DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 5033

Application
- [X] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [X] Application and attachments

Right Side

- [X] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [X] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 26 1958

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado
May 23, 1958

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA Aid, (Uranium) Antelope Mines (Norb claims) Carbon County, Wyoming

Enclosed are the original and two copies of the subject application. One copy of the application is being retained in our file.

The Applicant proposes to explore a mineralized target area by 16,400 feet of rotary non-core drilling at a total estimated project cost of $31,862.24.

Prices quoted on the submitted drilling bids seem well within reason.

JW Townsend
for E. N. Harshman

Form MF-103
Revised Oct. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION

APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

NAME OF APPLICANT (Full legal name and mailing address as it should appear on contract if one is executed)

Antelope Mines
N. P. Juneman, General Partner
1910 Hyview Drive
Casper, Wyoming

RECEIVED MAY 26 1958 D.M.E.A.

APPLICANT NOT TO USE THIS BLOCK

Docket Number	DMEA-5033
Date Received	5-26-58
Government Participation %	
Region	III
Division Code	700

BUSINESS ORGANIZATION (Check one)

- Individual [ ]
- Corporation [ ]
- Partnership [X]
- Other (Specify) [ ]

State in which firm is organized: Iowa

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
N. P. Juneman	1910 Hyview Dr., Casper, Wyo.	General Partner & Manager
Louis M. Murray	310 4th St., Sioux City, Iowa	General Partner

Mineral(s) for which you wish to explore: Uranium

Estimated Cost of Project: $31,862.24

LOCATION OF PROPERTY

Name	County	State
Norb Claims	Carbon County	Wyoming

GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Revised, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

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.

DMEA
DEPARTMENT OF THE INTERIOR
MAY 22 1958
REGION III
DENVER, COLORADO

MAY 21 1958
Dated

Louis M. Murray
BY *(Signature)*

General Partner
Title

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

(a) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

(b) State all the names by which you know the property.

(c) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

(d) Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

(b) State your interest, if any, in operations stated in 2*(a)*.

(c) State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

(a) To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

(b) Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

(a) Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

(b) If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

(c) In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

(a) Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

(c) Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

(g) Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

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)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Revised.

(b) Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 25960

ANTELOPE MINES
Application for Aid in an Exploration Project,
Pursuant to DMEA order 1, under the Defense
Production Act of 1950, as Amended

ANNEX 1

The land referred to in Article 1, paragraph (a) of the Application form MF-103 consists of 38 unpatented lode mining claims known as the Norb group, situated in Carbon County, Wyoming:

Sections 5, 6 and 7 of Township 27 North, Range 79 West.

Notices of location for the Norb group of claims are recorded in the Offices of the Recorder for Carbon County at Rawlins, Wyoming as follows:

Claim	Book No.	Page No.	Date
Norb No. 1	378	115	10/3/57
Norb No. 2	378	116	10/3/57
Norb No. 3	378	117	10/3/57
Norb No. 4	378	118	10/3/57
Norb No. 5	378	119	10/3/57
Norb No. 6	378	120	10/3/57
Norb No. 7	378	121	10/3/57
Norb No. 8	378	122	10/3/57
Norb No. 9	378	123	10/3/57
Norb No. 10	378	124	10/3/57
Norb No. 11	378	125	10/3/57
Norb No. 12	378	126	10/3/57
Norb No. 13	378	127	10/3/57
Norb No. 14	378	128	10/3/57
Norb No. 15	378	129	10/3/57
Norb No. 16	378	130	10/3/57
Norb No. 17	378	131	10/3/57
Norb No. 18	378	132	10/3/57
Norb No. 19	378	133	10/3/57
Norb No. 20	378	134	10/3/57
Norb No. 21	378	135	10/3/57
Norb No. 22	378	136	10/3/57
Norb No. 23	378	137	10/3/57
Norb No. 24	378	138	10/3/57
Norb No. 25	378	139	10/3/57
Norb No. 26	378	140	10/3/57
Norb No. 27	378	141	10/3/57
Norb No. 28	378	142	10/3/57
Norb No. 29	378	143	10/3/57
Norb No. 30	378	144	10/3/57
Norb No. 31	378	145	10/3/57
Norb No. 32	378	146	10/3/57
Norb No. 33	378	147	10/3/57
Norb No. 34	378	148	10/3/57
Norb No. 35	378	149	10/3/57
Norb No. 36	378	150	10/3/57
Norb No. 37	378	151	10/3/57
Norb No. 38	378	152	10/3/57

The above listed claims are shown on the enclosed property map entitled, Antelope Mines, Norb Claims, Shirley Basin.

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

Purpose

This application for exploration assistance is made on behalf of Antelope Mines, a partnership formed in the State of Iowa, with its principal office in the city of Casper, Wyoming. The purpose is to request exploration aid for uranium bearing ores in the Shirley Basin District of Wyoming, under the above named act.

1. Applicants Property Rights:

   a. ANNEX 1, following form MF-103, gives all pertinent facts about the applicants property rights. All the unpatented lode claims are listed together with the book and page number for each recorded location notice.

   b. The property is known only as the Norb claims.

   c. The claims are owned by the applicant with no royalty reservations, lien, or sale contract.

   d. The claims are free of all liens, mortgages, or encumbrances.

2. Physical Description

   a. There are no mine workings or production facilities on the lands covered by this application. One drill hole was found on Claim No. 2 that appeared to be 175 feet deep and was probably a seismograph drill hole from oil exploration.

   b. The owners have no interest in any producing facilities in the Shirley Basin district.

   c. There is no past or current production from the lands included in this application.

   d. There are no known ore reserves on the property. It is the intention of the applicants to support this request for exploration aid with the potential of the district and nearby properties, together with geologic evidence of favorable structure and host rocks on the claims.

Geologic Features

General Geology

   e. The Shirley Basin district is located near the center of southeastern Wyoming in the general local of the common corners of Albany, Carbon, Converse and Natrona Counties. The Basin is 30 miles long and 20 miles wide with its axis

striking west-northwest. The Basin is bordered on the north and east by the Laramie Mountains, on the south by the Freezout and Shirley Mountains, and on the west by the Clarkson-Poison Spider highlands.

The attached geology map from Konkel and Peterson is the only published geologic study of the Shirley Basin district. The map shows the outcrops, structure and geologic cross sections of the Basin. Much more information is now available from the recent exploration activities of such companies as Utah Construction Company, Kerr McGee Oil Industries and Tidewater Oil Company. The claims and lands owned and controlled by these companies are shown on the property map accompanying this report. The information that these companies have acquired on the Basin is held in confidence, but generalizations of ore bodies and controls known to exist are made part of this report.

Structural Geology and Ore Controls

The Norb claims lie near the axis of the Shirley Basin Tertiary Syncline. To date most known ores have been found on the north flank of this syncline. An interesting feature of the structure affecting the ore bearing Tertiary rocks is that the rocks were originally deposited from the granites of the North Laramie and Shirley Mountains. The Basin filled with Tertiary sediments that once dipped toward the Basin from the southwest and northeast. At a later date a reversal of dip was made by regional tilting of the sediments to the northwest 3° to 5°. This reverse dip plays an important part in the localizing of ores in the known occurrences of the Shirley Basin.

Ore bodies are colored red on the accompanying geology map. These ores average .50% U_3O_8 and the major ores are at depths at or greater than 275 feet. Recent hearings before the AEC Joint Committee in Washington designated the "202" Hearings disclose that ore reserves in the Shirley Basin are over 1,500,000 tons measured and can be as great as 3,000,000 tons of high grade ores.

Geologically the known deep ore bodies are controlled by a very easily explained and interpreted phenomena. The Tertiary sands of Shirley Basin are much more continuous in extent and character than for instance - the Gas Hills. These sands pinchout against pre-Tertiary erosional unconformities. These irregularities in the pre-Tertiary surface reach differences of as much as 200 feet. Ores are deposited on the southeast of these "highs" where sandstone lenses pinchout against the older resistant formations. The ores thereby reflect the reverse in dip of the Tertiary rocks where northwestward migrating uranium laden solutions were effectively trapped in the pinchout of the Tertiary sands.

The Norb claim group is located near the axis of the Tertiary syncline. Drilling depths may vary from 250 to 500 feet. An effort will be made to map the pre-Tertiary topography and Tertiary sands that may pinchout in the above described manner.

f. No samples of ore bearing material has been taken from the Norb claims and no exploration has been done.

3. Accessibility of Project

a. Mr. N. P. Juneman, Manager of Antelope Mines lives at 1910 Hyview Drive, phone 3-8327, Casper, Wyoming and will meet DMEA representatives and escort them to the property.

The Norb claims are reached by driving south of Casper on Highway 220 then taking State Secondary 184 approximately forty (40) miles to the Rim Road bordering Bates Hole, turn east for three (3) miles, then south as shown on the map.

b. Supply points to the Shirley Basin district is Casper, Wyoming approximately fifty (50) miles from the property.

4. The Exploration Project

a. The proposed exploratory work shall all be conducted by rotary non-core drilling to test the sandstone complex of the Wind River formation and the underlying pre-Tertiary erosional surface. Drill holes are so located to check: 1. The stratigraphic sandstone complex of the Wind River formation, 2. The continuation and dip of the sands, and 3. The resistant erosional reminents of the Mesaverde formation that may "pinchout" these sands of the Wind River formation. It is thought that these erosional "highs" may be sufficient to form pinchouts in the Wind River sands as they do in the known ore bodies of the Basin. These "pinchouts" may trap the uranium laden solutions migrating down the Tertiary syncline now plunging to the northwest.

It is necessary that all holes be probed with resistivity equipment to correlate and follow the Wind River sands. This can be contracted for with the radioactivity logs @ .13¢/foot plus drive time from field operation base of the contractor.

Stage I

It is impossible to project the depth of the Wind River formation on the Norb claims. It is thought that the 1st Stage drill holes planned to penetrate the Tertiary rocks will average 350 feet to 400 feet deep. Drill holes are so designated on the accompanying map to more easily test the pre-Tertiary erosional surface which probably has resistant "highs" striking and elongated northwest.

Stage II

Second Stage drilling should be concentrated near mineralization, and on the southeast side of pre-Tertiary "highs". It is proposed that a structural contour map be made from the 1st Stage drilling to control the second Stage mineralized offset drilling, and favorable "pinchout" drilling.

Stage III

Stage III drilling is restricted to core drilling of offset holes to Stage II ore or mineralized holes. Coring recently completed

in the Shirley Basin guarantees 80% + recovery in the ore zone. The contract cost of such coring averages $19.00/foot. It should be remembered, however, that the coring is restricted to only the ore zones.

b. No access road to the project need be built at this time.

c. In the event that the exploration contract with DMEA be granted, work can start within 15 days and drilling completed in 6 months. The daily average drilling rate anticipated is 300 feet per day, non-core rotary drilling.

5. Experience

Antelope Mines has had considerable experience and background in exploration projects. The project will be supervised by Mr. N. P. Juneman, General Manager of Antelope Mines.

6. Estimate of Costs

Stage I

a. Independent Contracts		
24 hours of actual operation time, tractor with dozer, including operator @ $13.00/hr.	$ 312.00	
6,400 feet of rotary non-core drilling @ $1.00/ft.	6,400.00	
Radiometric and resistivity hole logging @ 13¢/ft. plus 2 hrs. drive time per hole @ $10.00/hr., 6,400 x 13¢ + $320.00	1,152.00	$ 7,864.00
b. Personal Services		
1 Supervising Geologist @ $750/mo., 1 mo.	750.00	
1 Geologist helper @ $450/mo., 1 mo.	450.00	
1 Sampler @ $1.75/hr., plus time and one-half rate over 40 hrs/week worked, 1 mo.	392.00	
Labor - none		$ 1,592.00
c. Operating Materials and Supplies		
Sample Containers @ $24.00 per 1,000 4 x $24.00	96.00	$ 96.00
d. Operating Equipment		
1 4 wheel drive vehicle @ .12¢/mile 2,000 miles	240.00	
1 Pickup truck rental @ .10¢/mile 2,000 miles	200.00	$ 440.00
e. Rehabilitation and repairs. None		
f. New buildings, improvements, installations. None		
g. Miscellaneous		
Payroll taxes and insurance 5.2% x $1,592.00	82.78	

Accounting	100.00	
40 chemical analyses @ $3.50 each	140.00	$ 322.78
Estimated Total Cost of Stage I		$10,314.78

Stage II

a. Independent Contracts		
20 hrs. of actual operation time, tractor with dozer, including operator @ $13.00/hr.	$ 260.00	
7,500 feet of rotary non-core drilling @ $1.00/foot	7,500.00	
Radiometric and resistivity hole logging @ .13¢/foot plus 2 hrs. drive time per hole @ $10.00/hr., 7,500 x 13¢ + $500.00	1,475.00	$ 9,235.00
b. Personal Services		
1 Supervising Geologist @ $750/mo., 6 wks	1,125.00	
1 Geologist helper @ $450/mo., 6 wks.	675.00	
1 Sampler @ $1.75/hr. plus time and one-half rate over 40 hr./week worked, 6 wks.	588.00	$ 2,388.00
c. Operating Materials and Supplies		
Sample containers @ $24.00 per 1,000 5 x $24.00	120.00	$ 120.00
d. Operating Equipment		
1 4 wheel drive vehicle @ .12¢/mile 3,000 miles	360.00	
1 Pickup truck rental @ .10¢/mile 3,000 miles	300.00	$ 660.00
e. Rehabilitation and Repairs. None		
f. New buildings, improvements, installations. None		
g. Miscellaneous		
Payroll taxes and insurance 5.2% x $2,388.00	124.18	
Accounting	150.00	
60 chemical analyses @ $3.50 each	210.00	$ 484.18
Estimated Total Cost of Stage II		$12,887.18

Stage III

a. Independent Contracts		
16 hrs. of actual operation time, tractor with dozer, including operator @ $13.00/hr.	$ 208.00	
2,500 feet rotary non-core drilling @ $1.00/ft.	2,500.00	

200 feet diamond coring @ $14.00/ft	$2,800.00	
Radiometric and resistivity logging @ .13¢/ft. plus 2 hrs. drive time per hole @ $10.00/hr., 2,700 x 13¢ + $200.00	551.00	$ 6,059.00
b. Personal Services		
1 Supervising Geologist @ $750/mo. 1 mo.	750.00	
1 Geologist helper @ $540/mo. 1 mo.	450.00	
1 Sampler @ $1.75/hr. plus time and one-half rate over 40 hr./week worked, 1 mo.	392.00	
Labor - None		$ 1,592.00
c. Operating Materials and Supplies		
Sample containers @ $24.00 per 1,000 1 x $24.00	24.00	
Core boxes @ $12.50 each x 8	100.00	$ 124.00
d. Operating Equipment		
1 4 wheel drive vehicle @ 12¢/mile 2,000 miles	240.00	
1 Pickup truck rental @ 10¢/mile 2,000 miles	200.00	$ 440.00
e. Rehabilitation and Repairs None		
f. New buildings, improvements, installations None		
g. Miscellaneous		
Payroll taxes and insurance 5.2% x $1,592.00	82.78	
Accounting	100.00	
75 chemical analyses @ $3.50 each	262.50	$ 445.28
Estimated Total Cost of Stage III		$ 8,660.28

Summary

Estimated Total Cost Stage I	$10,314.78
Estimated Total Cost Stage II	12,887.18
Estimated Total Cost Stage III	8,660.28
Grand Total:	$31,862.24

7. Applicants Payment

a. The applicant is prepared to furnish their share of the cost of the proposed project in accordance with the regulations stated in Sec. 7 of DMEA Order 1, Revised.

b. The applicants propose to furnish their share of the costs by providing monies over and above the Governments participation.

FORD and FOX
CONSULTING GEOLOGISTS
P. O. Box 428
Riverton, Wyoming

B. C. COUCH DRILLING CO.

208 BOULDER BLDG.
TULSA, OKLAHOMA
PH. GIBSON 7-8847

TETON HOTEL
RIVERTON, WYOMING
PH. UL6-2271

DMEA
DEPARTMENT OF THE INTERIOR
MAY 23 1958
REGION III
DENVER, COLORADO

May 2, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 26 1958
DATE | INITIALS | CODE

Mr. Robert Ford
Riverton
Wyoming

Dear Sir:

I would like to submit the following bid on the proposed drilling program in Shirley Basin for Antelope Mines:

0 - 300' @ $ 0.95 per foot

300'- 600' @ $ 1.10 per foot

Sincerely yours,

B. C. COUCH DRILLING CO.

B. C. Couch

B. C. Couch

BCC:bb

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 26 1958
DATE | INITIALS | CODE

CHAS. H. EVITT
PHONE 2-7308
RES. PHONE 3-7343

EVITT DRILLING CO.

Seismograph Drilling ● Uranium Drilling ● Core Drilling
Grout Hole Drilling ● Pressure Grouting

Western Building
300 North Center Street
CASPER, WYOMING

APRIL 26, 1958

DMEA
DEPARTMENT OF THE INTERIOR
MAY 23 1958
REGION III
DENVER, COLORADO

DMEA
RECEIVED MAY 26 1958

MR. N. P. JUNEMAN:
1910 HYVIEW
CASPER, WYO.

DEAR MR. JUNEMAN:

IN REFERENCE TO YOUR REQUEST FOR BIDS DATED APRIL 18, 1958, FOR DRILLING TO BE DONE ON THE NORB CLAIMS, IN SHIRLEY BASSIN, WYO., I SUBMIT THE FORLLOWING BID FOR THE EVITT DRILLING CO.

DEPTH	PRICE PER FT.
0--------200'	$0.85
200------400'	1.00

ALL CORING AND STANDBY TIME, $20.00 PER HR. PLUS BITS AND MATERIAL.

VERY TRULY YOURS,
EVITT DRILLING CO.

Chas H Evitt

CHAS. H. EVITT

"DRILL HOLES WILL TELL"

PLUG DRILLING
CORE DRILLING
WATER WELLS
SEISMOGRAPH DRILLING

AIR AND WATER COMBINATION DRILLING

P. O. BOX 176
PHONES:
RIVERTON: UL6-2317
CASPER: 2-6166

BEAVERS & HARRIS DRILLING CO.

RIVERTON, WYOMING

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DMEA
RECEIVED MAY 26 1958
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DMEA
DEPARTMENT OF THE INTERIOR
MAY 23 1958
REGION III
DENVER, COLORADO

May 17, 1958

Antelope Mines
Mr. N.P. Juneman
1910 Hyview
Casper, Wyoming

Dear Sirs,

We would like to quote the following bid prices on proposed D.M.E.A. drilling program in Shirley Basin area of Wyoming.

Stage 1	Depth range	Drill Foot	No. holes	Average depth
non-core	0---250 ft.	------ 85¢	16	450 ft.
	250---450 ft.	------ 95¢		

Hugh M. Harris

Hugh M. Harris

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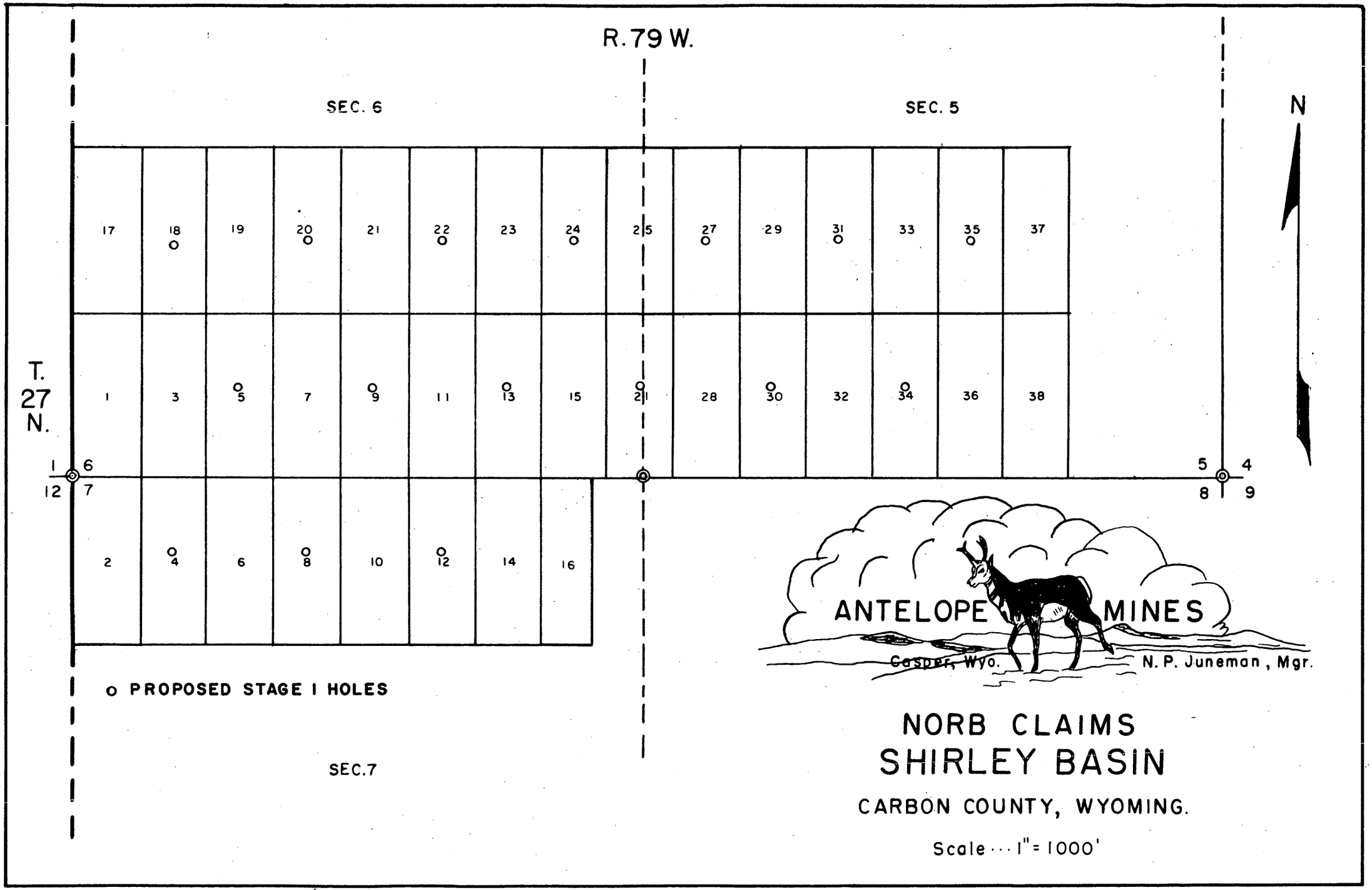
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o PROPOSED STAGE I HOLES
ANTELOPE MINES
Casper, Wyo.
N. P. Juneman, Mgr.
NORB CLAIMS
SHIRLEY BASIN
CARBON COUNTY, WYOMING.
Scale ··· 1" = 1000'

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Docket

Murphy

October 15, 1958

Summary of Proposed Project

Object: Denial of application for exploration aid.

Docket No.: DMEA-5033

Commodity: Uranium

Amount of application: $31,862.24

Applicant: Antelope Mines, a partnership
1910 Hyview Drive
Casper, Wyoming

Property rights: Owner of unpatented lode mining claims Norb Nos. 1 through 38, situate in secs. 5, 6, and 7, T. 27 N., R. 79 W., Carbon County, Wyoming

Date of application: May 21, 1958

Referred to Region III: June 4, 1958
Field Examination made: June 25, 1958
Field Team Report received: October 3, 1958

Work proposed: A three-stage drilling program to explore the Wind River formation with holes ranging from 350 feet tp 400 feet in depth.

Estimated Costs:

Bulldozing, 60 hours @ $13.00/hr.	$ 780.00
Core drilling, 200 feet @ $14.00/ft.	2,800.00
Non-core drilling 16,400 feet @ $1.00/ft.	16,400.00
Radioactive and resistivity logging	3,178.00
Personal services	5,572.00
Operating Materials and Supplies	340.00
Operating equipment	1,540.00
Miscellaneous	1,252.24
Total	$31,862.24

Excerpts from Report of Examination, by W. N. Sharp, USGS, and E. O. Binyon, USBM:

The property is in the Shirley Basin approximately half way between Casper, to the north, and Medicine Bow, to the south.

The Eocene Wind River formation outcrops throughout the basin, covering an area 9 miles wide and 20 miles long, and essentially is flat-lying. The Cretaceous beds that immediately underlie the Wind River dip about 10 degrees basinward.

Several large deposits of good grade uranium ore have been discovered at the base of the Wind River where it is in contact with the underlying Cretaceous Steel shale. These deposits lie in an area 7 to 9 miles east of the Norb claims.

The Applicant justifies its project on the theory that a recent uplift at the east end of the basin has tilted Tertiary beds westward 3° to 5° so that uranium-bearing ground water would move down dip toward the Norb claims; and that irregularities in the Wind River lower surface would tend to impede these solutions and cause uranium to deposit into large ore-grade bodies.

The field examiners note that the geologic features on which the Applicant's theory is based are not known to exist. Moreover, the position of the known large ore bodies, far up on the northeast limb of the proposed syncline, strongly suggest that other features than those brought out by the Applicant have functioned to concentrate uranium.

The examiners conclude that the geologic data available on the Shirley Basin, all general in nature, does not warrant a full exploration program on the Norb claims at this time, and that some preliminary exploration drilling would be required to establish the favorability of the Norb claim area.

The examiners and Field Team recommend the application for aid should be denied without prejudice to the property.

Commodity Members' Comments:

In memoranda, dated October 9 and 13, 1958, James Paone, USBM, and W. P. Williams, USGS, respectively, concur in the recommendation to deny the application.

Division of Rare and Miscellaneous Metals, F. M. Murphy,
October 15, 1958

Judging from the field examiners' report, there is no actual geologic information on the central part of the Shirley Basin. Therefore, the Applicant's premise for uranium deposition in the area of the Norb claims cannot be approved or disapproved at this time. I agree with the examiners that the Applicant should perform the initial prospecting of the area.

Conclusions and Recommendations:

The proposed exploration work apparently is based on unproven geologic premises and, therefore, can be classed as prospecting.

In a teletype, dated August 14, 1958, Region III advised Washington it would recommend that the application should be denied. The Administrator, in a letter, dated August 19, 1958, advised the Applicant that its request for aid was denied.

F. L. Knouse

F. L. Knouse, Acting Chief
Division of Rare and
Miscellaneous Metals

IN REPLY REFER TO:

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

DATE	INITIALS	
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October 13, 1958

Memorandum

To: F. L. Knouse, Office of Minerals Exploration

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

Subject: Review of field examination report, DMEA ~~4~~5033 (Uranium)
Antelope Mines, Norb Claims, Carbon County, Wyoming

The examining team report that the applicant's property does not warrant expenditure of Government funds for exploratory work at this time. The examiners point out that the property really needs prospecting to determine whether exploration work is justified.

The applicant believes that favorable geologic structures are present on his claims. The examiners, however, were unable to find evidence of the basin and regional uplift that the applicant mentioned. Geologic mapping of the area is needed before drilling is undertaken. A single plug-bit hole, drilled for seismic information, was barren of radioactive material.

I agree with the recommendations of the examining team for denial of the application because a discovery of ore probably would not result from the work.

W. P. Williams

W. P. Williams

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DATE	INITIALS	CODE
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	Murphy	700

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

Date October 9, 1958
DMEA Docket No. 5033
DMEA Contract No.
Commodity Uranium
Name of Applicant Antelope Mines
Location of property Carbon County, Wyo.
Estimated cost of project $31,862.34

Memorandum

To: Frederick L. Knouse, Acting Director, OME
Rare and Misc. Minerals Div.
From: James Paone, Bureau of Mines Member
Uranium Commodity Committee
Subject: Review of Field Team Report
(Application, Field Team Report, etc.)

1. Date of subject document: 10/3/58 2. Date received by reviewer: 10/9/58

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

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

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

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

7. Explain items marked 'yes' above:

8. Factors meeting special consideration:

a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs
h. ☐

9. Action advised:

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

10. Remarks: (Use back of page if necessary).

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
224 New Customhouse
Denver 2, Colorado
October 3, 1958

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10-9 HB 130
10/9 C 220
Murphy 700

Memorandum

To: Secretary to the Operating Committee, OME

From: Acting Executive Officer, OME Field Team, Region III

Subject: Docket No. DMEA-5033 (Uranium), Antelope Mines (Norb claims) Carbon County, Wyoming
Joint Report of Examination

Enclosed are the original and two copies of a joint report of examination on the subject project, dated September 30, 1958, by W. N. Sharp, Geologist, Geological Survey, and E. O. Binyon, Mining Engineer, Bureau of Mines.

The Field Examiners point out that the applicant does not provide or infer a target for the proposed exploration work and they conclude that until more is known geologically about the particular area of the Shirley basin, that Government participation in an exploration program is not warranted. Therefore, they recommend that the application be denied without prejudice, in which this office concurs.

E. N. Harshman

E. N. Harshman

Encls.

Note - Denied August 19, 1958 by Administrator's letter.
FMM

Reviewed by
OME OPERATING COMMITTEE
10-9-58
(date)

ON-SITE EXAM. REPORT

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

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

OME
DEPARTMENT OF THE INTERIOR
OCT 2 - 1958
REGION III
DENVER, COLORADO

DMEA 5033

Antelope Mines

Norb claims

Carbon County, Wyoming

Uranium

Joint Engineering and Geologic Report

by

W. N. Sharp, Geologist
Geological Survey

E. O. Binyon, Mining Engineer
Bureau of Mines

September 30, 1958

Reviewed by
OME OPERATING COMMITTEE
10-9-58
(Date)

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Ownership..... 4

History and production..... 4

Present status..... 4

Geology..... 5

Ore reserves..... 8

Applicant's proposed program..... 8

Conclusions and recommendations..... 13

ILLUSTRATIONS

Figure — Follows page

1. Location map, Antelope Mines, Norb claims, Carbon County, Wyoming. DMEA 5033..... 2

2. Geologic map of Shirley Basin and vicinity, Wyoming, showing Antelope Mines property. DMEA 5033..... 13

DMEA 5033

ANTELOPE MINES
NORB CLAIMS
CARBON COUNTY, WYOMING

INTRODUCTION AND SUMMARY

Antelope Mines, a partnership formed in the State of Iowa, with the principal office in Casper, Wyoming, applied to the Defense Minerals Exploration Administration for aid in exploration of the Norb claims in sections 5, 6, and 7, T. 27 N., R. 79 W., Carbon County, Wyoming. The property comprises a group of 38 contiguous unpatented claims or about 760 acres.

A field examination of the property and a reconnaissance of the western part of the Shirley Basin was made on June 25, 1958, by W. N. Sharp, geologist, U. S. Geological Survey, and E. O. Binyon, mining engineer, U. S. Bureau of Mines. Mr. N. P. Juneman, general manager of Antelope Mines accompanied the examining team on the examination.

The applicant in his request for assistance proposed an exploration drilling program of three stages. Stage I consisted of deep drilling through the Wind River formation on a 1,200- by 1,500-foot offset grid. Stage II was offset drilling in areas of mineralized Stage I holes and in areas where the pre-Tertiary surface is found to be irregular. Stage III would be core drilling of offset holes in ore-bearing intervals.

At the time of the field examination, the property had not been prospected. Only one drill hole was known anywhere on the property. The exploration program and request for assistance was justified with a regional geologic picture drawn from sketchy geologic data. The conspicuous shortcoming of the proposed program is that it is more prospecting in nature than exploration. No target is provided nor is one inferable from existing data.

The examining team concludes that until more is known geologically about the particular area of the Shirley Basin, an exploration program is not warranted. Denial without prejudice is recommended. OK

ACKNOWLEDGMENTS

Thanks are due N. P. Juneman, general partner and manager of Antelope Mines, for showing the examining team over the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Norb claims Nos. 1 through 38 are in secs. 5, 6, and 7, T. 27 N., R. 79 W., 6th principal meridian, Carbon County, Wyoming. The property is in the Shirley Basin approximately halfway between Casper to the north and Medicine Bow to the south. Casper, one of the largest towns in Wyoming, is approximately 45 miles by road north of the property. Located on U. S. Highway 20 and a railpoint on the CBQ railroad, it is a supply and equipment center for the area. Medicine Bow, a small

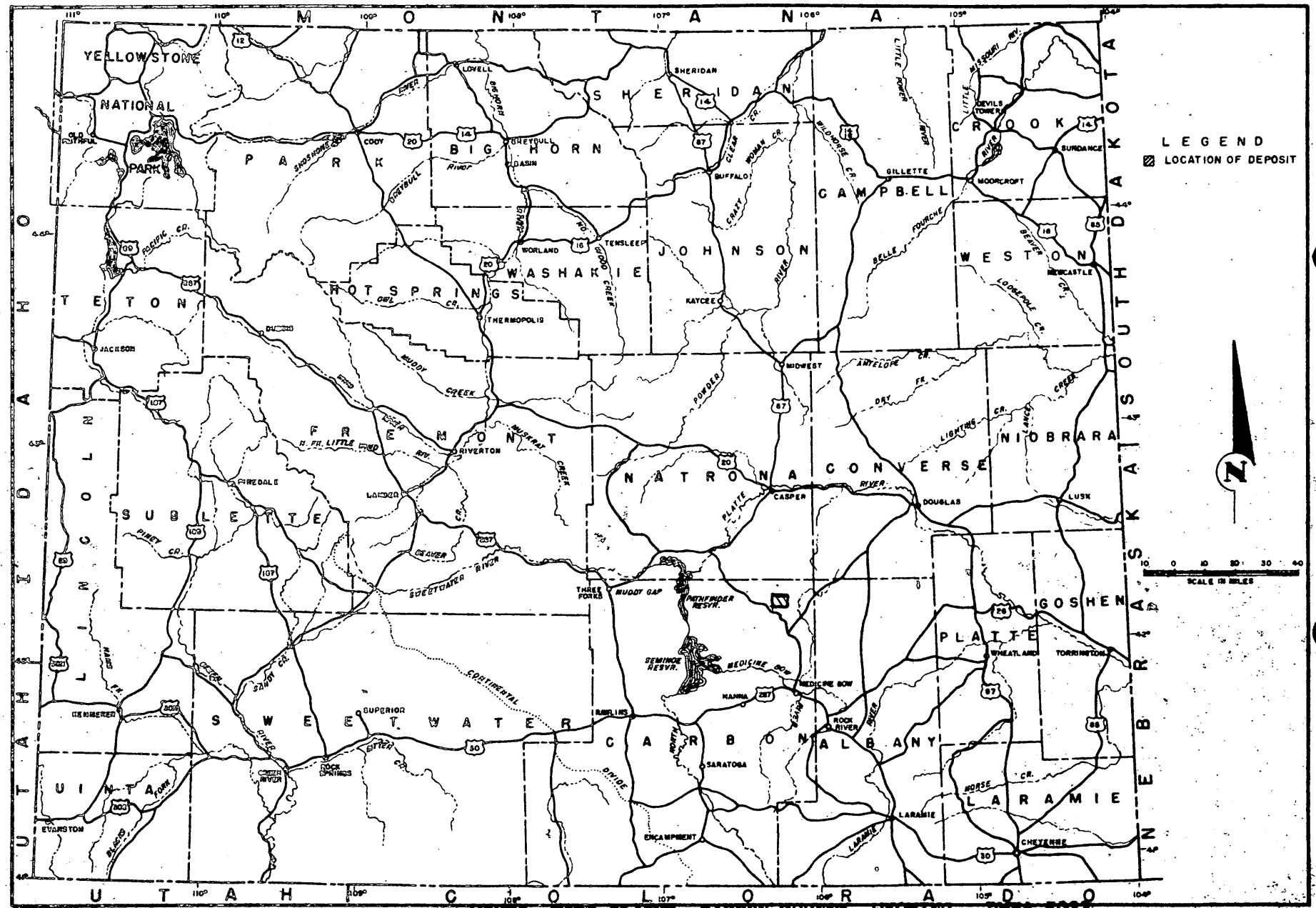

FIGURE 1 - LOCATION MAP, ANTELOPE MINES, NORB CLAIMS, CARBON COUNTY, WYOMING - DMEA 5033

community on U. S. Highway 30 and a railpoint on the Union Pacific Railroad, is 42.6 miles by road south of the property.

To reach the claims from Medicine Bow take secondary State Highway 0405 (the Casper road) out of Medicine Bow, go 39.2 miles, take a right hand unimproved road and go 3.4 miles to the west side of the property. The claims extend about 1 mile east from this point.

The entire area included by the claims as well as the surrounding area is one of low relief. The land is gently rolling and unmarked by any outstanding topographic feature. Altitude on the claims ranges between 7,200 and 7,230 feet.

There is a dam and stock pond at the east end of the property from which a plentiful supply of water for drilling is readily available. No electric power is available. The climate is typical of Wyoming, The summers are moderate with maximum temperatures seldom above 90°; however, the winters can be and usually are severe, with periods of sub-zero temperature, high winds and snow causing blizzard conditions. Travel over unimproved roads during snowstorms and heavy spring rains is difficult if not impossible at times. There is no timber in the area. The land, extremely good grazing country, is covered with a good growth of grasses.

OWNERSHIP

Antelope Mines, a partnership formed in the State of Iowa, is sole owner of the property which is comprised of a contiguous group of 38 unpatented lode mining claims called Norb Nos. 1 through 38. The group of claims includes an area of approximately 776.5 acres. A check of the records show that the claims were located on September 23, 24, 1957, and recorded at the office of the recorder in Rawlins, the county seat for Carbon County on October 3, 1957, in Book No. 378 on pages 115 through 152.

HISTORY AND PRODUCTION

There is little history of the property, the claims were staked in September 1957, the discovery drilling was done and the claims were recorded in October of the same year. No other work, except construction of the dam and a stock pond at the east end of the property has been done. The property has had no production.

PRESENT STATUS

No equipment or other facilities were on the property at the time of the examination.

GEOLOGY

The Antelope Mines property lies in the Shirley Basin of the southeastern part of central Wyoming. The basin is a relatively small structural development, elongate east-west, surrounded by highlands of granitic crystalline rocks and upturned Paleozoic and Mesozoic sedimentary rock units. The bedded sedimentary rocks that crop out generally around the basin all dip inward at moderate to low angles. The central part of the basin contains a simple sequence of early Tertiary sedimentary rock units that fill the basin, overlying the more strongly deformed Paleozoic and Mesozoic beds. These Tertiary rock units include the Eocene Wind River formation and the Oligocene-Miocene White River group. They consist of semi-consolidated coarse- to fine-grained sandstone lenses and beds, thin-bedded siltstone and claystone, and conglomerate. These units fill in the intermountain basins generally throughout Wyoming. The Wind River formation is especially conspicuous in the Gas Hills region and Wind River basin adjoining Shirley Basin to the west and northwest.

In the Shirley Basin the Wind River formation crops out in an area 9 miles wide and about 20 miles long and essentially is flat-lying. On the north side of the basin the beds appear to dip 1 to 2 degrees southward; at the southernmost edge of the outcrop the beds appear to be flat-lying. The Cretaceous beds that immediately underlie the Wind River dip about 10 degrees basinward.

Uranium deposits have been discovered recently in the Wind River formation of Shirley Basin near the northeastern edge of the formations outcrop (fig. 2). Several large deposits of good grade ore have been discovered, by random drilling, close to and at the base of the semi-consolidated sandstone-siltstone sequence where it is in contact with the underlying Cretaceous Steel shale. None of the deposits have been mined as yet.

The Norb claims lie near the central part of the flat-lying Wind River formation outcrop in the basin; about midway along the long east-west axis of the basin and about midway of the north and south rim-like boundaries. The Wind River formation crops out continuously across the property and probably ranges in thickness from 200 to 300 feet. One plug-bit hole has been drilled on the property for seismic data near the western boundary. An examination of the cuttings from this old hole indicated about a 240-foot thickness of Wind River formation. A reported radioactivity probe of the hole netted no significant anomalies or indications of mineralized rock.

Property to the west of the Norb claims is reported to have been drilled. One hole was said to have been mineralized.

The applicant has attempted to justify his request for aid by the apparent position of the Norb claims relative to certain deduced basin structural features. It would appear that the property lies on or close by a pre-Tertiary, structural axis that trends westward. That this axis

is also definable in the Tertiary rocks is not apparent from present sketchy mapping. The basin axis in surface rocks may be several miles south of the axis in Paleozoic and Cretaceous rocks.

The applicant also suggests that a recent uplift at the east end of the basin has tilted Tertiary beds westward 3 to 5° so that "uranium-laden" ground water would move down dip toward the Norb claims. Irregularities in the Wind River lower surface would tend to impede these "solutions" and cause uranium to deposit into large ore-grade bodies.

The idea and process is plausible but the geologic features on which they are based are not known to exist. The position of the known large ore bodies, far up on the northeast limb of the proposed post-Tertiary syncline, strongly suggest that other features than those brought out by the applicant have functioned to concentrate uranium.

It would appear that more subsurface data is required before a full program of drilling on the Norb claims would be warranted. A more careful mapping of the Tertiary rocks of the basin also would aid greatly in pointing out areas with features best for probable ore bodies.

The Norb claims are separated 7 to 9 miles from the known ore bodies in Shirley Basin (fig. 2). An evaluation of the intervening area appears necessary before the Norb claims can be properly assessed for exploration. At the present level of geologic data available on the property and the general region, the program proposed is more for general infor informational purposes than to explore for specific or even general mineralized targets.

ORE RESERVES

The property has no known ore reserves.

APPLICANT'S PROPOSED PROGRAM

As proposed by the applicant, the exploration program is to be done in three stages. Stage I is to include 6,400 feet of rotary non-core drilling in 16 holes. The holes are in three rows which run east-west across the claims and are spaced 1,350 feet between the top and middle rows and 1,500 feet between the middle and southern most or bottom row. Holes are spaced 1,200 feet apart in an east-west direction and are staggered in the rows. A minor amount of dozer work for drill site preparation is also included as well as radiometric and resistivity logging. Under Stage II 7,500 feet of rotary non-core drilling is proposed for the areas of mineralization and on the southeast side of pre-Tertiary highs. This stage would also include some dozer work and logging. Stage III is to include 2,500 feet of rotary non-core drilling and 200 feet of coring in offset holes around mineralized holes of Stage II. A minor amount of dozer work is also included.

The applicant's estimate of the costs of the exploration program is as follows:

Stage I

A. Independent Contracts

24 hrs. of actual operation time, tractor with dozer, including operator at $13/hr.	$ 312.00	
6,400 ft. of rotary non-core drilling at $1/ft.	6,400.00	
Radiometric and resistivity hole logging at $0.13/ft. plus 2 hrs. drive time per hole at $10/hr., 6,400 x 0.13 + $320.00	1,152.00	
		$ 7,864.00

B. Personal Services

1 Supervising Geologist at $750/mo. 1 mo.	750.00	
1 Geologist helper at $450/mo. 1 mo.	450.00	
1 Sampler at $1.75/hr. plus time and one-half rate over 40 hrs/week worked, 1 mo.	392.00	
Labor - none		
		1,592.00

C. Operating Materials and Supplies

Sample Containers at $24 per 1000 4 x $24	96.00	96.00

D. Operating Equipment

1 - 4-wheel drive vehicle at $0.12/mile 2,000 miles	240.00	
1 - Pickup truck rental at 0.10/mile 2,000 miles	200.00	
		440.00

E. Rehabilitation and repairs - none

F. New Buildings, Improvements, Installations - none

G. Miscellaneous

Payroll taxes and insurance 5.2 percent x $1,592.00	$ 82.78	
Accounting	100.00	
40 chemical analyses at $3.50/ea.	140.00	
		$ 322.78
		$10,314.78

Stage II

A. Independent Contracts

20 hrs. of actual operation time, tractor with dozer, including operator at $13/hr.	$ 260.00	
7,500 ft. of rotary non-core drilling at $1/ft.	7,500.00	
Radiometric and resistivity hole logging at 0.13/ft. plus 2 hrs. drive time per hole at $10/hr., 7,500 x 0.13 + $500	1,475.00	
		$ 9,235.00

B. Personal Services

1 Supervising Geologist at $750/mo. 6 wks.	1,125.00	
1 Geologist helper at $450/mo. 6 wks.	675.00	
1 sampler at $1.75/hr. plus time and one-half rate over 40 hr/week worked, 6 wks.	588.00	
		2,388.00

C. Operating Materials and Supplies

Sample containers at $24 per 1,000 5 x $24	$ 120.00	
		$ 120.00

D. Operating Equipment

1 - 4-wheel drive vehicle at $0.12/mile 3,000 miles	360.00	
1 - Pickup truck rental at $0.10/mile 3,000 miles	300.00	
		$ 660.00

E. Rehabilitation and Repairs - none

F. New Buildings, Improvements, Installations - none

G. Miscellaneous

Payroll taxes and insurance 5.2% x $2,388.00	124.18	
Accounting	150.00	
60 chemical analyses at $3.50 ea.	210.00	
		484.18
		$12,887.18

Stage III

A. Independent Contracts

16 hrs. of actual operation time, tractor with dozer, including operator at $13/hr.	208.00	
2,500 ft. rotary non-core drilling at $1/ft.	2,500.00	

200 ft. diamond coring at $14/ft.	$ 2,800.00	
Radiometric and resistivity logging at $0.13/ft. plus 2 hrs. drive time per hole at $10/hr. 2,700 x 0.13 + $200	551.00	
		$ 6,059.00

B. Personal Services

1 Supervising Geologist at $750/mo. 1 mo.	750.00	
1 Geologist helper at $450.00/mo. 1 mo.	450.00	
1 Sampler at $1.75/hr. plus time and one-half rate over 40 hr/week worked, 1 mo.	392.00	
Labor - none		
		1,592.00

C. Operating Materials and Supplies

Sample containers at $24 per 1,000 1 x $24	24.00	
Core boxes at $12.50 each x 8	100.00	
		124.00

D. Operating Equipment

1 - 4-wheel drive vehicle at $0.12 mile	240.00	
1 - Pickup truck rental at $0.10 mile 2,000 miles	200.00	
		440.00

E. Rehabilitation and Repairs - none

F. New Buildings, Improvements, Installations - none

G. Miscellaneous

Payroll taxes and insurance 5.2% x $1,592	$ 82.78	
Accounting	100.00	
75 chemical analyses at $3.50/ea.	262.50	
		$ 445.28
		$ 8,660.28

Summary

Estimated Total Cost Stage I	$10,314.78
Estimated Total Cost Stage II	12,887.18
Estimated Total Cost Stage III	8,660.28
Grand Total	$31,862.24

CONCLUSIONS AND RECOMMENDATIONS

The examining team concludes that the geologic data available on the Shirley Basin, all general in nature, does not warrant a full exploration program on the Norb claims at this time. With no detailed geologic mapping available in the region and particularly on the 7 to 9 miles that separates the Norb claims from known deposits, and with little or no information on the stratigraphic makeup of the Wind River Formation in the vicinity of the Norb claims, it would appear that some work preliminary to exploration drilling is mandatory.

The examining team recommends that the application be denied without prejudice.

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(12-56)

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8/19/58	Murphy	700
8/19	Kuzuke	700
8/19	Selfridge	130
8/19	Capodd	130
8/19	Nelson	130
"	Johnson	110
	Whittenberg	100
8/20	H. G.	220
		700

AUG 19 1958

Mr. Louis H. Murray, General Partner
Antelope Mines
1910 Nyview Drive
Casper, Wyoming

Re: Docket No. DMEA-5033 (Uranium)
Norb Claims
Carbon County, Wyoming

Dear Mr. Murray:

We regret that we were unable to completely process your application for exploration aid prior to June 30, 1958, the termination date for approving new contracts, as announced by the enclosed copy of a news release of June 6, 1958.

However, had the processing been completed, we would have been unable to approve a project based upon the information available to us in Washington concerning your property.

We wish to thank you for your interest in the DMEA program and for bringing the exploration plan to our attention.

Sincerely yours,

C. O. Ettendorf (for)

Administrator

Enclosure

FMMurphy/gla
8-19-58
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
FMMurphy
DMEA Field Team, Region III (2)

8623

~~Room 4370~~

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CHAIRMAN OPERATING COMM. DMEA

REURTT AUGUST 15 REGARDING EXAMINATION REPORTS.

DMEA 5033, 5038, AND 5039 WILL RECOMMEND DENIAL.
DMEA 5035, ~~XX~~ 5036 AND 5037 WILL RECOMMEND APPROVAL.

J W TOWSXXX TOWNSEND

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Denver, Colorado

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Date	Surname	Code
8/15/58	Knouse	700
		~~700~~
8/15	GCS	130
8/15	Jones	130
8/15	Wilson	130
"	Johnson	110
"	Hillkudsy	100
8/13	W. J.	220
		700

AUG 15 1958

DEPT. OF THE INTERIOR

DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior (Transfer to Office of Secretary)

TELETYPE

J. W. TOWNSEND
ALTERNATE ACTING EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION 3
224 NEW CUSTOMHOUSE BUILDING
DENVER, COLORADO

YOUR JULY MONTHLY REPORT INDICATES YOU ARE PREPARING EXAMINATION REPORTS ON DMEA-5033, 5035, 5036, 5037, 5038, AND 5039. PLEASE TELETYPE WHETHER A CLEARCUT DENIAL, APPROVAL, OR BORDERLINE WILL BE RECOMMENDED FOR EACH APPLICATION.

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE (SLB)

FLK/izm 8-15-58
cc: Mr. Knouse
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Dockets DMEA-5033
-5035
-5036
-5037
-5038
-5039

8623

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 12 1958
6/12 C 220 700

224 New Customhouse
Denver 2, Colorado
June 10, 1958

Memorandum

To: E. E. Harshman w/enclosures 1-5 below
DMEA/DFC Binyon w/enclosures 1-5 below

From: Alternate Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 5033 (Uranium) Antelope Mines (Mort claims) Carbon County, Wyoming

Enclosed is the following material relating to the subject docket:

1. Copy of the application for DMEA aid.

2. Memorandum of Review of the application by N. E. Nelson, USGS.

3. Memorandum of Review of the application by Jesse Paone, USBM.

4. Letter of transmittal of the foregoing dated June 4, 1958, from the Chairman, Operating Committee, DMEA.

5. Routing Control sheet.

A field examination of the property and a joint report of findings and recommendations pertaining to the Applicant's work proposal are requested.

Original signed by
J. W. TOWNSEND

J. W. Townsend

EEC:dpp

cc: Sect. Op. Comm. 2
Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/3	Murphy	700
6/3	Ellis	700
6/4	Martin	130
"	Johnson	110
"	Mittendorf	100
6/5	C	220
6/4		700

JUN 4 1958

Mr. Louis M. Murray, General Partner
Antelope Mines
1910 Hyview Drive
Casper, Wyoming

Re: Docket No. DMEA-5033 (Uranium) 6/4 Lamb (130)
Morb Claims
Carbon County, Wyoming 6/4 Kilsgaard (130)

Dear Mr. Murray:

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

Mr. J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

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

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FMMurphy/izm 6-2-58
cc: Mr. Murphy
Admr.'s Reading File
DMEA FT Reg. 3 (2)

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/2	Murphy	700
6/2	Ellis	700
6/4	Martin	138
"	Johnson	110
"	Townsend	100
		~~[illegible]~~
		220
		700

Mr. J. W. Townsend
Alternate Acting Executive Officer
DMEA Field Team, Region III
22h New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-5033 (Uranium)
Antelope Mines
Norb Claims
Carbon County, Wyoming

Dear Mr. Townsend:

The captioned application is referred to Region III Field Team for review, a field examination if deemed advisable, and recommendations.

Enclosed are copies of memoranda, dated May 28 and June 2, 1958, by N. E. Nelson, USGS, and James Paone, USBM, respectively, relating to the application. Also enclosed for Field Team use are two extra copies of the application.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (JB)

Enclosures

APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JB)
Member, Geological Survey

FMMurphy/izm 6-2-58
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

OFFICIAL FILE COPY DMEA RECEIVED JUN 2 1958		
DATE	INITIALS	CODE
6/2	C	220
6/3	Ellis	700
	Murphy	

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

Date June 2, 1958

DMEA Docket No. 5033
DMEA Contract No.
Commodity Uranium
Name of Applicant Antelope Mines
Name of Property Norb claims
Location of Property Carbon County, Wyoming
Estimated cost of project $31,862.24

MEMORANDUM

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

From: James Paone, Bureau of Mines Member
Uranium Commodity Committee

Subject: Review of Application
(Application, Plot Plan, Report, etc.)

1. Date of initial Contact 5/23/58 2. Date received by review 5/29/58

3. Prior report on this property been to reviewer Yes [ ] No [ ]

4. Prior report on nearby properties been to reviewer Yes [ ] No [ ]

5. Information available on ore production Yes [ ] No [ ]

6. Other pertinent factors been to reviewer Yes [ ] No [ ]

7. Explain item noted "Yes" above:

8. Indicate mining special consideration

a. Location [ ]
b. Geology [ ]
c. Evidence of Mineralization [ ]
d. Reserve [ ]
e. Reserve indicated [ ]
f. Alternate development [ ]
g. Other [ ]
h. [ ]

9. Action taken:

a. Obtain information from applicant [ ]
b. Refer to Field Team [X]
c. Reject [ ]
d. Agree with Field Team [ ]
e. Approve [ ]
f. Recommend other [ ]
g. Reject [ ]
h. Approval [ ]
i. Forward with Rec. [ ]

10. Remarks: (Use back of page if necessary)

IN REPLY REFER TO:

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

May 28, 1958
Re: DMEA 5033
Antelope Mines
Norb Claims
Carbon County, Wyoming
$31,862.24 - Uranium

Memorandum

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

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

Subject: Review of application

The applicant requests assistance in prospecting for a structural feature which might, judging by results at other properties in the large basin, be favorable for the deposition of uranium minerals.

The claims are about 7½ miles west of ore bodies on the property of Utah Mining Company. No information is at hand as to the results of prospecting on the properties between the Utah and Antelope claims.

No work has been done on the property of the applicant and nothing is known concerning subsurface conditions except that the property straddles the axis of a syncline in the Wind River formation. The Stage I widely-spaced drill holes would prospect for pinchouts of the Wind River rocks against 'highs' of older rocks.

The results of other drilling, if such has been done, should assist in estimating the probability of finding the favorable feature by the proposed prospect drilling.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

5/29 C 220
" Ellis 700
Murphy 700

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

May 26, 1958

Antelope Mines
1910 Hyview Drive
Casper, Wyoming

Subject: DMEA-5033

Gentlemen:

Your application for exploration assistance, dated May 21, 1958 submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-5033 and referred to the Rare and Miscellaneous Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

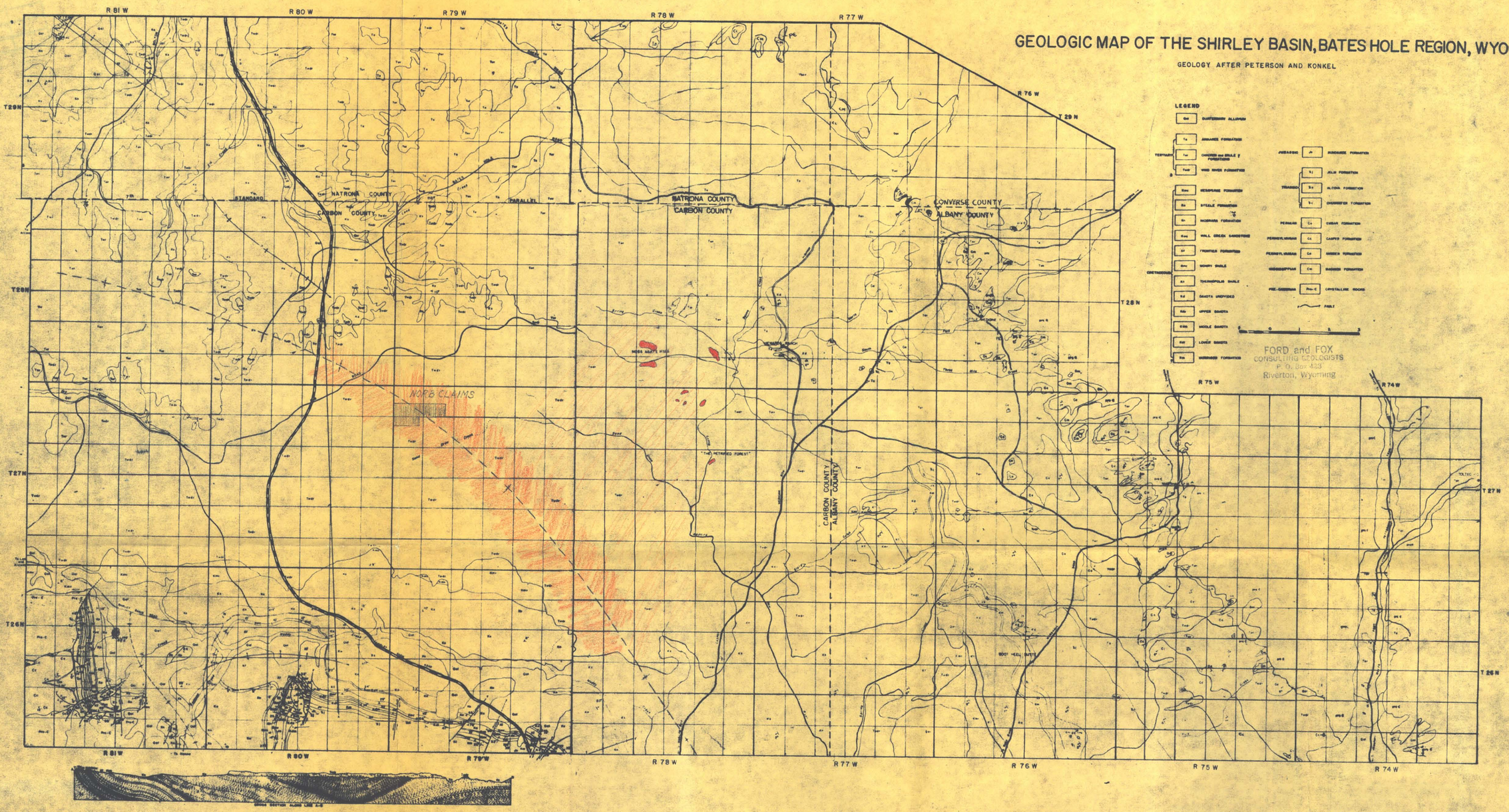
Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to: Region III.

GEOLOGIC MAP OF THE SHIRLEY BASIN, BATES HOLE REGION, WYO.

GEOLOGY AFTER PETERSON AND KONKEL



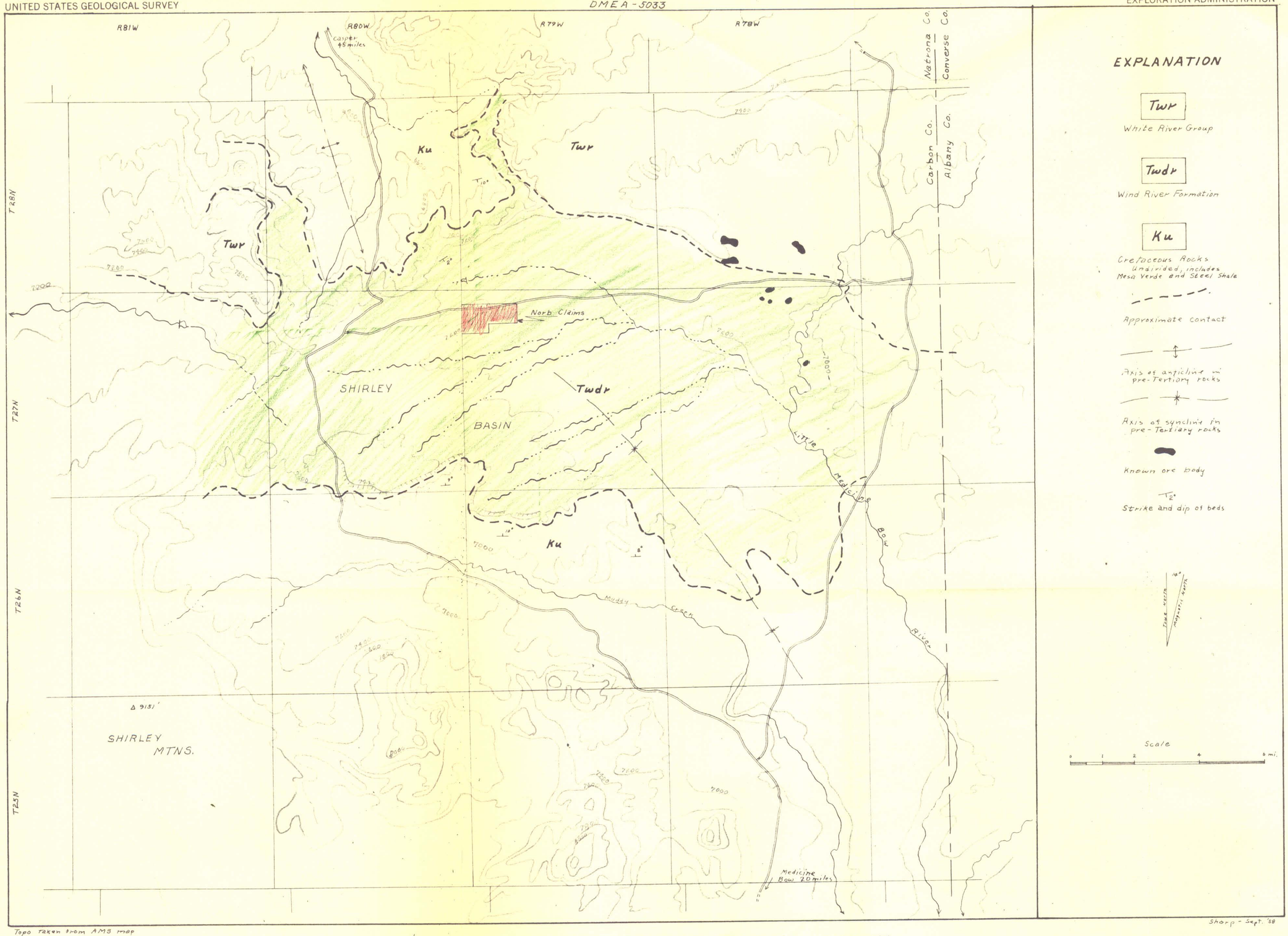
SOUTH CENTRAL WYOMING
SHIRLEY BASIN PROPERTY MAP

J & H — JENKINS AND HAND
K Mc — KERR McGEE
PP — PHILLIPS PETROLEUM
W — WESTERN STANDARD
TWTR — TIDEWATER OIL
UTAH — UTAH MINING
A — ANTELOPE MINES

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXAMINATION REPORT
DMEA - 5033

PREPARED FOR
DEFENSE MINERALS
EXPLORATION ADMINISTRATION



Topo taken from AMS map

Sharp - Sept. '58

Fig. 2 - GEOLOGIC MAP OF SHIRLEY BASIN AND VICINITY, WYOMING
SHOWING ANTELOPE MINES PROPERTY
DMEA - 5033