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

224 New Customhouse
Denver 2, Colorado

June 3, 1954

Mr. Cecil William Thompson
504 South Hobson Street
Mesa, Arizona

Re: Docket DMEA 3267

Dear Mr. Thompson:

Reference is made to your application for Government aid on the Cedar and Dingo claims.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of uranium is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W H King
W. H. King
Field Team, Region IV

for E. N. Hauskmann
A. H. Koschmann
Field Team, Region IV

RDB:es
cc: Docket
Administrator, DMEA
Williams
Traver
Koschmann (2)
Chron.

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

RECEIVED
JUN 10 1954

224 New Customhouse
Denver 2, Colorado

June 3, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3267 (Uranium), Cecil William Thompson, Cedar and Dingo Claims, San Juan County, Utah.

Enclosed are four copies of the report of examination on the subject docket, a copy of the letter of denial to the applicant and two copies of Form 3b.

W. H. King

W. H. King

E. M. Hirschman

for A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

June 3, 1954.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Report of Examination - DMEA Docket 3267 (Uranium), Cecil William Thompson, Cedar and Dingo claims, San Juan County, Utah.

Enclosed are eleven copies of the engineering report on the subject docket.

The applicant requested a small amount of rim stripping and 4,500 feet of wagon drilling at a total estimated cost of $6,780.00.

The examining engineer found the title to the claims is questionable and the applicant does not control the rim outcrop. The most favorable ore bearing formation is absent in these claims. The engineer examiner recommends denial of the application and we concur in this recommendation.

W. H. King

W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
May 26, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3267, Cecil William Thompson (Uranium), Cedar and Dingo claims, San Juan County, Utah

Enclosed are the original and ten copies of a "Summary, Conclusions, and Recommendations" by M. H. Salsbury, Bureau of Mines, and T. L. Finnell, Geological Survey, and of M. H. Salsbury's engineering report on the subject loan application.

Salsbury concludes that in addition to a questionable title to the ground covered by the application, the applicant does not control the rim outcrop which is essential for preliminary stripping exploration and certainly necessary in the event subsequent mining operations should be undertaken. The most favorable ore-bearing formation, the Shinarump, is absent in the area, and should uranium deposits be found in the Chinle, they would probably be small. He recommends denial of loan request.

I concur with his conclusions and recommendations.

The applicant was notified of the date set for the examination but failed to appear or have a representative to accompany the examining team.

The Atomic Energy Commission has indicated a disinterest in exploration of the area.

The brochure forwarded by your memorandum of February 24, 1954, instructing us to prepare a suitable report, is also enclosed.

W. M. Traver

W. M. Traver

enclosures

WMT/kp

cc 10
DMEA 3267
Chron
W.P.Williams

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

May 5, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3267, Cecil William Thompson, Cedar and Dingo claims, Deer Flat, San Juan County, Utah

Enclosed are 11 copies of a geologic report by T. L. Finnell of the U. S. Geological Survey covering the above docket.

It has been recommended that the application be denied.

E. N. Hauchman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

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

April 29, 1954

Memorandum

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

From: W. P. Williams, Colorado Plateau District

Subject: DMEA 3267, Cecil William Thompson, Cedar and Dingo claims, Deer Flat, San Juan County, Utah

Transmitted herewith are eleven copies of a geologic report on the Cedar and Dingo claims, Cecil William Thompson, Deer Flat, San Juan County, Utah.

The attached report was prepared by T. L. Finnell and is based on a joint field examination April 7, 1954, in company with M. H. Salsbury of the U. S. Bureau of Mines and H. A. Hubbard of U. S. Geological Survey. Neither the applicant nor his representative was present during the field examination.

Finnell concludes that the subject application should not receive favorable consideration at this time because of unfavorable geologic conditions and because of the possible invalidity of the applicant's claim locations.

WPWilliams

W. P. Williams,
Geologist

Enclosures 11

WPW/mlr

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

Summary, Conclusions, and Recommendations

By M. H. Salsbury
Mining Engineer
Bureau of Mines

T. L. Finnell
Geologist
Geological Survey

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By M. H. Salsbury and T. L. Finnell

The Cedar and Dingo unpatented claims, owned by Cecil William Thompson, located on Deer Flat mesa, San Juan County, Utah, were examined on April 7, 1954, by a DMEA Region IV examining team. The applicant had been advised of the impending visit, but was not present.

Government-assisted exploration was requested at an estimated cost of $6,780.00 -- Government participation 75 per cent, or $5,085.00 -- for building an access road, rim-stripping, and 4,500 feet of wagon drilling in holes averaging 75 feet in depth.

The applicant's original claim locations conflicted with a Utah state school section already under lease to other parties, and an amended filing was made to correct this, moving the claims eastward so that they now cover only a small part of the potential ore-bearing rim outcrop. The discovery monuments and location notices were not changed on the ground and some of them were still on the school section at the time of the examination. These irregularities and possible conflicts with other locations south and east of the property make the validity and effective area of the applicant's claims somewhat questionable. The potential ore-bearing formation of the region is the Shinarump conglomerate at the base of the Chinle formation, resting unconformably on the

Moenkopi formation. All are Triassic sediments. Geologic data to date places the main Shinarump channel, which has produced ore at the Hideout mine, on the southeast rim of Deer Flat mesa south of, or at least in the southern part of the applicant's property. The rim exposures west of the property indicate that the Shinarump conglomerate is absent in the area to be explored, and that the basal formation of the Chinle here is gray or gray-green carbonaceous sandy mudstone with lenses of light-colored medium to coarse-grained sandstone 1 to 3 feet thick. There is, however, evidence of some mineralization along the outcrop consisting of soil discoloration, at least 3 radioactive "shows" and abnormal radioactivity in the soil cover.

The logical method for exploration of this area would be rim-stripping along the outcrop west of the property first. This could not be done under Government-assisted exploration because the applicant does not control the rim area. The proposed drilling program appears to be wasteful and was not planned on the basis of preliminary rim-stripping.

Physical conditions favor core drilling in this area, rather than the wagon drilling proposed.

While there is a possibility of the occurrence of small ore bodies on the property, several factors, such as some question of validity of title and the fact that the correct sequence of exploration, involving rim-stripping on another property, cannot be followed under a Government-assisted project, are unfavorable.

Denial of the loan application is recommended.

UNITED STATES DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3267, Cecil William Thompson, Cedar and Dingo claims

Deer Flat, San Juan County, Utah

Uranium

Geologic Report

T. L. Finnell
U. S. Geological Survey

April 29, 1954

DMEA 3267

INTRODUCTION AND SUMMARY

Cecil William Thompson, 504 S. Hobson Street, Mesa, Ariz., has applied (DMEA 3267) to the Defense Minerals Exploration Administration for financial assistance to explore for uranium in the White Canyon district, San Juan County, Utah. Mr. Thompson owns the Cedar and Dingo group of contiguous claims in secs. 10, 15, and 22, T. 36 S., R. 17 E., Salt Lake Base and Principal Meridian. This group of 31 unpatented claims is on the northwest side of Deer Flat (fig. 1), approximately 44 miles by road west of Blanding, Utah. The claims are reached from Blanding by Utah Highway 95 to a point on Elk Ridge near the Bears Ears, and the Deer Flat road. An alternate route for winter access is by Utah Highway 95 (south) to a point below Maverick Point, and the Deer Flat uranium access road. The claims are about 66 to 75 miles from Monticello, Utah, the nearest station for receiving uranium ores.

The applicant proposes to build 5,000 feet of road on a bench just above the base of the Chinle formation, and to drill 60 holes by wagon drill on 25 to 50 foot centers along 3,000 feet of the bench. The estimated total cost of the work is $6,780.00, of which government participation would be $5,085.00.

Cedar No. 1 and Cedar No. 30 claims were examined April 7, 1954, by M. H. Salsbury of the U. S. Bureau of Mines, and T. L. Finnell and H. A. Hubbard of the U. S. Geological Survey. The field examiners found location monuments for Cedar No. 1, Cedar No. 30, and Cedar No. 32 claims (fig. 2). Because the applicant was not present during the examination, no other claim markers were found.

John Masters and Leo J. Miller, geologists of the U. S. Atomic Energy Commission, examined the Deer Flat area in 1951, and found the entire area unfavorable for exploratory drilling.

The field examiners are agreed that the proposed plan should not be approved because (1) exposures on the claims are too poor to allow an adequate geologic evaluation of the property, (2) the uranium-bearing parts of the outcrop are not on the applicant's claims, but are on a school section that is leased to another party, (3) wagon drilling does not appear to yield satisfactory results in the Deer Flat area, (4) the close-spacing of the holes is development rather than exploration drilling, and (5) the validity of the claim locations is in question.

CLAIM LOCATIONS

Cedar No. 1 location monument was found about 600 feet southwest along the Chinle-Moenkopi contact from the north section line of sec. 15, T. 36 S., R. 17 E. A notice of location in the monument describes the location as ". . . 900 feet southerly along the uranium ledge from the north section line of sec. 16, T. 36 S., R. 17 E. . . ." (see fig. 2). Cedar No. 1 claim is shown on the applicant's map to be entirely in sec. 10 with one side line lying along the section line between secs. 10 and 15.

Cedar No. 30 location monument was found near the Chinle-Moenkopi contact approximately on the section line between secs. 10 and 15, T. 36 S., R. 17 E. A notice of location in the monument describes the location as ". . . 300 feet southerly along the uranium ledge from the north section line of sec. 16, T. 36 S., R. 17 E. . . ." Cedar No. 30 claim is shown on the applicant's map to be entirely in sec. 10 with the south side line lying along the north side line of the Cedar No. 1 claim.

Cedar No. 32 location monument was found along the slash line of the section line between secs. 15 and 16, T. 36 S., R. 17 E., approximately 500 feet south of the northeast corner sec. 16. Cedar No. 32 claim is shown on the applicant's map to be approximately 850 feet east of the section line with Cedar No. 3 fractional claim between it and the section line (fig. 2). The locations of the claim monuments do not coincide with the description and, therefore, the claims may not be valid.

GEOLOGY

The Cedar and Dingo claims are on the west flank of the Monument upwarp, a broad anticlinorium that extends from Monument Valley in northeastern Arizona to Elk Ridge in southeastern Utah. The Monument upwarp is composed of sedimentary rocks of Paleozoic and Mesozoic age. Beds at the claims strike about N. 30° W. and dip 1-3 degrees southwest.

The Moenkopi formation (Lower and Middle ? Triassic) and the lower part of the Chinle formation (Upper Triassic) are exposed at the claims. Much of the Chinle formation is covered by landslide debris and talus.

The Moenkopi formation comprises 200-300 feet of interbedded red-brown siltstone and brown to light tan sandstone. Moenkopi siltstone is bleached gray for a few inches below the Chinle formation.

The lower part of the Chinle formation rests unconformably on the Moenkopi formation at the Cedar claims because the Shinarump conglomerate (Upper Triassic), which normally rests on the Moenkopi, is pinched out south of the proposed drilling area. The basal part of the Chinle formation, considered by the applicant to be the ore-bearing horizon, consists of gray to gray-green carbonaceous sandy mudstone with fossil wood fragments and discontinuous lenses 1 to 3 feet thick of light tan, medium- to coarse-grained sandstone.

Copper and uranium minerals replace fossil wood and impregnate the sandy mudstone and sandstone in the lower 6 feet of the Chinle formation. The uranium is believed to be in pitchblende and its alteration products associated with chalcocite, bornite, malachite, and azurite.

Samples were collected in 1953, from three locations (fig.2), and they yielded the following assay results:

SAMPLE NO.	DESCRIPTION	eU%	U%
TLF-1-53	Malachite impregnating slightly radioactive Chinle (?) sandstone float near Chinle-Moenkopi contact.	0.029	0.032
TLF-2-53	Chalcocite and bornite replacing wood float near Chinle-Moenkopi contact--Malchite and limonite coating.	0.79	0.24
TLF-4-53	Radioactive gray carbonaceous sandy mudstone about 2 feet above Moenkopi. Some wood replaced by copper sulphides and carbonates.	0.15	0.014

Shallow pits in the soil near the float samples show radioactivity up to 0.8 mr./hr. on a "Scintillator" Model 111. Although the samples may indicate an ore body behind the outcrop, exposures are too poor and the geologic knowledge of the habits of ore deposits in areas where the Shinarump conglomerate is not present, is too limited to allow adequate evaluation of the sample and outcrop data. Where the Shinarump conglomerate is present in the White Canyon district, uranium deposits are localized in basal Shinarump sandstone where it fills channels cut into the Moenkopi formation. No channel is visible in the rim exposures examined for this report.

COMMENTS REGARDING EXPLORATION IN THE AREA

The AEC and USGS approach to exploration in the Shinarump is to examine the outcrops for uranium-bearing channels. Rims are sometimes stripped with a bulldozer where exposures are poor. The presence of uranium minerals in channel sediments is frequently considered justification for diamond drilling along the channel trend behind the outcrop. Because much of the outcrop near the proposed drilling on the Cedar claims is in section 16 (a school section leased to another person by the State of Utah), rim stripping cannot be done by the applicant under a DMEA contract.

Wagon drilling was attempted on the W. N. claim by Minerals Engineering Company for the White Canyon Mining Company during February 1954. The drilling was satisfactory about 100 feet from the outcrop, but, when drilling was attempted 250 feet from the outcrop, water, which stops wagon drilling, was encountered above the ore horizon. The wagon drilling proposed by Mr. Thompson is on a bench 90-100 feet above the Moenkopi and 250-400 feet from the outcrop. A spring flows from a Chinle sandstone about 2,500 feet northeast of the drilling area. The spring is updip and indicates that water may be present in sandstone beneath the drilling area.

Bulldozer operations around Deer Flat indicate that 56 hours, instead of the 40 hours estimated by the applicant, would be required to do the road building. Rim stripping requires about 8 hours of dozer work for each 250 feet of rim to be stripped.

Hand leveling from the top of the Moenkopi formation to the bench where drilling is proposed shows that drilling depths will vary from 90 to 100 feet instead of the 75 feet estimated by the applicant.

CONCLUSIONS AND RECOMMENDATIONS

The proposed drilling area appears to be unfavorable due to the absence of the Shinarump conglomerate and any other sandstone that might fill a channel into the Moenkopi and thus be a favorable host rock for uranium ore deposits. The critical part of the outcrop for determining the presence of a channel cut into the Moenkopi formation is on property controlled by a person other than the applicant. The plan as proposed involves wagon drilling, which does not appear to yield satisfactory results on Deer Flat, on 25 and 50 foot centers, a spacing that appears to be development rather than exploration drilling. Finally, the validity of the applicant's claim locations is in question.

The field examiners are agreed that the applicant's request for assistance should not be approved.

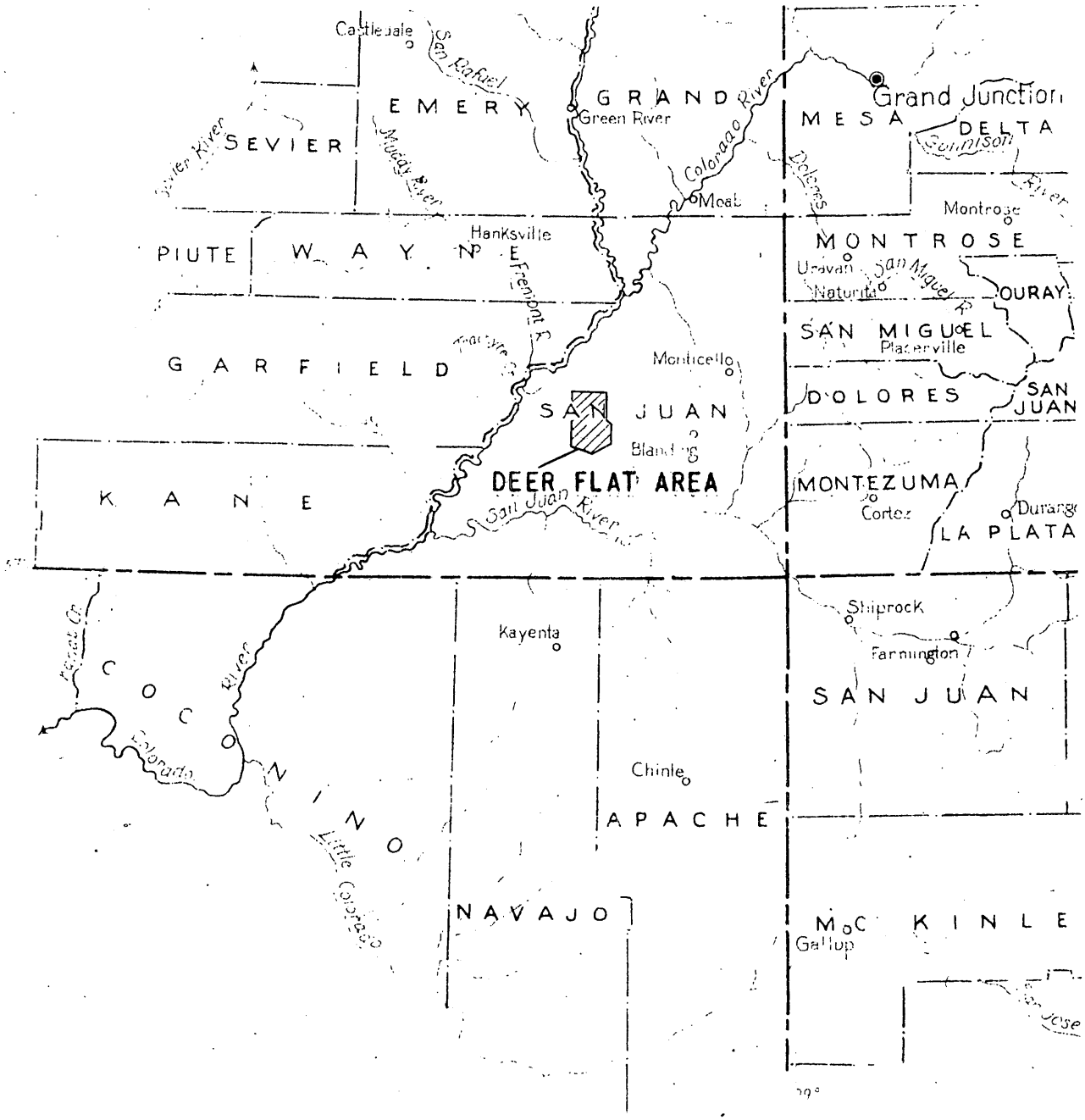

Figure 1. INDEX MAP OF PART OF UTAH AND ARIZONA, SHOWING THE DEER FLAT AREA

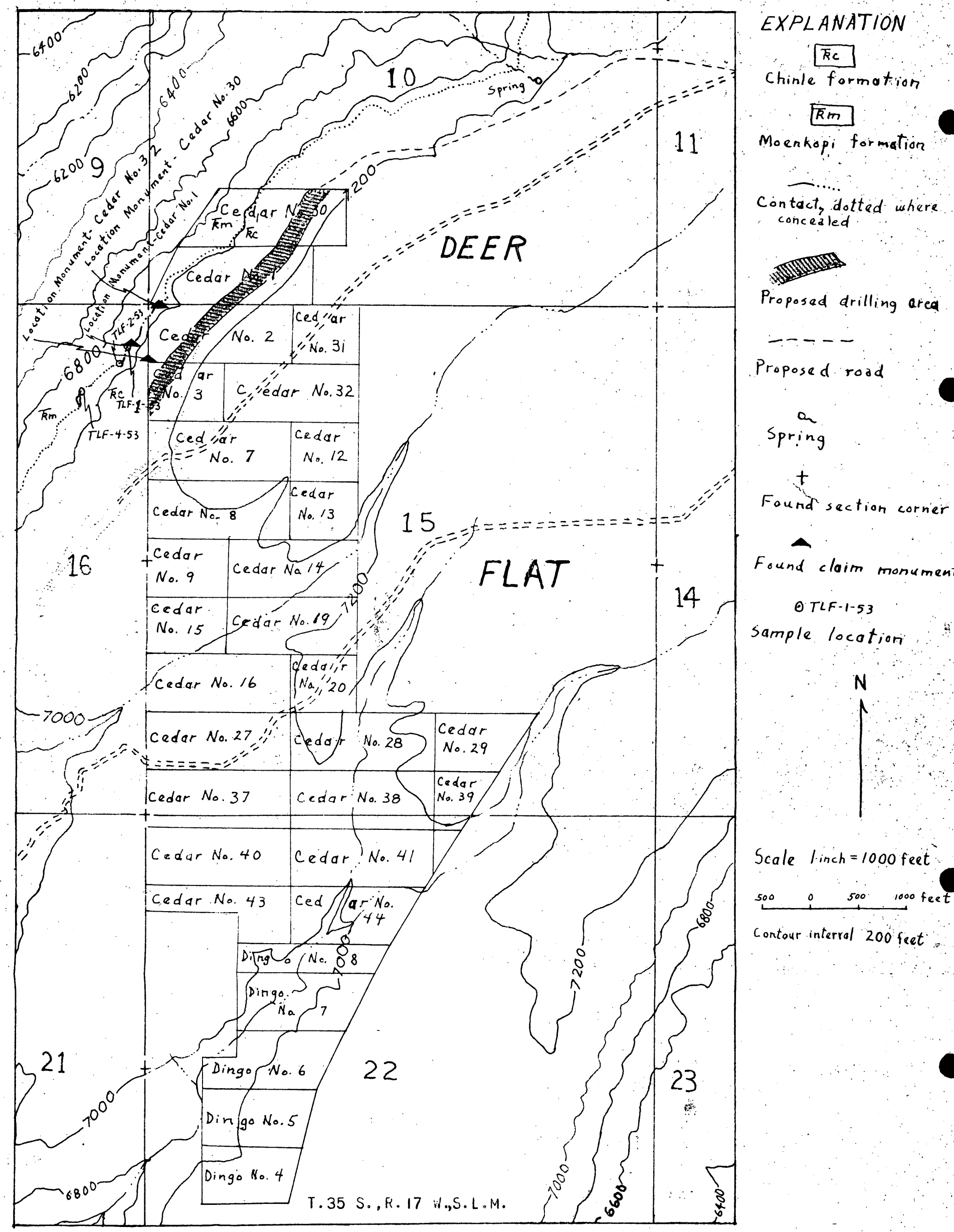

FIGURE 2. SKETCH MAP OF THE CEDAR AND DINGO CLAIMS, DEER FLAT, SAN JUAN COUNTY, UTAH

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

Engineering Report

By M. H. Salsbury
Mining Engineer
Bureau of Mines

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

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1. Location map, Cedar and Dingo claims, Cecil William Thompson, San Juan County, Utah	1
2. Sketch map of the Cedar and Dingo claims, Deer Flat, San Juan County, Utah	*

* With the geologic report.

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

ENGINEERING REPORT

By M. H. Salsbury

INTRODUCTION

The Cedar and Dingo claims, owned by Cecil William Thompson, 504 S. Hobson St., Mesa, Arizona, were examined on April 7, 1954 by a DMEA Region IV examining team. The applicant did not accompany them.

The applicant requested Government-assisted exploration, consisting of bulldozing for an access road and rim-stripping, and 4,500 feet of wagon drilling, at an estimated cost of $6,780.00 -- Government participation 75 percent, or $5,085.00.

ACKNOWLEDGMENTS

Data were obtained from the results of Geological Survey reconnaissance and drilling, which is still being carried on in the area. T. L. Finnell, the Geological Survey member of the examining team, who is also in charge of the Deer Flat project, reports that the Atomic Energy Commission did not approve exploration of the area when it was originally considered for one of their projects.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The property is located on and below the northwest rim of Deer Flat mesa in secs. 10, 15, and 22, T.36 S, R.17 E. of the Salt Lake meridian, San Juan County, Utah (Fig. 1). It is

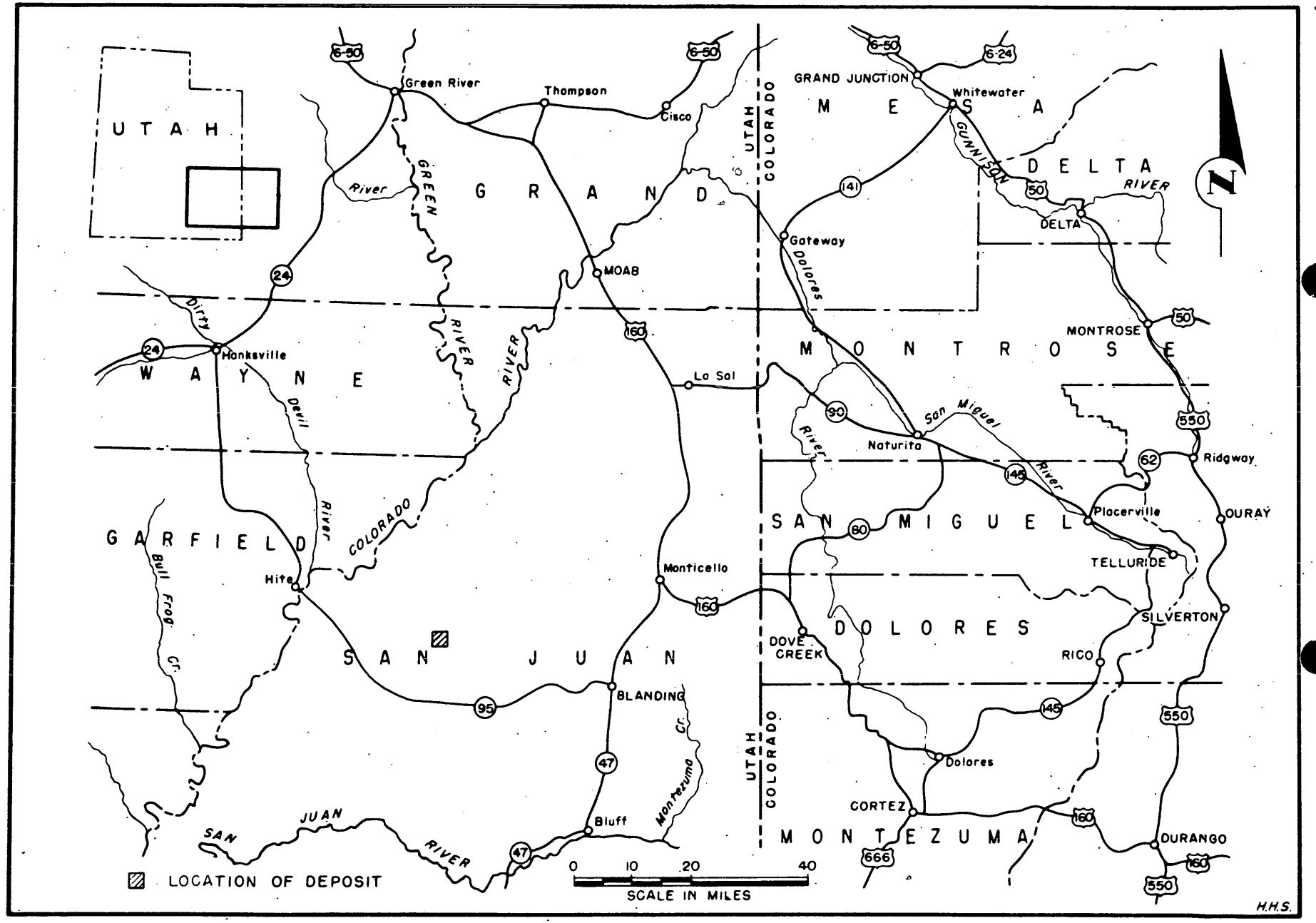

FIGURE 1. - LOCATION MAP, CEDAR AND DINGO CLAIMS, CECIL WILLIAM THOMPSON, SAN JUAN COUNTY, UTAH (DMEA 3267)

reached over gravelled Utah highway 95 extending west from Blanding, Utah, and a rough connecting road, a distance of 54 miles from Blanding, and an additional 26 miles over surfaced Utah highway 47 from Monticello, Utah, the site of the nearest uranium ore-buying station. The unsurfaced roads are passable with difficulty in wet weather.

The area is typical Colorado Plateau mesa land at an elevation of about 7000 feet, with deep canyons cutting into the higher areas. The mesa rims are vertical cliffs grading into steep slopes, littered with landslide debris, and covered by talus.

The normally arid climate permits year around mining, as well as other operations, although surface drilling would be difficult in severe winter weather. Access to the region is a problem during spring thaws or after heavy storms, although this was not experienced during the unusually dry winter of 1953-54.

Water for domestic and drilling requirements is scarce and must be hauled from springs or from catch basins constructed to collect runoff. Fuel for domestic use is obtainable from an abundant growth of pinon pine. All supplies must be hauled from Blanding or Monticello, which are connected by scheduled motor freight lines with Grand Junction, Colorado, the nearest major supply center.

Power for all purposes must be supplied by the individual operator.

LABOR AND LIVING CONDITIONS

The remote location makes the labor problem difficult in competition with operations nearer the larger towns. From $1.75 to $2.00 per hour is being paid currently for semi-skilled work. Each operator must provide housing, usually in the form of house trailers.

HISTORY, PRODUCTION, AND OWNERSHIP

The mining history of Deer Flat dates from 1951. It was first considered for a drilling project of the Atomic Energy Commission. That was not approved. Later the Geological Survey carried on reconnaissance and established a drilling project on the southeast side of the mesa that is still active.

An ore deposit of the channel type was located by drilling and an underground operation of the White Canyon Mining Company at the Hideout mine has produced approximately 1000 tons of ore assaying from 0.17 to 0.39 percent U_3O_8 and 1500 tons assaying less than 0.17 percent U_3O_8. There has been no production from the applicant's ground.

The applicant located the group of 31 claims in April 1953, filing location certificates in the courthouse at Monticello on April 22, 1954, as verified by the Bureau engineer. Some of the claims and discovery monuments were actually in sec. 16,T.36 S. R.17 E., and were so described in the location certificates (Fig. 2 with the geologic report). The applicant realized later that this was a school section under lease to other parties, and filed amended locations on August 7, 1953, describing the claims as in sec. 15 without, however, moving the dis-

covery monuments or correcting the location notices. This was verified in the field by the examining team. The common corner of secs. 9, 10, 15, and 16 has been established and was used for reference.

In the event of an adverse claim, the validity of the applicant's title might be questionable. No discovery monuments indicating conflicting locations were found along the rim. To the east and south, however, the property adjoins claims located by the White Canyon Mining Company and G. Babble. After the various claims are surveyed, it is possible that some conflict may develop along the south and east boundaries. A detailed check of all locations was not made or considered necessary.

There are no oil or gas leases in the area which might conflict.

DESCRIPTION OF THE DEPOSITS

The known ore deposit in the Deer Flat area occurs in the Shinarump conglomerate at the base of the Triassic Chinle formation, and occupies a poorly developed channel cut in the underlying Moenkopi formation. The uranium appears to be pitchblende and alteration products, associated with copper minerals, replacing fossil wood fragments and carbonaceous material in the Shinarump conglomerate. The general strike of the beds is N.30° W, dipping 1 to 3 degrees to the southwest.

There is only a short section of potential ore-bearing outcrop on the applicant's ground at the north end. On the school section to the west, the Moenkopi-Chinle contact can be traced for

several thousand feet, and mineralization at several points is indicated by discoloration of the soil, and by radioactivity "shows". Typical Shinarump conglomerate, however, does not appear to be present, and the basal formation of the Chinle here is gray or gray-green, carbonaceous, sandy mudstone with lenses of tan, medium-to-coarse-grained sandstone 1 to 3 feet thick. This fact, and other data from reconnaissance on neighboring mesas, indicates that the main Shinarump channel passes further south, and any ore deposits occurring in the area which the applicant proposes to explore are likely to be small. Geologic knowledge to date, however, does not rule out completely the possibility of a channel occurrence on the claims.

MINEABLE ORE RESERVES

There are no ore reserves on the property.

No sampling was done. Three samples taken previously by Finnell, and shown on Figure 2 with the geologic report, are as follows:

Sample No.	Description	eU percent	U percent
TLF-1-53	Malachite impregnating slightly radioactive sandstone float near Chinle-Moenkopi contact.	0.029	0.032
TLF-2-53	Chalcocite and bornite replacing wood (float near Chinle-Moenkopi contact). Malachite and limanite coating.	0.79	0.24

Sample No.	Description	eU percent	U percent
TLF-4-53	Radioactive gray carbonaceous sandy mudstone about 2 feet above the Moenkopi. Some wood replaced by copper minerals.	0.15	0.014

Finnell has noted abnormal radioactivity in the soil cover near the float samples, up to 0.8 Mr/hr., which he believes may indicate an ore body behind the outcrop, although known data to date are too incomplete to permit adequate interpretation.

PRESENT STATUS

Exploration and Development

The property is totally undeveloped. The Geological Survey drilling program has not presently approached the Cedar and Dingo claims, and the only other exploration in the vicinity was carried on to the south by wagon drilling which was unsuccessful. The one small mining operation on Deer Flat mesa to date is the Hideout mine on the southeast rim about one mile east of the applicant's claims. Drilling by the Geological Survey is planned to test an anomaly about half way between the Hideout mine and the Cedar and Dingo claims.

Mining and Milling and Other Facilities

There are no buildings or mining or milling equipment on the property.

PROJECT PROPOSALS WITH COSTS

The applicant proposed the following program:

Bulldozing 40 hours @ $12.00/hr. for access road and some rim stripping	$480.00
Wagon drilling 60 holes for a total of 4500 feet @ $1.00/ft.	4500.00
Additional labor for 90 days @ $15.00/day	1350.00
Use of truck for 90 days @ $5.00/day	450.00
Total estimated cost -	$6780.00

The applicant's proposal called for a small amount of rim stripping and 4500 feet of wagon drilling in 60 holes spaced at 50 foot intervals on a line near the western boundary of the property. This is not a well-planned program. The drilling pattern suggests an effort to determine the extent of mineralization away from the rim, by drilling rather closely spaced holes along a length of 3000 feet without determining first the location and extent of mineralization at the outcrop by rim stripping. Stripping is a normal and essential type of exploration which would be invaluable in this case as a drilling guide.

Undoubtedly the applicant's intent to do very little stripping and rely on drilling arises from the fact that he does not control much of the rim outcrop and could not include stripping on this ground as part of a Government-assisted project.

Known conditions do not favor the use of wagon drilling. Such a project last year in the area to the south encountered water in one of the middle Chinle beds and poor results were obtained. The same bed must be penetrated on the Cedar and Dingo claims. There is a spring north of the claims on an outcrop of

this bed, indicating that the same wet conditions are likely to be encountered.

Finnell has determined that the average drilling depth to the potential ore horizon is closer to 100 feet than the 75 feet estimated by the applicant.

A suitable exploration program, assuming that the applicant had control of the area covering the outcrop of the favorable horizon, would include additional rim stripping, and from 1000 to 2500 feet of diamond drilling at a cost of $6000.00 to $12,000.00.

PRODUCTION PLAN

The time required to complete the revised program would be from 2 to 4 months, depending on the amount of drilling.

PROPOSED FINANCING

The applicant states that he is prepared to furnish his share of the cost in labor, equipment, and cash. Use of his truck and his own labor would make up most of his contribution.

CONCLUSIONS

The area proposed for exploration is located on a section of the Chinle-Moenkopi contact which appears to be north of the main ore channel. Shinarump conglomerate, the best potential ore formation, is not found at the rim west of the property. While there is some indication at the rim that ore might be present in the Chinle mudstone just above the Moenkopi formation, it is doubtful that a sufficient tonnage exists to justify any large expenditure for exploration. The ore deposits found in the main ore channel at the Hideout mine were not large, and deposits

occurring out of the channel are, in all probability, even smaller.

Assuming that the required expenditure is justified, control of the area covering the rim outcrops by the operator would be essential to permit preliminary rim stripping as a guide to a drilling program, and probably to facilitate mining should any ore be found.

The location procedures have been irregular and, while the claims may be entirely valid on the assumption that the intent of the locator governs rather than compliance with the law in detail, the examining engineer questions their validity.

The applicant suggests that Geological Survey personnel at the Deer Flat camp provide technical assistance and makes no other provision. Technical advice would probably be necessary as he does not appear to have the needed training or experience.

All factors considered, the proposed exploration does not appear to meet requirements for a Government-assisted project.

RECOMMENDATIONS

It is recommended that the request for Government-assisted exploration be denied.

6/15/54 rgfa

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

224 New Customhouse
Denver 2, Colorado

June 3, 1954

Mr. Cecil William Thompson
504 South Hobson Street
Mesa, Arizona

Re: Docket DMEA 3267

Dear Mr. Thompson:

Reference is made to your application for Government aid on the Cedar and Dingo claims.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of uranium is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. King
Field Team, Region IV

/s/ E. N. Harshman for
A. H. Koschmann
Field Team, Region IV

EDB:es
cc: Docket
Administrator, DMEA
Williams
Traver
Koschmann (2)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

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

COPY

224 New Customhouse
Denver 2, Colorado

June 3, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3267 (Uranium), Cecil William Thompson, Cedar and Dingo Claims, San Juan County, Utah.

Enclosed are four copies of the report of examination on the subject docket, a copy of the letter of denial to the applicant and two copies of Form 3b.

/s/ W. H. King

/s/ E. N. Harshman for
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

June 3, 1954.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Report of Examination - DMEA Docket 3267 (Uranium), Cecil William Thompson, Cedar and Diago claims, San Juan County, Utah.

Enclosed are eleven copies of the engineering report on the subject docket.

The applicant requested a small amount of rim stripping and 4,500 feet of wagon drilling at a total estimated cost of $6,780.00.

The examining engineer found the title to the claims is questionable and the applicant does not control the rim outcrop. The most favorable ore bearing formation is absent in these claims. The engineer examiner recommends denial of the application and we concur in this recommendation.

W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
May 26, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 3267, Cecil William Thompson (Uranium), Cedar and Diego claims, San Juan County, Utah

Enclosed are the original and ten copies of a "Summary, Conclusions, and Recommendations" by M. H. Salsbury, Bureau of Mines, and T. L. Finnell, Geological Survey, and of M. H. Salsbury's engineering report on the subject loan application.

Salsbury concludes that in addition to a questionable title to the ground covered by the application, the applicant does not control the rim outcrop which is essential for preliminary stripping exploration and certainly necessary in the event subsequent mining operations should be undertaken. The most favorable ore-bearing formation, the Shinarump, is absent in the area, and should uranium deposits be found in the Chinle, they would probably be small. He recommends denial of loan request.

I concur with his conclusions and recommendations.

The applicant was notified of the date set for the examination but failed to appear or have a representative to accompany the examining team.

The Atomic Energy Commission has indicated a disinterest in exploration of the area.

The brochure forwarded by your memorandum of February 24, 1954, instructing us to prepare a suitable report, is also enclosed.

W. M. Traver

W. M. Traver

enclosures

WMT/kp

cc 10
DMEA 3267
Chron
W.P.Williams

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

May 5, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3267, Cecil William Thompson, Cedar and Dingo claims, Deer Flat, San Juan County, Utah

Enclosed are 11 copies of a geologic report by T. L. Finnell of the U. S. Geological Survey covering the above docket.

It has been recommended that the application be denied.

E. M. Haschman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

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

April 29, 1954

Memorandum

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

From: W. P. Williams, Colorado Plateau District

Subject: DMEA 3267, Cecil William Thompson, Cedar and Dingo claims, Deer Flat, San Juan County, Utah

Transmitted herewith are eleven copies of a geologic report on the Cedar and Dingo claims, Cecil William Thompson, Deer Flat, San Juan County, Utah.

The attached report was prepared by T. L. Finnell and is based on a joint field examination April 7, 1954, in company with M. H. Salsbury of the U. S. Bureau of Mines and H. A. Hubbard of U. S. Geological Survey. Neither the applicant nor his representative was present during the field examination.

Finnell concludes that the subject application should not receive favorable consideration at this time because of unfavorable geologic conditions and because of the possible invalidity of the applicant's claim locations.

WWilliams

W. P. Williams,
Geologist

Enclosures 11

WPW/mlr

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

DMEA 3267

CEDAR AND DEVIL CLAIMS
CHOCOLATE TEMPLE
SAN JUAN COUNTY, UTAH

Summary, Conclusions, and Recommendations

by R. H. Salisbury
Mining Engineer
Bureau of Mines

T. A. Finnell
Geologist
Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE

6-14-54
(date)

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By M. H. Salsbury and T. L. Finnell

The Cedar and Dingo unpatented claims, owned by Cecil William Thompson, located on Deer Flat mesa, San Juan County, Utah, were examined on April 7, 1954, by a DMEA Region IV examining team. The applicant had been advised of the impending visit, but was not present.

Government-assisted exploration was requested at an estimated cost of $6,780.00 -- Government participation 75 per cent, or $5,085.00 -- for building an access road, rim-stripping, and 4,500 feet of wagon drilling in holes averaging 75 feet in depth.

The applicant's original claim locations conflicted with a Utah state school section already under lease to other parties, and an amended filing was made to correct this, moving the claims eastward so that they now cover only a small part of the potential ore-bearing rim outcrop. The discovery monuments and location notices were not changed on the ground and some of them were still on the school section at the time of the examination. These irregularities and possible conflicts with other locations south and east of the property make the validity and effective area of the applicant's claims somewhat questionable. The potential ore-bearing formation of the region is the Shinarump conglomerate at the base of the Chinle formation, resting unconformably on the

Moenkopi formation. All are Triassic sediments. Geologic data to date places the main Shinarump channel, which has produced ore at the Hideout mine, on the southeast rim of Deer Flat mesa south of, or at least in the southern part of the applicant's property. The rim exposures west of the property indicate that the Shinarump conglomerate is absent in the area to be explored, and that the basal formation of the Chinle here is gray or gray-green carbonaceous sandy mudstone with lenses of light-colored medium to coarse-grained sandstone 1 to 3 feet thick. There is, however, evidence of some mineralization along the outcrop consisting of soil discoloration, at least 3 radioactive "shows" and abnormal radioactivity in the soil cover.

The logical method for exploration of this area would be rim-stripping along the outcrop west of the property first. This could not be done under Government-assisted exploration because the applicant does not control the rim area. The proposed drilling program appears to be wasteful and was not planned on the basis of preliminary rim-stripping.

Physical conditions favor core drilling in this area, rather than the wagon drilling proposed.

While there is a possibility of the occurrence of small ore bodies on the property, several factors, such as some question of validity of title and the fact that the correct sequence of exploration, involving rim-stripping on another property, cannot be followed under a Government-assisted project, are unfavorable.

Denial of the loan application is recommended.

UNITED STATES DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 3267, Cecil William Thompson, Cedar and Dingo claims

Deer Flat, San Juan County, Utah

Uranium

Geologic Report

T. L. Finnell
U. S. Geological Survey

April 29, 1954

Reviewed by
DMEA OPERATING COMMITTEE
6-14-54
(date)

DMEA 3267

INTRODUCTION AND SUMMARY

Cecil William Thompson, 504 S. Hobson Street, Mesa, Ariz., has applied (DMEA 3267) to the Defense Minerals Exploration Administration for financial assistance to explore for uranium in the White Canyon district, San Juan County, Utah. Mr. Thompson owns the Cedar and Dingo group of contiguous claims in secs. 10, 15, and 22, T. 36 S., R. 17 E., Salt Lake Base and Principal Meridian. This group of 31 unpatented claims is on the northwest side of Deer Flat (fig. 1), approximately 44 miles by road west of Blanding, Utah. The claims are reached from Blanding by Utah Highway 95 to a point on Elk Ridge near the Bears Ears, and the Deer Flat road. An alternate route for winter access is by Utah Highway 95 (south) to a point below Maverick Point, and the Deer Flat uranium access road. The claims are about 66 to 75 miles from Monticello, Utah, the nearest station for receiving uranium ores.

The applicant proposes to build 5,000 feet of road on a bench just above the base of the Chinle formation, and to drill 60 holes by wagon drill on 25 to 50 foot centers along 3,000 feet of the bench. The estimated total cost of the work is $6,780.00, of which government participation would be $5,085.00.

Cedar No. 1 and Cedar No. 30 claims were examined April 7, 1954, by M. H. Salsbury of the U. S. Bureau of Mines, and T. L. Finnell and H. A. Hubbard of the U. S. Geological Survey. The field examiners found location monuments for Cedar No. 1, Cedar No. 30, and Cedar No. 32 claims (fig. 2). Because the applicant was not present during the examination, no other claim markers were found.

John Masters and Leo J. Miller, geologists of the U. S. Atomic Energy Commission, examined the Deer Flat area in 1951, and found the entire area unfavorable for exploratory drilling.

The field examiners are agreed that the proposed plan should not be approved because (1) exposures on the claims are too poor to allow an adequate geologic evaluation of the property, (2) the uranium-bearing parts of the outcrop are not on the applicant's claims, but are on a school section that is leased to another party, (3) wagon drilling does not appear to yield satisfactory results in the Deer Flat area, (4) the close-spacing of the holes is development rather than exploration drilling, and (5) the validity of the claim locations is in question.

CLAIM LOCATIONS

Cedar No. 1 location monument was found about 600 feet southwest along the Chinle-Moenkopi contact from the north section line of sec. 15, T. 36 S., R. 17 E. A notice of location in the monument describes the location as ". . . 900 feet southerly along the uranium ledge from the north section line of sec. 16, T. 36 S., R. 17 E. . . ." (see fig. 2). Cedar No. 1 claim is shown on the applicant's map to be entirely in sec. 10 with one side line lying along the section line between secs. 10 and 15.

Cedar No. 30 location monument was found near the Chinle-Moenkopi contact approximately on the section line between secs. 10 and 15, T. 36 S., R. 17 E. A notice of location in the monument describes the location as ". . . 300 feet southerly along the uranium ledge from the north section line of sec. 16, T. 36 S., R. 17 E. . . ." Cedar No. 30 claim is shown on the applicant's map to be entirely in sec. 10 with the south side line lying along the north side line of the Cedar No. 1 claim.

Cedar No. 32 location monument was found along the slash line of the section line between secs. 15 and 16, T. 36 S., R. 17 E., approximately 500 feet south of the northeast corner sec. 16. Cedar No. 32 claim is shown on the applicant's map to be approximately 850 feet east of the section line with Cedar No. 3 fractional claim between it and the section line (fig. 2). The locations of the claim monuments do not coincide with the description and, therefore, the claims may not be valid.

GEOLOGY

The Cedar and Dingo claims are on the west flank of the Monument upwarp, a broad anticlinorium that extends from Monument Valley in northeastern Arizona to Elk Ridge in southeastern Utah. The Monument upwarp is composed of sedimentary rocks of Paleozoic and Mesozoic age. Beds at the claims strike about N. 30° W. and dip 1-3 degrees southwest.

The Moenkopi formation (Lower and Middle ? Triassic) and the lower part of the Chinle formation (Upper Triassic) are exposed at the claims. Much of the Chinle formation is covered by landslide debris and talus.

The Moenkopi formation comprises 200-300 feet of interbedded red-brown siltstone and brown to light tan sandstone. Moenkopi siltstone is bleached gray for a few inches below the Chinle formation.

The lower part of the Chinle formation rests unconformably on the Moenkopi formation at the Cedar claims because the Shinarump conglomerate (Upper Triassic), which normally rests on the Moenkopi, is pinched out south of the proposed drilling area. The basal part of the Chinle formation, considered by the applicant to be the ore-bearing horizon, consists of gray to gray-green carbonaceous sandy mudstone with fossil wood fragments and discontinuous lenses 1 to 3 feet thick of light tan, medium- to coarse-grained sandstone.

Copper and uranium minerals replace fossil wood and impregnate the sandy mudstone and sandstone in the lower 6 feet of the Chinle formation. The uranium is believed to be in pitchblende and its alteration products associated with chalcocite, bornite, malachite, and azurite.

Samples were collected in 1953, from three locations (fig.2), and they yielded the following assay results:

SAMPLE NO.	DESCRIPTION	eU%	U%
TLF-1-53	Malachite impregnating slightly radioactive Chinle (?) sandstone float near Chinle-Moenkopi contact.	0.029	0.032
TLF-2-53	Chalcocite and bornite replacing wood float near Chinle-Moenkopi contact--Malchite and limonite coating.	0.79	0.24
TLF-4-53	Radioactive gray carbonaceous sandy mudstone about 2 feet above Moenkopi. Some wood replaced by copper sulphides and carbonates.	0.15	0.014

Shallow pits in the soil near the float samples show radioactivity up to 0.8 mr./hr. on a "Scintillator" Model 111. Although the samples may indicate an ore body behind the outcrop, exposures are too poor and the geologic knowledge of the habits of ore deposits in areas where the Shinarump conglomerate is not present, is too limited to allow adequate evaluation of the sample and outcrop data. Where the Shinarump conglomerate is present in the White Canyon district, uranium deposits are localized in basal Shinarump sandstone where it fills channels cut into the Moenkopi formation. No channel is visible in the rim exposures examined for this report.

COMMENTS REGARDING EXPLORATION IN THE AREA

The AEC and USGS approach to exploration in the Shinarump is to examine the outcrops for uranium-bearing channels. Rims are sometimes stripped with a bulldozer where exposures are poor. The presence of uranium minerals in channel sediments is frequently considered justification for diamond drilling along the channel trend behind the outcrop. Because much of the outcrop near the proposed drilling on the Cedar claims is in section 16 (a school section leased to another person by the State of Utah), rim stripping cannot be done by the applicant under a DMEA contract.

Wagon drilling was attempted on the W. N. claim by Minerals Engineering Company for the White Canyon Mining Company during February 1954. The drilling was satisfactory about 100 feet from the outcrop, but, when drilling was attempted 250 feet from the outcrop, water, which stops wagon drilling, was encountered above the ore horizon. The wagon drilling proposed by Mr. Thompson is on a bench 90-100 feet above the Moenkopi and 250-400 feet from the outcrop. A spring flows from a Chinle sandstone about 2,500 feet northeast of the drilling area. The spring is updip and indicates that water may be present in sandstone beneath the drilling area.

Bulldozer operations around Deer Flat indicate that 56 hours, instead of the 40 hours estimated by the applicant, would be required to do the road building. Rim stripping requires about 8 hours of dozer work for each 250 feet of rim to be stripped.

Hand leveling from the top of the Moenkopi formation to the bench where drilling is proposed shows that drilling depths will vary from 90 to 100 feet instead of the 75 feet estimated by the applicant.

CONCLUSIONS AND RECOMMENDATIONS

The proposed drilling area appears to be unfavorable due to the absence of the Shinarump conglomerate and any other sandstone that might fill a channel into the Moenkopi and thus be a favorable host rock for uranium ore deposits. The critical part of the outcrop for determining the presence of a channel cut into the Moenkopi formation is on property controlled by a person other than the applicant. The plan as proposed involves wagon drilling, which does not appear to yield satisfactory results on Deer Flat, on 25 and 50 foot centers, a spacing that appears to be development rather than exploration drilling. Finally, the validity of the applicant's claim locations is in question.

The field examiners are agreed that the applicant's request for assistance should not be approved.

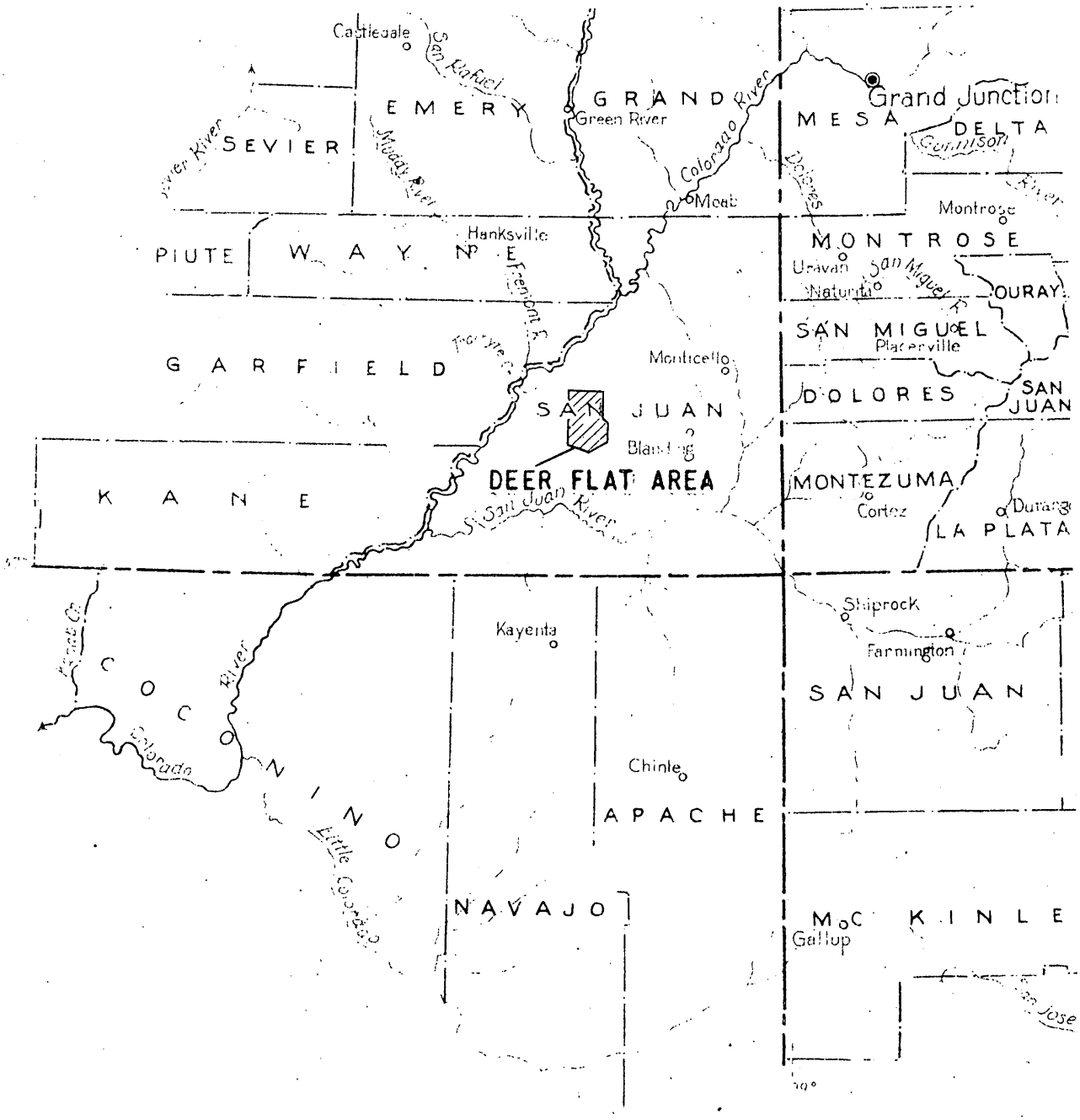

Figure 1. INDEX MAP OF PART OF UTAH AND ARIZONA, SHOWING THE DEER FLAT AREA

SEM 3267

CEDAR AND DIEGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

Engineering Report

By L. M. Salsbury
Mining Engineer
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE

6-14-54
(date)

Book 3267

CEDAR AND [illegible] CLAIMS
[illegible] DIVISION
SAN JUAN COUNTY, UTAH

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ILLUSTRATIONS

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1. Location map, Cedar and Diego claims, Cecil Milton Thompson, San Juan County, Utah	1
2. Sketch map of the Cedar and Diego claims, Moor Flat, San Juan County, Utah	*

* With the geologic report.

DMEA 3267

CEDAR AND DINGO CLAIMS
CECIL WILLIAM THOMPSON
SAN JUAN COUNTY, UTAH

ENGINEERING REPORT

By F. H. Salsbury

INTRODUCTION

The Cedar and Dingo claims, owned by Cecil William Thompson, 501 S. Hobson St., Mesa, Arizona, were examined on April 7, 1959 by a DMEA Region IV examining team. The applicant did not accompany them.

The applicant requested an unfinished exploration, consisting of bulldozing for an access road and rim-stripping, and 4,500 feet of wagon drilling, at an estimated cost of $6,700.00 -- [illegible] 75 percent, or $5,025.00.

[illegible]

Data were obtained from the results of Geological Survey reconnaissance and drilling, which is still being carried on in the area. T. P. Finnell, the Geological Survey member of the examining team, who is also in charge of the Deer Flat project, reports that the Atomic Energy Commission did not approve exploration of the area when it was originally considered for one of their projects.

LOCATION, ACCESSIBILITY, AND PHYSICAL FEATURES

The property is located on and below the northwest rim of Deer Flat Mesa in secs. 10, 15, and 22, T.36 S., R.17 E. of the Salt Lake meridian, San Juan County, Utah (Fig. 1). It is

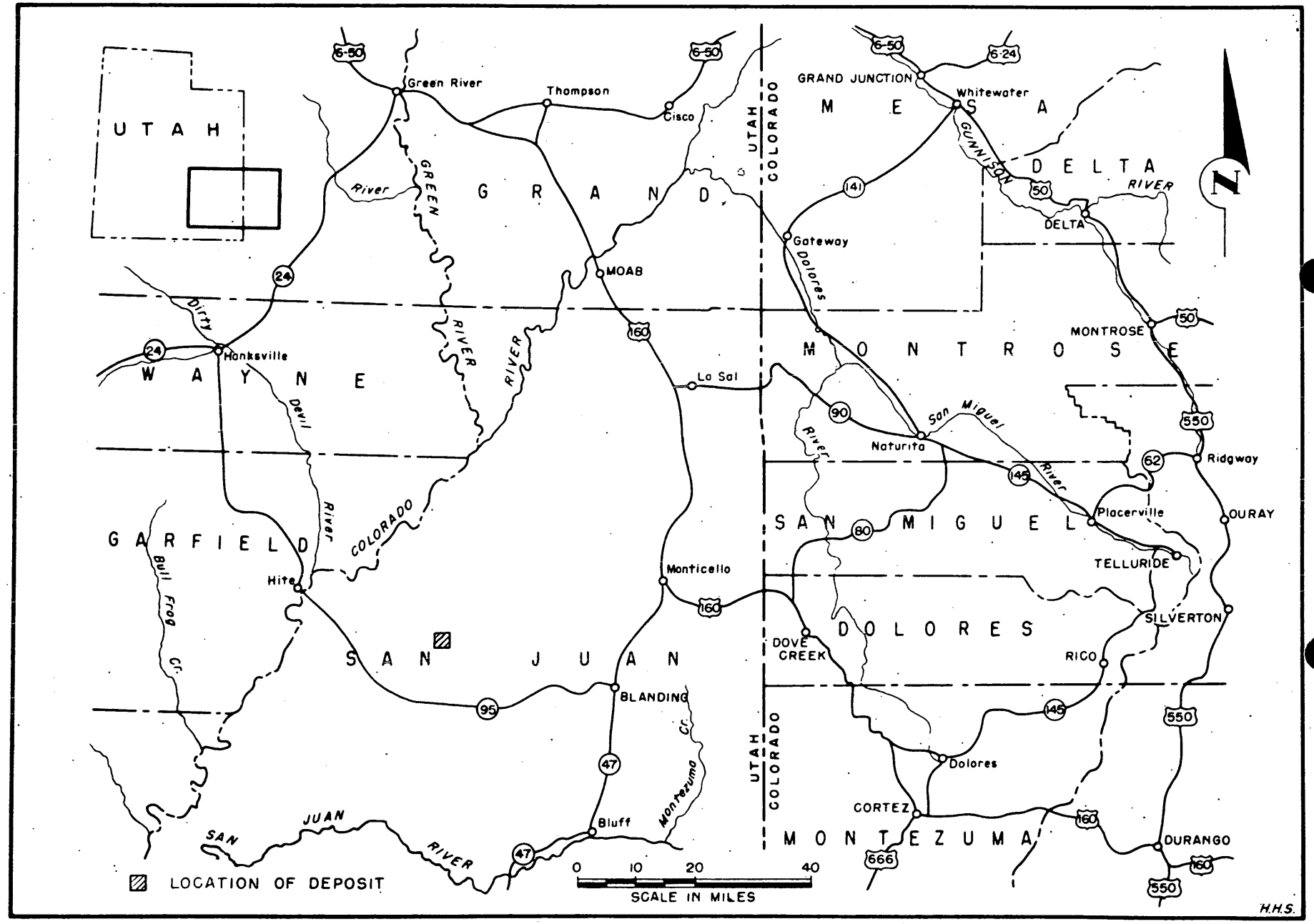

FIGURE 1. - LOCATION MAP, CEDAR AND DINGO CLAIMS, CECIL WILLIAM THOMPSON, SAN JUAN COUNTY, UTAH (DMEA 3267)

reached over gravelled Utah highway 95 extending west from Blanding, Utah, and a rough connecting road, a distance of 54 miles from Blanding, and an additional 26 miles over surfaced Utah highway 47 from Monticello, Utah, the site of the nearest uranium ore-buying station. The unsurfaced roads are passable with difficulty in wet weather.

The area is typical Colorado Plateau mesa land at an elevation of about 7000 feet, with deep canyons cutting into the higher areas. The mesa rims are vertical cliffs breaking into steep slopes, littered with landslide debris, and covered by talus.

The normally arid climate permits year around mining, as well as other operations, although surface drilling would be difficult in severe winter weather. Access to the region is a problem during spring thaws or after heavy storms, although this was not experienced during the unusually dry winter of 1953-54.

Water for domestic and drilling requirements is scarce and must be hauled from springs or from catch basins constructed to collect runoff. Fuel for domestic use is obtainable from an abundant growth of pinon pine. All supplies must be hauled from Blanding or Monticello, which are connected by scheduled motor freight lines with Grand Junction, Colorado, the nearest major supply center.

Power for all purposes must be supplied by the individual operator.

LABOR AND LIVING CONDITIONS

The remote location makes the labor problem difficult in competition with operations nearer the larger towns. From $1.75 to $2.00 per hour is being paid currently for semi-skilled work. Each operator must provide housing, usually in the form of house trailers.

HISTORY, ACTIVITY, AND OPERATIONS

The mining history of Deer Flat dates from 1951. It was first considered for a drilling project of the Atomic Energy Commission. This was not approved. Later the Geological Survey carried on reconnaissance and established a drilling project on the southeast side of the mesa that is still active.

An ore deposit of the channel type was located by drilling and an underground exploration of the White Canyon Mining Company at the northwest. The mesa produced an estimated 1000 tons of ore assaying from 0.27 to 0.39 percent U_3O_8 and 1500 tons assaying less than 0.17 percent U_3O_8. There has been no production from the applicant's ground.

The applicant located the group of 31 claims in April 1953, filing location certificates in the courthouse at Monticello on April 22, 1954, as verified by the Bureau engineer. Some of the claims and discovery monuments were actually in sec. 16, T.36 S., R.17 E., and were so described in the location certificates (Fig. 2 with the geologic report). The applicant realized later that this was a school section under lease to other parties, and filed amended locations on August 7, 1953, describing the claims as in sec. 15 without, however, moving the dis-

covery monuments or correcting the location notices. This was verified in the field by the examining team. The common corner of secs. 9, 10, 15, and 16 has been established and was used for reference.

In the event of an adverse claim, the validity of the applicant's title might be questionable. No discovery monuments indicating conflicting locations were found along the rim. To the east and south, however, the property adjoins claims located by the White Dragon Mining Company and C. Dobbie. After the various claims are surveyed, it is possible that some conflict may develop along the south and east boundaries. A detailed check of all locations was not made or considered necessary.

There are no oil or gas leases in the area which might conflict.

[illegible]

The lenticular deposit in the Teer Flat area occurs in the Shinarump conglomerate at the base of the Triassic Chinle formation, and occupies a nearly developed channel within the underlying Moenkopi formation. The mineral appears to be pitch-blende and alteration products, associated with copper minerals, replacing fossil wood fragments and carbonaceous material in the Shinarump conglomerate. The general strike of the beds is N.30° W, dipping 1 to 3 degrees to the southwest.

There is only a short section of potential ore-bearing outcrop on the applicant's ground at the north end. In the school section to the west, the Moenkopi-Chinle contact can be traced for

several thousand feet, and mineralization at several points is indicated by discoloration of the soil, and by radioactivity "shows". Typical Chinarump conglomerate, however, does not appear to be present, and the basal formation of the Chinle here is gray or gray-green, carbonaceous, sandy mudstone with lenses of hard, medium-to-coarse-grained sandstone 1 to 3 feet thick. This fact, and other data from reconnaissance on neighboring mesas, indicates that the main Chinarump channel passes further south, and any ore deposits occurring in the area which the applicant proposes to prospect are likely to be small. Geologic knowledge to date, however, does not rule out completely the possibility of a small deposit on the claims.

[illegible] on the property.

No sampling was done. Three samples taken previously by Mitcell, and shown on Figure 2 with the geologic report, are as follows:

Sample No.	Description	% percent	U percent
[illegible]	Malachite [illegible]	[illegible]	0.032
	radioactive sandstone float near Chinle-Shinarump contact.		
[illegible]-2-53	Chalcocite and bornite replacing wood (float near Chinle-Shinarump contact). Malachite and limonite coating.	0.72	0.24

Sample No.	Description	eU percent	U percent
TLP-4-53	Radioactive gray carbonaceous sandy mudstone about 2 feet above the Moenkopi. Some wood replaced by copper minerals.	0.15	0.014

Finnell has noted abnormal radioactivity in the soil cover near the Pleat samples, up to 0.8 r/hr., which he believes may indicate an ore body behind the outcrop, although known data to date are too inconclusive to permit adequate interpretation.

[illegible]

Exploration and Development

The property is totally undeveloped. The geological survey drilling program has not presently approached the Cedar and Dixie claims, and the only other exploration in the vicinity was carried out to the north by rotary drilling which was unsuccessful. The one small prospect pit on the claims which appears to date is the Edward mine on the southeast corner of the Pleat and the east of the applicant's claims. Drilling by the geological survey is planned to test an anomaly about half way between the Edward mine and the Cedar and Dixie claims.

Mining and Milling and Other Facilities

There are no buildings or mining or milling equipment on the property.

PROJECT PROPOSED FOR COMMERCIAL USE

The applicant proposed the following program

Bulldozing 40 hours @ $12.00/hr. for access road and some pit stripping	$480.00
Wagon drilling 60 holes for a total of 4500 feet @ $1.00/ft.	4500.00
Additional labor for 90 days @ $15.00/day	1350.00
Use of truck for 90 days @ $5.00/day	450.00
Total estimated cost -	$6780.00

The applicant's proposal called for a small amount of pit stripping and 4500 feet of wagon drilling 60 holes spaced at 50 foot intervals on a line near the western boundary of the property. This is not a well-planned program. The drilling pattern proposed is adequate to determine the extent of mineralization away from the pits by drilling holes closely spaced holes along a length of [illegible] feet [illegible] the [illegible] and extend [illegible] at the expense of the stripping. Stripping is planned and constitutes type of small problem which would be invaluable in this and wagon drilling guide.

Undoubtedly the applicant's intention is to very little stripping and rely on drilling prior to the fact that he does not control [illegible] of the mineral deposit and could not finance stripping on this property as part of a [illegible]-assisted project.

Known conditions do not favor the use of wagon drilling. [illegible] a prospect hole near in the area to the south encountered water in one of the middle Chinle beds and poor results were obtained. The same hole [illegible] to be penetrated on the Cedar and Dingo claims. There is a spring north of the claims on an outcrop of

this bed, indicating that the same wet conditions are likely to be encountered.

Finnell has determined that the average drilling depth to the potential ore horizon is closer to 250 feet than the 75 feet estimated by the applicant.

A suitable exploration program, assuming that the applicant had control of the area covering the extrapolated favorable horizon, would include additional rim stripping, and from 1000 to 2500 feet of diamond drilling at a cost of $ 6000.00 to $12,000.00.

[illegible]

The time required to complete the revised program would be from 2 to[illegible] months, depending on the amount of drilling.

[illegible]

The applicant states that he is prepared to furnish his share of the cost in labor, equipment, and cash. Use of his truck and his own labor would make up most of his contribution.

[illegible]

The area proposed for exploration is located on a section of the Chinle-Wenkopi contact which appears to be north of the main ore channel. Chinarump conglomerate, the host potential ore formation, is not known at all in most of the property. While there is a possibility that ore might be present in the Chinle mudstone just above the Wenkopi formation, it is doubtful that a sufficient tonnage exists to justify any large expenditure for exploration. The ore deposits found in the main ore channel at the Hidden Line were not large, and deposits

occurring out of the channel are, in all probability, even smaller.

Assuming that the required expenditure is justified, control of the area covering the rim outcrops by the operator would be essential to permit preliminary rim stripping as a guide to a drilling program, and probably to facilitate mining should any ore be found.

The location procedures have been irregular and, while the claims may be entirely valid on the assumption that the intent of the locator governs rather than compliance with the law in detail, the examining engineer questions their validity.

The applicant suggests that geological survey personnel and the [illegible] may provide technical assistance and makes no other provision. Technical advice would probably be necessary as he does not appear to have the needed training or experience.

All factors considered, the proposed exploration does not appear to meet requirements for a Government-assisted project.

[illegible]

It is recommended that the request for Government-assisted exploration be denied.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

224 New Customhouse
Denver 2, Colorado

February 26, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMA Form 3a and MF-103 and supporting data pertaining to the following application for Government assistance in exploration work:

Cecil William Thompson (Uranium)
504 South Hobson Street
Mesa, Arizona

W. H. King

Enclosures

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

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Cecil William Thompson (Uranium)
504 South Hobson Street
Mesa, Arizona

W. H. King

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

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

Not to be filled in by applicant

Docket No. 3267
Metal or Mineral Uranium
Date Received
Estimated Cost $6,780
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: CECIL WILLIAM THOMPSON
504 S. HOBSON ST.
MESA, ARIZONA

(*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. — INDIVIDUAL

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. NONE

(*d*) If a partnership, add to the above statement the names and addresses of all partners. NO PARTNERS

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract ALL OF MY CEDAR AND DINGO CLAIMS IN SECTIONS 10-15-22 - T36S-R17E SLM. AS SET FORTH ON ATTACHED MAP.
San Juan County, Utah

(*b*) State any mine name by which the property is known. CEDAR & DINGO CLAIMS

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

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

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

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

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. NO WORKS GOING ON

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. NONE

(*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. SEE MAP

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. ABOUT 40 MILES FROM BLANDING UTAH - AN EXISTING ROAD ON THE PROPERTY

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

16—66551-1

SEE SHEET #4(e)

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

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. SEE SHEET # 5(b) ALSO SEE MAP

(*c*) The work will start within 10 days and be completed within 4 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. SEE SHEET #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: SEE SHEET #6

(*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.). SEE SHEET #6

(*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. SEE SHEET #6

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. WORK TO BE CONTRACTED - SUCH ITEMS TO BE INCLUDED

(*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. ONE TON TRUCK - SEE SHEET

(*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. NONE

(*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. NONE

(*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. NONE

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

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

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

LABOR

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 Feb 20, 1954

C. W. Thompson
(Applicant)

By

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

4 (e)

U.S. DEPT. OF THE INTERIOR
Minerals Administration
RECEIVED
MAR 1 - 1954

This application calls for road building & wagon drilling. There are several men in the county available for caterpillar work. One is on Dry Flat at this time (Feb 20, 1954) doing work for the White Canyon Mining Co. He charges $12.00 per hour for his #18 International.

There is also a wagon drill working on the Flat for White Canyon Mining Co. at this time. - It is my understanding they charge 75¢ a foot for the first 50 ft and graduate their prices up according to the depth of the hole. - Most of the proposed drilling will be under 75 ft and should average around $1.00 per foot

C. W. Thompson
504 S. Hobson St.
Mesa, Arizona

#5 (b) Feb 2[illegible] 1954

The proposed caterpillar work is to build a road from the now existing road in Section 10, T36S-R17E off the rim in Hideout Canyon. This rim is about 100 ft thick (there would be very little blasting to get off) Just under this rim is a bench that runs along the canyon for some distance. It is on this bench (just above the Shinarump) that I propose to drill - also strip the rim in places.

Starting on this bench 600 ft North of the Section line between Sec 10 and 15 and running South West for 3000 ft I would like to put down a hole every 50 ft in the promising places and where the showings are good, close the holes up to 25 ft apart. The cat work should take about 40 hours and 60 holes should tell the story.

C.W. Thompson
504 S. Hobson St.
Mesa, Arizona

5(d):

Feb 20, 1954.

I am a miner working at present for Magma Copper Co. in Superior Arizona.

As for supervision, The United States Geological Survey worked on White Canyon Mining Co.'s Hideout Claim last summer, and as I understand it, they will be there again this summer. — I would like to have this worked out under their program and supervision, if possible. — with their expenses paid back out of the ore if it develops.

The man to see on this, I believe, would be Mr. Tom Trimell, head of the U.S.G.S. on Deer Flat.

C. W. Thompson
504 S. Hobson St
Mesa, Arizona

Feb 20, 1954

#6 Caterpillar estimate 40 hours at $12.00 per hour.
Drilling estimate 60 holes 75 ft each at $1.00 per foot.

6 (b) Labor - 1 man 3 months at $15.00 per day
6 (d) 1 pick up truck for field work and transportation
5.00 per day (gas oil and repairs)

Cat	Drill	Labor	Truck
40 hours	60 holes	90 days	90 days
12 per hour	75 ft each	15 per day	5 per day
80	300	450	$450.00
40	420	90	
$480.00	4500 Total feet	$1350.00	
	1.00 per foot		
	$4500.00		

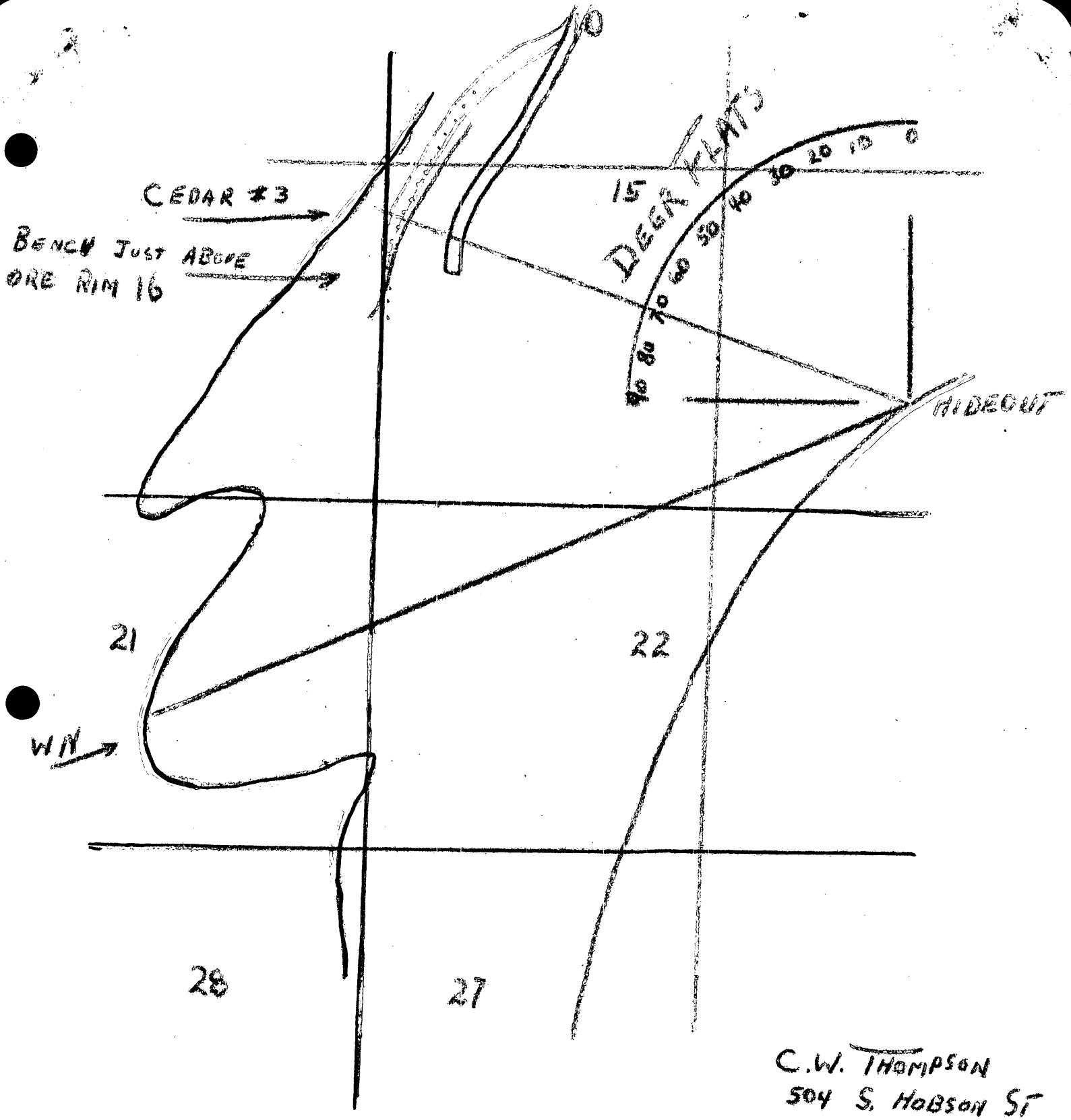
480.00	Cat
4500.00	Drill
1350.00	Labor
450.00	Truck
$6780.00	Total applied for

C. W. Thompson
504 S. Hobson St
Mesa, Arizona

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. DIVISION STREET
SPOKANE 2, WASHINGTON

SPOKANE
FEB 25
730PM
1954
WASH.

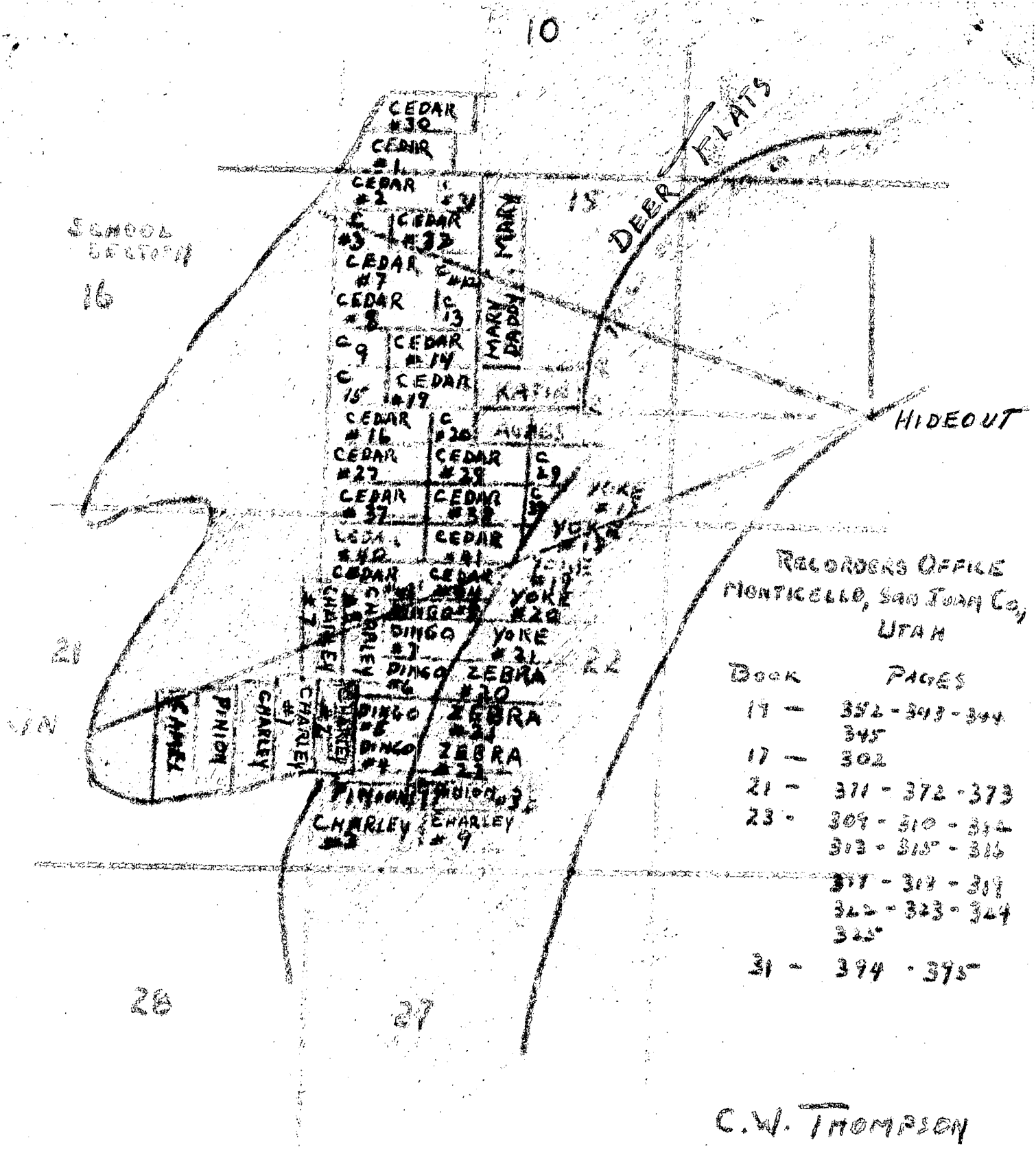
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.



C.W. THOMPSON
504 S. HOBSON ST
MESA, ARIZONA

EXISTING ROAD
PROPOSED ROAD
PROPOSED DRILL HOLES
OR PERMITS

T 36 S - R 17 E



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C.W. THOMPSON
504 S. HOBSON ST.
MESA, ARIZONA

- WHITE CANYON MINING CO.
- C. W. THOMPSON
- SCHOOL SECTION
- G. BABBLE

T 36 S - R 17 E

U.S DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET 3267

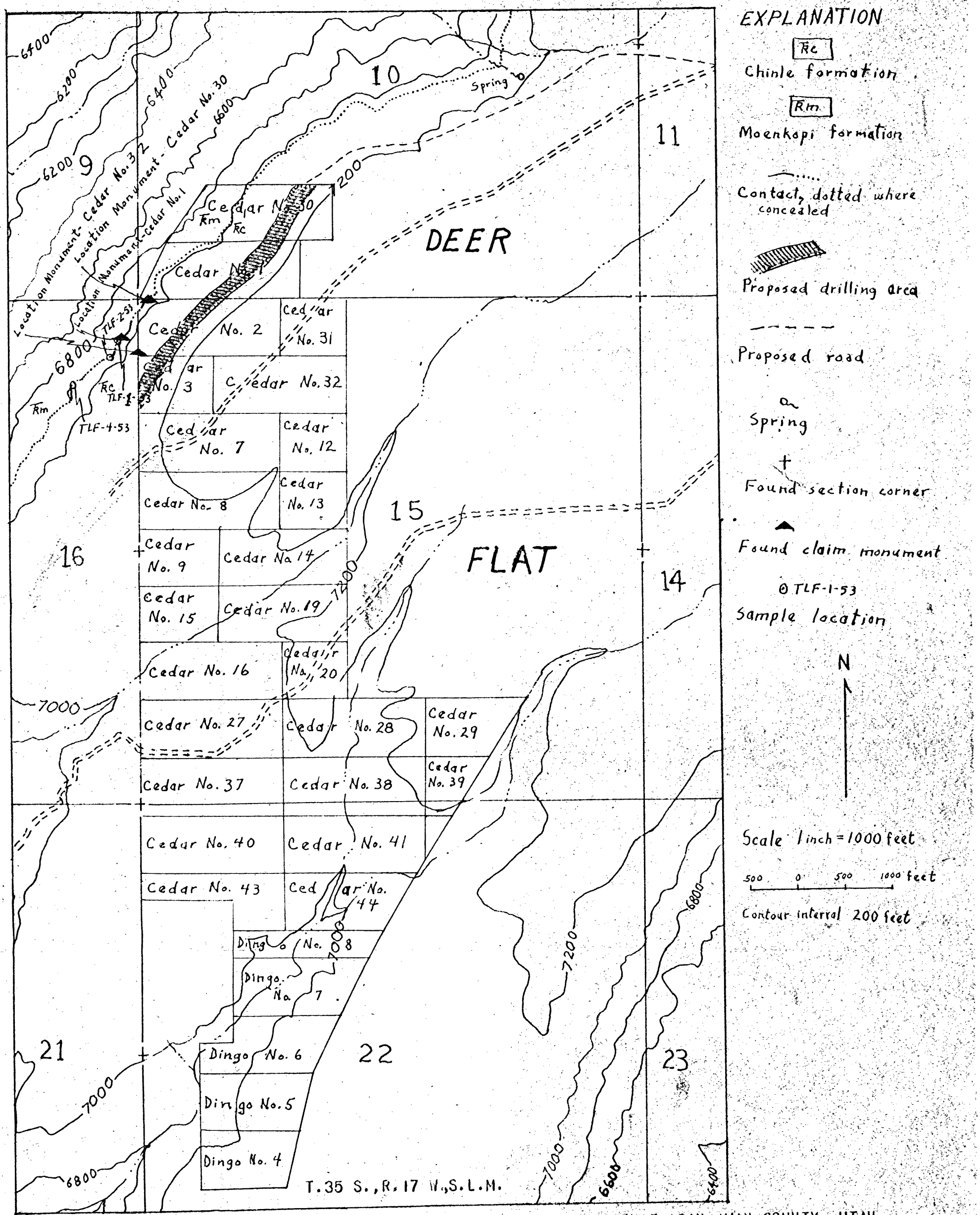

FIGURE 2. SKETCH MAP OF THE CEDAR AND DINGO CLAIMS, DEER FLAT, SAN JUAN COUNTY, UTAH