UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JUN 16 1958

GEOLOGICAL SURVEY
DENVER, COLORADO

224 New Customhouse
Denver 2, Colorado
June 13, 1958

Memorandum

To: E. N. Harshman w/enclosures 1-6 below
DMEA/DFC Binyon w/enclosures 1-6 below

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

Subject: Docket No. DMEA 5038 (Uranium) Giant Cycle Corporation (Standen-Taylor, DePue, and Oxide Metals Leases) Fall River County, South Dakota

Enclosed is the following material relating to the subject docket:

1. Copy of the application for Government assistance for exploration work under the DMEA program.

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

3. Memorandum of Review by James Paone, USBM.

4. Letter of transmittal of the foregoing to this office dated June 9, 1958, from the Chairman, Operating Committee, DMEA.

5. Drill bids from Scott Bros., Fryar Drilling Company, and E. E. Hubbard.

6. 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.

J. W. Townsend

HMC:dp
cc: Sec. Op. Comm. 2
Docket
Chron.

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

DMEA
DEPARTMENT OF THE INTERIOR
JUN 12 1958
REGION III
DENVER, COLORADO

JUN 5 1958

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

Re: Docket No. DMEA-5038 (Uranium)
Giant Cycle Corporation
Standen-Taylor, DeFue, and
Oxide Metals Leases
Fall River County, South Dakota

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 June 4 and 6, 1958, by N. R. Nelson, USGS, and James Paone, USBM, respectively, relating to the application. Also enclosed, for Field Team use, are two copies of the application.

In the event the Field Team recommends a project to explore the subject leased lands, the Applicant should be advised that if a contract is approved we will require the following Consents to Lien and Subordination Agreements:

Standen-Taylor Lease - N½ sec. 35, T. 7 S., R. 2 E.:
by Charles A. Standen, Glen D. Standen,
Nettie L. Taylor, and Norah K. Taylor

Claims: Goof Off Nos. 1, 2, and 2½; South View
Nos. 1-9, inclusive, and Berit Nos. 1 and 2:
by Oxide Metals Corporation; and

Claims: Virginia C, Virginia C Nos. 1 and 2;
Button Nos. 1 and 2; and Viking No. 1:
by Milford A. DeFue.

The Applicant should also be requested to submit copies of the lease agreements between Oxide Metals Corporation, Edgemont Mining & Uranium Corporation, and Giant Resources, Inc. We have a copy of the latter corporation's assignment of the Goof Off, et al., claims to the Applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

P.S. If projects are approved under both docket numbers DMEA-5038 and DMEA-5039, consideration should be given to combining them under one contract.

June 4, 1958
Re: DMEA 5038
Great Cycle Corp.
Shanahan-Taylor, DeFoe, etc. claims
Fall River County, S. D.
433,356 - Uranium

Memorandum

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

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

Subject: Review of application

As in applications 5037 and 5039, assistance is requested in prospecting by widely-spaced drill holes, for deposits of uranium-bearing minerals in the Early Cretaceous Lakota formation.

Unlike the Triangle Group of 5037, these claims contain no known ore, although the application says commercial grade ore has been mined from the Fall River formation on the DeFoe and Taylor properties. The application says 'Lakota' ore in substantial amount has been found 4 miles to the southeast and small deposits have been mined to the north. The A.E.C. drilled one hole which contains 2 feet of 0.63% U_3O_8 in the Lakota formation.

On the strength of the scattered showings in the Lakota, the applicant justifies the proposed prospecting of an area underlain by Lakota rocks. No channel, no trend, no belt has been indicated.

Referral of the application to the Field Team is recommended.

H. E. Nelson

H. E. Nelson

cc: DMEA (3)
James Pearce
C.I. Gardner
Director's reading
Branch reading
Chron. file
Docket file
HENelson/mm
8-MI-6-4-58

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

Date: June 6, 1958

DMEA Docket No. 5038
DMEA Contract No.
Commodity: Uranium
Size of Applicant: Giant Cycle Corp.
Name of Property: Standen-Taylor, DePue, & Metcalf
Location of Property: Fall River, County, S. Dak.
Estimated Cost of Project: $33,356.00

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Application

1. Date of submittal to Committee: 5/27/58 Date received by Bureau of Mines: 6/2/58
3. Prior report on this property taken to Minerals: Yes [ ]
4. Prior report on mining properties taken to Minerals: Yes [ ]
5. Information available on pure production: Yes [ ] No [ ]
6. Other pertinent factors known to Minerals: Yes [ ] No [ ]
7. Explain item marked "yes" above.

8. Recommendations and alternatives:

a. Loaned [ ]
b. Purchased [ ]
c. Advance of purchase price [ ]
d. Grubstake [ ]
e. Proposed modification [ ]
f. Alternate modification [ ]
g. Rejected
h.

9. Action taken:

a. Obtain information from applicant [ ]
b. Refer to Field Man [ ]
c. Reject [ ] X
d. Meet with Field Man [ ]
e. Place on file [ ]
f. Suggest alternate plan [ ]
g. Return unsatisfactory [ ]
h. Approval [ ]
i. Consult with Mr. [ ]

10. Remarks (Use back of page if necessary)

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

JAN 30 1959

Mr. Merrill E. Shoup, President
Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

Re: Docket No. DMEA-5038 (Uranium)
Standen Taylor, DePue, and
Oxide Metals Leases
Fall River County, South Dakota

Dear Mr. Shoup:

In accordance with our letter of September 19, 1958, we are enclosing a copy of the regulations for obtaining Federal assistance in financing mineral exploration under which the new Office of Minerals Exploration will operate and five copies of the OME application, MEX Form 40.

Careful study of all our information concerning your property reveals that had the processing of your DMEA application been completed, we would have been unable to approve an exploration project.

If you apply for exploration assistance under the new OME program, it will be necessary for you to furnish any additional information that would indicate the possibility of making a significant discovery on your property. Otherwise, your application will be denied under the OME program.

If you do not wish to participate in the OME program, we shall appreciate being so informed.

Sincerely yours,

Frank E. Johnson

Acting Director

Enclosures

FLKnouse/GCSelfridge/gla
1-16-59
cc to: Director's Reading File
THKiilsgaard, Rm. 5224
FMMurphy
OME Field Team, Region III (2)

Form MF-103
Revised Oct. 1957

EXHIBIT

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
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)

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

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

APPLICANT NOT TO USE THIS BLOCK

Docket Number	DMEA-5038
Date Received	5-29-58
Government Participation %	
Region	III
Division Code	700

BUSINESS ORGANIZATION (Check one)

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

State in which firm is organized: Delaware

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

Name	Address	Title
Merrill E. Shoup,	Colorado Springs, Colorado	President
M. W. Bowen,	" " "	Exec.Vice-Pres.
H. Bates,	" " "	Secretary
John Jacobs, Jr.,	" " "	Treasurer

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

Estimated Cost of Project: $ 33,356.00

LOCATION OF PROPERTY

Name	County	State
Standen-Taylor,DePue & Mineral Oxide	Fall River	So.Dakota

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
JUN 12 1958
REGION III
DENVER, COLORADO

May 24, 1958
Dated

Max W. Bowen
BY *(Signature)*

Executive Vice-President
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 w[illegible] is executed, how soon will the work start and how m[illegible] 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.

* * * * *

WASH., D.C. 25960

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

STANDEN-TAYLOR LEASE
DePUE LEASE
METAL OXIDE LEASE

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LIST OF ILLUSTRATIONS

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Exhibit "B" Map showing Position of Drill Holes for D.M.E.A. Loan	Back Folder
~~Exhibit "C" Form MF-103~~	~~Back Folder~~
Exhibit "D" Drillers' Bids	Back Folder

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

INFORMATION REQUIRED WITH APPLICATION

STANDEN TAYLOR LEASE, DEPUE LEASE AND METAL OXIDE LEASE

1. Applicants' Property Rights

Standen Taylor Lease

1. (a) Consists of 320 acres or 16 claims located in N½ Section 35, T.7S., R.2E., Fall River County, South Dakota.

NAME OF CLAIMS	PAGE RECORDED	BOOK RECORDED	DATE
Jackson 1 & 2	517	31M	10/23/52
Jackson 3 & 4	518	31M	10/23/52
Taylor 1 & 2	515	31M	10/23/52
Taylor 3 & 4	516	31M	10/23/52
Betty J. 1 & 2	513	31M	10/23/52
Betty J. 3 & 4	514	31M	10/23/52
Nettie L. 1 & 2	511	31M	10/23/52
Nettie L. 3 & 4	512	31M	10/23/52

These claims are recorded in Fall River County Courthouse, Recorder's office, Fall River County, Hot Springs, South Dakota.

1. (a) DePue Lease

Consists of approximately 140 acres or 7 claims located in Sections 26 & 27, T.7S., R.2E., Fall River County, South Dakota.

NAME OF CLAIMS	PAGE RECORDED	BOOK RECORDED	DATE
Virginia "C"	314	31M	6/27/52
Virginia "C_1"	314	31M	6/27/52
Virginia "C_2"	315	31M	6/27/52
Button 1	316	31M	6/27/52
Button 2	315	31M	6/27/52
Viking 1	316	31M	6/27/52

These claims are recorded in Fall River County Courthouse, Recorder's office, Fall River County, Hot Springs, South Dakota.

1. (a) Metal Oxide Lease

Consists of 16 claims or approximately 280 acres located in Section 25 & 26, T. 7S., R.2E., Fall River County, South Dakota.

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

NAME OF CLAIMS	PAGE RECORDED	BOOK RECORDED	DATE
Geof Off 1	356	31M	10/1/52
Geof Off 2	357	31M	10/1/52
Geof Off 2.5	357	31M	10/1/52
Geof Off 2.75	57	33M	4/17/53
South View 1 & 2	285	31M	6/5/52
South View 3 & 4	286	31M	6/5/52
South View 5 & 6	287	31M	6/5/52
Valley View 7	335	31M	8/12/52
South View 8	335	31M	8/12/52
South View 9	336	31M	8/12/52
Berit 1	174	31M	7/12/52
Berit 2	175	31M	7/12/52

These claims are recorded in Fall River County Courthouse, Recorder's office, Fall River County, Hot Springs, South Dakota.

1. (b) Standen Taylor Lease, DePue Lease and Metal Oxide Lease.

1. (c) Lessee--Refer to Exhibit "A",Copy of Lease.

Owner- Standen Taylor Lease--Mr. Jack Standen and Mrs. Nettie L. Taylor.

Edgemont, South Dakota

DePue Lease--Mr. Milford DePue, 3024 Yale Ave., Venice, California.

Metal Oxide Lease--Mr. Irvin Kenner, Present address unknown.

1. (d) None

2. Physical Description

2. (a) Refer to Exhibit "B", Claim Map.

At present time there is no production from this area. The past production is unknown. The A. E. C. has drilled hole No. 454, which drilled commercial ore. It is on the DePue Group of claims.

2. (b) None

2. (c) Taylor and Virginia "C" had production from Fall River formation. Records unavailable.

2. (e) The formations present are in the Inyan Kara group of Early Cretaceous age.

The surface formation is the Fall River formation and is 50 feet thick, of sandstone, siltstones and mudstones. Directly below is the Fuson formation, composed of mostly siltstones and mudstones with some thin sandstone lenses. This unit is 120 feet thick. The Lakota formation lies below the Fuson and is about 135 feet thick. This formation is mostly fine grained sandstone with thin, siltstone-mudstone stringers.

Commercial grade ore has been mined on the DePue and Taylor properties. The drilling indicates ore grade uranium in the Lakota formation. The A. E. C. has drilled several widely spaced holes and have found mineralization in the form of primary ores at a depth of 235 feet. This mineralization occurs in a broad channel, which trends northwest.

Numerous small deposits have been mined in the Lakota formation in Craven and Red Canyons, north of this area. It has been reported by Pictograph Mining & Uranium Company, Inc. that they had drilled out 30,000 tons of uranium in the Lakota formation in an area 4 miles southeast of the DePue and Taylor Property.

It seems evident that a well engineered drilling program would be successful in discovering a larger commercial uranium deposit in the Lakota formation.

2. (f) The Fall River formation has been a successful producer in the above described area and we desire to test the underlying Lakota formation. The Lakota formation has been drilled by the A. E. C. An ore hole containing 2 feet of 0.65% U_3O_8 has been drilled.

2. (g) No reports available.

3. <u>Accessibility of Project</u>

3. (a) J. J. Seerley and L. E. Lewis, Giant Cycle Corporation, Edgemont, South Dakota. The property is located 10 miles north of Edgemont, South Dakota on a Fall River county road.

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

3. (b) Edgemont, South Dakota

Ten miles between Edgemont and the property.

4. The Exploration Project

4. (a) We propose to test the Lakota formation. Refer to Exhibit "B", Map showing Position of Drill Holes.

No. of holes (First Stage)	=	25 Plug Holes
No. of holes (Second Stage)	=	30 Plug Holes
No. of holes (Third Stage)	=	8 Core Holes

4. (b) No access road necessary

4. (c) Start work immediately on completion of Bear Lodge D. M. E. A. program. Completion time four (4) months. Anticipated daily average 300 feet.

5. Experience

The applicant company is managed by the Golden Cycle Corporation, P. O. Box 86, Colorado Springs, Colorado.

Golden Cycle Corporation has been mining for some sixty years, owns and operates gold mines in Cripple Creek, Colorado; operates a shaft uranium mine on a government lease near Uravan, Colorado, and has other mining and commercial investments. The project will be directly supervised by J. J. Seerley, a mining engineer with 12 years experience and L. E. Lewis, a geologist with 7 years experience, with 3 years in uranium exploration and mining.

6. Estimate of costs.

6. (a)

	HOLES	DEPTH	TOTAL FEET
First Stage	25	300	7,500
Second Stage 1/	30	300	9,000
Third Stage 2/	8	300	2,400
Total	63		18,900

1/ Second stage drilling is to off-set mineralized holes to delineate one ore body.

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

2/ Core drilling is to obtain a factor between radiometric probe results and chemical assays of core.

	HOLES	DEPTH	TOTAL FEET	COSTS/FT.	TOTAL DIRECT COSTS
Drilling First Stage	25	300	7,500	$ 1.00	7,500
Drilling Second Stage	30	300	9,000	$ 1.00	9,000
Drilling Third Stage	8 (plug)	300	2,400	$ 1.00	2,400
	8 (core)	30	240	$10.00	2,400
Total	63		19,140		$21,300

6. (b) Personal Services

Labor

1 Caterpillar Operator-- 2 months @ $442.00 per month 884.00

Supervision

1 Mining Engineer--4 months @ $750.00 per month 3,000.00
1 Geologist-- 4 months @ $600.00 per month 2,400.00
Total $6,284.00

Employees listed above are available.

6. (c) Operating Materials and Supplies

Gas, oil and supplies-- 2 pickups @ $120.00 480.00

Caterpillar, diesel fuel -- 2000 gallons @ $0.17 340.00

Oil and lubrication @ $30.00 per month 120.00
Total $940.00

6. (d) Operating Equipment

1 3/4 ton International Pickup (owned) use allowance $40.00 per month 160.00

1 ½ ton Willys Pickup (owned) use allowance $40.00 per month 160.00

1 Caterpillar D-8 bulldozer (owned) use allowance $7.00 per hour for 208 hours per month--2 months 2,912.00
Total $3,232.00

Operating equipment is to be furnished by the applicant.

Fair market value of the following equipment is as listed below:

1	3/4 ton International Pickup	1,500.00
1	½ ton Willys Pickup	1,200.00
1	Caterpillar D-8 bulldozer	14,000.00

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

6. (e) Initial Rehabilitation and Repairs

None

6. (f) New Buildings, Fixtures and Installations

None

6. (g) Miscellaneous

Analytical work--120 samples	@ $3.50	420.00
Accounting	$75.00 per month	300.00
Compensation, liability (14% of labor costs)		880.00
Total		$1,600.00

7. (a) Yes

7. (b) Total cost of entire project is $33,356.00. We propose to pay $13,446 cash and the balance of $3,232.00 in use allowance on the equipment listed under 6. (d). This would equal our 50% share of $33,356.00, which is $16,678.00

Giant Cycle Corporation
P. O. Box 86
Colorado Springs, Colorado

STANDEM-TAYLOR LEASE
D.PUB LEASE
METAL OXIDE LEASE

EXHIBIT "A"

"COPY OF LEASE"

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

(C O P Y)

ASSIGNMENT AND ACCEPTANCE

For value received, EDGEMONT MINING & URANIUM CORP., a Delaware Corporation, qualified to do business in the State of South Dakota, as successor in interest to A. LUDWIG and E. J. BROCKMAN, as "Lessees", under that certain lease agreement dated the 27th of September 1952 by and between CHAS. A. STAMDEN, GLEN D. STAMDEN, NETTIE L. TAYLOR and NORAN E. TAYLOR, as "Lessors", relating to unpatented lode mining claims situated in the N1/2 of Section 35, T7s, R2E, Black Hills Meridian, Fall River County, South Dakota known as Jacksen No. 1 - No. 4, inclusive; Taylor No. 1 - No. 4, inclusive; Betty J. No. 1 - No. 4, inclusive; and Nettie T. No. 1 - No. 4, inclusive, which lease agreement is recorded in Book 31 Misc., Page 495, in the County Records of Fall River County, South Dakota, hereby assigns all of its right, title and interest in and to the above described lease unto GIANT RESOURCES, INC., a Nevada Corporation qualified to do business in the state of South Dakota, its successors and assigns from this day forever, and in consideration of the foregoing assignment, the said GIANT RESOURCES, INC. hereby assumes and agrees to perform all the covenants and agreements on the part of lessees contained in said lease agreement.

IN WITNESS WHEREOF, the parties have hereunto caused this instrument to be executed by their duly authorized officers on this 13th day of March, 1957.

EDGEMONT MINING & URANIUM CORP.

By_____
L. R. Cox, President

GIANT RESOURCES, INC.

By_____
Donald W. Kanaly, President

GIANT CYCLE CORP.
P.O. BOX 86
GRAND JUNCTION, COLO.

State of Colo.)
) ss
County of Mesa)

Before me the undersigned Notary Public within and for said County and State personally appeared L. Z. Cox, who acknowledged himself to be the President of Edgemont Mining & Uranium Corp., a Corporation, and that he, as such president, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as President.

In witness whereof I have hereunto set my hand and official seal this 13th day of March, 1957.

My Commission Expires: Oct. 6, 1958

Dorthea E. Jensen
Notary Public

State of Colo.)
) ss
County of Mesa)

Before me the undersigned Notary Public within and for said County and State personally appeared Donald W. Kanaly, who acknowledged himself to be the President of Giant Resources, Inc., a Corporation, and that he, as such president, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as President.

In witness whereof I have hereunto set my hand and official seal this 13th day of March, 1957.

My Commission Expires: Oct. 6, 1958

Dorthea E. Jensen
Notary Public

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

(C O P Y)

ASSIGNMENT

RECITALS

GIANT RESOURCES, INC., a Nevada Corporation, qualified to do business in the State of South Dakota, has heretofore, by assignment, become the lessee of certain mining properties and has heretofore conveyed unto THE GOLDEN CYCLE CORPORATION, a one-half (1/2) undivided interest in and to GIANT RESOURCES, INC.'s interest in and to said mining properties. It is now the intention of GIANT RESOURCES, INC., and THE GOLDEN CYCLE CORPORATION, to assign all of their respective rights, titles and interest in and to the said mining properties unto GIANT CYCLE CORPORATION, a Delaware corporation, qualified to do business in the State of South Dakota.

NOW THEREFORE, in consideration of $1.00 and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by all of the parties to this assignment, GIANT RESOURCES, INC., a Nevada Corporation, and THE GOLDEN CYCLE CORPORATION, a West Virginia Corporation, hereinafter collectively referred to as "Assignors", do hereby assign unto GIANT CYCLE CORPORATION, a Delaware Corporation, qualified to do business in the State of South Dakota, all of Assignors right, title and interest in ~~and~~ to the following described leaseholds:

1. That certain lease dated May 16, 1953, by and between NETTIE L. TAYLOR, of Edgemont, South Dakota, as lessor, and E. J. BROCKMAN and A. LUDWIG, as lessees, leasing the S 1/2, Section 35, T7S, R2E, Black Hills Meridian, Fall River County, South Dakota, which lease agreement is recorded in the records of Fall River County, South Dakota, in Book 33 Misc., Pages 459 - 461, inclusive.

2. The certain lease agreement dated September 27, 1952 by and between CHAS. A. STANDEN, GLEN D. STANDEN, NETTIE L. TAYLOR and NORAH E. TAYLOR, as lessors, and A. LUDWIG and E. J. BROCKMAN, as lessees, leasing for mining purposes those certain unpatented lode mining claims situated in N 1/2 of Section 35, T7S, R2E, Black Hills Meridian, Fall River County, South Dakota, known as Jackson No. 1 -

Taylor No. 1 - No. 4, inclusive, Betty J. No. 1 - No. 4, inclusive
No. 4, inclusive; and Nettie T. No. 1 - No. 4, inclusive, which lease agreement is recorded in Book 31 Misc., Page 495, in the County Records of Fall River County, South Dakota.

3. That certain lease agreement dated September 14, 1954, by and between MINING RESEARCH CORPORATION, as lessor, and EDGEMONT MINING CO., INC., as Lessee, leasing those certain unpatented lode mining claims known as BARKER & HOWELL numbers 1, 4, 8, 16 and 17, all situated in the NE 1/4 of Section 21, T7S, R2E, Black Hills Meridian, Fall River County, South Dakota, and which lease agreement is recorded in the records of Fall River County, South Dakota in Book 40 Misc., Pages 695 - 698, inclusive.

4. That certain lease agreement dated August 11, 1952, by and between MILFORD A. DeFUE, as lessor, and E. J. BROOKMAN, as lessee, leasing those certain unpatented lode mining claims known as Virginia C., Virginia C. #1 and Virginia C. #2, Viking #1, Button #1 and Button #2, and Dusty Long Legs, located in Sections 26 and 27, T7S, R2E, Black Hills Meridian, Fall River County, South Dakota, and which lease agreement is recorded in the records of Fall River County, South Dakota, in Book 31 Misc., Page 495.

5. That certain lease agreement dated June 15, 1955, by and between D. W. DUTOIT, as lessor, and EDGEMONT MINING & URANIUM CORP., as lessee, leasing those certain unpatented lode mining claims known as Don #1, and Don #2, located in Section 3, T8S, R3E, Black Hills Meridian, Fall River County, South Dakota, location certificates for which are recorded in Book 31, Page 293 in the records of Fall River County, South Dakota, and which lease is recorded in the records of Fall River County, South Dakota in Book 40 Misc., Pages 592 and 593.

6. That certain lease agreement dated June 25, 1956, by and between H. O. COE, and others, as lessors, and EDGEMONT MINING & URANIUM CORP., as lessee, leasing those unpatented lode mining claims known as C and R #1, Coe #1 - Coe #4, inclusive; Kar-Mel #1 and Kar-Mel #2; M. C. #3 - #6, inclusive, located in Fall River County, South Dakota, and which lease agreement is recorded in the records

of Fall River County, South Dakota in Book 40 Misc., Pages 698 - 701, inclusive, which is subject to a two and one-half (2 1/2) percent royalty interest on C and R #1, Coe #1 - Coe #4, inclusive and M. C. #3 thru M. C. #6, inclusive over and above the royalty obligation to lessors.

TO HAVE AND TO HOLD, unto the said GIANT CYCLE CORPORATION, its successors and assigns from this day forever.

It being expressly understood that neither of the Grantors warrant their interests in the above described properties.

In consideration of the above assignment, the said GIANT CYCLE CORPORATION, as to those leases which, as a condition of assignment, requires the assumption of the obligation by the Assignee, does hereby assume the obligation to faithfully perform all of the terms covenants contained in such of the above leasehold agreement as have such requirement.

It is expressly understood that although this assignment has been executed as of the 22nd day of July 1957, that the effect thereof is to be retroactive to the commencement of business on the first day of July, 1957, and that any ores mined or sold from the above assigned properties, or any proceeds therefrom, since the first day of July, 1957, are hereby also assigned unto the said GIANT CYCLE CORPORATION.

In Witness Whereof the parties hereto have caused this instrument to be executed by their duly authorized officers and their corporate seals hereunto affixed, all as of the 23rd day of July, 1957.

GIANT RESOURCES, INC.

(Seal)

By_____
T. R. Gillenwaters, President

Attest:

_____
William E. Foster, Asst. Secy.

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

THE GOLDEN CYCLE CORPORATION

By _____
Merrill E. Shoup, President

(Seal)

Attest:

_____
H. Bates, Secretary

GIANT CYCLE CORPORATION

By _____
Merrill E. Shoup, President

(Seal)

_____
H. Bates, Secretary

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

State of Colorado)
) ss
County of)

Before me the undersigned Notary Public within and for said County and State personally appeared T. R. Gillenwaters and William E. Foster, who acknowledged themselves to be the President and Assistant Secretary, respectively, of Giant Resources, Inc., a Corporation and that they, as such President and Assistant Secretary, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by themselves as President and Assistant Secretary, respectively.

In Witness Whereof, I have hereunto set my hand and official seal this 29th day of July, 1957.

My Commission Expires: Oct. 6, 1958

Dorothea E. Jensen
Notary Public

State of Colorado)
) ss
County of El Paso)

Before me the undersigned Notary Public within and for said County and State personally appeared Merrill E. Shoup and H. Bates, who acknowledged themselves to be the President and Secretary, respectively, of The Golden Cycle Corporation, a Corporation, and that they, as such President and Secretary, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by themselves as President and Secretary, respectively.

In Witness Whereof, I have hereunto set my hand and official seal this 31st day of July, 1957.

My Commission Expires: July 9, 1960

Nola F. Winters
Notary Public

State of Colorado)
) ss
County of El Paso)

Before me the undersigned Notary Public within and for said County and State personally appeared Merrill Shoup and H. Bates, who acknowledged themselves to be the President and Secretary, respectively, of Giant Cycle Corporation, a Corporation, and that they, as such President and Secretary, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by themselves as President and Secretary, respectively.

In Witness Whereof, I have hereunto set my hand and official seal this 31st day of July, 1957.

My Commission Expires: July 9, 1960

Nola F. Winters
Notary Public

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

LEASE

PARTIES The parties of this agreement are Chas. A. Standen, Mattie L. Taylor, Fall River County, S. Dakota; Glen D. Standen, Fall River County, S. Dakota, and Norah E. Taylor, Fall River County, S. Dakota, hereinafter referred to as "Lessors"; and A. Ludwig, Edgemont, S. Dakota, and J. Brockman, Edgemont, S. Dakota, hereinafter referred to as "Lessees".

PURPOSE The purpose of this instrument is to grant to the Lessees the right to mine, develop, and explore the properties hereinafter described for minerals that may be found thereon, and set forth the rights, duties, and obligations of each of the parties connected with such agreement.

PROPERTY North ½ of Section 35, Township 7 S, Range 2 E, and the following Lode Mining Claims;
Jackson #1, #2, #3, and #4
Taylor #1, #2, #3, and #4
Betty J. #1, #2, #3, and #4
Mattie L. #1, #2, #3, and #4
The property covered by this agreement is all located in Section 35, Township 7 S, Range 2 E, Black Hills Meridian, Fall River County, S. Dakota.

WARRANTIES BY LESSORS The Lessors covenant that they are the owners of a valid existing Lode Mining Claims upon the premises above discribed; that they have conformed in every detail and requirement of the Statutes of the State of South Dakota and the United States of America with reference to lode mining locations. They further covenant that all of such claims are located upon public domain; that there are no conflicting claims; that there are no surface owners who have a right to damage claims by reason of injury to the surface; and they covenant that they have rights-of-way in and to the property for all purposes connected with exploration, development, and mining. The Lessors covenant that they are under no disability that would impair their right to execute this agreement.

CONSIDERATION The Lessees, for the execution of this agreement, have paid the sum of One Dollar, ($1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged and the Lessees agree to pay a sum equal to Ten Per Cent, (10%), of the amounts paid by the purchaser of minerals or materials produced and sold from the property and which such amounts shall include all bonuses, premiums, and shipping allowances paid by the purchaser.

TERM This lease shall commence on the 27th day of September, 1952, and shall continue for a period of five years from that date and shall terminate the 27th day of September, 1957, at 12 o'clock noon; provided, however that the Lessees may renew such lease for a like period and at the same terms by giving notice thereof to the Lessors, in writing, at least 90 days prior to September 27, 1957.

GIANT CYCLE
P.O. BOX
COLORADO

REPORTS

The Lessees shall furnish true copies of all smelter [illegible] on the minerals or materials [illegible] property. Such true copies shall [illegible] time of payment on such returns [illegible] 10 days after receipt of such re- [illegible] by the Lessees.

[illegible] OF LESSEES

The Lessees covenant that they will, within 90 days after the commencement of this lease, commence active operation of exploration, development, and mining upon the premises above described. The Lessees covenant that they will save and hold the Lessors harmless from any claims or damages arising out of their operation. The Lessees covenant that they will within each year, commencing September 27, 1952, expend not less than Five Hundred Dollars, ($500.00), in exploration, development, or mining of property. They shall cause all necessary affidavits of annual labor to be filed so as to preserve the Lessors' interest in such claims and they shall see that all stakes nomination the boundaries of the various claims are kept erect and in such fashion that notice is given of the existence of such claims. The Lessees may terminate this agreement and all obligations hereunder when in their opinion it is uneconomical to proceed further with the purpose and requirements of this agreement. Upon the reaching of such opinion the Lessees shall give writt en notice to the Lessors of his intention to terminate the Lease and shall pay the accrued rentals required by this lease and the additional sum of One Dollar, ($1.00), When such notice and payment is made, the lease shall be forthwith terminated.

[illegible]

This lease may be assigned by the Lessees without the consent of the Lessors; provided, only that at the time of such assignment the Lessees shall give notice of the assignment and provide the Lessors with a copy of such instrument, which shall require the assignee thereof to faithfully perform the agreement herein contained.

[illegible] TO [illegible] FROM AGENCIES

There is presently organized, administrative agencies of the United Stated of America for the purpose of assistand in financing development, exploration, and mining of materials designated as "strategic" and "critical". It is contemplated by the parties that assistance may or will be sought from such agencies by the Lessees. If such assistance is sought, the Lessors herewith grant consent.

[illegible] BOUND

This agreement shall be binding upon the assignees, heirs, and legatees of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have set their hand and seal.

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

Lessor

Lessor

Lessor

Lessee

Lessee

STATE OF [illegible] DAKOTA
County of Bell River

On this the 27th day of September, before me, the undersigned officer, appeared Chas. A. Standen, Glen D. Standen, Ralph E. Taylor, A. Ludwig, and [illegible], known to me or satisfactorily proven to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

In witness thereof I hereunto set my hand and [illegible] seal.

Notary Public

GIANT CYCLE CORP.
P.O. BOX 86
COLORADO SPRINGS, COLO.

ASSIGNMENT AND ACCEPTANCE

For value received A. Ludwig and E. J. Brockman, lessees, hereby assigns all their right, title and interest in and to that certain lease dated the 27th day of September, 19 52, by and between Chas. A. Standon, Glen D. Standon and Norma E. Kylo Nettie L. Taber, and A. Ludwig and E.J. Brockman, wherein the following properties were leased for a period of 5 years:

N½ of Section 35, Township 7 S, Range 2 E, and the following Lode Mining Claims:
Jackson Nos 1, 2, 3, and 4.
Taylor No. 1, No. 2, No. 3, and No. 4
Betty J. No. 1, No. 2, No. 3 and No. 4
Nettie L. No. 1, No. 2, No. 3 and No. 4
The property covered by this agreement is all located in Section 35, Township 7S, Range 2E, Black Hills Meridian, Fall River County, S. Dakota.

unto Edgemont Mining Co., Inc., as assignee, its successors and assigns;

And in consideration of this assignment, the said Edgemont Mining Co., Inc. hereby assumes and agrees to perform all the covenants and agreements in said lease contained, by the lessee therein agreed to be made and performed.

WITNESS, our hands and seals this 24th day of Sept., A. D. 1952.

A. Ludwig
E J Kerockemann (SEAL)

(SEAL)

EDGEMONT MINING CO., INC.

By _____
President

Attest:

A Ludwig
Secretary

INDEXED
COMPARED
RECORDED

35393

MINES DEVELOPMENT, INC.
FARMERS UNION BUILDING
DENVER 3, COLORADO

SETTLEMENT STATEMENT

LIQUIDATION NO. [illegible]
DISTRICT Edgemont
DATE February 7, 1958

DATE RECEIVED [illegible]
RECEIVED OF [illegible]
ADDRESS [illegible]
TYPE OF ORE

A.E.C. LIC. NO. R-3672
CONTRACT NUMBER
CLAIM NAME Taylor Lease
STATE S.Dak.
MINE DIST. Edgemont
COUNTY Fall River
HAULAGE DISTANCE 10
TO PRODUCER 2/?/58
TO STOCKPILE —

LOT NO.	WET WEIGHT (LBS.)	% H_2O	DRY WEIGHT (LBS.)	SETTLEMENT ASSAYS (%)				CONTENTS (LBS.)			
				[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3?		163.35	[illegible]	[illegible]	

[illegible]	[illegible]	[illegible]	[illegible]				

	POUNDS	UNIT PRICE	AMOUNT
[illegible]	[illegible]	[illegible]	[illegible]
			[illegible]
			[illegible]
[illegible]	[illegible]	[illegible]	77.?7
	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]
			1??.3?
			[illegible]
			[illegible]

[illegible]

MINES DEVELOPMENT, INC.
FARMERS UNION BUILDING
DENVER 3, COLORADO

LIQUIDATION NO. 919
DISTRICT Edgemont
DATE January 8, 1958

SETTLEMENT STATEMENT

DATE RECEIVED 12/2/57 LOT NO. E-1733 SHIPPER'S LOT NO.

A.E.C. LIC. NO. E-3472 CONTRACT NUMBER

RECEIVED BY Giant Grain Corp.

CLAIM NAME Taylor Lease STATE S. Dak.

SHIPPING ADDRESS Box 66 - Colorado Springs, Colorado

MINE DIST. Edgemont COUNTY Bell Fourche

TO PROCESS 12/3/57

TYPE OF ORE

HAULAGE DISTANCE 30 TO STOCKPILE

LOT NO.	WET WEIGHT (LBS.)	% H2O	DRY WEIGHT (LBS.)	SETTLEMENT ASSAYS (%) U3O8	V2O5	CaCO3		CONTENTS (LBS.) U3O8	V2O5		
E-1733	96,070	5.05	91,222	0.22	0.50	0.58		200.69	456.11	589.89	
WET TONS	48.035	DRY TONS	45.611								

ITEM	TONS	POUNDS	UNIT PRICE	AMOUNT
Base Price		200.69	3.50	702.42
Premium: U3O8 in excess of 4 LB./TON	45.611 x	.40 x	0.75	13.68
U3O8 in excess of 10 LB./TON			0.50	
TOTAL U3O8 PAYMENT				716.10
Penalties: Lime (CaCO3 in excess of 6%) [-]				( )
Other [-]				( )
TOTAL FOR ORE				716.10
Vanadium		456.11	0.51	241.39
Development Allowance		200.69	0.50	100.35
Haulage Allowance 30 Miles	48.035		0.90	43.23
TOTAL V2O5 and ALLOWANCES				370.97
TOTAL GROSS SETTLEMENT				986.66
Deductions: [-]				( )
NET SETTLEMENT				$986.66

DISTRIBUTION

%	PAYEE	AMOUNT	CHK. NO.
100	Giant Grain Corp.	$986.66	L 1119

NOTE:
Buyer's assays govern if seller fails to submit his assays prior to acceptance of settlement payment.

All rates paid are based upon U. S. Atomic Energy Commission published schedule.

District Representative Ace Runge

Approved T. [illegible]

October 7, 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 5038, (uranium), Giant Cycle Corporation, Standen-Taylor et al leases, Fall River County, South Dakota

The examining team concludes that the Giant Cycle Corporation properties, the DePue, Standen-Taylor, and Metal Oxide leases, do not warrant deep drilling exploration through the Lakota formation. The properties lie west of a sandstone channel that is the principal target of present day drilling in the region.

Results of test drilling by the AEC in the region show that large uranium deposits are not likely to be found on the applicant's property. Drilling by the U. S. Geological Survey on the property was barren in all holes. The sandstone cut by drilling was tightly cemented and showed no indications of being a good site for uranium deposits.

I agree with the recommendations of the examining team for denial of the application on the grounds that the work would probably not result in a significant discovery.

W. P. Williams

cc: OME (3)
James Paone
C.I. Gardner
Director's reading
Branch reading
Chron. file
Docket file
WPWilliams/mm
G-MD-10-7-58

5038

224 New Customhouse
Denver 2, Colorado
September 26, 1958

Memorandum

To: Secretary to the Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket No. [redacted]-5038 (Uranium) Giant Cycle Corporation (Standen-Taylor, DuPue, and Metal Oxide Leases) Fall River County, South Dakota - Joint Report of Examination

Enclosed are the original and two copies of a joint report of examination on the subject project by R. G. Rinyon, [redacted], and W. N. Sharp, [redacted].

The Field Examiners conclude that the probability for making a significant discovery is not sufficiently promising to justify Government participation. Accordingly, they recommend that the applicant's work proposal be denied; in which the Field Team concurs.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Original signed by
J. W. TOWNSEND

J. W. Townsend

Enclosures
HMC:bh
cc: Harshman) w/copy
OME/DFC (2)) of
Baker, AEC) subject
Docket) report
Chron.

Reviewed by
OME OPERATING COMMITTEE

(date)

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
SEP 25 1958
REGION III
DENVER, COLORADO

DMEA 5038

Giant Cycle Corporation

Standen-Taylor, DePue, and Metal Oxide Leases

Fall River County, South Dakota

Uranium

Joint Engineering and Geologic Report

by

W. N. Sharp
Geological Survey

E. O. Binyon
Bureau of Mines

Reviewed by
OME OPERATING COMMITTEE

September 24, 1958

(date)

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ILLUSTRATIONS

Figure	Follows page
1. Location map, Giant Cycle Corporation (Standen-Taylor, DePue, and Oxide Metals leases), Fall River County, South Dakota - DMEA 5038	2
2. Geologic map of part of the Edgemont NE quadrangle, Fall River County, South Dakota, showing Giant Cycle Corporation property and some existing drill holes, DMEA 5038	12

DMEA 5038

GIANT CYCLE CORPORATION
STANDEN-TAYLOR, DuPUE, AND METAL OXIDE LEASES
FALL RIVER COUNTY, SOUTH DAKOTA

INTRODUCTION AND SUMMARY

The Giant Cycle Corporation, a Colorado corporation, P. O. Box 86, Colorado Springs, Colorado, applied to the Defense Minerals Exploration Administration for aid in exploration of the Standen-Taylor, DuPue, and Metal Oxide leases, in sections 25, 26, 27, and 35, T. 7 S., R. 2 E., Fall River County, South Dakota. The property comprises a group of 37 mostly contiguous, unpatented claims or about 740 acres.

The applicant proposed an exploration drilling program that consisted of three stages. The first and second stages comprise 55 plug bit holes; the third stage is of 8 holes partly cored. The total footage for the program is 19,140 feet, and the estimated cost is $33,356.00.

The program is designed to explore the Lakota formation, and especially the lower sandstone interval of the Lakota. A number of AEC drill holes have been put down through Lakota in the vicinity of the claims, but the company has not drilled through Lakota on the property.

At the present time no mining is in progress on the property. There is some past production but it was confined to the exposed Fall River formation. Southeast of the property the Runge mine is producing from an upper Lakota sandstone, and several large deposits are reported to have been found in lower Lakota.

A field examination of the property was made on June 26, 1958, by W. N. Sharp, geologist, U. S. Geological Survey, and E. O. Minyon, mining engineer, U. S. Bureau of Mines. J. J. Seerley, resident manager, and L. E. Lewis, geologist for the company, accompanied the examining team on the examination.

As a result of the field examination and discussions of the geologic features with Survey geologists familiar with the detailed geology of the region, the examining team concludes that the property does not warrant exploratory drilling at this time.

ACKNOWLEDGMENTS

Thanks are due Garland E. Gott of the U. S. Geological Survey for information on the geology of the area and J. J. Seerley, resident manager, and L. E. Lewis, geologist for the company, who conducted the examining team over the property.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The claims are in secs. 23, 26, 27, and 35, T. 7 S., R. 2 E., BHM, Fall River County, South Dakota. The approximate center of the property is 10.5 miles by road slightly west of north of Edgemont, South Dakota, the nearest sizable community. To reach the property from Edgemont go north on the White Draw School County road for 8.8 miles to a junction with an unimproved dirt road to the left; take the dirt road and go 1.7 miles to the center of the property. Edgemont, a rail point on the C. B.

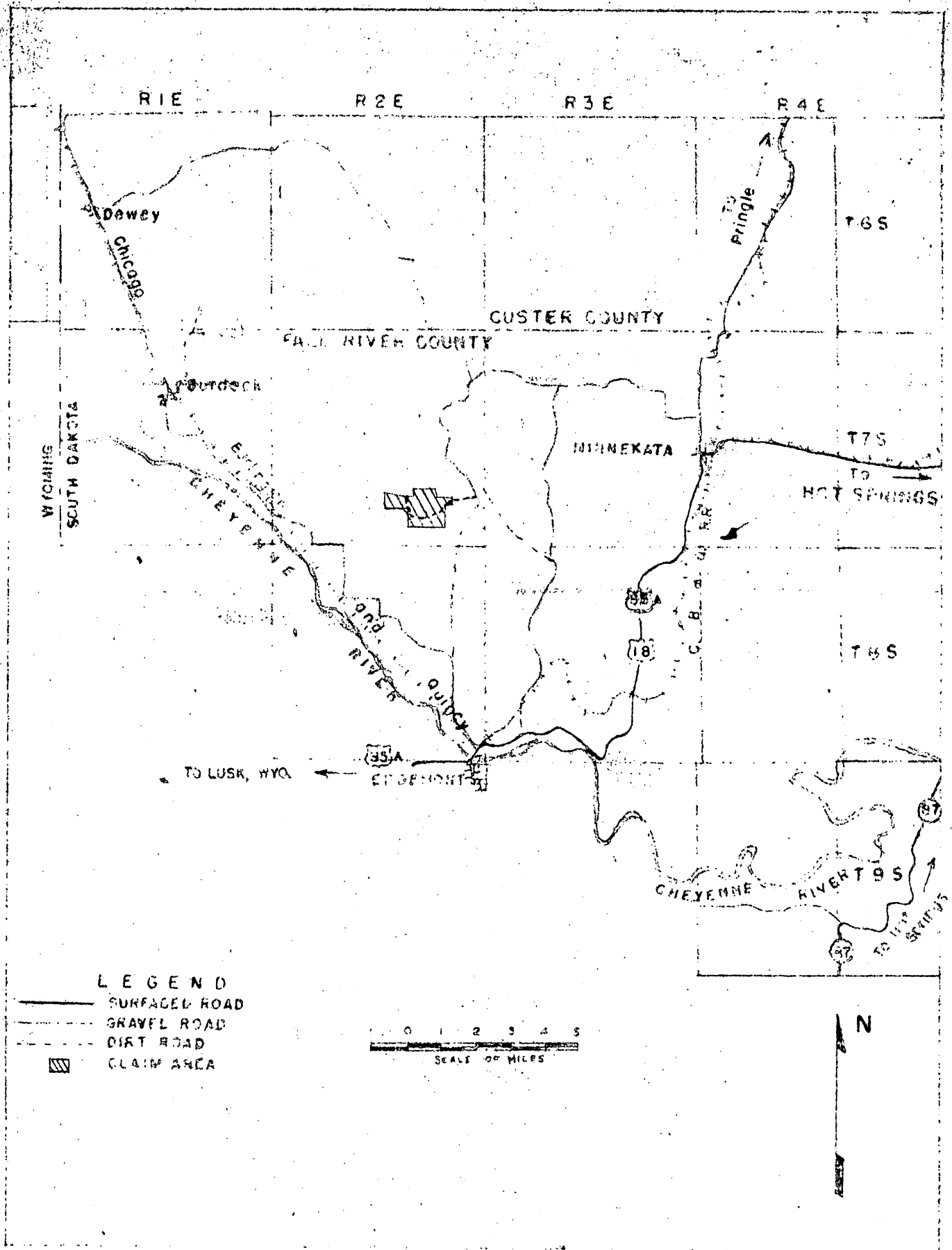


FIGURE 1 - LOCATION MAP, GIANT CYCLE CORPORATION, (STANDEN-TAYLOR, DEPUE AND OXIDE METALS LEASES) FALL RIVER COUNTY, SOUTH DAKOTA - DMEA 5038

and Q. Railroad, is a supply and small equipment center, and a source of labor for the Edgemont Mining District. The town is also the site of the only uranium mill in the area.

The claims overlie high rolling terrane, incised at places by shallow to moderately deep draws. On the westernmost part of the property, or the Virginia C claims, the altitudes range from 3,850 to 3,950 feet; and on the eastern part, the South View and Goof Off claims, the range is from 3,900 to 4,050 feet. In section 35 the Standen-Taylor lease area slopes gently to the southwest, the southwest corner having an altitude of 3,830 feet and the northwest corner 4,030 feet. There are no outstanding topographic features on the property other than the draws that cut south and southwest through the claims.

A small amount of timber, mainly ponderosa pine, is found on the property mainly along the draws. Most of the timber is small and knotty and appears unfit for mine use. The flats and mesas are well covered with grasses and some cactus. A small stock pond is on the Standen-Taylor lease but this pond could not supply water steadily for drilling or small mine use; however, water could be hauled from other nearby ponds or wells. Electric power is not available. Gasoline or diesel driven equipment is used for drilling and mining.

The climate is typical of the north-central plains states. Summers are moderate; however, the winters are sometimes severe, and temperatures drop to well below 0 degrees for short periods. The low temperature with snow and wind can make outside operations difficult or impractical for such short periods.

OWNERSHIP

The applicant holds the subject property under assignments of lease agreements from Giant Resources, Inc., a Nevada Corporation, and Golden Cycle Corp., a Colorado corporation; and from Giant Resources, Inc., which held the property under an assignment of the leases from Edgemont Mining and Uranium Co., Inc., and A. Ludwig and E. J. Brackman of Edgemont, South Dakota. The owners of the claims and other land are as listed below:

Land	Owner
Standen-Taylor lease	Jack Standen and Mrs. Kattie L. Taylor Edgemont, South Dakota
Virginia C claims or DePue Lease	Milford DePue 3024 Yale Ave., Venice, Calif.
Berit, South View, Valley View, and Goof Off claims or Metals Oxide lease	Mining Research Corp. Wheatridge, Colo. Original owner - leased to Edgemont Mining Co., Inc.

Several discrepancies are noted in descriptions of the Metal Oxide lease. The map shows a Goof Off claim No. 3/5 but this claim is not listed in the Assignment. The map shows a South View claim No. 6 but this claim is recorded as Valley View claim No. 6. The list of claims given by the applicant shows a South View No. 6 claim and a Valley View claim No. 7. The claims are recorded as Valley View claim No. 6 and South View No. 7.

The claims as recorded at the County Recorder's office at Hot Springs, S. Dak., are as follows:

Claim	Book	Page	Date of discovery	Date recorded
Jackson Nos. 1, 2, 3 & 4	31 Mins.	517-518	8/24/52	10/23/52
Taylor Nos. 1, 2, 3 & 4	"	515-516	"	"
Betty J, Nos. 1, 2, 3 & 4	"	513-514	"	"
Nettie L. Nos. 1, 2, 3, 4	"	511-512	"	"
Virginia C Amended location	"	314	?	6/27/52
Virginia C	"	373	-	10/11/53
Virginia C No. 1	"	314	4/29/52	6/27/52
Virginia C No. 2	"	315	"	"
Button No. 1	"	316	"	"
Button No. 2	"	315	"	"
Viking No. 1	"	316	"	"
Goof Off 1 & 2	"	356-357	8/4/52	10/1/52
" " 2.3	"	357	9/1/52	10/1/52
" " 2.75	"	57	2/22/53	4/27/53
South View 1, 2, 3, 4	"	285-286	4/25/52	6/5/52
South View 5	"	287	4/25/52	6/5/52
Valley View 6	"	287		8/12/52
South View 7	"	335	7/18/52	8/12/52
South View 8	"		8/6/52	"
South View 9	"	336	"	"
Berit No. 1 and 2	"	174-175	5/18/52	7/12/52

The claims include an area of about 669 acres.

HISTORY AND PRODUCTION

The Virginia C group and the Geof Off and South View-Valley View claims were some of the first claims located and worked in the Edgemont mining district. The Virginia C group of claims, owned by Edgemont Mining Co., was the largest producer in the district during the first year or two of mining. All mines now have ceased to operate. The property as a whole produced about 6,300 tons of ore that averaged 0.245 percent U_3O_8. The South View-Valley View claims were exploratory drilled through Fall River formation only in 1953 under a DMEA contract to Guide Metals Corp., a subsidiary of Mining Research Corp. (DMEA contract Idm-E 580). The records show that production from the property amounted to 67.2 tons of ore that averaged 0.34 percent U_3O_8; however, it is reported that about 120 tons were shipped. Production of ore from the Standen-Taylor lease (N½, sec. 35) was 1,307.1 tons with a grade of 0.235 percent U_3O_8. All production was from the Fall River formation.

PRESENT STATUS

The property is not being worked at present.

GEOLOGY

The Giant Cycle Corporation Bear Lodge property is situated at the southern end of the Black Hills domal uplift, on the western flank where a thick section of sedimentary rock units ranging in age from Cambrian to Tertiary dip southwestward away from the crystalline core.

The principal consolidated rocks exposed on the property consist of a series of lower Cretaceous sedimentary formations that are known collectively as the Inyan Kara group. This group which forms some of the pronounced outer peripheral hogbacks to the Central Black Hills, contains the majority of the known uranium ore deposits of both the southern and northern Black Hills. The Inyan Kara group overlies the Jurassic Morrison formation, and in the area of the property forms a belt of outcrop about 5 miles wide, covered to the west by overlying Skull Creek shale. Locally thin deposits of Tertiary White River formation and Quaternary gravels and alluvium cover the Cretaceous rocks.

The Inyan Kara group of the lower Cretaceous stratigraphic interval is now divided into two formations--the Fall River and the Lakota. The Fall River or the uppermost formation of the group is about 150 feet thick and consists predominantly of fine-grained sandstone interbedded carbonaceous sandstone and mudstone, and thin mudstone beds. The Lakota formation, which now includes the Fuson mudstone formation and the thin discontinuous Minnewaste limestone of Barton, is 200 to 300 feet thick and is a series of thick fluvial sandstones and mudstones. Interfingering

of the different rock types within the formation is common, and the lithologic sequence changes from place to place throughout the area.

Mapping by the USGS in the Southern Black Hills shows that several channel sandstone units of both the Lakota and Fall River formations are extensive. These sandstone units have been numbered from S_1 to S_5. Sandstones S_1 through S_4 are in Lakota; S_5 is in lower Fall River. Of these extensive sand units only S_1, S_3 (lower Lakota), S_4 (upper Lakota), and S_5 are present in the vicinity of the property (Edgemont NE quadrangle). The S_1 sandstone in the Edgemont NE quadrangle fills a broad northwest-trending channel and ranges from 0-250 feet thick along the axis of the channel. However, thicknesses of 200-250 feet are consistent. The unit is generally not cemented but calcite and silica does cement sand grains locally.

The S_3 sandstone is a white massive fine-grained sandstone that can be recognized generally because of its color and lack of bedding. It varies from 75 feet to 300 feet in thickness within the quadrangle, but is probably absent generally west of Craven Canyon which runs northwestward across the center of the quadrangle east of the property. Of the three Lakota sands, the uppermost S_4 is most notable because it contains the Gould and Runge mines. S_4 sandstone fills in irregularities on a pre-Fall River surface and reaches a maximum thickness of 150 feet along a narrow northwest-trending channel. S_4 is a crossbedded, fine- to coarse-grained unit, light yellow to gray, and calcareous at places.

Sandstone S_5 of lower Fall River is a microcrossed widespread sandstone that is as much as 100 feet thick. This sandstone at places contains abundant silica cement.

Structure in the sedimentary rocks of the Edgemont NE quadrangle is simple. The beds dip generally 2-4 degrees to the southwest, away from the Black Hills domal uplift. Dips on a west-dipping monocline in the southeast part of the quadrangle has a maximum of 20 degrees. A small pre-Inyan Kara dome is present in the southwest part of the quadrangle and several faults of minor displacement are noticeable.

Stanton-Taylor, DePue, and Metal Oxide properties

The Giant Cycle Corporation properties of this application lie about 1 to 1½ miles west of Craven Canyon. This position places them west of the Inyan Kara rocks that have features favorable for ore deposits. The properties are west of the S_1 sandstone channel which is the principal target of present day drilling in the region.

The AEC, during its preliminary exploration drilling programs, drilled a number of randomly spaced holes that cut the Lakota stratigraphic interval across the Edgemont NE quadrangle. A number of these holes are on and near by the Giant Cycle property (Fig. 2).

The results of this drilling indicate that the chances of large uranium deposits being found in the Lakota interval under the area are poor.

The narrow channel of S_4 sandstone in the upper Lakota passes directly below the property. In 1955 the USGS did wide spaced core drilling along

about 5 miles of the extent of the S_4 sandstone channel, including several holes on the present Giant Cycle property (fig. 8). The result of this S_4-drilling was the initial discovery of uranium in the poorly cemented S_4 sandstone near the present Range mine, south of the subject property. The S_4 sandstone that underlies the Giant Cycle property was barren in all holes. The sandstone appeared to be tightly cemented throughout and showed no indications of being a good site for uranium deposits.

ORE RESERVES

An estimate of reserves on the subject property that would be meaningful cannot be made. The sites that have been mined were all small producers and the ore-grade was low. A very small tonnage of low-grade ore reserves may remain on the Virginia 8 and the Stephen-Taylor leases.

APPLICANT'S PROGRAM

The program proposed by the applicant consists of three stages of drilling; Stage I to be the primary or grid drilling; Stage II, offset drilling around mineralized Stage I holes; and Stage III, core drilling for establishing the ratio between radiometric probe and chemical assay results. Some bulldozer work for the preparation of drill sites and access roads to the sites is proposed.

The applicant's estimated cost of the program is as follows:

	Holes	Depth	Total feet
6 (a) Stage I Rotary Noncore	25	300	7,500
Stage II " "	30	300	9,000
Stage III " "			
and core	8	300	2,400
	63		18,900

	Holes	Depth	Total feet	Cost/ft.	Direct costs Total
Stage I Rotary Noncore drilling	25	300	7,500	$1.00	$ 7,500.00
Stage II " " "	30	300	9,000	1.00	9,000.00
Stage III " " "	8	300	2,400	1.00	2,400.00
Core drilling	8	30	240	10.00	2,400.00
					21,300.00

6 (b) Personnel Services		
Labor		
1 caterpillar operator 2 mos. @ $442/mo.	884.00	
Supervision		
1 mining engineer 4 mos. @ $750/mo.	3,000.00	
1 geologist 4 mos. @ $600/mo.	2,400.00	6,284.00
6 (c) Operating materials and supplies		
Gas, oil and supplies 2 Pickups @ $120/mo.	480.00	
Caterpillar diesel fuel 2000 gals. @ $0.17	340.00	
Oil and lubrication $30/mo. for 4 mos.	120.00	940.00
6 (d) Operating Equipment		
1 3/4-ton pickup use allowance $40/mo.	160.00	
1 ½-ton Willys pickup use allowance $40/mo.	160.00	
1 caterpillar D-8 bulldozer use allowance $7/hr. for 208 hrs. per mo. for 2 mos.	2,912.00	3,232.00

(Fair market value of equipment - 3/4 ton International Pickup $1,500.00, 1½-ton Willys Pickup $1,200.00, 1 D-8 Caterpillar $14,000.00)

6 (e) Initial Rehabilitation and Repair	None	
New Buildings, Fixtures and Installations	None	
6 (g) Miscellaneous		
Analytical work 120 samples at $3.50	420.00	
Accounting $75/mo. 4 mos.	300.00	
Compensation, liability 14% of labor costs	880.00	1,600.00
Total for entire project		$33,356.00

RECOMMENDED PROGRAM

Exploration of the property with Government assistance is not recommended.

CONCLUSIONS AND RECOMMENDATIONS

The examining team concludes that the Giant Cycle Corporation properties, DuPue, Swanson-Taylor, and Metal Oxide leases, do not warrant deep drilling exploration through the Lakota. It would appear from available geologic and existing exploratory data that the properties are not located properly with respect to any geologic feature of the Inyan Kara group to constitute a target. The S_1 sandstone of the lower Lakota is gradually thinning westward from Craven Canyon to the property site, but the abrupt changes in thickness of this unit that in other places are good drilling targets lie eastward of the property. The S_4 sandstone of upper Lakota that in other places to the southeast contains large uranium deposits, has been drilled in the vicinity and on the property, and appears to have generally the wrong characteristics for an ore-bearing host rock.

The examining team recommends that the applicant's request for assistance in exploring by drilling the Lakota interval on the said property be denied.

June 4, 1958
Re: DMEA 5038
Grant Cycle Corp.
Brandon-Taylor, DePue, etc. claims
Fall River County, S. D.
$33,336 - Uranium

Memorandum

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

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

Subject: Review of application

As in applications 5037 and 5039, assistance is requested in prospecting by widely-spaced drill holes, for deposits of uranium-bearing minerals in the Early Cretaceous Lakota formation.

Unlike the Triangle Group of 5037, these claims contain no known ore, although the application says commercial grade ore has been mined from the Fall River formation on the DePue and Taylor properties. The application says 'Lakota' ore in substantial amount has been found 4 miles to the southeast and small deposits have been mined to the north. The A.E.C. drilled one hole which contains 2 feet of 0.63% U_3O_8 in the Lakota formation.

On the strength of the scattered showings in the Lakota, the applicant justifies the proposed prospecting of an area underlain by Lakota rocks. No channel, no trend, no halo has been indicated.

Referral of the application to the Field Team is recommended.

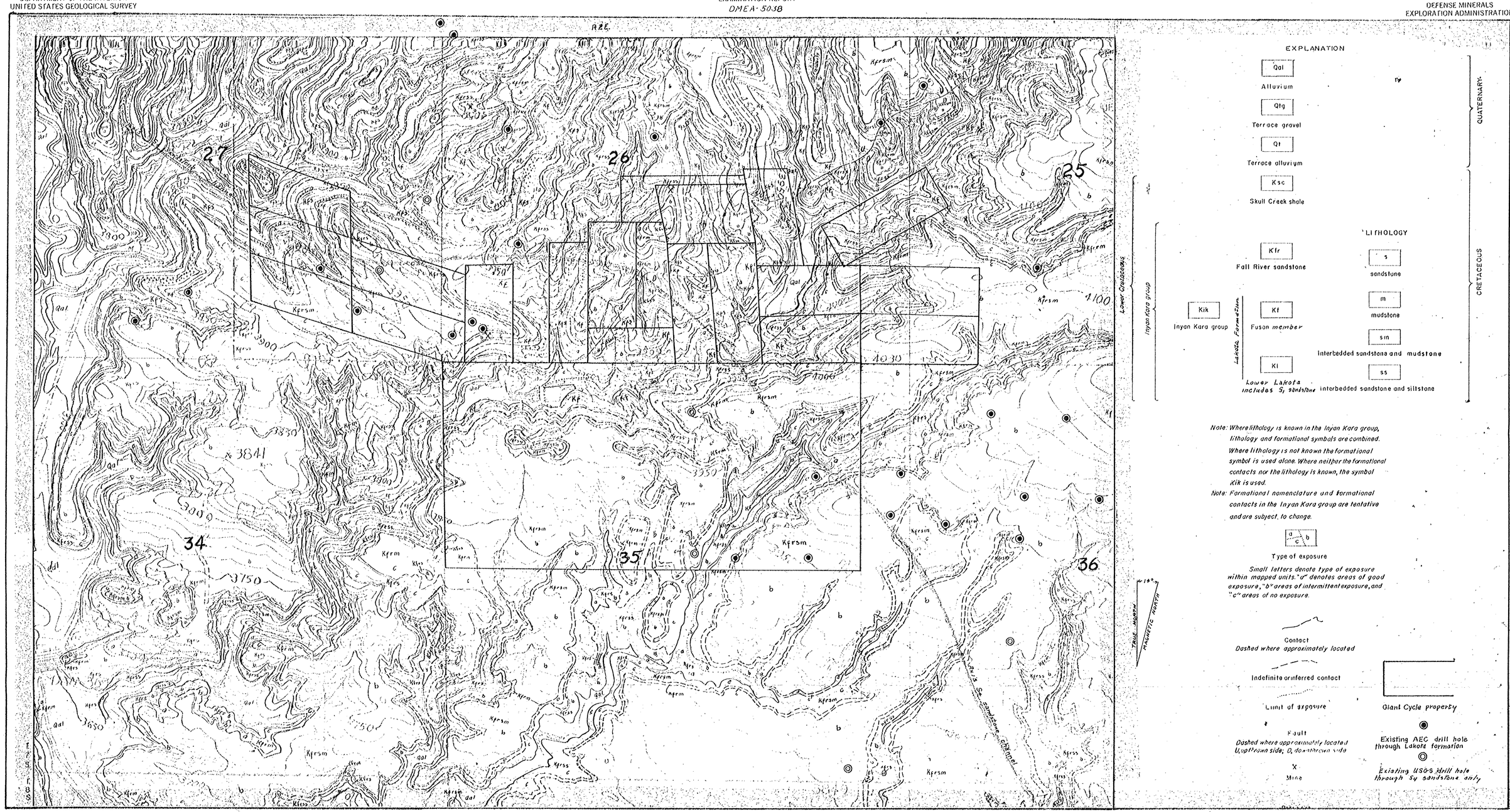
N. E. Nelson

cc: DMEA (3)
James Paone
C.I. Gardner
Director's reading
Branch reading
Chron. file
Docket file
NENelson/mm
G-MD-6-4-58

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXAMINATION REPORT
DMEA-5038

PREPARED FOR
DEFENSE MINERALS
EXPLORATION ADMINISTRATION



Geology and topography from map by Gott & Schnabel, USGS MF-59

Sharp, Aug. '58

Fig. 2 - GEOLOGIC MAP OF PART OF THE EDGEMONT NE QUADRANGLE, FALL RIVER CO., SO. DAK. SHOWING GIANT CYCLE CORP. PROPERTY AND SOME EXISTING DRILL HOLES
DMEA - 5038

0 1000 2000 3000 feet

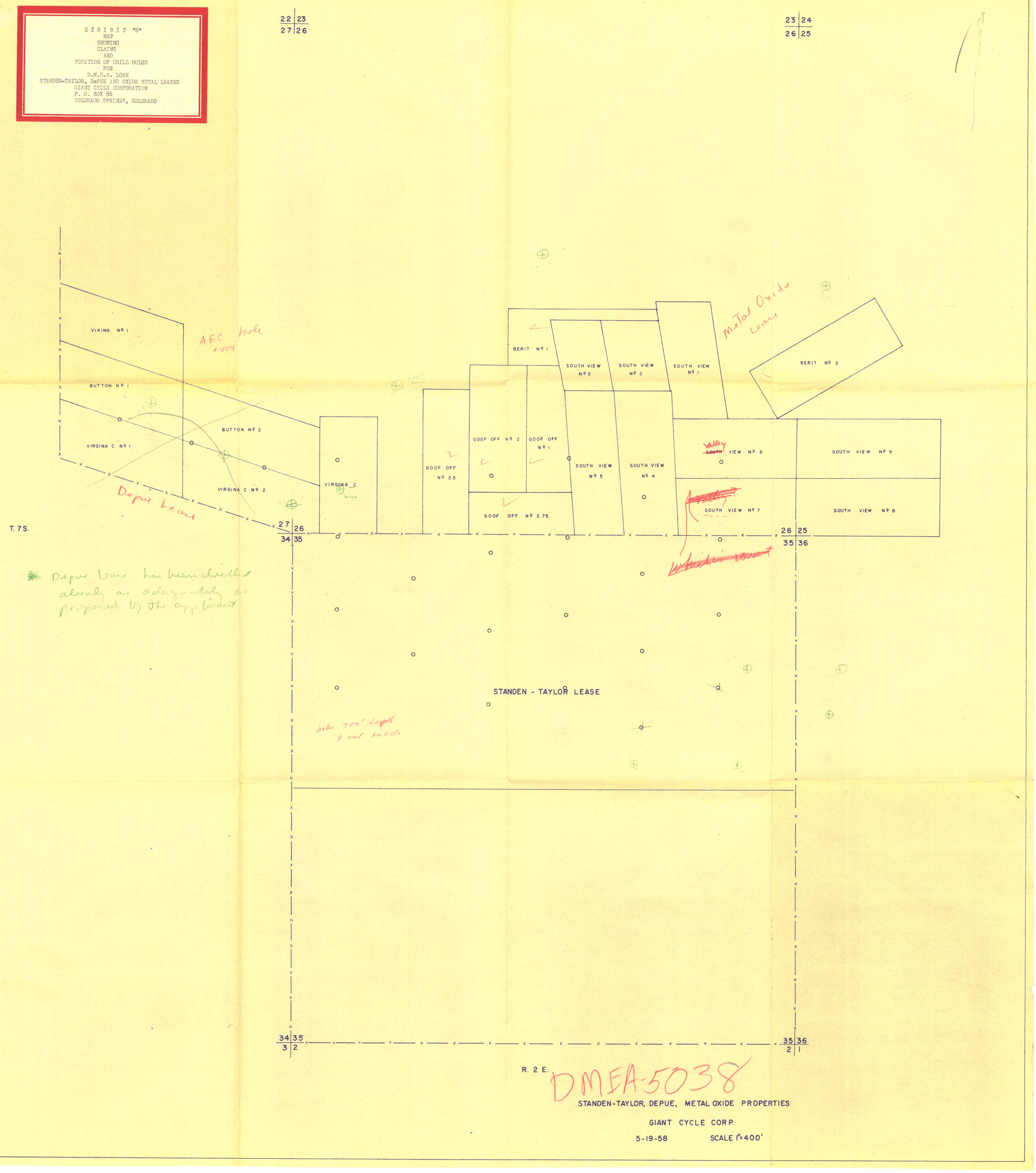



EXHIBIT "B"
MAP
SHOWING
CLAIMS
AND
POSITION OF DRILL HOLES
FOR
D.M.E.A. LOAN
STANDEN-TAYLOR, DePUE AND OXIDE METAL LEASES
GIANT CYCLE CORPORATION
P. O. BOX 86
COLORADO SPRINGS, COLORADO