cost of adequate exploration drilling for such scattered and erratic occurrences is considered to be prohibitive. This would be true even for a program calling for a maximum drilling depth of 50 feet instead of the 125 feet proposed by the applicant.

It is concluded that the production which might be obtained as a result of the proposed exploration is not likely to be significant. Moreover, the type of exploratory drilling which would be likely to be successful economically should be carried on in conjunction with, and actually a part of a mining operation, and not on a predetermined pattern. Such a program does not lend itself to a DMEA project. Consequently an alternate to the applicant's elaborate and unsuitable proposal is not suggested.

Denial of the proposed project under DMEA 3961 is recommended.

ACKNOWLEDGMENTS

The applicant furnished ownership data on the claims included in the proposed project and partial production and exploration records, but did not present a drilling plan based on geological considerations or the known habit of ore occurrence.

The Atomic Energy Commission was consulted, and data on a drilling project in the vicinity (RMO 826 Investigational Wagon Drilling in North Wash Mining District, Henry Mountains, Garfield County, Utah) were utilized in evaluating the proposed project. AEC production records were used.

LOCATION, TOPOGRAPHY, AND CLIMATE

The Ellen and Mt. Pennell claims are in secs. 1 and 12, T. 32 S., R. 11 E., Salt Lake principal meridian, Garfield County, Utah. (Figures 1 and 2). The property is on the east slope of the Henry Mountains, 25 miles northwest of Hite, Utah, on the Colorado River, and 28 miles south of Hanksville, Utah. They are reached from Hanksville over Utah Highway 95, a poor, graded road, and a short connecting access road. Hanksville is 60 miles south of Green River, Utah, over a graded highway now being surfaced. Grand Junction, Colorado, the nearest major source of mining supplies, is 108 miles farther east of Green River, over U. S. Highway 6 - 50.

The nearest buying station for uranium ores is at White Canyon, Utah about 10 miles east of Hite, Utah.

Power, supplies, labor, access roads and drill sites present no particular problems. A drilling contractor would furnish his own labor and equipment for the proposed exploration. Water for mining purposes is scarce, except for intermittent flows at points any nearer than the Colorado River. The applicant proposes, if necessary, to drill a well if local supplies fail. The feasibility of this was not investigated.

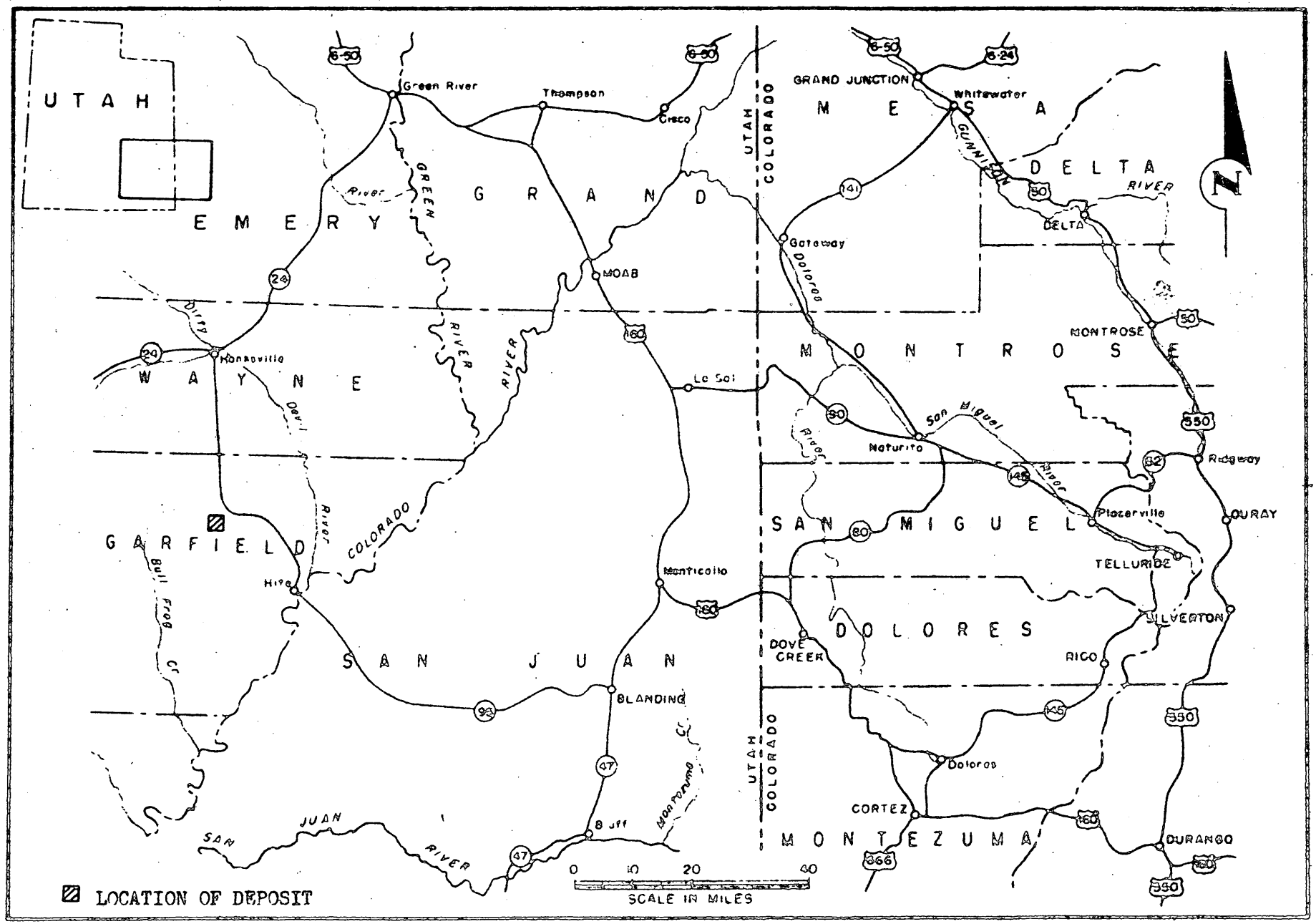

FIGURE 1 - LOCATION MAP, ELLEN AND PENNELL CLAIMS, UNITED WESTERN MINERALS COMPANY, GARFIELD COUNTY, UTAH.
DMEA 3961

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3961 DECEMBER 1955

RECEIVED
JAN 23 1956

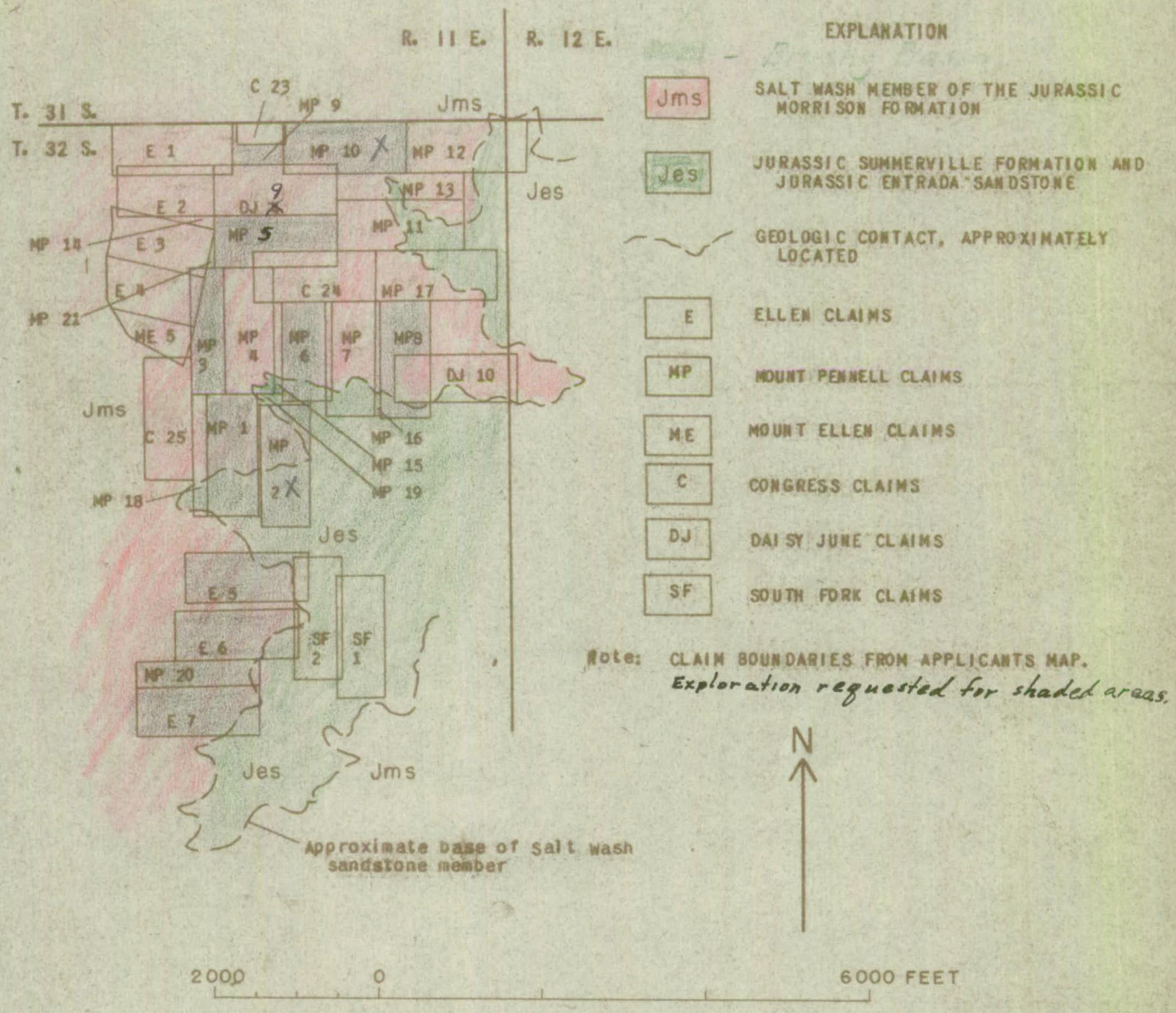

FIGURE 2. GEOLOGIC MAP SHOWING UNITED WESTERN MINERALS COMPANY PROPERTY, GARFIELD COUNTY, UTAH.

HISTORY AND PRODUCTION

There has been mining activity in the Henry Mountains area since pioneer days. Exploration and mining operations for vanadium date from the 1920's. No vanadium-uranium deposits of any notable significance have been found to date. Present activity dates from 1950. In 1952, the Atomic Energy Commission undertook a reconnaissance drilling program in the area without, however, finding any worthwhile deposits.

Recent exploration of the applicant's property dates from June 1954. Operations were carried on by Clifford Smith and other lessees of the Pennell Uranium Corporation, owner of the claims. Rim exposures were investigated by short drifts, and areas behind these rims were first wagon drilled and then stripped where ore was found at a depth of 6 feet or less. Production from the property, including only 2 of the claims listed in the application, as shown by the records of the Atomic Energy Commission, is as follows:

Claim	Tons	Average % U_3O_8
Daisy June No. 1	35.52	0.22
Daisy June No. 5	31.38	0.23
Daisy June No. 6	39.60	0.12
Daisy June No. 7	9.94	0.32
Ellen No. 2	215.98	0.16
Ellen No. 3	95.80	0.12
Mt. Pennell 4	15.53	0.31
Mt. Pennell 9	19.47	0.19
Mt. Pennell 10	9.88	0.29
Mt. Pennell 11	70.03	0.16
Congress No. 2	399.77	0.21
Congress No. 3	70.15	0.19
Congress No. 11	166.12	0.21
Congress No. 29	242.62	0.18

The total to date is 1421 tons from 14 claims or an average of 100 tons per claim. The average content was 0.19 percent U_3O_8. The vanadium content was from less than 0.50 percent to 2.00 percent V_2O_5 with the average less than 1.00 percent.

The applicant states that the production from claims included in the proposed DMEA project totaled 56,560 pounds (28.3 tons) averaging 0.35 percent U_3O_8

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The list of shipments from the claims since July 1953 and shown under Production, will give examples of size and grade of ore bodies found in this area.

The list represents 14 claims from which there was produced approximately 1,421 tons of uranium ore that averaged about 0.19 percent U_3O_8.

Undoubtedly, similar undiscovered ore bodies exist and the area will probably continue to produce ore in small amounts. It is not considered economical, however, to drill for these ore bodies on a closer spacing than 50 feet, and such a spacing is too wide for this type of mineralization.

ORE RESERVES

Data on ore grade material encountered in exploration to date are not sufficient for use in computing any reserves.

No samples were taken. Outcrops and shallow mineralization in several holes were checked radiometrically.

PROPOSED EXPLORATION

The applicant has proposed a drilling program totaling 50,000 feet of core and non-core drilling in 400 holes averaging 125 feet in depth at an estimated cost of $107,041.00. Government participation at 75 percent would be $80,280.75. The estimated unit costs of drilling alone, $1.25 per foot for non-core drilling, and $2.50 per foot for core drilling, are reasonable, but overhead costs, averaging $0.38 per foot, are some what high.

No drilling sites were suggested by the applicant. A program for drilling

400 holes to a depth of 125 feet is not justified either geologically or economically by conditions on the property. While drilling done to date indicates that there is mineralization in several different horizons, only the topmost could be explored or mined economically for the type of deposit discovered to date. It would not be feasible to mine deeper occurrences unless they could be followed in from rim exposures. The probable returns from production would not pay for development in barren ground. There will undoubtedly be more ore found and mined on the property but it is not likely to be profitable except on a very small scale. The total production to be expected is not likely to be enough to be considered significant. A mining enterprise with the best chance of success would be a small project employing two or three men. In such an operation, mineralization exposed in rim outcrops could be followed by underground or surface workings, with supplementary wagon drilling ahead of the mining operation to guide the advance of underground or surface work when ore pinches out in the working faces. This type of work would actually be a combination of exploration and development which would be impractical to set up as a DMEA project. For this reason an alternate plan of DMEA exploration to take the place of the elaborate and uneconomic proposal of the applicant is not suggested by the examining team.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that, while small ore bodies in discontinuous lenses at several different horizons will be found on the Ellen and Mt. Pennell claims, the possibility for a significant production of uranium is poor. Because an efficient type of exploration for a deposit of this type would combine wagon drilling with actual mining operations, it is not believed that a feasible DMEA project could be devised. Wagon drilling should be done just ahead of mining faces and not on a predetermined pattern. There are no known ore trends which would permit determination of the more favorable drilling areas.

It is further concluded that the only horizon which is likely to furnish any production is at a very shallow depth, and there is no evidence to support the applicant's proposal to test the formation down to 125 feet in depth.

The Commodity Committee reviewers based their recommendations for a field examination on the fact that AMC drilling on adjoining property found ore-grade mineralization in 17 out of 147 holes. The Atomic Energy Commission report on this project (RMO 886) shows that only small, scattered ore bodies were indicated by these mineralized holes. Exploration on two claims in the proposed DMEA project by the applicant shows very similar results.

Denial of the application for Government assisted exploration under DMEA 3961 is recommended.

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

RECEIVED
OCT 24 1955

[illegible] New Customhouse
Denver 2, Colorado

October 19, 1955

Memorandum

To: W. H. King (w/brochure)
J. W. Hesler (w/brochure)

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3961 (Uranium) United Western Minerals Co., Eklen and Funnell claim groups, Garfield County, Utah

Enclosed is the subject application in the amount of $167,041.00. Also enclosed is a copy of a letter from the Chairman of the Operating Committee and memoranda from J. E. Crawford and H. E. Nelson, Commodity Members, who do not concur in the recommendation to deny the subject application without a field examination.

A field examination and suitable report are required.

W. H. Traver

Enclosures

HMC:pw

cc: Sec.Op.Comm. (2)
Harshman
Subject DMEA-3961
Chron

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

RECEIVED
OCT 24 1955

[redacted]
[redacted]

October 19, 1955

[redacted]

To: W. E. King (w/brochure)
J. W. [redacted] (w/brochure)

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3961 (Uranium) United Western Minerals Co., Milan and Pennell claim groups, Garfield County, Utah

Enclosed is the subject application in the amount of $[redacted]. Also enclosed is a copy of a letter from the Chairman of the Operating Committee and memoranda from J. Z. Crawford and H. E. [redacted], Commodity Members, who do not concur in the recommendation to deny the subject application without a field examination.

A field examination and suitable report are required.

W. E. Shaver

[redacted]

HMC:pw

cc: Sec.Op.Comm. (2)
Harshman
Subject DMEA-3961
Chron

Surname copy

Murphy
Ellis
Leehan
Rilogaard
Selfridge

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

OCT 12 1955

Mr. Alva A. Simpson, Jr.
United Western Minerals Company
136 West Palace Avenue
Santa Fe, New Mexico

Re: Docket No. DMEA-3961 (Uranium)
Allen and Pennell claim groups
Garfield County, Utah

Dear Mr. Simpson:

The application for assistance in exploring the subject property in Garfield County, Utah, 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 the Executive Officer of Region III at the following address:

Mr. W. M. Traver
Executive Officer
DMEA Field Team, Region III
22k New Customhouse Building
Denver 2, Colorado

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

Sincerely yours,
Frank E. Johnson
Acting Administrator

FMMurphy/gla
10-12-55
cc to: Admr.'s Reading File
Docket
Code 700
Mr. Murphy
DMEA Field Team, Region III (2)

P.C.L.

Surname copy

Murphy
Ellis
Selfridge
Robinson

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

OCT 12 1955

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

Re: Docket No. DMEA-3961 (Uranium)
United Western Minerals Co.
Ellen and Pennell claim groups
Garfield County, Utah

Dear Mr. Traver:

This is to acknowledge your memorandum, dated September 26, and the attached copies of the joint memorandum from the Grand Junction office, dated September 22, 1955, recommending that the above-docketed application be denied without a field examination.

Enclosed are copies of memoranda, dated October 4 and 7, 1955, by J. E. Crawford, USGS, and H. E. Nelson, USGS, respectively, relating to the subject application.

You will note that the Community Members do not concur in the recommendation to deny the subject application without a field examination. The Rare and Miscellaneous Metals Division also believes that a field examination should be seriously considered.

Therefore, the Field Team is requested to reconsider their recommendation of denial, and possibly schedule a field examination of the subject property.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SWS)

Enclosures

APPROVED:

/s/ Robert W. Geehan (SWS)
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey (SWS)

FMMurphy/gla
10-12-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3641
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Murphy

RGh

10/11/55 glu

IN REPLY REFER TO:

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

RECEIVED
OCT 10 1955

October 7, 1955

Re: DMEA 3961
United Western Minerals Co.
Ellen and Pennell Claims
Garfield Co., Utah
$107,041.00 - Uranium

Memorandum

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

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

Subject: Review of application and memoranda of Denver and Grand Junction offices.

The Grand Junction office has recommended that the subject application be denied without a field examination and the Denver office concurs.

I disagree with the recommendation.

The Preliminary Geologic Map Showing the Distribution of Uranium Deposits and Principal Ore-Bearing Formations of the Colorado Plateau Region indicates the subject claims are in an area from which significant tonnages of uranium ore has been produced. The map shows one black dot signifying a deposit or group of deposits that have yielded 1,000 tons or more of uranium ore as of January 1, 1954, and five red dots which signify deposits or groups of deposits that have yielded less than 1,000 tons of uranium ore as of January 1, 1954, or are known to contain uranium ore.

I have no detailed information concerning the A.E.C. drill holes, especially the 17 that showed material of ore grade. The drilling done by the applicant showed 3 centers of mineralization. If the figures (6')*, etc., represent intersections, Pennell #5 holes, 24, 25, 26, 27 and 28, although on 20 centers, would seem to indicate an ore body. Pennell #5 hole, 18 and Pennell #8, holes 13, 14, 21, 23 and 24 possess interest.

The small recent (1954) production given for the Pennell, Ellen and Smith claims, 142.1 tons, does not bespeak large ore bodies, and only 28.3 tons are credited to claims in the subject group. Production is continuing on nearby, probably contiguous, ground.

The drilling proposed may exceed the footage necessary to explore the claims, certainly little or no footage should be spent on blocking out ore.

I recommend that the Field Team be requested to reconsider the recommendation of denial and be asked to make a field examination.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

RECEIVED
OCT 10 1955

October 7, 1955

Re: DMEA 3961
United Western Minerals Co.
Kilen and Pennell Claims
Garfield Co., Utah
$107,041.00 - Uranium

Memorandum

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

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

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I disagree with the recommendation.

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I have no detailed information concerning the A.E.C. drill holes, especially the 17 that showed material of ore grade. The drilling done by the applicant showed 3 centers of mineralization. If the figures (6')⁰, etc., represent intersections, Pennell #5 holes, 24, 25, 26, 27 and 28, although on 28 centers, would seem to indicate an ore body. Pennell #5 hole, 18 and Pennell #8, holes 13, 14, 21, 23 and 24 possess interest.

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The drilling proposed may exceed the footage necessary to explore the claims, certainly little or no footage should be spent on blocking out ore.

I recommend that the Field Team be requested to reconsider the recommendation of denial and be asked to make a field examination.

N. E. Nelson

N. E. Nelson

NENelson:iml
d-10/7/55

cc: Director's reading, 4212
Branch reading, 4212
EMMA (3)
Docket file
J. E. Crawford, 3041
J. O. Kested, 3210

10/4/55 gla

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

October 4, 1955

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4445

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

Subject: Application for assistance, DMEA Docket 3961, United Western Minerals Company, Garfield County, Utah

I have reviewed the application for assistance, DMEA Docket 3961, and I have discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The United Western Minerals Company has applied for DMEA aid to explore for uranium on its two groups of claims in the Henry Mountains mining district, Garfield County, Utah. The proposed exploration program consists of 40,000 feet of non-core and 10,000 feet of core drilling on subject claims to find and block out ore bodies; the total estimated cost is $107,041.

Mineralization of the carnotite type is present in the Salt Wash member of the Morrison formation which underlies the subject claims. Past production on the claims has been 56,650 pounds of ore averaging 0.35 percent U_3O_8 and 1.2 percent V_2O_5.

The field team in their September 22, 1955, memorandum to W. M. Traver state that although material of ore grade is present on adjoining claims, the ore bodies in the Henry Mountain area are scattered and in the 100-ton ore class; the spacing of drill holes would necessarily be close, making the exploration program expensive. They, therefore, recommend that the application for DMEA assistance be denied without a field examination.

Insofar as field examinations have been conducted on less promising areas, the presence of ore-grade material and the fact that 56 holes have been drilled by the applicant seem to merit some attention from the field examiners. While I believe a field examination would not be out of order, I do not think the extensive exploration outlined by the applicant is economically feasible.

Mr. Hosted concurs in the recommendation of the field team that the application be denied without a field examination.

John E Crawford

John E. Crawford

Attachment

9/28/55 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

RECEIVED
SEP 28 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA-3961 (Uranium), United Western Minerals Company, Garfield County, Utah

Enclosed are four copies of a review of the subject application by the Grand Junction office. They recommend that the application for DMEA assistance be denied without a field examination.

We concur in this recommendation.

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

DMEA
Date Rec'd.
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

September 22, 1955

Memorandum

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

From: J. W. Hasler, USGS
M. H. Salsbury, USBM

Subject: DMEA docket 3961. Application for government assistance
United Western Minerals Company, Garfield County, Utah

The United Western Minerals Company, 136 West Palace, Santa Fe, New Mexico, has applied for DMEA assistance to explore for uranium on the Ellen and Pennell claims in the north wash area of the Henry Mountains mining district, Garfield County, Utah.

The rocks underlying the subject claims are largely the Salt Wash member of the Morrison formation of Jurassic age. The minerals are of the Carnotite type which is common in the Morrison deposits on the Colorado Plateau. Limited mining operations have been carried on in this area for many years; however, the operations have been largely by pick and wheelbarrow methods, consequently, the ore shipped has been of a rather high grade.

In 1952, the AEC undertook a small drilling project on the Daisy June and Congress claims adjacent to the Ellen and Pennell (RMO 826). Of the 178 holes drilled 47 were mineralized and 17 showed material of ore grade. The uranium ore bodies in the Henry Mountain area were scattered and are very small and trends are difficult to ascertain. The size of the ore bodies expected are in the 100 ton ore class. No trends or guides can be readily found to delineate ground that may be productive. Spacing of drill holes would necessarily be too close, making an expensive exploration program and the size of the ore bodies are not large enough to be economically significant. It is therefore recommended that the application for DMEA assistance be denied without a field examination. Enclosed is the applicants application.

J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury
M. H. Salsbury
Mining Engineer

JWH/vll

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

RECEIVED
SEP 28 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA-3961 (Uranium), United Western Minerals Company, Garfield County, Utah

Enclosed are four copies of a review of the subject application by the Grand Junction office. They recommend that the application for DMEA assistance be denied without a field examination.

We concur in this recommendation.

W. M. Traver
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

RECEIVED
SEP 23 1955

DMEA
Date Rec'd.
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

September 22, 1955

Memorandum

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

From: J. W. Hasler, USGS
M. H. Salsbury, USBM

Subject: DMEA docket 3961. Application for government assistance
United Western Minerals Company, Garfield County, Utah

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J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury
M. H. Salsbury
Mining Engineer

JWH/vll

Chairman, Operating Comm. D.M.E.A.

RECEIVED
SEP 2 1955

DN 235 BUR MINES 9-22-55 11-21 AM

CHAIRMAN, OPERATING COMMITTEE, DMEA

CORRECTION OUR TELETYPE JUST TRANSMITTED DOCKET DMEA 3961 UNITED WESTERM MINERALS COMPANY WILL BE RECOMMENDED FOR DENIAL WITHOUT FIELD EXAMINATION. RECOMMENDATIONS ON OTHER TWO DOCKETS AS STATED.

W M TRAVER

Denver, Colo.

SEP 22 3 09 PM '55
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

Chairman, Opr. Comm. D.M.E.A.

RECEIVED

SEP 2 1955

DN 235 BUR MINES 9-22-55 -0-12 AM

CHAIRMAN, OPERATING COMMITTEE, DMEA

WE CONTACTED GRAND JUNCTION FIELD OFFICE RGXX REGARDING QUCIKER ACTION ON PRELIMINARY JOINT MEMORANDA REPORTS PRIOR TO RECEIPT OF YOUR TELETYPE. THEY PROMISED IMMEDIATE ACTION ON FUTURE APPLICATIONS. THE THREE DOCKETS 3961, 3962, 3966 YOU INQUIRED ABOUT WILL REQUIRE FIELD EXAMINATIONS.

W M TRAVER

Sept. 23 - See TT of 22nd re 3961 - No field examination.

Denver, Colo.

SEP 22 1 43 PM '59

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

Surname copy

Ellis
Leahon
Selfridge
Nelson
Yeghman

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

Department of the Interior
DMEA
1x1(01) Revolving Fund, Defense Production Act, Interior
(Allocated Working Fund to the Office of the Secy.)

SEP 21 1955

TELETYPE

W. H. TRAMEL, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION III
[illegible] NEW CUSTOMHOUSE BUILDING
DENVER 2, COLORADO

RE NORMETE CORPORATION, DOCKET DMEA-3962; UNITED WESTERN MINERALS CO., DOCKET DMEA-3961; PARADOX MINING CO. INC., DOCKET DMEA-3966, PERMANENT ADVERSE STATUS OF GRAND JUNCTION JOINT MEMORANDA.

George C. Selfridge

GEORGE C. SELFRIDGE, (WB)
CHAIRMAN, OPERATING COMMITTEE

EWEllis//gla
9-21-55
cc to: Admr.'s Reading File
Operating Committee
Docket DMEA-3961
" DMEA-3962
" DMEA-3966
Code 700
Confirmation to Region III DMEA FieldTeam

RCS

Subject: Exploration
Re:

United Western Minerals Co.
136 West Palace Ave.,
Santa Fe, New Mexico

September 6, 1955

Gentlemen:

The receipt of your application dated August 22, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3961 and referred to the Rare & Miscellaneous 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

60932

September 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III

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 III.

DMEA-3961 United Western Minerals Co.

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

Copy to Mr. Hassler

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

RECEIVED
SEP - 2 1955

224 New Customhouse
Denver 2, Colorado

August 31, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), United Western Minerals Company, Garfield County, Utah.

Enclosed are two copies of the subject application in the amount of $107,041.00.

One copy of the application has been forwarded to the Grand Junction office for their study and recommendations.

W. M. Traver

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

224 New Customhouse
Denver 2, Colorado

August 31, 1955

Memorandum

To: J. W. Naeler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), United Western Minerals Company, Garfield County, Utah.

Enclosed is a copy of the subject application in the amount of $107,041.00.

Please study this application and discuss it with the AEC and Bureau of Mines representatives in Grand Junction and forward this office eight copies of your recommendations regarding a field examination of the property.

W. M. TRAVER,

W. M. Traver

Enclosures

JDC:jy

cc: Sec. Opr. Comm. (2)
Harshman
Docket
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DMEA
Date Rec'd.
AUG 31 1955
BUREAU OF MINES
Denver, Colorado

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

RECEIVED
SEP - 2 1955

Not to be filled in by applicant.

Docket No. 3961
Metal or Mineral Uranium
Date Received 9-2-55
Estimated Cost 107,041.00
Participation (Government %) 75

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: UNITED WESTERN MINERALS COMPANY
136 West Palace Avenue
Santa Fe, New Mexico

(*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. See attached 1. (b)

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. attached 1. (c)

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not applicable

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.

See attached marked 2. General.

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
attached 3. (a)

(*b*) State any mine name by which the property is known. None.

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

(*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. Lease, as amended, and amendatory letter attached 3. (d)

(*e*) If you own the land, describe any liens or encumbrances on it not applicable

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Included - attached 3. (a)

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. attached 4. (a)

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. attached 4. (b)

(*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. attached 4. (c)

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. attached 4. (d)

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. attached 4. (e)

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Franklin and Vandalia type ore.

(*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. attached 5. (b)

(*c*) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. attached 5. (d)

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.). attached 6. (a)

(*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. attached 6. (b)

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. attached 6. (c)

(*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. attached 6. (d)

(*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. attached 6. (e)

(*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. attached 6(f

(*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. attached 6. (g)

(*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. attached 6 (h)

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

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

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

Explain in detail on acompanying paper. All required personnel

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 August 29, 1955

UNITED WESTERN MINERALS COMPANY
(Applicant)

By Alvin R. Simpson
President

ATTEST:
Hubert A. Holt
Secretary

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

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

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SEP 2 1955

1. (b) A Delaware Corporation, qualified to do business in New Mexico, Utah, Colorado and California.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N.Mex.

OFFICERS & DIRECTORS

1 (c)

President & Director	Alva A. Simpson, Jr. 136 West Palace Avenue Santa Fe, New Mexico
Secretary	Herbert A. Holt 136 West Palace Avenue Santa Fe, New Mexico
Treasurer	Herbert A. Holt 136 West Palace Avenue Santa Fe, New Mexico
Director (Chairman)	Patrick J. Hurley 301 Hillside Avenue Santa Fe, New Mexico
Director	Norman S. Dike c/o University Club 1 West 54th Street New York, New York
Director	Wilson Hurley Korber Building Albuquerque, New Mexico
Director	John K. Schemmer 630 Fifth Avenue New York 20, New York
Director	Benno C. Schmidt 630 Fifth Avenue New York 20, New York
Director	Anneliese A. Simpson 136 West Palace Avenue Santa Fe, New Mexico

2. General

In accordance with DMEA Order 1, Government Aid in Defense Exploration Projects, this application and all accompanying papers in quadruplicate with name and address on each sheet of application and on all accompanying papers is being filed with the Defense Minerals Exploration Administration, 224 New Customhouse, Denver 2, Colorado.

UNITED WESTERN MINERALS COMPANY
(A Delaware Corporation)
136 W. Palace, Santa Fe, New Mex.

3. (a) Applicant wishes to explore the following claims:

Ellen Nos. 5, 6 and 7.

Pennell Nos. 1, 2, 3, 5, 6, 8, 9, 10, and 20.

The other claims covered by the lease with Pennell Uranium Corporation are excluded.

The legal descriptions of the claims herein included, and book and page numbers for each recorded location, appear on the Notices of Location attached hereto.

NOTICE OF LOCATION

Book 30 Page 182

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

3. (a)

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this Ellen No. 5 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated on the west rim of South Fork Wash adjoining Ellen #6 on the North

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SEP - 2 1955

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S.E. corner monument No. 1;

thence West 1500 feet to S. W. corner monument No. 2;

thence North 300 feet to West end of center monument;

thence North 300 feet to N. W. corner monument No. 3;

thence East 1500 feet to N. E. corner monument No. 4;

thence South 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Ellen # 5

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51671
Recorded June 14th 1954 at 10:00 A.M.
at request of H. O. Wilding
Mildred Deuel County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page 183 UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Ellen # 6 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section 12 R-11 E. T-32 S. approximately 3500 ft. E. and 1000 ft. So. of NW corner of section Twelve

in the Henry Mountain Mining District Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S. E. corner monument No. 1;

thence West 1500 feet to S. W. corner monument No. 2:

thence North 300 feet to West end of center monument;

thence North 300 feet to N. W. corner monument No. 3;

thence East 1500 feet to N. E. corner monument No. 4;

thence South 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Ellen # 6

Located this 14th day of June, 19 54

Names of Locators

George Ross

51672
Recorded June 14 19 54 at 10:00A.M.
at request of Harry O. Wilding
Mildred Deuel County Recorder

NOTICE OF LOCATION

Book 30 Page 184

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
186 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this Ellen #7 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section 12 R-11 E, T-32 So., approximately 2400 ft. E and 1600 ft. So. of NW corner of Sec. 12

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S E corner monument No. 1;

thence West 1500 feet to S W corner monument No. 2;

thence North 300 feet to West end of center monument;

thence North 300 feet to N W corner monument No. 3;

thence East 1500 feet to N E corner monument No. 4;

thence South 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

The name of the mining claim above described is, and shall be known as the Ellen # 7

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51673

Recorded June 14th 19 54 at 10:00 AM

at request H. O. Wilding

Mildred Deuel County Recorder

NOTICE OF LOCATION

Book 30 Page 186

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Ronnell # 1 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S., approximately 2000 ft. E/ and 600 ft. No of SW corner of Section One

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2;

thence East 300 feet to North end of center monument;

thence East 300 feet to corner monument No. 3;

thence 1500 feet to corner monument No. 4;

thence 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

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SEP - 2 1955

The name of the mining claim above described is, and shall be known as the Ronnell # 1

Located this 14th day of June, 19 54.

Names of Locators

51674
Recorded June 14 19 54 at 10:00 AM
at request of H. O. Wilding
Mildred Doucl County Recorder

George Ross

Copy

NOTICE OF LOCATION

Book 30 Page # 136

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this Pennell # 2 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S approximately 2600 ft. E and 350 ft. N of SW corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S.W. corner monument No. 1;

thence North 1500 feet to N.W. corner monument No. 2;

thence East 300 feet to North end of center monument;

thence East 300 feet to N.E. corner monument No. 3;

thence South 1500 feet to S.E. corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pennell # 2

Located this 14th day of June, 19 54.

Names of Locators

51675

Recorded June 14 19 54 at 10:00AM

at request of Harry O. Wilding

Mildred Doual County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page #187 UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Pennell # 3 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S, approximately 1700 ft. E and 2400 Ft. So. of NW corner of Sec. One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2;

thence East 300 feet to North end of center monument;

thence East 300 feet to N E corner monument No. 3;

thence South 1500 feet to S E corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pennell # 3

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51676
Recorded June 14th 19 54 at 10:00 AM
at request of Harry O. Wilding
Mildred Doucl County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 189

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this Pennell # 5 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E., T-32 S., approximately 2000 ft. E. and 1300 ft. S of NW corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet West of this location (Place of Discovery) Monument, at the West end of center monument, and running

thence	North	300 feet to	NW	corner monument No. 1;
thence	East	1500 feet to	NE	corner monument No. 2;
thence	South	300 feet to	East	end of center monument;
thence	South	300 feet to	SE	corner monument No. 3;
thence	West	1500 feet to	SW	corner monument No. 4;
thence	North	300 feet to	place of beginning,	

including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

The name of the mining claim above described is, and shall be known as the Pennell # 5

Located this 14th day of June, 19 54.

Names of Locators

51678
Recorded June 14th 19 54 at 10:00 AM
at request of Harry C. Wilding
Mildred Deuel County Recorder

COPY

NOTICE OF LOCATION

Book 18 Page # 317

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this Pennell # 6 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated North Wash

in the Unorganized Mining District Copperfield, Utah County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 50 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2;

thence East 300 feet to N E end of center monument;

thence East 300 feet to N E corner monument No. 3;

thence South 1500 feet to S E corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pennell # 6

Located this 23rd day of February, 19 54.

Names of Locators

George Ross

45021

Recorded Feb. 24, 1954 at 11:50 AM
at request of George Ross

Mildred Deuel
County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 192

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
126 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this Pennell # 8 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R.-11 E., T.-32 So. Approximately 6100 ft. E. and 3300 ft. So. of N W corner of Section One.

in the Henry Mountain Mining District Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S. W. corner monument No. 1;

thence North 1500 feet to N. W. corner monument No. 2;

thence East feet to North end of center monument;

thence East 300 feet to N. E. corner monument No. 3;

thence South 1500 feet to S. E. corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

The name of the mining claim above described is, and shall be known as the Pennell # 8

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51681

Recorded Juon 14 19 54 at 10:00 AM

at request of H. O. Wilding

Mildred Deual County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 193

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Pennell # 9 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 So. approximately 3200 ft. E. and 1400 ft. So. of Nw corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2;

thence East 300 feet to North end of center monument;

thence East 300 feet to N E corner monument No. 3;

thence South 1500 feet to S E corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

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The name of the mining claim above described is, and shall be known as the Pennell # 9

Located this 14th day of June, 1954

Names of Locators

George Ross

51682

Recorded June 14th 19 54 at 10:00 A. M.

at request of H. O. Wilding

Mildred Daval County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 194

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Pannell # 10 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section One R-11 E, T-32 So. approximately 3500 ft. E. and 300 ft. So. of NW corner of Section one

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet West of this location (Place of Discovery) Monument, at the West end of center monument, and running

thence North 300 feet to NW corner monument No. 1;

thence East 1500 feet to N E corner monument No. 2:

thence South 300 feet to East end of center monument;

thence South 300 feet to S E corner monument No. 3;

thence West 1500 feet to S W corner monument No. 4;

thence North 300 feet to place of beginning, including all Dips. Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pannell # 10

Located this 14th day of June, 19 54.

Names of Locators

George Rogo

51683
Recorded June 14th 19 54 at 10:00 Am
at request of H. O. Wilding
Mildred Duval County Recorder

COPY

Certificate

COUNTY OF GARFIELD }
STATE OF UTAH } SS

RECEIVED
SEP 2 1955

I, Mildred Deuel duly elected, qualified and acting county Recorder in and for Garfield County, State of Utah, do hereby certify that the foregoing is a true copy of Notice of Location recorded (or filed) 9 day of July 19 55 and now of record in my office.

Book 85 Page 399

IN Witness Whereof, I have hereunto set my hand and affixed the seal of the Recorder, at the city of Panguitch, Utah, this 26 day of August 19 55

Mildred Deuel
Garfield County Recorder

NOTICE OF LOCATION

BOOK 85 PAGE 399

NOTICE IS HEREBY GIVEN, That the undersigned, having complied with the requirements of SECTION 2324 of the REVISED STATUTES of the United States, and the Local Laws, Customs and Regulations of this District, ha located Fifteen hundred feet in length by 600 feet in width, on this the valuable CLIMAX minerals Lode, Vein or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated IN NORTH FORK OF DRY CANYON, ETC. in Section 12 (unsurveyed), Township 32 South, Range 11 East

in the unorganized Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 600 feet East of this location (Discovery) Monument, at the CENTER East end center monument, and running

thence South 156 [redacted] feet to S.E. corner monument No. 1;

thence West 1500 feet to S.W. corner monument No. 2;

thence North 156 [redacted] feet to West end center monument;

thence North 156 [redacted] feet to N.W. corner monument No. 3;

thence East 1500 feet to N.E. corner monument No. 4;

thence South 156 [redacted] feet to place of beginning; including all Dips, Spurs, Angles and Variations This claim is north of Ellen #7 and south of Ellen #6

81587 RECORDED July 9th 1955 AT 10:30 AM

AT REQUEST OF Pennell Uranium Corp.

Mildred Sewell COUNTY RECORDER

The above described Mining Claim shall be known as the Mt Pennell #20

Located this 22 day of May 1955

Note.

The small type on blank lines is merely a guide for the locator and is no part of this notice.

†DIAGRAM OF CLAIM—The location (discovery point) and corner monuments should be designated on the accompanying diagram to make the Record of claim more perfect.

A mining claim must not exceed 1500 feet in length along the vein or lode by 600 feet in width, 300 feet on each side of center of vein at surface.

No location of a mining claim can be made until the discovery of the vein or lode within the limits of the ground claimed.

The claim must be distinctly marked on the ground, so its boundaries can be readily traced.

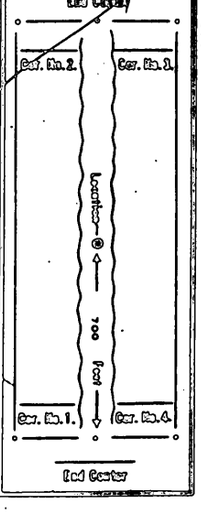
A severe penalty is provided by law for removing or defacing the stakes or monuments of a mining claim.

Claims located on Sunday or holidays are legal.

All valuable mineral deposits in lands of the Government are locatable by citizens of the United States only, and those who have declared their intentions to become such.

This location notice must be filed for Record with the County Recorder of the county in which the claim is located.

† DIAGRAM OF CLAIM.



NAMES OF LOCATORS:

Pennell Uranium Corp.

By: D. G. Hughes

RECEIVED AUG 25 1955

BLANK No. 23

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
Palace, Santa Fe, N. Mex.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

3. (d)

MINING LEASE

THIS INDENTURE, made this 18th day of March, 1955 between PENNELL URANIUM CORPORATION, a Utah Corporation, hereinafter referred to as Lessor, and UNITED WESTERN MINERALS COMPANY, A Corporation, organized and existing under the laws of the State of Delaware, and having principal offices in the City of Santa Fe, State of New Mexico, hereinafter referred to as Lessee.

WITNESSETH:

That Lessor for and in consideration of the sum of $10.00 and the royalties hereinafter reserved, and the mutual covenants and agreements hereinafter contained, has granted, demised and let, and by these presents does grant, demise and let, unto the said Lessee all of the following described mining claims located in the Henry Mountain Trachyte Mining District, Garfield County, Utah, to-wit:

ELLEN No. 5	PENNELL No. 6
ELLEN No. 6	PENNELL No. 8
ELLEN No. 7	PENNELL No. 9
	PENNELL No. 10
PENNELL No. 1	
PENNELL No. 2	
PENNELL No. 3	MT. HILLIER
PENNELL No. 5	No. 1

together with the spurs, dips and angles of any vein or veins within said mining claims, and any dumps, loose ore, buildings, or other structures appurtenant thereto.

TO HAVE AND TO HOLD unto the said Lessee for the term of five (5) years from the date hereof, unless sooner forfeited or terminated, as provided herein, together with an option existing in favor of the said Lessee to renew said lease for an additional period of five (5) years thereafter, upon giving written notice to Lessor, not less than thirty (30) days before the expiration of the original term, and provided further that said Lessee shall have performed all of the covenants contained herein, for the purpose of exploring for and mining ore, metals and minerals therefrom upon the following terms and conditions:

1. The Lessee is given immediate possession of said property and agrees to protect the same from damage or loss by any outside parties. Lessee agrees to commence drilling by July 1, 1955, and to drill a minimum of five thousand feet (5000') of drill hole for exploration for minerals upon

the above described claims, by or before the 15th day of February 1956. Lessee shall give notice to Lessor at least twenty (20) days prior to the commencing of any actual drilling and Lessor shall have the right to have its own geologist, mining engineer or representative present at such drilling. Whether represented or not, at the actual drilling, Lessor shall be supplied with copies of all drilling logs and a complete report of core or probing reports and of all assays or technical data relative to such exploration. Provided, however, that any drilling performed upon claims owned by 100 ASSOCIATES OF AMERICA, and covered by a separate agreement entered into between Lessor and Lessee extemporaneous herewith and under the same date as this lease shall be credited upon the minimum requirements of five thousand feet (5000') of drilling contained in this paragraph above.

2. The Lessee agrees to commence actual mining operations within sixty (60) days of discovery of any commercial body of ore of a size justifying mining operations and mine the same in a miner-like fashion and in the greatest quantity consistent with good mining practices and with due regard to the preservation of the property as a workable mine. Lessor agrees to keep accurate accounts and to render monthly statements to the Lessor and to pay as rental for the said property a royalty for all minerals recovered, as follows, to-wit:

A Royalty of twelve and one-half percentum (12½%) of the gross mill receipts on all ore and/or minerals extracted and sold from the property which has a value at the mill of Seventy-five Dollars ($75.00) or less per ton, and fifteen percentum (15%) of the gross mill receipts upon all ore or minerals having a greater value than Seventy-five Dollars ($75.00) per ton at the mill, or ore buying station. Lessee shall also pay to Lessor, twenty-five percentum (25%) of the United States or Atomic Energy Commission bonus on all ores mined from said claims, provided however, that any hauling allowance or mine development allowance shall not be included in the determination of gross mill receipts.

3. Lessee agrees to inform the mill or ore buyers of the foregoing royalty requirement and authorize them to pay said royalty direct to Lessor together with a duplicate settlement sheet or invoice.

4. Lessee agrees that once mining operations have commenced upon said property, to work said premises with a minimum of one hundred twenty (120) miner shifts per month, during the continuance of this lease unless prevented by Act of God, labor strikes, scarcity of labor, disaster, or extraordinary conditions beyond the control of Lessee, or the equivalent in drilling or other work.

5. In the event a dispute shall arrise between the parties as to whether or not exploration, development, mining or production is being performed as provided in this Agreement or any other differences of opinion hereunder, each party shall appoint a geologist or mining engineer who shall in turn mutually agree upon and appoint a third geologist or mining engineer to whom said dispute shall be referred for arbitration. Each party hereto agrees to be bound by the majority decision of that arbitration committee and the costs of said arbitration will be borne by the parties equally.

6. If default be made in the payment of the royalty above specified or any part thereof, or if mining operations are abandoned, or halted, or a failure of Lessee to keep or perform any of the covenants of this lease for a period of sixty (60) days after written notice of such failure has been served by Lessor upon Lessee at Santa Fe, New Mexico, then the Lessor may at its option terminate this lease, re-enter said premises and remove all persons therefrom. The Lessee shall have the right to remove all machinery and tools placed on the property by him during the sixty (60) day period immediately following such termination of this lease, provided, however, in so far as matters in dispute are submitted to arbitration, the sixty (60) day period shall commence to run only upon the day of the arbitration committee's decision and notice to the party in default.

7. Lessor agrees to do all necessary assessment work and to keep all of said claims in good standing, and to file proof of assessment or annual labor at least thirty (30) days before due and shall deliver copies of such proof to Lessor at least thirty (30) days before the date

for filing the same. Lessor agrees to comply with all the Utah compensation laws and to procure sufficient liability insurance to protect Lessor from any damage, claim or loss arising from, or by virtue of the operation of said claims by Lessee, including, but without limitation, claims by employees, agents, visitors and/or invitees of Lessee, and furthermore to keep all said claims free from any liens or encumbrances.

8. That Lessee will deliver to Lessor the above mentioned claims with appurtenances and improvements in good order and condition without demand or further notice on the last day of the term, or any extension term hereof, or at any time previous thereto, upon termination of this Agreement.

9. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of both parties hereto, as well as to their heirs, executors, administrators, and personal representatives, except that Lessee shall not assign, encumber, or sell or enter into sub-leases hereunder without the written approval of the Lessor.

10. The Lessor may have additional claims in the area and lease to Lessee up to seven such claims under the same terms and conditions as set forth in this lease, upon notice from Lessor that said party intends to include said claims hereunder.

11. Lessor shall at all reasonable times have access to all records concerning the properties leased herein including, but without limitation, geological reports, engineering reports, drill hole reports and logs, disbursement and receipt accounts, and surveys. Lessee shall notify the Lessor of all ore strikes upon the claims.

IN WITNESS WHEREOF, the parties have caused these presents to be signed and sealed this 18th day of March, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Sewvell
President

ATTEST:

/s/ Richard A. Parker
Secretary

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

Lessee

ATTEST:

By /s/ Alva A. Simpson, Jr.
President

/s/ Anneliese A. Simpson
Secretary

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

RIDER

WHEREAS, the parties hereto have heretofore on this 18th day of March, 1955, entered into a mining lease, copies of which are attached hereto and incorporated herein by reference; and

WHEREAS, it is their desire that this Rider be incorporated into and form a part of said mining lease and be supported by the considerations set forth therein;

NOW, THEREFORE, it is mutually agreed as follows:

1. Pennell Uranium Corporation, Lessor, shall defend against all adverse claims affecting the properties described in said lease, and each party shall notify the other in the event an adverse claim is asserted with regard to the described properties. That, in the event adverse claims are asserted by third parties, United Western Minerals Company, Lessee, may join with Pennell in defending the titles and rights of possession in and to the claims described in said Lease at their option, and that this Lease shall terminate as to that portion of the described property which may have defective title without damage to either of the parties herein.

IN WITNESS WHEREOF the parties have caused these presents to be signed and sealed this 18th day of March, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Souvall
President

ATTEST:

/s/ Richard A. Parker
Secretary

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

Lessee

By /s/ Alva A. Simpson, Jr.
President

ATTEST:

/s/ Anneliese A. Simpson
Secretary

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

AMENDMENT

It is understood and agreed that the foregoing Mining lease has been agreed upon and approved by the parties thereto with the following amendments:

1. The time to commence drilling provided for in clause 1 is extended until July 1, 1955.
2. The lessee may at its option at any time be relieved of all obligations under said Mining Lease, except to drill a minimum of 5000 feet, as provided for in clause 1 of said Mining Lease, and to pay accrued royalties, by surrendering said Mining Lease to the Lessor,

IN WITNESS WHEREOF, the parties have caused these presents to be signed and sealed this 28th day of April, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Souvall
President

ATTEST:

/s/ Edward L. Summer
Treasurer

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

By /s/ Alva A. Simpson, Jr.
President

ATTEST:

/s/ Anneliese A. Simpson
Secretary

Pennell Uranium Corporation

630 Judge Building

Salt Lake City 1, Utah

New Address
1228 Newhouse Hotel

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

May 14, 1955

3. (a)

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To Whom It May Concern:

This will serve to inform you that we have leased the following described mining claims to United Western Minerals Company Inc:

Mt. Pennell 1,2,3,5,6,8,9,10,19,20.
Ellen 5,6,7
Mt. Ellior 1,2,3

all located in the Freckyte Mining District, Garfield County, Utah.

Dated at Salt Lake City, Utah this 14th day of May 1955.

PENNELL URANIUM CORPORATION

Edward L. Thomas

PRESIDENT

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

4. (b) **Past Production on Claims:**

56,650 lbs., averaging 0.35 U_3O_8 and 1.2 V_2O_5.

Reserves:

Only a small part of the claims has been mined; therefore, there is reason to believe that the reserve should exceed past production many times.

4. (c) **Geologic features and mineralization:**

The uranium-vanadium ore in this area is produced from the salt wash member of the Morrison sandstone. The Morrison varies from a few feet to 400 feet in thickness. Ore bodies are being mined at various depths throughout the stratum. The ores, which are chiefly oxides of uranium and vanadium, are similar to ores found in the Morrison formation throughout the Colorado plateau, and consist largely of a mineral replacement of fossil wood and other carbonaceous material. Much of the ore occurs as a coating on sand grains and as a filling of pore spaces between sand grains. Ore is actively being produced in the area and there are numerous outcrops of ore on the claims. Common sense mining methods indicate the claims should be drilled before attempting to resume mining operations. As the ore horizons on the claims vary from 5 to approximately 100 feet below the surface, the development drilling can be performed by the wagon drill. Therefore, due to the shallow drilling depths and position of the claims in an area of production, the claims definitely merit drilling.

4. (d) The area is approximately 22 miles south of Hanksville, Utah, on the road leading to Hite from Hanksville. A side road heading west passes through the claims and on to other claims currently worked by Pennell Uranium Corporation, Lone Star Uranium Company and Kaiser Uranium Company. The claims are located about 2 miles off the main road. Most of the ore is hauled to the White Canyon buying station some 50 miles to the east on a road maintained by the State Highway Department. All of the roads in the area are dirt but usually in good condition.

Company owned house trailers, buildings and living facilities are available in the area. Supplies, fuel, etc. can be obtained in the town of Greenriver, which is approximately 80 miles to the north on State Highway 24. The town of Hanksville is approximately 22 miles to the north of the claim area and is easily accessible in the event of emergency.

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(a Delaware Corporation)
130 W. Palace, Santa Fe, N. Mex.

4. (a) Several of the claims have produced ore intermittently for 20 years. However, records are not available or do not exist on actual production up to the time Border Uranium Company leased the claims in June, 1954. Border Uranium Company shipped about 30 tons of ore averaging .35% U_3O_8 and 1.2% V_2O_5.

No drilling has been done on the claims in the past as there were numerous ore outcroppings to be worked. An exploratory drilling operation has been undertaken by United Western Minerals Company in compliance with the lease.

United Western Minerals Company completed 2,824 footage of exploration drilling as follows:

"The following is a record of drilling the Pennell claims. This drilling operation started May 21, 1955.

Name of Claim	Hole No.	Reading	Depth
Pennell #5	1	0	73
	2	0	82
	3	0	104
	4	0	104
	5	0	110
	6	0	100
	7	0	54
	8	0	85
	9	.05 (27')*	57
	10	0	52
	11	0	52
	12	0	52
	13	0	52
	14	0	51
	15	0	51
	16	.05 (27')*	51
	17	.05 (27 3/4')*	51
	18	.15 (27')*	51
	19	0	51
	20	0	51
	21	0	51
	22	0	51
	23	0	30
	24	0.35 (6')*	38
	25	0.38 (6')*	38
	26	0.35 (6')*	38
	27	0.27 (6')*	38
	28	0.37 (6')*	30
	29	0	38
	30	0	38
		TOTAL FOOTAGE	1,724

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Pennell #8	1	0	30
	2	0	38
	3	0	38
	4	0	38
	5	0	50
	6	0	40
	7	0	50
	8	0	35
	9	0	60
	10	0	50
	11	0	50
	12	0.05	50*
	13	0.15	50*
	14	0.20	50*
	15	0	38
	16	0	50
	17	0	37
	18	0	50
	19	0	50
	20	0	50
	21	0.20	28*
	22	0.05	34*
	23	0.30	34*
	24	0.15	34*
	25	0	34
	26	0	32
		TOTAL FOOTAGE	1,100

* Depth at which mineralization was found.

"The last few holes which we have drilled in Pennell #5 are in a good area and, unfortunately, either had steel stuck in them, which made drilling difficult, or the formation was such that the drill would not go down to the required depth. It appears there is a fairly substantial ore body running through these claims. The area that had the most surface indication, we were unable to drill due to moving the drill for the completion of assessment work in other areas. These claims will be drilled in the future. The drill holes on Pennell #5 mainly were drilled along the south side of the claim, near the Congress #4. Spacing of these holes was about 20 feet apart.

"Drill holes on the Pennell #8 were spaced the same and drilled in the northwest portion of the claim. The drilling program was halted on the 20th day of June, 1955, in order to complete necessary assessment work on other claims. Each hole has been plugged with a 2 x 2 post and marked by a number kept in the original drill record book."

/s/ Max O. Jernigan
Engineer

CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: CLIMAX URANIUM COMPANY — Grand Junction, Colorado, November 5, 19 54
Liquidation No.: 1535 — Lot No.: — Shippers Lot No.:
Bought of: Clifford Smith — A.E.C. License No. R-1535
Address: 1725 Hobson, Pueblo, Colorado
Type of Ore: Carnotite — Date Received: 10/16/54 thru 10/31/54
Mining Claim: Pennell #3 — Mining District: Henry Mt. (Tenabo) — File No.:

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	Settlement Assays U_3O_8	V_2O_5	$CaCO_3$		Contents Pounds U_3O_8	V_2O_5	$CaCO_3$	
S-4933	14,000	8.6	12,869	0.41	1.37	8.31		52.76	176.31	1,069.41	

	Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8				
0.41% = 52.76 lbs. at	$3.50	$26.72	6.43	$184.64
Development allowance 52.76 lbs. at	.50	4.10	6.43	26.38
Premium in excess of 4# per ton Total lbs. U_3O_8 52.76 Less: 6.43 tons @ 4# 25.72 PREMIUM LBS. 27.04	.75	3.15	6.43	20.23
Total U_3O_8 Payment				$231.32
Haulage allowance $10.00 per wet ton				70.40
V_2O_5				
1.37% = 176.31 lbs. at	.31	8.50	6.43	54.66
				$356.38
Less: Excess Lime Charge				
6.43 tons @ $1.69/ton				10.87
Total Gross Price				$345.51
Deductions: 1. Royalty - Pennell Uranium Corp. 25% of $245.73				62.18
Net Proceeds				$283.33

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company.

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, for sums due to me on account of the ore deliveries described herein.

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent.

CU-175 SM-10-54 WGY

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
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COLORADO PLATEAU URANIUM ORE PROJECT

[redacted]norican Smelting and Refining Company, Ore P[redacted]sing Agent For
United States Atomic Energy Commission

Receiving Station Montrose, Utah — Grand Junction, Colorado September 1, 1954

Liquidation No. 6070 — Lot No. 11705 — Buyers Lot No.

Bought of Clifford Smith — A.E.C. Lic. No. P-1585

Address Box 1005, Durango, Colorado

Type of Ore Carnotite — Contract No. — Rec. 8/26/54

Mining Claim Pennell — Mining District Gray Mtn. — Pile 30

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
11705	18440	1.30	18200	0.24	0.99	0.9	43.68	180.18	163.80

U3O8	Per Lb.	Per Ton	Short Tons	Total Value
.24% = 4.8# at	3.50	16.80	9.1000	$152.88
Development allowance 4.3# at	.50	2.10	"	21.84
Uranium in excess of 4# per ton 4.8# - 4# = 0.8# at	.75	.60	0	5.46
TOTAL U3O8 PAYMENT		19.80	9.1000	$180.18
Haulage allowance (205) 100 miles @ 60¢ per wet ton mile			9.2200	55.32
TOTAL				$235.50

V2O5				
.99% = 19.8# at	.31	6.138	9.1000	55.86
TOTAL GROSS PRICE				291.36
Deductions:				
Sampling Charge @ $1.00 per lot		$1.00		
Royalties: Pennell Uranium Corporation 25% of (214.20) =		53.55		- 54.55
NET PROCEEDS				$236.81

Correct [illegible] — Paid September 3, 1954
Checked [illegible] — Vo. No. 9/20
Approved [illegible] — Check No. 13224

SD

I certify that I am the lawful owner or authorized representative of the Lawful Owner of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Commission.

I certify that I hold the A. E. C. Source Material Licence numbered above

I hereby transfer to the Commission, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, except for final quarterly adjustment for average V_2O_5-U_3O_8 ratio, for sums due to me on account of the ore deliveries described herein.

[illegible]
Seller or Agent

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
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(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

J6939

WEIGHT AND ASSAY CERTIFICATE

Shipper Clifford Smith A. E. C. License No. Lot No. [illegible]

Mining Claim Granable Mining District Disposition [illegible]

DATE	SCALE TICKET NO.	MILL-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
10/21/54	312448		24,130	10,050	14,080	8.6	12,869	C. Smith	C. Smith	[illegible]
			24,130	10,050	14,080	8.6	12,869			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.41			0.41	52.76
V_2O_5%	1.37			1.37	176.31
$CaCO_3$%	8.31			8.31	1,069.41

Prepared by [illegible]

Checked by [illegible]

Approved

CU1017 - 15M - 11/53 ® G. J. K.

Form No. 0-2 61-5-3 W & Y

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Colorado Plateau Uranium Ore Project

AMERICAN SMELTING AND REFINING COMPANY
ORE PURCHASING AGENT FOR
UNITED STATES ATOMIC ENERGY COMMISSION

WEIGHT AND ASSAY CERTIFICATE

No 11705

I
Royalty

Station MONTICELLO

Shipper Clifford Smith A.E.C. License No. P-1585 Shipper's Lot No. _____ File No. _____

Date Weighed	R. R. Car No. Truck Lic. No.	Scale Ticket No.	Miles ago	Wet Weight Pounds	H_2O	Dry Weight Pounds	Mining Claim	District	County	State	File
8-24-54	T	40-8205		18440	130	18200	Ranch	Henry Mts.	Garfield	Utah	
			100								
							Lockhart: Torbyite				
			11								
				18440	130	18200					

Sampling Foreman Earl N. Allred AUG 27 1954
Date

Assays	C.P.U.O.P.	Shipper	Umpire	Settlement
U_3O_8 %	0.24			
V_2O_5 %	0.49			
$CaCO_3$ %	0.9			

R. W. Langridge SEP 1 1954
Chief Chemist Date

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

1970

WEIGHT AND ASSAY CERTIFICATE

Shipper C. W. Hansen A. E. C. License No. Lot No. 5-3886

Mining Claim Ellen #2 Mining District Disposition 71-29

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
7/7/59M	29443		15,470	9,850	15,620	4.3	14,948	Smith	Smith	[illegible]
			15,470	9,850	15,620	4.3	14,948			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.29			0.29	43.35
V_2O_5%	1.27			1.27	189.84
$CaCO_3$%	5.15			5.15	769.82

Prepared by J. M.

Checked by [illegible]

Approved

RG

CU1017-15M-11/59

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

WEIGHT AND ASSAY CERTIFICATE

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UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
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Shipper C. M. Stowe A. E. C. License No. Lot No. 5-3910

Mining Claim Ellen #2 Mining District Disposition M-23

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
7/8/54	29486		25,460	9,860	15,600	4.3	14,929	Smith	Smith	H. O. Brown
			25,460	9,860	15,600	4.3	14,929			

Assays	C. U	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.30			0.30	44.79
V_2O_5%	1.60			1.60	238.86
$CaCO_3$%	4.84			4.84	722.56

Prepared by J. M.

Checked by

Approved

CU1017 - 15M - 11/53

PS

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

WEIGHT AND ASSAY CERTIFICATE

1010

Shipper C. W. Adams A. E. C. License No. Lot No. 5-3924

Mining Claim Ellen #2 Mining District Disposition #-2 3

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
2/11/54	29506		25,880	9,830	16,050	3.5	15,488	Smith	Smith	[illegible]
			25,880	9,830	16,050	3.5	15,488			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.47			0.47	72.79
V_2O_5%	1.95			1.95	302.02
$CaCO_3$%	4.45			4.45	689.22

Prepared by [illegible]

Checked by [illegible]

Approved

RS

CU1017 - 15M - 11/53

CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: Climax Uranium Company — Grand Junction, Colorado, July 16, 1954
Liquidation No.: Amended 1275 and 1931 — Lot No.: — Shippers Lot No.:
Bought of: C. V. Shaw — A.E.C. License No.: P-1757
Address: 245 Bolford, Grand Junction, Colorado
Type of Ore: Carnotite — Date Received: 5/18/54 thru 7/15/54
Mining Claim: Ellen #2 — Mining District: Gypsy Mt. (North Nash) — Pile No.:

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	Settlement Assays U_3O_8	Settlement Assays V_2O_5	Settlement Assays $CaCO_3$	Contents Pounds U_3O_8	Contents Pounds V_2O_5	Contents Pounds $CaCO_3$
S-3444	22,190	4.8	21,125	0.14	0.20	14.21	29.58	42.25	3,001.86
S-3511	25,630	5.3	25,219	0.15	0.08	17.05	37.83	20.18	4,299.84
S-3512	24,[illegible]	6.8	22,368	0.15	0.07	16.10	33.55	15.66	3,601.25
S-3562	13,720	3.1	13,295	0.22	0.10	18.94	29.25	13.30	2,518.07
S-3[illegible]	15,620	4.3	14,948	0.29	1.27	5.15	43.35	189.84	769.82
S-3910	15,600	4.3	14,929	0.30	1.60	4.84	44.79	238.86	722.56
S-3924	16,[illegible]	3.5	15,[illegible]	0.47	1.95	4.45	72.79	302.02	689.22
	133,410	4.8	127,372	0.228575	0.645440	12.25	291.14	822.11	15,602.62

	Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8 0.228575% = 291.14 lbs. at	$3.50	$16.00	63.69	$1,018.99
Development Allowance 291.14 lbs. at	.50	2.29	63.69	145.57
Premium in excess of 4# per ton				
Total lbs. U_3O_8 291.14				
Less: 63.69 Tons @ 4# 254.76				
PREMIUM LBS. 36.38 at	.75	.43	63.69	27.22
Total U_3O_8 Payment				$1,191.85
Haulage allowance $6.00 per wet ton				401.43
V_2O_5 0.645440% = 822.11 lbs. at	.31	4.00	63.69	254.85
				$1,848.13
Less: Freight from Grand Junction 63.69 Tons @ $2.85 Per Ton				183.43
Total Gross Price				$1,664.70
Deductions:				
1. Royalty - Nash Consolidated Uranium Corp. 25% of $1,117.70				279.43
Net Proceeds				$1,385.27

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company.

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, for sums due to me on account of the ore deliveries described herein.

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent

CU-178 5M-2-54 WAY

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UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Form No. 04 9-54 [illegible]

COLORADO PLATEAU URANIUM ORE PROJECT

American Smelting and Refining Company, Ore Purchasing Agent For
United States Atomic Energy Commission

Receiving Station: Monticello, Ut. — Grand Junction, Colorado: July 28, 1954

Liquidation No.: 5813 — Lot No.: 12143 — Shippers Lot No.:

Bought of: Clifford Smith — A.E.C. License No.: [illegible]

Address: Box 1005, Pueblo, Colorado

Type of Ore: Carnotite — Contract No.: — Date Received: 7/23/54

Mining Claim: Daisy June — Mining District: Henry Mts. — Pile No.: 30

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	Settlement Assays U_3O_8	Settlement Assays V_2O_5	Settlement Assays $CaCO_3$	Contents Pounds U_3O_8	Contents Pounds V_2O_5	Contents Pounds $CaCO_3$
12143	29080	4.70	27713	.35	.72	5.2	41.57	199.53	1441.00

U_3O_8	Per Lb.	Per Ton	Short Tons	Total Value
.35% = 3.0# at	2.50	7.500	13.8565	$103.93
Development allowance 3.0# at	.50	1.500	"	20.78
TOTAL U_3O_8 PAYMENT		9.000	13.8565	$124.71
Haulage allowance 100 miles at 6¢ per wet ton mile			14.540	87.24
TOTAL				$211.95

V_2O_5				
.72% = 14.4# at	.31	4.464	13.8565	61.86
TOTAL GROSS PRICE				$273.81
Deductions: Royalties: Pennell Uranium Corporation 25% of 165.79				- 41.45
NET PROCEEDS				$232.36

Correct FPP — Paid July 28, 1954
Checked LRJ — Vo. No. 2/230
Approved HCJ — Check No. 12790

Haulage # 14540
Pd. by check
8/9/54

These claims are adjoining our Henry Mountain claims.

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Commission.

I certify that I hold the A. E. C. Source Material License numbered above.

I hereby transfer to the Commission, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, except for final quarterly adjustment for average V_2O_5—U_3O_8 ratio, for sums due to me on account of the ore deliveries described herein.

Seller or Agent

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: Climax Uranium Company — Grand Junction, Colorado, April 16, 19 54
Liquidation No. 1153 — Lot No. — Shippers Lot No.
Bought of: Clifford Smith — A.E.C. License No. R-1543
Address: 1726 Nakomis, Pueblo, Colorado
Type of Ore: Carnotite — Date Received: 4/1/54 thru 4/15/54
Mining Claim: Slate Creek #1 — Mining District: Henry Mtn — Pile No.

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	Settlement Assays U_3O_8	V_2O_5	$CaCO_3$	Contents Pounds U_3O_8	V_2O_5	$CaCO_3$
S-A-2341	16,100	3.2	15,585	0.43	2.26	6.06	67.02	352.22	944.45

	Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8				
0.43% = 67.02 lbs. at	$3.50	$30.11	7.79	$234.57
Development allowance 67.02 lbs. at	.50	4.30	7.79	33.51
Premium in excess of 4# per ton				
Total lbs U_3O_8 67.02				
Less: 7.79 tons @ 4# 31.16				
PREMIUM LBS. 35.86 at	.75	3.45	7.79	26.90
Total U_3O_8 Payment				$294.98
Haulage allowance 10.00 per wet ton				80.50
V_2O_5				
2.26% = 352.22 lbs. at	.31	14.02	7.79	109.19
Total Gross Price				$484.67
Less: Excess Haul Charge 7.79 tons @ $1.02/ton				7.95
Deductions: 1. Royalty - Pennell Mining Co. - 15% of $362.71				54.41
Net Proceeds				$422.31

These claims are adjoining our Henry Mountain claims.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company.

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, for sums due to me on account of the ore deliveries described herein.

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent

CU-178 5M-2-54 W&Y

2503-1-12-W & Y

UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation

Rifle COLORADO

Purchased Ore LOAD DETAIL

PERIOD 3-30-54 thru 4-15-54

RECEIVED 1955

NAME Clifford C Smith ADDRESS Pueblo, Colorado

CLAIM Slate Creek #1

DATE SHIPPED	TICKET NUMBER	POUNDS ORE	% H_2O	POUNDS DRY ORE	~~V_2O_5~~ GRADE U_3O_8	POUNDS ~~V_2O_5~~ U_3O_8	~~V_2O_5~~ GRADE V_2O_5	POUNDS ~~V_2O_5~~ V_2O_5	$CaCo_3$ GRADE	POUNDS $CaCo_3$
4-6	5443	16780	1.5	16528.30	0.37	61.15	1.71	282.63	7.5	1570.19
4-8	5467	17840	2.0	17483.20	0.37	64.69	1.71	298.86	9.5	1660.96
4-10	5482	17800	2.5	17355.00	0.21	36.45	1.72	298.51	10.6	1839.63
4-14	5584	18680	3.2	18082.24	0.21	37.97	1.72	311.01	10.6	1916.72
4-15	5573	12400	3.0	12338.80	0.32	39.48	2.02	249.24	7.7	950.06
		85320	2.4	81781.14	0.27	239.74	1.76	1440.35	7.7	7937.50

These claims are adjoining our Henry Mountain claims.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

TOTAL

Form No. 0-23. 6M-5-58 W & Y

Colorado Plateau Uranium Ore Project

AMERICAN SMELTING AND REFINING COMPANY
ORE PURCHASING AGENT FOR
UNITED STATES ATOMIC ENERGY COMMISSION

№ 11463

P.O. Box 1005
Pueblo, Colorado

WEIGHT AND ASSAY CERTIFICATE

Station MONTICELLO

Shipper Clifford Smith A.E.C. License No. 1585 Shipper's Lot No. Pile No.

Date Weighed	R. R. Car No. Truck Lic. No.	Scale Ticket No.	Mileage	Wet Weight Pounds	H_2O	Dry Weight Pounds	Mining Claim	District	County	State	Pile No.
[illegible]	T	39257	200	29080	470	27713	Daisy June	Henry Mt.	Emery	Utah	30
			100								
				29080	470	27713					

These claims are adjoining our Henry Mountain claims.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Sampling Foreman Earl N. Allred JUL 17 1954 Date

Assays		C.P.U.O.P.	Shipper	Umpire	Settlement
U_3O_8	%	0.15			
V_2O_5	%	0.72			
$CaCO_3$	%	5.2			

J. N. Latimer JUL 21 1954
Chief Chemist Date

UNITED WESTERN MINERALS COMPANY
(A Delaware Corporation)
136 W. Palace, Santa Fe, New Mex.

5. (d) For history, property holdings, and financing of United Western Minerals Company reference is made to the attached Press Release.

Operations will be supervised by Harlan Newell Rhodes of Santa Fe, New Mexico;

Education: Graduate of New Mexico School of Mines, Socorro, New Mexico, in Petroleum and Mining Engineering.

Employment Experience:

New Mexico Oil Conservation Commission
New Mexico State Land Office - Mining Engineer
Private employment, Callup, New Mexico - Mining Engineer on the Navajo Reservation, Colorado Plateau
Magnolia Petroleum Company
Dallas Power and Light Company - Surveyor
Petty Geophysical Engineering Company

Geological engineering consultation will be made available by George C. Reikes. The following is quoted from Who's Who in America, Volume 28;

"Geologist, Anaconda Copper Mining Co., Butte, Mont. 1925-26; chief geol., Ciesche Sp. Akc. (subsidiary Anaconda). Katowice, Poland, 1926-30, asst. to mgr. mines, 1930-34; asst. to cons. engr. Phila. and Reading Coal and Iron Co., Phila, 1935-36; spl. agent in charge non-ferrous metal mining, study of productivity of mine labor in U. S., U. S. Bur. of Mines, 1936-37; chief mining engr., Nat. Lead Co., St. Louis, Mo., 1937-41; asst. chief copper and zinc branch, Office of Prdn. Management, Washington, D.C., 1941; dir. zinc div. W. P. B., Washington, D.C. 1942-43; resident mgr. Olin Corp., Aluminum Reduction Works, Tacoma, Washington, 1943-44; dir. aluminum-magnesium div. W.P.B., Washington, D.C., 1944-45; vice pres. Mines, Inc. (subsidiary of Ventures Ltd. Toronto, Can.), 1945-48; mining geologist Kennecott Copper Corp., 1948-49; chief mining br. Industry Div. ECA mission to Greece, 1949-51; chief mining development div., Defense Materials Procurement Agy., Region III (Europe, Middle East, Africa) since 1952, Mem. Am. Inst. Mining and Metall. Engrs., Mining and Metall. Sec. Am., Soc. Econ. Geologists, Canadian Inst. Mining and Metall. Instn. Mining and Metallurgy."

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

PRESS RELEASE

April 27, 1955

5. (d)

United Western Minerals Company, a Delaware corporation with main offices in Santa Fe, New Mexico, announced today through its President, Alva A. Simpson, Jr. that it had completed the acquisition through merger of all of the mining and oil and gas properties of United States Uranium Corporation, and Pueblo-Southern Corporation of Santa Fe, New Mexico and Border Uranium Corporation, Pueblo, Colorado. The transaction is wholly privately financed. No public offering of stock has been made. The merger took place in the First National Bank, Santa Fe, New Mexico.

In addition to these corporations, other properties were acquired by United Western Minerals Company from Dr. Jose Maldonado, Andrew F. Mitchell, Patrick J. Hurley, Alva A. Simpson, Jr. and John Candelario, all of Santa Fe, New Mexico; Max O. Jernigan, G. R. McNary, E. L. Bailey, C. B. Laurence, Darrell C. Williams, Dr. G. F. Ohlenroth, Edward J. Mankin, Dudley Cornell, Dr. Sam Yonemato, B. V. Wood, Roy Eidal and Dewey Rivera, all of Albuquerque, New Mexico; Arthur Lyon, George D. Fehr, Earl E. Fehr, Paul F. Catterson, John A. Howell, Earl H. Perkins, Richard P. Smoot, Joe Lyon, Jr., Joe M. Lyon, Jr., Hal W. Chandler, Bernard H. Wolff, David L. Clive, Jack de Ojeda, S. Robert Gilbertson and Ralph E. Jorgenson, all of Salt Lake City, Utah; Scott R. Brown and George W. Brown of Farmington, New Mexico and Charles W. Hendel, III of Blanding, Utah and J. Ted Bonner of Moab, Utah.

United Western also obtained an option to acquire all of the properties, including mine, mill and machinery, of Western Manganese Corporation of Greenville, California.

The properties in New Mexico alone comprise approximately 500,000 acres of mineral leases, claims and permits of State federal and private lands with the major part of the holdings being in the Grant's Laguna area of McKinley and Valencia Counties. These lands have been selected on the basis of careful geological and engineering studies and are believed to represent the choicest holdings of various individuals and companies acquired over the past three years. Manganese properties in Soccoro County and Beryllium-Mica claims in Santa Fe County are among the properties.

In Utah the Company holds approximately 36,000 acres of uranium-vanadium leases, permits and claims on federal and state lands, including a producing mine in the Henry mountains. The Com-

pany expects the former McNary claims which it has acquired in the Circle Cliffs area in Utah which will be drilled in the near future to be in production by the middle of June.

The company also has approximately 26,000 acres of unproven oil and gas leases in Utah and approximately 22,000 acres of unproven oil and gas leases in New Mexico. In addition the Company has interests of valuable manganese, mercury and calcite holdings in the Republic of Mexico.

United Western Minerals Company has also sold to J. H. Whitney & Co. and White, Weld & Co., both of New York City, 300,000 shares of its common stock at the price of $1.00 per share, as well as an option to acquire an additional 250,000 shares at the same price. Whitney and White, Weld have also taken farmout agreements from Western on approximately 62,500 acres of leases, claims and permits for the purpose of conducting exploratory operations for the discovery of uranium. Under the terms of the Uranium Farmout Agreement, Whitney and White, Weld propose to spend approximately $250,000 in the conduct of operations under that agreement. Whitney and White, Weld have also taken a farmout on certain of the oil and gas leases of United Western on which it is proposed that geological studies will shortly be commenced.

Alva A. Simpson, Jr. will be the President, General Manger and a Director of the Company. Patrick J. Hurley, of Santa Fe, New Mexico, will be Chairman of the Board of Directors. Other Directors will be Norman S. Dike of Thompson, Conn., Wilson Hurley of Albuquerque, New Mexico and Benno Schmidt and John K. Schemmer of New York City.

This is one of the most important developments in the rapidly growing uranium business in this area; the consummation by United Western of this transaction constitutes one of the largest single private uranium consolidations in history.

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Ample water for drinking and camp use is available near the camp site.

4. (e) Mining operations have been carried on in this area for many years. Experienced labor is easily obtainable from sources near at hand. There is no apparent labor shortage at this time.

Ample water is available on the site.

Most supplies are available at Hanksville, 22 miles, or Greenriver, 80 miles. Heavy equipment and mining tools are purchased in Grand Junction, Colorado. S & M Supply Company of Grand Junction have new opened a supply house in Greenriver, Utah.

5. (b) Attached is a survey conducted by Earl Kershaw, Professional Engineer and Land Surveyor, License #107, State of Utah, Salt Lake City, Utah.

On Pennell #5 drilling, as per the drilling report enclosed in 4 (a) disclosed commercial ore in place. Previously ore had been shipped from Claim #5 and sold to the AEC.

Pennell #8 showed commercial ore as a result of drilling and previously ore had been shipped and sold to the AEC from this claim. It is planned as a result of additional wagon drilling to block out the indicated ore bodies on these claims prior to mining. After the ore body is blocked out, the proposed exploration program will be carried on on the other Pennell claims by drilling, while Pennell Nos. 5 and 8 will be mined.

Ore-bearing strata in this area are in pockets and veins, and all of the claims, after exploration drilling, will be drilled for blocking out ore bodies found as a result of the exploration drilling prior to mining. It is estimated that 50,000 feet of exploration drilling will develop a sizeable ore body. As soon as the drilling indicates commercial deposits or ore-bearing beds, the ore will be mined and shipped to Greenriver, Utah, AEC ore-buying station.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
336 W. Palace, Santa Fe, N. Mex.

6. (a) Independent Contracts.

Drilling can be contracted at $1.25 per foot for non-core and $2.50 per foot for core drilling in depths up to 200 feet. It is estimated that 50,000 feet of exploration drilling will be required on subject claims. This footage can be accomplished by drilling 400 holes to a depth of approximately 125 feet. Each hole will be cored in a maximum interval of 25 feet at a cost of $62.50 per hole. It will be necessary to drill approximately 100 feet of hole on a non-core basis at $1.25 per foot. Total drilling cost will be approximately $187.50 per hole.

Contract on drilling the Pennell group (400 holes averaging 125 feet each)		
40,000 feet @ $1.25	$50,000.00	
10,000 feet @ $2.50	25,000.00	75,000.00
Caterpillar and bulldozer work constructing additional roads to drill sites:		
200 hours at $15.00 per hour with equipment and operator		3,000.00
		$78,000.00

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
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6. (b) Labor, supervision, consultants.

LABOR

Blasting crew (3 men) for road and drill sites. Combination powder man and jackhammer operator.		
3 men @ $20.00 per day - 20 days	$1,200.00	

SUPERVISION

1 field supervisor @ $25.00 per day 90 days	2,250.00	
Geologic and engineering supervision 1 man @ $35.00 per day - 90 days	3,150.00	

CONSULTATION

Geological and engineering consultants	1,000.00	
		$7,600.00

6. (c) Operating Materials and supplies.

Powder, fuse and caps	400.00	
Camp equipment and supplies,		
House trailer rental @ $65.00 per month	195.00	
Miscellaneous camp equipment @ $25.00 per month	75.00	
Fuel and oil @ $6.00 per day - 90 days	540.00	
		$1,210.00

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
135 W. Palace, Santa Fe, N. Mex.

6. (d) Operating equipment.

Homelite drill complete	$1,800.00
215 CFM IR compressor (used)	1,500.00
2 Cleveland jackhammers	125.00
Hose and fittings	50.00
Steel and bits	100.00
1955 Ford 3/4-T Pickup	2,200.00
1940 Ford 3/4-T Pickup	300.00
Babble Geiger counter 600 B	350.00
Reelmaster reel	125.00
500 ft. cable	125.00
Probe	75.00
	$6,750.00

The above equipment is owned by the operator and the following figures are based on use allowance:

3 months @ $250.00 per month $ 750.00

6. (e) Rehabilitation and repairs.

None. - - -

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
133 W. Palace, Santa Fe, N. Mex.

6. (f) New buildings, improvements, installations.

The construction of the following buildings will be necessary to carry out the exploration and development program:

Temporary portable building constructed of pine lumber, cook shack and dining hall, 16' x 30'	$ 750.00	
Tool equipment shed, 16' x 30'	750.00	
Pine construction sleeping quarters, 16' x 30'	750.00	
Flooring for tent houses; lumber and other necessary items for trailer houses	500.00	$2,750.00

6. (g) Miscellaneous.

Cost of repairs to and maintenance of operating equipment	$2,000.00	
(This estimate is based upon repairs only to the company vehicles, drills and equipment and the cost of gasoline, oil, grease and repairs for 3 months. The drilling and bulldozer cost of repairs and maintenance are not estimated as it is anticipated that these will be contracted.)		
Accounting, analytical work, workmen's compensation, employer's liability insurance and payroll taxes (This estimate does not include workmen's compensation, employer's liability insurance and payroll taxes for the contractors or their employees)	5,000.00	$7,000.00

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

6. (h) Contingencies.

It is estimated that an additional $9,731.00 may be necessary for the construction of drill roads and drill sites due to the broken terrain in this area. Also included in this amount are certain funds that may be necessary, along with other companies operating in the area, to improve the road between North Wash and Hanksville, Utah. Due to the lack of maintenance, operators in this area have had to do a certain amount of road work in order to ship their ore. Also estimated in this fund is a certain amount for water development due to the fact that a good deal of the drilling has to be done with water and the lack of water facilities in this area, with increased mining and drilling, may make it necessary for the drilling of a well and the construction of a tank to hold water.

$9,731.00 - Bruch, Inc

RECAP 6. Estimate of costs

6. (a)	$ 78,000.00
(b)	7,800.00
(c)	1,210.00
(d)	750.00
(e)	- - -
(f)	2,750.00
(g)	7,000.00
(h)	9,731.00
	$107,041.00

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

7. (b).

United Western Minerals Company is prepared to furnish its share of the cost in the proposed project in accordance with government regulations on government participation, Section 7, DMEA #1.

(1) Money

United Western Minerals Company has funds in cash bank deposits available for this purpose.

(2) Equipment

United Western Minerals Company has certain mining equipment and vehicles available for use in the exploration and development program outlined for the Henry Mountains area.

(3) Other

United Western Minerals Company has qualified personnel, engineers, geologists, experienced miners, drillers and field men that will be furnished for the Henry Mountains project.

The foregoing statements, geological reports, maps and plans are attached to and make a part of the United Western Minerals Company's application for aid in an exploration and development project pursuant to DMEA Order 1, under the Defense Production Act of 1950 as amended.

Certificate

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SEP 26 1955

COUNTY OF GARFIELD }
STATE OF UTAH } SS

I, Mildred Deuel duly elected, qualified and acting county Recorder in and for Garfield County, State of Utah, do hereby certify that the foregoing is a true copy of Notice of Location recorded (or filed) 9 day of July 19 55 and now of record in my office.

Book 85 Page 399

IN Witness Whereof, I have hereunto set my hand and affixed the seal of the Recorder, at the city of Panguitch, Utah, this 26 day of August 19 55

Mildred Deuel
Garfield County Recorder

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

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SEP 28 1955

224 New Customhouse
Denver 2, Colorado

September 26, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Field Team, Region III

Subject: DMEA-3961 (Uranium), United Western Minerals Company, Garfield County, Utah

Enclosed are four copies of a review of the subject application by the Grand Junction office. They recommend that the application for DMEA assistance be denied without a field examination.

We concur in this recommendation.

W. M. Traver
W. M. Traver

E. N. Harshman
E. N. Harshman

Enclosures

DMEA
Date Rec'd.
SEP 23 1955
BUREAU OF MINES
Denver, Colorado

September 22, 1955

Memorandum

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

From: J. W. Hasler, USGS
M. H. Salsbury, USBM

Subject: DMEA docket 3961. Application for government assistance
United Western Minerals Company, Garfield County, Utah

The United Western Minerals Company, 136 West Palace, Santa Fe, New Mexico, has applied for DMEA assistance to explore for uranium on the Ellen and Pennell claims in the north wash area of the Henry Mountains mining district, Garfield County, Utah.

The rocks underlying the subject claims are largely the Salt Wash member of the Morrison formation of Jurassic age. The minerals are of the Carnotite type which is common in the Morrison deposits on the Colorado Plateau. Limited mining operations have been carried on in this area for many years; however, the operations have been largely by pick and wheelbarrow methods, consequently, the ore shipped has been of a rather high grade.

In 1952, the AEC undertook a small drilling project on the Daisy June and Congress claims adjacent to the Ellen and Pennell (RMO 826). Of the 178 holes drilled 47 were mineralized and 17 showed material of ore grade. The uranium ore bodies in the Henry Mountain area were scattered and are very small and trends are difficult to ascertain. The size of the ore bodies expected are in the 100 ton ore class. No trends or guides can be readily found to delineate ground that may be productive. Spacing of drill holes would necessarily be too close, making an expensive exploration program and the size of the ore bodies are not large enough to be economically significant. It is therefore recommended that the application for DMEA assistance be denied without a field examination. Enclosed is the applicants application.

J. William Hasler
J. William Hasler
Geologist

M. H. Salsbury
M. H. Salsbury
Mining Engineer

JWH/vll

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

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224 New Customhouse
Denver 2, Colorado

August 31, 1955

DMEA 3961

Memorandum

To: J. V. Hasler

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), United Western Minerals Company, Garfield County, Utah.

Enclosed is a copy of the subject application in the amount of $107,041.00.

Please study this application and discuss it with the AEC and Bureau of Mines representatives in Grand Junction and forward this office eight copies of your recommendations regarding a field examination of the property.

W. M. TRAVER,

W. M. Traver

Enclosures

JDC:jy

cc: Sec. Opr. Comm. (2)
Harshman
Docket
Chron.

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

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SEP - 2 1955

224 New Customhouse
Denver 2, Colorado

August 31, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Uranium), United Western Minerals Company, Garfield County, Utah.

Enclosed are two copies of the subject application in the amount of $107,041.00.

One copy of the application has been forwarded to the Grand Junction office for their study and recommendations.

W. M. Traver

W. M. Traver

Enclosures

JDC:jy

cc: Harshman
Hasler
Docket
Chron.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DMEA
Date Rec'd.
AUG 31 1955
BUREAU OF MINES
Denver, Colorado

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

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

RECEIVED SEP - 2 1955

Not to be filled in by applicant

Docket No. 3961
Metal or Mineral Uranium
Date Received 9-2-55
Estimated Cost 107,041.00
Participation (Government %) 75

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: UNITED WESTERN MINERALS COMPANY
136 West Palace Avenue
Santa Fe, New Mexico

(*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. See attached 1. (b)

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. attached 1. (c)

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not applicable

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.
See attached marked 2. General.

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
attached 3. (a)

(*b*) State any mine name by which the property is known. **None.**

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

(*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. Lease, as amended, and amendatory letter attached 3. (d)

(*e*) If you own the land, describe any liens or encumbrances on it not applicable

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. included - attached 3. (a)

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. attached 4. (a)

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. attached 4. (b)

(*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. attached 4. (c)

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. attached 4. (d)

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. attached 4. (e)

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

(*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. attached 5. (b)

(*c*) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. attached 5. (d)

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.). attached 6. (a)

(*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. attached 6. (b)

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. attached 6. (c)

(*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. attached 6. (d)

(*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. attached 6. (e)

(*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. attached 6(f)

(*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. attached 6. (g)

(*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. attached 6 (h)

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

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

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

Explain in detail on acompanying paper. All required personnel

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 August 23, 1955

UNITED WESTERN MINERALS COMPANY
(Applicant)

By Alva R. Simpson

President

ATTEST:

Herbert A. Holt

Secretary

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

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

RECEIVED

1. (b) A Delaware Corporation, qualified to do business in New Mexico, Utah, Colorado and California.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N.Mex.

OFFICERS & DIRECTORS

1 (c)

President & Director	Alva A. Simpson, Jr. 136 West Palace Avenue Santa Fe, New Mexico
Secretary	Herbert A. Holt 136 West Palace Avenue Santa Fe, New Mexico
Treasurer	Herbert A. Holt 136 West Palace Avenue Santa Fe, New Mexico
Director (Chairman)	Patrick J. Hurley 301 Hillside Avenue Santa Fe, New Mexico
Director	Norman S. Dike c/o University Club 1 West 54th Street New York, New York
Director	Wilson Hurley Korber Building Albuquerque, New Mexico
Director	John K. Schemmer 630 Fifth Avenue New York 20, New York
Director	Benno C. Schmidt 630 Fifth Avenue New York 20, New York
Director	Anneliese A. Simpson 136 West Palace Avenue Santa Fe, New Mexico

2. General

In accordance with DMEA Order 1, Government Aid in Defense Exploration Projects, this application and all accompanying papers in quadruplicate with name and address on each sheet of application and on all accompanying papers is being filed with the Defense Minerals Exploration Administration, 224 New Customhouse, Denver 2, Colorado.

UNITED WESTERN MINERALS COMPANY
(A Delaware Corporation)
136 W. Palace, Santa Fe, New Mex.

3. (a) Applicant wishes to explore the following claims:

Ellen Nos. 5, 6 and 7.

Pennell Nos. 1, 2, 3, 5, 6, 8, 9, 10, and 20.

The other claims covered by the lease with Pennell Uranium Corporation are excluded.

The legal descriptions of the claims herein included, and book and page numbers for each recorded location, appear on the Notices of Location attached hereto.

NOTICE OF LOCATION

Book 80 Page 182

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

3. (a)

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Ellen No. 5 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, on the west rim of South Fork Wash adjoining Ellen #6 on the North

RECEIVED
SEP - 2 1955

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S.E. corner monument No. 1;

thence West 1500 feet to S. W. corner monument No. 2:

thence North 300 feet to West end of center monument;

thence North 300 feet to N. W. corner monument No. 3;

thence East 1500 feet to N. E. corner monument No. 4;

thence South 300 feet to place of beginning, including all Dips. Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Ellen # 5

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51671
Recorded June 14th 1954 at 10:00 A.M.
at request of H. O. Wilding
Mildred Deuel County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page 183 UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Ellen # 6 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section 12 R-11 E, T-32 S, approximately 3600 ft. E. and 1000 ft. So. of NW corner of section Twelve.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S. E. corner monument No. 1;

thence West 1500 feet to S. W. corner monument No. 2:

thence North 300 feet to West end of center monument;

thence North 300 feet to N W corner monument No. 3;

thence East 1500 feet to N E corner monument No. 4;

thence South 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Ellen # 6

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51672

Recorded June 14 19 54 at 10:00A.M.

at request of Harry O. Wilding

Mildred Deusl County Recorder

NOTICE OF LOCATION

Book 30 Page 184

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Ellen #7 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section 12 R-11 E, T-32 So., approximately 2400 ft. E and 1600 ft. So. of NW corner of Sec. 12

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet East of this location (Place of Discovery) Monument, at the East end of center monument, and running

thence South 300 feet to S E corner monument No. 1;
thence West 1500 feet to S W corner monument No. 2;
thence North 300 feet to West end of center monument;
thence North 300 feet to N W corner monument No. 3;
thence East 1500 feet to N E corner monument No. 4;
thence South 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Ellen # 7

Located this 14th day of June, 19 54.

Names of Locators

George Ross

51673

Recorded June 14th 19 54 at 10:00 AM

at request H. O. Wilding

Mildred Deuel County Recorder

NOTICE OF LOCATION

Book 30 Page 185

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
126 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Farnell # 1 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S., approximately 2000 ft. E/ and 600 ft. No of SW corner of Section One

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2:

thence East 300 feet to North end of center monument;

thence East 300 feet to corner monument No. 3;

thence 1500 feet to corner monument No. 4;

thence 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

RECEIVED
SEP - 2 1955

The name of the mining claim above described is, and shall be known as the Farnell # 1

Located this 14th day of June, 1954.

Names of Locators

George Ross

51674
Recorded June 14 1954 at 10:00 AM
at request of E. O. Wilding
Mildred Deuel County Recorder

Copy

NOTICE OF LOCATION

Book 30 Page # 136

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this Fonnell # 2 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S approximately 2600 ft. E and 350 ft. N of SW corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;
thence North 1500 feet to N W corner monument No. 2;
thence East 300 feet to North end of center monument;
thence East 300 feet to N E corner monument No. 3;
thence South 1500 feet to S E corner monument No. 4;
thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

RECEIVED
SEP - 2 1955

The name of the mining claim above described is, and shall be known as the Fonnell # 2

Located this 14th day of June, 19 54.

Names of Locators

51675
Recorded June 14 19 54 at 10:00AM
at request of Harry O. Wilding
Mildred Doual County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page #167

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Fonnell # 3 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E. T-32 S. approximately 1700 ft. E and 2400 Ft. So. of NW corner of Sec. One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;
thence North 1500 feet to N W corner monument No. 2;
thence East 300 feet to North end of center monument;
thence East 300 feet to N E corner monument No. 3;
thence South 1500 feet to S E corner monument No. 4;
thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Fonnell # 3

Located this 14th day of June, 19 54.

Names of Locators

George Rees

51676
Recorded June 14th 19 54 at 10:00 AM
at request of Harry O. Wilding
Mildred Dowel County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 180

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district ha..S... located fifteen hundred feet in length by six hundred feet in width on this, Pennell # 5 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 S., approximately 2700 ft. E. and 1300 ft. S of NW corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet West of this location (Place of Discovery) Monument, at the West end of center monument, and running

thence North 300 feet to N W corner monument No. 1;

thence East 1500 feet to N E corner monument No. 2:

thence South 300 feet to East end of center monument;

thence South 300 feet to S E corner monument No. 3;

thence West 1500 feet to S W corner monument No. 4;

thence North 300 feet to place of beginning, including all Dips. Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pennell # 5

Located this 14th day of June, 19 54.

Names of Locators

51678
Recorded June 14th 19 54 at 10:00 AM
at request of Harry O. Wilding
Mildred Duel County Recorder

COPY

NOTICE OF LOCATION

Book 18 Page # 317

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Fonnell # 6 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, North Wash

in the Unorganized Mining District, Garfield, Utah County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 50 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;
thence North 1500 feet to N W corner monument No. 2;
thence East 300 feet to North end of center monument;
thence East 300 feet to N E corner monument No. 3;
thence South 1500 feet to S E corner monument No. 4;
thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Fonnell # 6

Located this 23rd day of February, 19 54.

Names of Locators

George Ross

45021

Recorded Feb. 24, 1954 at 11:50 AM
at request of George Ross

Mildred Dowl
County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 192

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Ronnell # 8 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R.-11 E., T.-32 So. Approximately 4100 ft. E. and 3300 ft. So. of N W corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;
thence North 1500 feet to N W corner monument No. 2;
thence East feet to North end of center monument;
thence East 300 feet to N E corner monument No. 3;
thence South 1500 feet to S E corner monument No. 4;
thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

The name of the mining claim above described is, and shall be known as the Ronnell # 8

Located this 14th day of June, 19 54

Names of Locators

George Ross

51631

Recorded June 14 19 54 at 10:00 AM

at request of H. O. Wilding

Mildred Duval County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 193

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district have located fifteen hundred feet in length by six hundred feet in width on this, Fonzell # 9 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, Section One R-11 E, T-32 So. approximately 3200 ft. E. and 1400 ft. So. of NW corner of Section One.

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet South of this location (Place of Discovery) Monument, at the South end of center monument, and running

thence West 300 feet to S W corner monument No. 1;

thence North 1500 feet to N W corner monument No. 2;

thence East 300 feet to North end of center monument;

thence East 300 feet to N E corner monument No. 3;

thence South 1500 feet to S E corner monument No. 4;

thence West 300 feet to place of beginning, including all Dips, Spurs, Angles and variations, together with all offshoots and extensions.

The name of the mining claim above described is, and shall be known as the Fonzell # 9

Located this 14th day of June, 1954.

Names of Locators

George Ross

51682

Recorded June 14th 1954 at 10:00 A. M.

at request of H. O. Wilding

Mildred Dawol County Recorder

COPY

NOTICE OF LOCATION

Book 30 Page # 194

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Notice is Hereby Given That the undersigned, having complied with the requirements of Section 2324 of the Revised Statutes of the United States, the Laws of the State of Utah, and the Local Laws, Customs and Regulations of this district has located fifteen hundred feet in length by six hundred feet in width on this, Pownell # 10 Lode, Vein, or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated, in Section One R-11 E, T-32 So. approximately 3500 ft. E. and 300 ft. So. of NW corner of Section one

in the Henry Mountain Mining District, Garfield County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 100 feet West of this location (Place of Discovery) Monument, at the West end of center monument, and running

thence North 300 feet to NW corner monument No. 1;

thence East 1500 feet to N E corner monument No. 2;

thence South 300 feet to East end of center monument;

thence South 300 feet to S E corner monument No. 3;

thence West 1500 feet to S W corner monument No. 4;

thence North 300 feet to place of beginning, including all Dips. Spurs, Angles and variations, together with all offshoots and extensions

The name of the mining claim above described is, and shall be known as the Pownell # 10

Located this 14th day of June, 19 54

Names of Locators

Owen Rees

51695
Recorded June 14th 19 54 at 10:03 Am
at request of H. O. Wilding
Mildred Duval County Recorder

COPY

NOTICE OF LOCATION

BOOK 85 PAGE 399

NOTICE IS HEREBY GIVEN, That the undersigned, having complied with the requirements of SECTION 2324 of the REVISED STATUTES of the United States, and the Local Laws, Customs and Regulations of this District, ha located Fifteen hundred feet in length by 600 feet in width, on this the valuable CLIMAX minerals Lode, Vein or Deposit, bearing Gold, Silver, Copper, Lead and other valuable minerals, situated IN NORTH FORK OF DRY CANYON, ETC. in Section 12 (unsurveyed), Township 32 South, Range 11 East

in the unorganized SUPERVISOR'S Mining District, Garfield FORMERLY County, State of Utah, the location being described and marked on the ground as follows, to-wit:

Beginning 600 feet East of this location (Discovery) Monument, at the EAST end center monument, and running

thence South WEST 156 [redacted] feet to S E corner monument No. 1;

thence West SOUTH 1500 feet to S W corner monument No. 2;

thence North 156 EAST [redacted] feet to West end center monument;

thence North 156 [redacted] feet to N. W corner monument No. 3;

thence East SOUTH 1500 feet to N E corner monument No. 4;

thence South 156 WEST [redacted] feet to place of beginning; including all Dips, Spurs, Angles and Variations This claim is north of Ellen #7 and south of Ellen #6

81587 RECORDED July 9th 19 55 AT 10:30 AM

AT REQUEST OF Pennell Uranium Corp.

Mildred Hessel COUNTY RECORDER

The above described Mining Claim shall be known as the Mr Pennell #20

Located this 22 day of May 19 55

Note.

*The small type on blank lines is merely a guide for the locator and is no part of this notice.

†DIAGRAM OF CLAIM—The location (discovery point) and corner monuments should be designated on the accompanying diagram to make the Record of claim more perfect.

A mining claim must not exceed 1500 feet in length along the vein or lode, by 600 feet in width, 300 feet on each side of center of vein at surface.

No location of a mining claim can be made until the discovery of the vein or lode within the limits of the ground claimed.

The claim must be distinctly marked on the ground, so its boundaries can be readily traced.

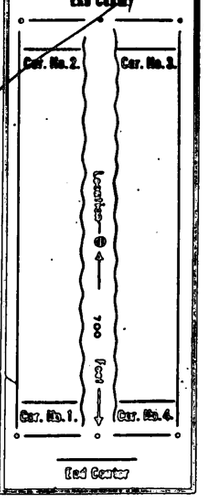
A severe penalty is provided by law for removing or defacing the stakes or monuments of a mining claim.

Claims located on Sunday or holidays are legal.

All valuable mineral deposits in lands of the Government are locatable by citizens of the United States only, and those who have declared their intentions to become such.

This location notice must be filed for Record with the County Recorder of the county in which the claim is located.

† DIAGRAM OF CLAIM.



NAMES OF LOCATORS:

Pennell Uranium Corp.

By: P. G. Hughes

RECEIVED AUG 26 1955

BLANK No. 23

TO WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. M.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

3. (ad)

MINING LEASE

THIS INDENTURE, made this 18th day of March, 1955 between PENNELL URANIUM CORPORATION, a Utah Corporation, hereinafter referred to as Lessor, and UNITED WESTERN MINERALS COMPANY, A Corporation, organized and existing under the laws of the State of Delaware, and having principal offices in the City of Santa Fe, State of New Mexico, hereinafter referred to as Lessee.

WITNESSETH:

That Lessor for and in consideration of the sum of $10.00 and the royalties hereinafter reserved, and the mutual covenants and agreements hereinafter contained, has granted, demised and let, and by these presents does grant, demise and let, unto the said Lessee all of the following described mining claims located in the Henry Mountain Trachyte Mining District, Garfield County, Utah, to-wit:

ELLEN No. 5	PENNELL No. 6
ELLEN No. 6	PENNELL No. 8
ELLEN No. 7	PENNELL No. 9
	PENNELL No. 10
PENNELL No. 1	
PENNELL No. 2	
PENNELL No. 3	MT. HILLIER
PENNELL No. 5	No. 1

together with the spurs, dips and angles of any vein or veins within said mining claims, and any dumps, loose ore, buildings, or other structures appurtenant thereto.

TO HAVE AND TO HOLD unto the said Lessee for the term of five (5) years from the date hereof, unless sooner forfeited or terminated, as provided herein, together with an option existing in favor of the said Lessee to renew said lease for an additional period of five (5) years thereafter, upon giving written notice to Lessor, not less than thirty (30) days before the expiration of the original term, and provided further that said Lessee shall have performed all of the covenants contained herein, for the purpose of exploring for and mining ore, metals and minerals therefrom upon the following terms and conditions:

1. The Lessee is given immediate possession of said property and agrees to protect the same from damage or loss by any outside parties. Lessee agrees to commence drilling by July 1, 1955, and to drill a minimum of five thousand feet (5000') of drill hole for exploration for minerals upon

the above described claims, by or before the 15th day of February 1956. Lessee shall give notice to Lessor at least twenty (20) days prior to the commencing of any actual drilling and Lessor shall have the right to have its own geologist, mining engineer or representative present at such drilling. Whether represented or not, at the actual drilling, Lessor shall be supplied with copies of all drilling logs and a complete report of core or probing reports and of all assays or technical data relative to such exploration. Provided, however, that any drilling performed upon claims owned by 100 ASSOCIATES OF AMERICA, and covered by a separate agreement entered into between Lessor and Lessee extemporaneous herewith and under the same date as this lease shall be credited upon the minimum requirements of five thousand feet (5000') of drilling contained in this paragraph above.

2. The Lessee agrees to commence actual mining operations within sixty (60) days of discovery of any commercial body of ore of a size justifying mining operations and mine the same in a miner-like fashion and in the greatest quantity consistent with good mining practices and with due regard to the preservation of the property as a workable mine. Lessor agrees to keep accurate accounts and to render monthly statements to the Lessor and to pay as rental for the said property a royalty for all minerals recovered, as follows, to-wit:

A Royalty of twelve and one-half percentum (12½%) of the gross mill receipts on all ore and/or minerals extracted and sold from the property which has a value at the mill of Seventy-five Dollars ($75.00) or less per ton, and fifteen percentum (15%) of the gross mill receipts upon all ore or minerals having a greater value than Seventy-five Dollars ($75.00) per ton at the mill, or ore buying station. Lessee shall also pay to Lessor, twenty-five percentum (25%) of the United States or Atomic Energy Commission bonus on all ores mined from said claims, provided however, that any hauling allowance or mine development allowance shall not be included in the determination of gross mill receipts.

3. Lessee agrees to inform the mill or ore buyers of the foregoing royalty requirement and authorize them to pay said royalty direct to Lessor together with a duplicate settlement sheet or invoice.

4. Lessee agrees that once mining operations have commenced upon said property, to work said premises with a minimum of one hundred twenty (120) miner shifts per month, during the continuance of this lease unless prevented by Act of God, labor strikes, scarcity of labor, disaster, or extraordinary conditions beyond the control of Lessee, or the equivalent in drilling or other work.

5. In the event a dispute shall arrise between the parties as to whether or not exploration, development, mining or production is being performed as provided in this Agreement or any other differences of opinion hereunder, each party shall appoint a geologist or mining engineer who shall in turn mutually agree upon and appoint a third geologist or mining engineer to whom said dispute shall be referred for arbitration. Each party hereto agrees to be bound by the majority decision of that arbitration committee and the costs of said arbitration will be borne by the parties equally.

6. If default be made in the payment of the royalty above specified or any part thereof, or if mining operations are abandoned, or halted, or a failure of Lessee to keep or perform any of the covenants of this lease for a period of sixty (60) days after written notice of such failure has been served by Lessor upon Lessee at Santa Fe, New Mexico, then the Lessor may at its option terminate this lease, re-enter said premises and remove all persons therefrom. The Lessee shall have the right to remove all machinery and tools placed on the property by him during the sixty (60) day period immediately following such termination of this lease, provided, however, in so far as matters in dispute are submitted to arbitration, the sixty (60) day period shall commence to run only upon the day of the arbitration committee's decision and notice to the party in default.

7. Lessor agrees to do all necessary assessment work and to keep all of said claims in good standing, and to file proof of assessment or annual labor at least thirty (30) days before due and shall deliver copies of such proof to Lessor at least thirty (30) days before the date

for filing the same. Lessor agrees to comply with all the Utah compensation laws and to procure sufficient liability insurance to protect Lessor from any damage, claim or loss arising from, or by virtue of the operation of said claims by Lessee, including, but without limitation, claims by employees, agents, visitors and/or invitees of Lessee, and furthermore to keep all said claims free from any liens or encumbrances.

8. That Lessee will deliver to Lessor the above mentioned claims with appurtenances and improvements in good order and condition without demand or further notice on the last day of the term, or any extension term hereof, or at any time previous thereto, upon termination of this Agreement.

9. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of both parties hereto, as well as to their heirs, executors, administrators, and personal representatives, except that Lessee shall not assign, encumber, or sell or enter into sub-leases hereunder without the written approval of the Lessor.

10. The Lessor may have additional claims in the area and lease to Lessee up to seven such claims under the same terms and conditions as set forth in this lease, upon notice from Lessor that said party intends to include said claims hereunder.

11. Lessor shall at all reasonable times have access to all records concerning the properties leased herein including, but without limitation, geological reports, engineering reports, drill hole reports and logs, disbursement and receipt accounts, and surveys. Lessee shall notify the Lessor of all ore strikes upon the claims.

IN WITNESS WHEREOF, the parties have caused these presents to be signed and sealed this 18th day of March, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Souvall
President

ATTEST:

/s/ Richard A. Parker
Secretary

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

Lessee

ATTEST:

By /s/ Alva A. Simpson, Jr.
President

/s/ Anneliese A. Simpson
Secretary

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

RIDER

WHEREAS, the parties hereto have heretofore on this 18th day of March, 1955, entered into a mining lease, copies of which are attached hereto and incorporated herein by reference; and

WHEREAS, it is their desire that this Rider be incorporated into and form a part of said mining lease and be supported by the considerations set forth therein;

NOW, THEREFORE, it is mutually agreed as follows:

1. Pennell Uranium Corporation, Lessor, shall defend against all adverse claims affecting the properties described in said lease, and each party shall notify the other in the event an adverse claim is asserted with regard to the described properties. That, in the event adverse claims are asserted by third parties, United Western Minerals Company, Lessee, may join with Pennell in defending the titles and rights of possession in and to the claims described in said Lease at their option, and that this Lease shall terminate as to that portion of the described property which may have defective title without damage to either of the parties herein.

IN WITNESS WHEREOF the parties have caused these presents to be signed and sealed this 18th day of March, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Sewell
President

ATTEST:

/s/ Richard A. Parker
Secretary

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

Lessee

By /s/ Alva A. Simpson, Jr.
President

ATTEST:

/s/ Annaliese A. Simpson
Secretary

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

AMENDMENT

It is understood and agreed that the foregoing Mining lease has been agreed upon and approved by the parties thereto with the following amendments:

1. The time to commence drilling provided for in clause 1 is extended until July 1, 1955.
2. The lessee may at its option at any time be relieved of all obligations under said Mining Lease, except to drill a minimum of 5000 feet, as provided for in clause 1 of said Mining Lease, and to pay accrued royalties, by surrendering said Mining Lease to the Lessor,

IN WITNESS WHEREOF, the parties have caused these presents to be signed and sealed this 28th day of April, 1955.

PENNELL URANIUM CORPORATION
1229 Newhouse Hotel
Salt Lake City, Utah

Lessor

By /s/ Sam W. Pennell
President

ATTEST:

/s/ Edward L. Sumner
Treasurer

UNITED WESTERN MINERALS COMPANY
Santa Fe, New Mexico

By /s/ Alva A. Simpson, Jr.
President

ATTEST:

/s/ Anneliese A. Simpson
Secretary

Pennell Uranium Corporation

630 Judge Building
Salt Lake City 1, Utah

New Address
1229 Northern Hotel

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

3. (a)

May 14, 1955

To Whom It May Concern:

This will serve to inform you that we have leased the following described mining claims to United Western Minerals Company Inc:

Mt. Pennell 1,2,3,5,6,8,9,10,19,20.
Eilen 5,6,7
Mt. Hillier 1,2,3
all located in the Truckyto Mining District, Garfield County, Utah.

Dated at Salt Lake City, Utah this 14th day of May 1955.

PENNELL URANIUM CORPORATION

Edward L. Pennell
Treasurer

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SEP - 2 1955

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

4. (a) Several of the claims have produced ore intermittently for 20 years. However, records are not available or do not exist on actual production up to the time Border Uranium Company leased the claims in June, 1954. Border Uranium Company shipped about 30 tons of ore averaging .35% U_3O_8 and 1.2% V_2O_5.

No drilling has been done on the claims in the past as there were numerous ore outcroppings to be worked. An exploratory drilling operation has been undertaken by United Western Minerals Company in compliance with the lease.

United Western Minerals Company completed 2,824 footage of exploration drilling as follows:

"The following is a record of drilling the Pennell claims. This drilling operation started May 21, 1955.

Name of Claim	Hole No.	Reading	Depth
Pennell #5	1	0	73
	2	0	82
	3	0	104
	4	0	104
	5	0	110
	6	0	100
	7	0	54
	8	0	85
	9	.05 (27')*	57
	10	0	52
	11	0	52
	12	0	52
	13	0	52
	14	0	51
	15	0	51
	16	.05 (27')*	51
	17	.05 (27 3/4')*	51
	18	.15 (27')*	51
	19	0	51
	20	0	51
	21	0	51
	22	0	51
	23	0	30
	24	0.35 (6')*	38
	25	0.38 (6')*	38
	26	0.35 (6')*	38
	27	0.27 (6')*	38
	28	0.37 (6')*	30
	29	0	38
	30	0	38
		TOTAL FOOTAGE	1,724

UNITED WESTERN MINERALS COMPANY
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Pennell #8	1	0	30
	2	0	38
	3	0	38
	4	0	38
	5	0	50
	6	0	40
	7	0	50
	8	0	35
	9	0	60
	10	0	50
	11	0	50
	12	0.05	50*
	13	0.15	50*
	14	0.20	50*
	15	0	38
	16	0	50
	17	0	37
	18	0	50
	19	0	50
	20	0	50
	21	0.20	28*
	22	0.05	34*
	23	0.30	34*
	24	0.15	34*
	25	0	34
	26	0	32
		TOTAL FOOTAGE	1,100

* Depth at which mineralization was found.

"The last few holes which we have drilled in Pennell #5 are in a good area and, unfortunately, either had steel stuck in them, which made drilling difficult, or the formation was such that the drill would not go down to the required depth. It appears there is a fairly substantial ore body running through these claims. The area that had the most surface indication, we were unable to drill due to moving the drill for the completion of assessment work in other areas. These claims will be drilled in the future. The drill holes on Pennell #5 mainly were drilled along the south side of the claim, near the Congress #4. Spacing of these holes was about 20 feet apart.

"Drill holes on the Pennell #8 were spaced the same and drilled in the northwest portion of the claim. The drilling program was halted on the 20th day of June, 1955, in order to complete necessary assessment work on other claims. Each hole has been plugged with a 2 x 2 post and marked by a number kept in the original drill record book."

/s/ Max O. Jernigan
Engineer

CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: CLIMAX URANIUM COMPANY — Grand Junction, Colorado, November 5, 19 54
Liquidation No.: 1526 — Lot No.: — Shippers Lot No.:
Bought of: Clifford Smith — A.E.C. License No. P-1585
Address: 1726 Wabash, Pueblo, Colorado
Type of Ore: Carnotite — Date Received: 10/16/54 thru 10/31/54
Mining Claim: Pennell 1/5 — Mining District: Henry Mt. (Trachyte) — Pile No.:

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
5-4933	14,080	8.6	12,869	0.41	1.37	8.31	52.76	176.31	1,069.41

	Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8				
0.41% = 52.76 lbs. at	$3.50	$28.72	6.43	$184.66
Development allowance 52.76 lbs. at	.50	4.10	6.43	26.38
Premium in excess of 4# per ton				
Total lbs. U_3O_8 52.76				
Less: 6.43 tons @ 4# 25.72				
PREMIUM LBS. 27.04	.75	3.15	6.43	20.28
Total U_3O_8 Payment				$231.32
Haulage allowance $10.00 per wet ton				70.40
V_2O_5				
1.37% = 176.31 lbs. at	.31	8.50	6.43	54.66
				$356.38
Less: Excess Lime Charge				
6.43 tons @ $1.69/ton				10.87
Total Gross Price				$345.51
Deductions:				
1. Royalty - Pennell Uranium Corp. 25% of $248.73				62.18
Net Proceeds				$283.33

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company.

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, for sums due to me on account of the ore deliveries described herein.

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent.

CU-178 5M-10-54 W&Y

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

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COLORADO PLATEAU URANIUM ORE PROJECT

American Smelting and Refining Company Ore Purchasing Agent For
United States Atomic Energy Commission

Receiving Station [illegible] Grand Junction, Colorado September 3, 1954
Liquidation No. [illegible] Lot No. 11705 Shippers Lot No.
Bought of [illegible] A.E.C. License No. [illegible]
Address [illegible], Colorado
Type of Ore Carnotite Contract No. Date Received 8/26/54
Mining Claim Pennell Mining District Henry Mtns. Pile No. 20

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
11705	18440	1.30	18200	0.24	0.99	0.9	43.68	180.18	163.80

U308	Per Lb.	Per Ton	Short Tons	Total Value
.24% = 4.8# at	3.50	16.80	9.1000	$152.88
Development allowance 4.8# at	.50	2.40	"	21.84
Premium in excess of 4# per ton 4.8# - 4# = 0.8# at	.75	.60	"	5.46
TOTAL U308 PAYMENT		19.80	9.1000	$180.18
Haulage allowance (205) 100 miles @ 6¢ per wet ton mile			9.2200	55.32
TOTAL				$235.50

V205

.99% = 19.8# at	.31	6.138	9.1000	55.86
TOTAL GROSS PRICE				$291.36
Deductions:				
Sampling Charge @ $1.00 per lot		$1.00		
Royalties: Pennell Uranium Corporation 25% of (214.20) =		53.55		- 54.55
NET PROCEEDS				$236.81

Correct CFK Paid September 3, 1954
Checked DPR Ve. No. 9/20
Approved KJ Check No. 13224

cp

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Commission.

I certify that I hold the A. E. C. Source Material License numbered above.

I hereby transfer to the Commission, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, except for final quarterly adjustment for average V_2O_5—U_3O_8 ratio, for sums due to me on account of the ore deliveries described herein.

Clifford Smith
Seller or Agent

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

J6939

WEIGHT AND ASSAY CERTIFICATE

Shipper Clifford Smith A. E. C. License No. Lot No. 5-1988

Mining Claim Jennie Mining District Disposition 17-25

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
10/21/54	91248		24,130	10,050	14,080	7.6	12,869	C. Smith	C. Smith	[illegible]
			24,130	10,050	14,080	8.6	12,869			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.41			0.41	52.76
V_2O_5%	1.37			1.37	176.31
$CaCO_3$%	8.31			8.31	1,069.41

Prepared by [illegible]

Checked by [illegible]

Approved

CU1017 - 15M - 11/53 [illegible] K

Form No. 0-33 6M-5-53 W & Y

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Colorado Plateau Uranium Ore Project

AMERICAN SMELTING AND REFINING COMPANY
ORE PURCHASING AGENT FOR
UNITED STATES ATOMIC ENERGY COMMISSION

WEIGHT AND ASSAY CERTIFICATE

No. 11705

I
Royalty

Station MONTICELLO

Shipper Clifford Smith A.E.C. License No. P-1585 Shipper's Lot No. Pile No.

Date Weighed	R. R. Car No. Truck Lic. No.	Scale Ticket No.	Mileage	Wet Weight Pounds	H_2O	Dry Weight Pounds	Mining Claim	District	County	State	Pile No.
[illegible]	T	40258205		18440	130	18200	Pennell	Henry Mt.	Garfield	Utah	30
			100								
							Locality: Trachyte				
				18440	130	18200					

Sampling Foreman Earl N. Allred AUG 27 1954 Date

Assays		C.P.U.O.P.	Shipper	Umpire	Settlement
U_3O_8	%	.227			
V_2O_5	%	.274			
$CaCO_3$	%	.04			

Chief Chemist SEP 1 1954 Date

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

3970

WEIGHT AND ASSAY CERTIFICATE

Shipper C. M. Hanna A. E. C. Licence No. Lot No. 5-3886

Mining Claim Ellen # 2 Mining District Disposition A-23

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
7/7/54	29443		25,470	9,850	15,620	4.3	14,948	Smith	Smith	[illegible]
			25,470	9,850	15,620	4.3	14,948			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.29			0.29	43.35
V_2O_5%	1.27			1.27	189.84
$CaCO_3$%	5.15			5.15	769.82

Prepared by J. M.

Checked by [illegible]

Approved

RS

CU1017 - 15M - 11/53

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

WEIGHT AND ASSAY CERTIFICATE

996

Shipper C. W. Adams A. E. C. License No. Lot No. 5-3910

Mining Claim Ellen #2 Mining District Disposition M-23

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
7/9/54	29486		25,460	9,860	15,600	4.3	14,929	Smith	Smith	[illegible]
			25,460	9,860	15,600	4.3	14,929			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.30			0.30	44.79
V_2O_5%	1.60			1.60	238.86
$CaCO_3$%	[illegible]			4.84	722.56

Prepared by J. M.

Checked by [illegible]

Approved

CU1017 - 15M - 11/53

CLIMAX URANIUM COMPANY

Grand Junction, Colorado

WEIGHT AND ASSAY CERTIFICATE

12010

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

Shipper C. W. Shaw A. E. C. License No. Lot No. 5-3224

Mining Claim Ellen #2 Mining District Disposition A-23

DATE	SCALE TICKET NO.	MILE-AGE	GROSS WEIGHT	TARE WEIGHT	NET WET WEIGHT	H_2O	DRY WEIGHT	TRUCK LINE	DRIVER	WEIGHED BY
7/11/54	29506		25,880	9,830	16,050	3.5	15,488	Smith	Smith	Parks
			25,880	9,830	16,050	3.5	15,488			

Assays	C. U.	Shipper	Umpire	Settlement	Content Pounds
U_3O_8%	0.47			0.47	72.79
V_2O_5%	1.95			1.95	302.02
$CaCO_3$%	4.45			4.45	689.22

Prepared by J. M.

Checked by

Approved

CU1017 - 15M - 11/53 ®

RS

CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: Climax Uranium Company — Grand Junction, Colorado, July 16, 1954
Liquidation No.: Amended 1275 and 1331 — Lot No.: — Shippers Lot No.:
Bought of: C. W. Shum — A.E.C License No.: P-1757
Address: 245 Ralford, Grand Junction, Colorado
Type of Ore: Carnotite — Date Received: 5/18/54 thru 7/15/54
Mining Claim: Ellen #2 — Mining District: Henry Mt. (North Hash) — Pile No.:

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
5-3444A	22,190	4.8	21,125	0.14	0.20	14.21	29.58	42.25	3,001.86
5-3501	26,630	5.3	25,219	0.15	0.08	17.05	37.83	20.18	4,299.84
5-3512	24,000	6.8	22,368	0.15	0.07	16.10	33.55	15.66	3,601.25
5-3562	13,720	3.1	13,295	0.22	0.10	18.94	29.25	13.30	2,518.07
5-3885	15,620	4.3	14,948	0.29	1.27	5.15	43.35	189.84	769.82
5-3910	15,600	4.3	14,929	0.30	1.60	4.84	44.79	238.86	722.56
5-3924	16,050	3.5	15,488	0.47	1.95	4.45	72.79	302.02	689.22
	133,610	4.8	127,372	0.228575	0.645440	12.25	291.14	822.11	15,602.62

		Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8					
0.228575% = 291.14 lbs. at		$3.50	$16.00	63.69	$1,018.99
Development Allowance 291.14 lbs. at		.50	2.29	63.69	145.57
Premium in excess of 4# per ton					
Total lbs. U_3O_8	291.14				
Less: 63.69 Tons @ 4#	254.76				
PREMIUM LBS.	36.38 at	.75	.43	63.69	27.29
Total U_3O_8 Payment					$1,191.85
Haulage allowance $6.00 per wet ton					401.43
V_2O_5					
0.645440% = 822.11 lbs. at		.31	4.00	63.69	254.85
					$1,848.13
Less: Excess Lime Charge 63.69 Tons @ $2.88 Per Ton					183.43
Total Gross Price					$1,664.70
Deductions:					
1. Royalty - Moab Consolidated Uranium Corp. 25% of $1,117.70					279.43
Net Proceeds					$1,385.27

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement for sums due to me on account of the ore deliveries described herein

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent

2U-178 5M-2-54 W&Y

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
136 W. Palace, Santa Fe, N. Mex.

COLORADO PLATEAU URANIUM ORE PROJECT

American Smelting and Refining Company, Ore Purchasing Agent For
United States Atomic Energy Commission

Receiving Station: Monticello, Ut. — Grand Junction, Colorado: July 20, 1954

Liquidation No.: 5813 — Lot No.: 11463 — Shippers Lot No.:

Bought of: Clifford Smith — A.E.C. License No.: R-3585

Address: Box 1005, Pueblo, Colorado

Type of Ore: Carnotite — Contract No.: — Date Received: 7/13/54

Mining Claim: Daisy June — Mining District: Henry Mtn. — Pile No.: 30

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$		CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$	
11463	29000	4.79	27723	.15	.72	5.2		41.57	199.53	1441.00	

	Per Lb.	Per Ton	Short Tons	Total Value
1108				
.15% - 3.0# at	2.50	7.500	13.8565	$103.93
Development allowance 3.0# at	.50	1.500	"	20.78
TOTAL U308 PAYMENT		9.000	13.8565	$124.71
Haulage allowance 100 miles at 6¢ per wet ton mile			14.580	87.24
TOTAL				$211.95
V205				
.72% - 14.4# at	.32	4.48	13.8565	61.96
TOTAL GROSS PRICE				$273.81
Deductions: Royalties:				
Pennell Uranium Corporation				
25% of 165.79				- 41.45
NET PROCEEDS				$232.36

Correct WFP — Paid July 28, 1954
Checked LRJ — Vo. No. 3/23
Approved HCJ — Check No. 12790

Haulage #14540
[illegible] check
8/19/54

These claims are adjoining our Henry Mountain claims.

I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to the Commission.

I certify that I hold the A. E. C. Source Material License numbered above.

I hereby transfer to the Commission, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, except for final quarterly adjustment for average V_2O_5—U_3O_8 ratio, for sums due to me on account of the ore deliveries described herein.

Seller or Agent

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

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CLIMAX URANIUM COMPANY
GRAND JUNCTION, COLO.

Receiving Station: Climax Uranium Company — Grand Junction, Colorado, April 16, 19 54
Liquidation No. 1153 — Lot No. — Shippers Lot No.
Bought of: Clifford Smith — A.E.C. License No. R-1455
Address: 1726 Hubach, Pueblo, Colorado
Type of Ore: Carnotite — Date Received: 4/1/54 thru 4/15/54
Mining Claim: Slate Creek #1 — Mining District: Henry Mts. — Pile No.

Lot No.	Wet Weight Pounds	H_2O	Dry Weight Pounds	SETTLEMENT ASSAYS U_3O_8	V_2O_5	$CaCO_3$	CONTENTS POUNDS U_3O_8	V_2O_5	$CaCO_3$
Pile-2341	16,100	3.2	15,595	0.43	2.26	6.05	67.02	352.22	944.45

	Per Lb.	Per Ton	Short Tons	Total Value
U_3O_8				
0.43% = 67.02 lbs. at	$3.50	$30.11	7.79	$234.57
Development allowance 67.02 lbs. at	.50	4.30	7.79	33.51
Premium in excess of 4# per ton				
Total lbs U_3O_8 67.02				
Less: 7.79 tons @ 4# 31.16				
PREMIUM LBS. 35.86 at	.75	3.45	7.79	26.90
Total U_3O_8 Payment				$294.98
Haulage allowance 10.00 per wet ton				80.50
V_2O_5				
2.26% = 352.22 lbs. at	.31	14.02	7.79	109.19
Total Gross Price				$484.67
Less: Excess Mine Claims 7.79 tons @ $1.02/ton				7.95
Deductions: 1. Royalty - Pennell Mining Co. - 15% of $362.72				54.41
Net Proceeds				$422.31

These claims are adjoining our Henry Mountain claims.

UNITED WESTERN MINERALS COMPANY
(a Delaware Corporation)
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I certify that I am the lawful owner or authorized Representative of the Lawful Owner, of the Ore described in this Settlement Sheet and have legal right to deliver the same to Climax Uranium Company.

I hereby transfer to Climax Uranium Company, effective as of the date of delivery of the ore, all my right, title and interest in and to said ore.

I will accept the amount as shown above as "Total Gross Price" in full settlement, for sums due to me on account of the ore deliveries described herein.

Buyers assays govern if Seller fails to submit his assays prior to acceptance of payment.
All rates paid are based on U. S. Atomic Energy Commission Published Schedules.

Seller or Agent

CU-178 5M-3-54 W&Y

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UNITED STATES VANADIUM COMPANY
A Division of Union Carbide and Carbon Corporation

Rifle COLORADO

Purchased Ore LOAD DETAIL

PERIOD 3-30-54 thru 4-15-54

NAME Clifford C. Smith ADDRESS Pueblo, Colorado

CLAIM Slate Creek #1

DATE SHIPPED	TICKET NUMBER	POUNDS ORE	% H_2O	POUNDS DRY ORE	GRADE U_3O_8	POUNDS U_3O_8	GRADE V_2O_5	POUNDS V_2O_5	$CaCo_3$ GRADE	POUNDS $CaCo_3$
4-6	5443	16780	1.5	16528.30	0.37	61.15	1.71	282.63	9.5	1570.19
4-8	5467	17840	2.0	17483.20	0.37	64.69	1.71	298.86	9.5	1660.90
4-10	5482	17800	2.5	17355.00	0.21	36.45	1.72	298.51	10.6	1839.63
4-14	5554	18680	3.2	18082.24	0.21	37.97	1.72	311.01	10.6	1916.72
4-15	5573	10720	3.0	10398.40	0.32	39.48	2.02	249.24	9.7	950.06
		83820	2.4	81787.14	0.27	239.74	1.76	1440.35	9.7	7937.50

These claims are adjoining our Henry Mountain claims.

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TOTAL

Form No. 0-88 6M-5-53 W & Y

Colorado Plateau Uranium Ore Project

AMERICAN SMELTING AND REFINING COMPANY
ORE PURCHASING AGENT FOR
UNITED STATES ATOMIC ENERGY COMMISSION

RECEIVED JUL 1955

№ 11463

WEIGHT AND ASSAY CERTIFICATE

Station MONTICELLO

P.O. Box 1005
Pueblo, Colorado

Shipper Clifford Smith

A.E.C. License No. 1585

Shipper's Lot No. _____ Pile No. _____

Date Weighed	R. R. Car No. Truck Lic. No.	Scale Ticket No.	Mileage	Wet Weight Pounds	H_2O	Dry Weight Pounds	Mining Claim	District	County	State	Pile No.
July	I	38857	200	29080	470	27713	Daisy Jane	Henry Mt.	Emery	Utah	30
			100								
				29080	470	27713					

These claims are adjoining our Henry Mountain claims.

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Sampling Foreman Earl N. Allred JUL 17 1954 Date

Assays		C.P.U.O.P.	Shipper	Umpire	Settlement
U_3O_8	%	0.15			
V_2O_5	%	0.22			
$CaCO_3$	%	5.2			

J. N. Latimer JUL 21 1954
Chief Chemist Date

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4. (b) **Past Production on Claims:**

56,650 lbs., averaging 0.35 U_3O_8 and 1.2 V_2O_5.

Reserves:

Only a small part of the claims has been mined; therefore, there is reason to believe that the reserve should exceed past production many times.

4. (c) **Geologic features and mineralization:**

The uranium-vanadium ore in this area is produced from the salt wash member of the Morrison sandstone. The Morrison varies from a few feet to 400 feet in thickness. Ore bodies are being mined at various depths throughout the stratum. The ores, which are chiefly oxides of uranium and vanadium, are similar to ores found in the Morrison formation throughout the Colorado plateau, and consist largely of a mineral replacement of fossil wood and other carbonaceous material. Much of the ore occurs as a coating on sand grains and as a filling of pore spaces between sand grains. Ore is actively being produced in the area and there are numerous outcrops of ore on the claims. Common sense mining methods indicate the claims should be drilled before attempting to resume mining operations. As the ore horizons on the claims vary from 5 to approximately 100 feet below the surface, the development drilling can be performed by the wagon drill. Therefore, due to the shallow drilling depths and position of the claims in an area of production, the claims definitely merit drilling.

4. (d) The area is approximately 22 miles south of Hanksville, Utah, on the road leading to Hite from Hanksville. A side road heading west passes through the claims and on to other claims currently worked by Pennell Uranium Corporation, Lone Star Uranium Company and Kaiser Uranium Company. The claims are located about 2 miles off the main road. Most of the ore is hauled to the White Canyon buying station some 50 miles to the east on a road maintained by the State Highway Department. All of the roads in the area are dirt but usually in good condition.

Company owned house trailers, buildings and living facilities are available in the area. Supplies, fuel, etc. can be obtained in the town of Greenriver, which is approximately 80 miles to the north on State Highway 24. The town of Hanksville is approximately 22 miles to the north of the claim area and is easily accessible in the event of emergency.

Ample water for drinking and camp use is available near the camp site.

4. (e) Mining operations have been carried on in this area for many years. Experienced labor is easily obtainable from sources near at hand. There is no apparent labor shortage at this time.

Ample water is available on the site.

Most supplies are available at Hanksville, 22 miles, or Greenriver, 80 miles. Heavy equipment and mining tools are purchased in Grand Junction, Colorado. S & M Supply Company of Grand Junction have now opened a supply house in Greenriver, Utah.

5. (b) Attached is a survey conducted by Karl Kershaw, Professional Engineer and Land Surveyor, License #107, State of Utah, Salt Lake City, Utah.

On Pennell #5 drilling, as per the drilling report enclosed in 4 (a) disclosed commercial ore in place. Previously ore had been shipped from Claim #5 and sold to the AEC.

Pennell #8 showed commercial ore as a result of drilling and previously ore had been shipped and sold to the AEC from this claim. It is planned as a result of additional wagon drilling to block out the indicated ore bodies on these claims prior to mining. After the ore body is blocked out, the proposed exploration program will be carried on on the other Pennell claims by drilling, while Pennell Nos. 5 and 8 will be mined.

Ore-bearing strata in this area are in pockets and veins, and all of the claims, after exploration drilling, will be drilled for blocking out ore bodies found as a result of the exploration drilling prior to mining. It is estimated that 50,000 feet of exploration drilling will develop a sizeable ore body. As soon as the drilling indicates commercial deposits or ore-bearing beds, the ore will be mined and shipped to Greenriver, Utah, AEC ore-buying station.

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PRESS RELEASE

April 27, 1955

5. (d) United Western Minerals Company, a Delaware corporation with main offices in Santa Fe, New Mexico, announced today through its President, Alva A. Simpson, Jr. that it had completed the acquisition through merger of all of the mining and oil and gas properties of United States Uranium Corporation, and Pueblo-Southern Corporation of Santa Fe, New Mexico and Border Uranium Corporation, Pueblo, Colorado. The transaction is wholly privately financed. No public offering of stock has been made. The merger took place in the First National Bank, Santa Fe, New Mexico.

In addition to these corporations, other properties were acquired by United Western Minerals Company from Dr. Jose Maldonado, Andrew F. Mitchell, Patrick J. Hurley, Alva A. Simpson, Jr. and John Candelario, all of Santa Fe, New Mexico; Max O. Jernigan, G. R. McNary, E. L. Bailey, C. B. Laurence, Darrell C. Williams, Dr. G. F. Ohlenroth, Edward J. Mankin, Dudley Cornell, Dr. Sam Yonemato, B. V. Wood, Roy Eidal and Dewey Rivera, all of Albuquerque, New Mexico; Arthur Lyon, George D. Fehr, Earl E. Fehr, Paul F. Catterson, John A. Howell, Earl H. Perkins, Richard P. Smoot, Joe Lyon, Jr., Joe M. Lyon, Jr., Hal W. Chandler, Bernard H. Wolff, David L. Clive, Jack de Ojeda, S. Robert Gilbertson and Ralph E. Jorgenson, all of Salt Lake City, Utah; Scott R. Brown and George W. Brown of Farmington, New Mexico and Charles W. Hendel, III of Blanding, Utah and J. Ted Bonner of Moab, Utah.

United Western also obtained an option to acquire all of the properties, including mine, mill and machinery, of Western Manganese Corporation of Greenville, California.

The properties in New Mexico alone comprise approximately 500,000 acres of mineral leases, claims and permits of State federal and private lands with the major part of the holdings being in the Grant's Laguna area of McKinley and Valencia Counties. These lands have been selected on the basis of careful geological and engineering studies and are believed to represent the choicest holdings of various individuals and companies acquired over the past three years. Manganese properties in Soccoro County and Beryllium-Mica claims in Santa Fe County are among the properties.

In Utah the Company holds approximately 36,000 acres of uranium-vanadium leases, permits and claims on federal and state lands, including a producing mine in the Henry mountains. The Com-

pany expects the former McNary claims which it has acquired in the Circle Cliffs area in Utah which will be drilled in the near future to be in production by the middle of June.

The company also has approximately 26,000 acres of unproven oil and gas leases in Utah and approximately 22,000 acres of unproven oil and gas leases in New Mexico. In addition the Company has interests of valuable manganese, mercury and calcite holdings in the Republic of Mexico.

United Western Minerals Company has also sold to J. H. Whitney & Co. and White, Weld & Co., both of New York City, 300,000 shares of its common stock at the price of $1.00 per share, as well as an option to acquire an additional 250,000 shares at the same price. Whitney and White, Weld have also taken farmout agreements from Western on approximately 62,500 acres of leases, claims and permits for the purpose of conducting exploratory operations for the discovery of uranium. Under the terms of the Uranium Farmout Agreement, Whitney and White, Weld propose to spend approximately $250,000 in the conduct of operations under that agreement. Whitney and White, Weld have also taken a farmout on certain of the oil and gas leases of United Western on which it is proposed that geological studies will shortly be commenced.

Alva A. Simpson, Jr. will be the President, General Manger and a Director of the Company. Patrick J. Hurley, of Santa Fe, New Mexico, will be Chairman of the Board of Directors. Other Directors will be Norman S. Dike of Thompson, Conn., Wilson Hurley of Albuquerque, New Mexico and Benno Schmidt and John K. Schemmer of New York City.

This is one of the most important developments in the rapidly growing uranium business in this area; the consummation by United Western of this transaction constitutes one of the largest single private uranium consolidations in history.

6. (a) Independent Contracts.

Drilling can be contracted at $1.25 per foot for non-core and $2.50 per foot for core drilling in depths up to 200 feet. It is estimated that 50,000 feet of exploration drilling will be required on subject claims. This footage can be accomplished by drilling 400 holes to a depth of approximately 125 feet. Each hole will be cored in a maximum interval of 25 feet at a cost of $62.50 per hole. It will be necessary to drill approximately 100 feet of hole on a non-core basis at $1.25 per foot. Total drilling cost will be approximately $187.50 per hole.

Contract on drilling the Pennell group (400 holes averaging 125 feet each)		
40,000 feet @ $1.25	$50,000.00	
10,000 feet @ $2.50	25,000.00	75,000.00
Caterpillar and bulldozer work constructing additional roads to drill sites:		
200 hours at $15.00 per hour with equipment and operator		3,000.00
		$78,000.00

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6. (b) Labor, supervision, consultants.

LABOR

Blasting crew (3 men) for road and drill sites. Combination powder man and jackhammer operator.		
3 men @ $20.00 per day - 20 days	$1,200.00	

SUPERVISION

1 field supervisor @ $25.00 per day 90 days	2,250.00	
Geologic and engineering supervision 1 man @ $35.00 per day - 90 days	3,150.00	

CONSULTATION

Geological and engineering consultants	1,000.00	
		$7,600.00

6. (c) Operating Materials and supplies.

Powder, fuse and caps	400.00	
Camp equipment and supplies,		
House trailer rental @ $65.00 per month	195.00	
Miscellaneous camp equipment @ $25.00 per month	75.00	
Fuel and oil @ $6.00 per day - 90 days	540.00	
		$1,210.00

6. (d) Operating equipment.

Homelite drill complete	$1,800.00
215 CFM 1R compressor (used)	1,500.00
2 Cleveland jackhammers	125.00
Hose and fittings	50.00
Steel and bits	100.00
1955 Ford 3/4-T Pickup	2,200.00
1940 Ford 3/4-T Pickup	300.00
Babble Geiger counter 600 B	350.00
Reelmaster reel	125.00
500 ft. cable	125.00
Probe	75.00
	$6,750.00

The above equipment is owned by the operator and the following figures are based on use allowance:

3 months @ $250.00 per month $ 750.00

6. (e) Rehabilitation and repairs.

None. - - -

6. (f) New buildings, improvements, installations.

The construction of the following buildings will be necessary to carry out the exploration and development program:

Temporary portable building constructed of pine lumber, cook shack and dining hall, 16' x 30'	$ 750.00	
Tool equipment shed, 16' x 30'	750.00	
Pine construction sleeping quarters, 16' x 30'	750.00	
Flooring for tent houses; lumber and other necessary items for trailer houses	500.00	$2,750.00

6. (g) Miscellaneous.

Cost of repairs to and maintenance of operating equipment	$2,000.00	
(This estimate is based upon repairs only to the company vehicles, drills and equipment and the cost of gasoline, oil, grease and repairs for 3 months. The drilling and bulldozer cost of repairs and maintenance are not estimated as it is anticipated that these will be contracted.)		
Accounting, analytical work, workmen's compensation, employer's liability insurance and payroll taxes (This estimate does not include workmen's compensation, employer's liability insurance and payroll taxes for the contractors or their employees)	5,000.00	$7,000.00

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6. (h) Contingencies.

It is estimated that an additional $9,731.00 may be necessary for the construction of drill roads and drill sites due to the broken terrain in this area. Also included in this amount are certain funds that may be necessary, along with other companies operating in the area, to improve the road between North Wash and Hanksville, Utah. Due to the lack of maintenance, operators in this area have had to do a certain amount of road work in order to ship their ore. Also estimated in this fund is a certain amount for water development due to the fact that a good deal of the drilling has to be done with water and the lack of water facilities in this area, with increased mining and drilling, may make it necessary for the drilling of a well and the construction of a tank to hold water.

$9,731.00

RECAP 6. Estimate of costs

6. (a)	$ 78,000.00
(b)	7,600.00
(c)	1,210.00
(d)	750.00
(e)	- - -
(f)	2,750.00
(g)	7,000.00
(h)	9,731.00
	$107,041.00

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5. (d) For history, property holdings, and financing of United Western Minerals Company reference is made to the attached Press Release.

Operations will be supervised by Harlan Newell Rhodes of Santa Fe, New Mexico:

Education: Graduate of New Mexico School of Mines, Socorro, New Mexico, in Petroleum and Mining Engineering.

Employment Experience:

New Mexico Oil Conservation Commission
New Mexico State Land Office - Mining Engineer
Private employment, Gallup, New Mexico - Mining Engineer on the Navajo Reservation, Colorado Plateau
Magnolia Petroleum Company
Dallas Power and Light Company - Surveyor
Petty Geophysical Engineering Company

Geological engineering consultation will be made available by George C. Heikes. The following is quoted from Who's Who in America, Volume 28:

"Geologist, Anaconda Copper Mining Co., Butte, Mont. 1925-26; chief geol., Ciesche Sp. Akc. (subsidiary Anaconda). Katowice, Poland, 1926-30, asst. to mgr. mines, 1930-34; asst. to cons. engr. Phila. and Reading Coal and Iron Co., Phila, 1935-36; spl. agent in charge non-ferrous metal mining, study of productivity of mine labor in U. S., U. S. Bur. of Mines, 1936-37; chief mining engr., Nat. Lead Co., St. Louis, Mo., 1937-41; asst. chief copper and zinc branch, Office of Prdn. Management, Washington, D.C., 1941; dir. zinc div. W. P. B., Washington, D.C. 1942-43; resident mgr. Olin Corp., Aluminum Reduction Works, Tacoma, Washington, 1943-44; dir. aluminum-magnesium div. W.P.B., Washington, D.C., 1944-45; vice pres. Mines, Inc. (subsidiary of Ventures Ltd. Toronto, Can.), 1945-48; mining geologist Kennecott Copper Corp., 1948-49; chief mining br. Industry Div. ECA mission to Greece, 1949-51; chief mining development div., Defense Materials Procurement Agy., Region III (Europe, Middle East, Africa) since 1952, Mem. Am. Inst. Mining and Metall. Engrs., Mining and Metall. Sec. Am., Soc. Econ. Geologists, Canadian Inst. Mining and Metall. Instn. Mining and Metallurgy."

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7. (b).

United Western Minerals Company is prepared to furnish its share of the cost in the proposed project in accordance with government regulations on government participation, Section 7, DMRA #1.

(1) **Money**

United Western Minerals Company has funds in cash bank deposits available for this purpose.

(2) **Equipment**

United Western Minerals Company has certain mining equipment and vehicles available for use in the exploration and development program outlined for the Henry Mountains area.

(3) **Other**

United Western Minerals Company has qualified personnel, engineers, geologists, experienced miners, drillers and field men that will be furnished for the Henry Mountains project.

The foregoing statements, geological reports, maps and plans are attached to and make a part of the United Western Minerals Company's application for aid in an exploration and development project pursuant to DMRA Order 1, under the Defense Production Act of 1950 as amended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DEFENSE MINERALS EXPLORATION ADMINISTRATION
P O Box #431, Joplin, Missouri

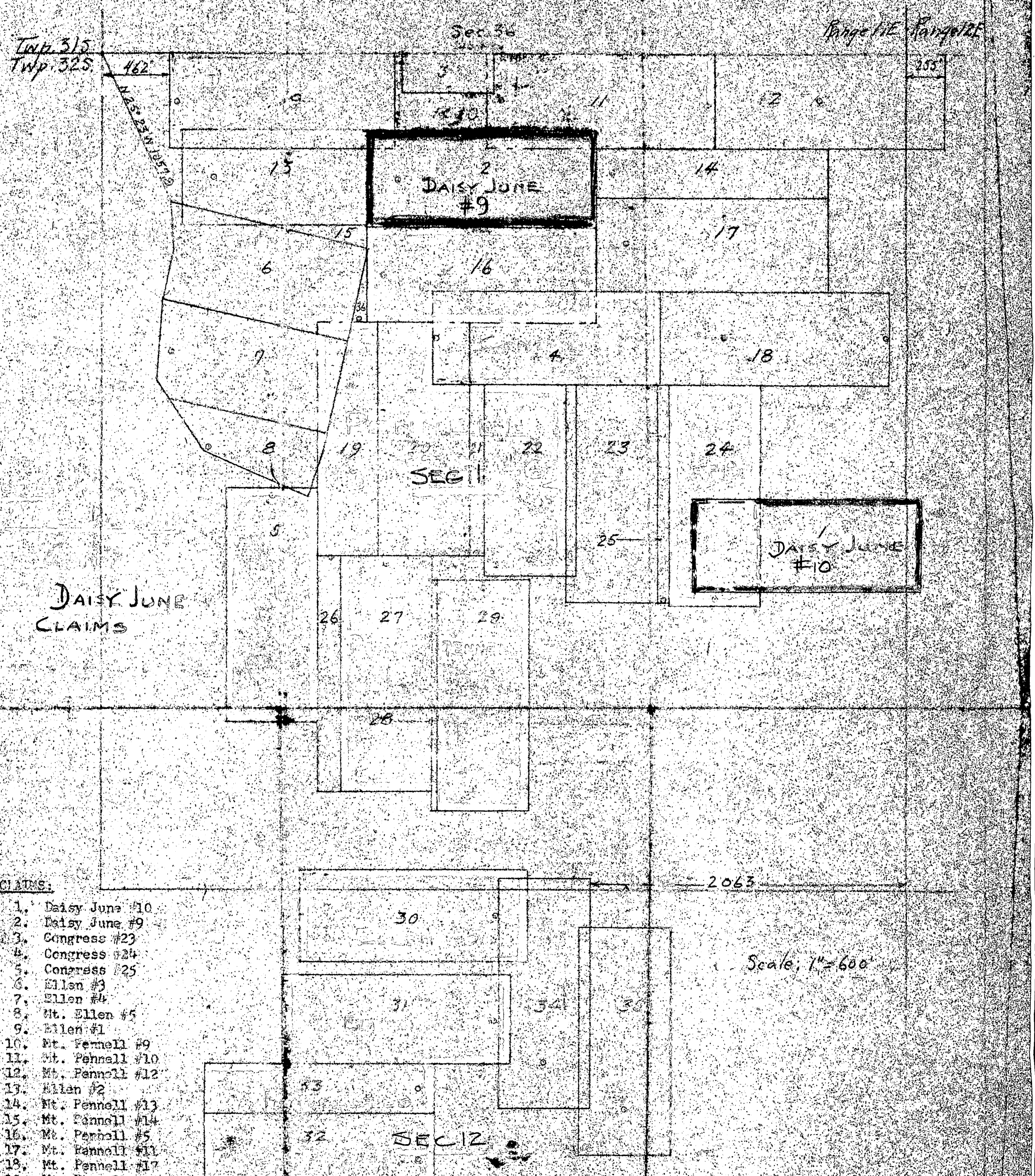
OFFICIAL BUSINESS

JOPLIN MO. AUG 25 5 PM 1955

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

5(b)

Pennell Group of Claims



Scale: 1" = 600'

CLAIMS:

1. Daisy June #10
2. Daisy June #9
3. Congress #23
4. Congress #24
5. Congress #25
6. Ellen #3
7. Ellen #4
8. Mt. Ellen #5
9. Ellen #1
10. Mt. Pennell #9
11. Mt. Pennell #10
12. Mt. Pennell #12
13. Ellen #2
14. Mt. Pennell #13
15. Mt. Pennell #14
16. Mt. Pennell #5
17. Mt. Pennell #11
18. Mt. Pennell #17
19. Mt. Pennell #3
20. Mt. Pennell #4
21. Mt. Pennell #15
22. Mt. Pennell #6
23. Mt. Pennell #7
24. Mt. Pennell #8
25. Mt. Pennell #16
26. Mt. Pennell #18
27. Mt. Pennell #1
28. Mt. Pennell #19
29. Mt. Pennell #2
30. Ellen #5
31. Ellen #6
32. Ellen #7
33. Mt. Pennell #20
34. South Fork #2
35. South Fork #1
36. Mt. Pennell #21

I, EARL KERSHAW, do hereby certify that I have made a correct survey of the Pennell Group Mining Claims, including Congress 23, 24 and 25, and Daisy June 9 and 10, and Ellen 1, 2, 3, 4, 5, 6 and 7, and South Fork 1 and 2, and Mt. Pennell 1, 2, 3, 4, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 18, 19 and 20, in Sections 1 and 12, Township 32, S. (unsurveyed) Range 11 East, in Garfield County, Utah, as shown on plat above.

DATE: May 5, 1955

(Signed) Earl Kershaw

Professional Engineer and Land Surveyor. License No. 107, State of Utah, Salt Lake City, Utah

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136 W. Palace, Santa Fe, N. Mex.