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

224 New Customhouse
Denver, Colorado

Air Mail

September 7, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, Docket DMA-243, Donald S. Tedford, Ogre and Bogle Tungsten Claims, Victorio Mining District, Luna County, New Mexico

Enclosed herewith are original and two copies of the report as indicated above.

We concur with the conclusions and recommendations of the examining team.

J. H. East, Jr.

A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

September 6, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, Docket DMA-243, Donald S. Tedford, Ogre and Bogle Tungsten Claims, Victorio Mining District, Luna County, New Mexico

The application accompanying the subject docket was for a development loan of from $7,500 to $10,750 for the construction of a mill to produce tungstic trioxide concentrates from scheelite bearing limestone.

Very little development has been done on the claims, and there are not any measured reserves. Indicated reserves are estimated at 1200 tons with an average of 0.105 percent tungstic trioxide. Inferred reserves may be appreciable, but data are lacking.

The examining engineer recommends denial of the production loan, with which we concur.

Paul T. Allsman

Paul T. Allsman

Mining Division
Date Rec'd.

AUG 31 1951

BUREAU OF MINES
Denver, Colorado
TUCSON, ARIZONA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

August 27, 1951

Memorandum

To : Paul T. Allsman, Denver, Colorado

From : Chief, Arizona-New Mexico Br., Mining Div., Region IV

Subject : Final Report, Docket DMA-243, Donald S. Tedford's Ogre and Bogle Tungsten Claims, Victorio Mining District, Luna County, N. Mex.

Enclosed are original and 7 copies of the above report by John H. Soule'. No separate report on geology will be submitted by the Geological Survey.

Tedford originally applied for a production loan to develop his tungsten deposit and build a small mill. The examining engineer recommends denial of the loan because of lack of ore. Tedford states that he now wants to apply for an exploration loan. When details of such a proposal are received, a supplemental report will be submitted.

This report has my approval.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC P. T. Allsman (7)
C. A. Anderson
DMA-243
DF

FOR VICTORY
BUY UNITED STATES SAVINGS BONDS AND STAMPS

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-243, Donald S. Tedford's Ogre and Bogle Tungsten Claims, Victorio Mining District, Luna County, New Mexico

John H. Soule', Mining Engineer
U. S. Bureau of Mines

August, 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By J. H. Soule'[1]

The Ogre-Bogle group of tungsten claims is located in the Victorio Mining District, Luna County, New Mexico. The claims are 4.5 miles southwest of Gage, the nearest railroad point.

Donald S. Tedford, locator of the claims, applied to the Defense Minerals Administration for a development loan of $7,500, raised this to $9,000, then to $10,750, and finally dropped it to $2,500 for exploration. Originally he wanted to build a small mill to produce tungsten concentrates. The application, Docket DMA-243, was referred to the field for examination.

Indicated ore reserves total 1,200 tons containing 0.105 percent WO_3. Inferred reserves may be appreciable but insufficient exploration work has been done to permit of their calculation.

A study of the available data shows the reserves are small and low in grade, there is insufficient value in said reserves to repay the development loan, and there is considerable doubt of the metallurgical efficiency of a gravity plant, such as was requested, to treat scheelite ores.

Recommendations are made that the development loan be denied. A small exploration project with Government participation could be recommended. A supplemental report will be submitted when a detailed exploration proposal can be worked out with the applicant.

1/ Mining engineer, Bureau of Mines

DONALD S. TEDFORD'S OGLE AND BOOLE TUNGSTEN CLAIMS, VICTORIO MINING DISTRICT, LUNA COUNTY, N. MEX. , DOCKET DMA-243

Engineering Report

By John H. Soule'
Mining Engineer
U. S. Bureau of Mines

August 1951

DONALD S. TEDFORD'S
OGRE AND BOGLE TUNGSTEN CLAIMS,
VICTORIO MINING DISTRICT
LUNA COUNTY, NEW MEXICO
DMA-243

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INTRODUCTION

Donald S. Tedford, locator of the Ogre, Bogle and four other claims in the Victorio Mining District, Luna County, New Mexico, applied to the Defense Minerals Administration for a development loan of $7,500 to install a small mill and to prepare the mine for the production of tungsten ores. This application, Docket DMA-243 later was raised to $9,000, then to $10,750. Recently he applied for $2,500 for exploration. As the information contained in the application was not complete, the brochure was sent to the field for an examination. The field examination was completed on July 13, 1951, and the results are reported herein.

ACKNOWLEDGMENTS

Acknowledgment is made of material obtained from the New Mexico Field Office files. This material was gathered from a previous examination by W. R. Storms, Mining Engineer of the Bureau of Mines. Acknowledgment also is due Donald S. Tedford for showing the examining engineer the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Ogre and Bogle group of claims is located largely in the western and adjoining quarters of secs. 30 and 31, T. 24 S., R. 12 W., in the Victorio Mining District, Luna County, N. Mex. The property is just 4.5 miles by road south of Gage, N. Mex. It is reached by traveling south from Gage for 2.5 miles, thence taking the right fork of the road for an additional mile to a small power line, and a

thence following this power line westerly to its end on the property, a distance of nearly one mile.

The Ogre and Bogle group of claims is situated on the southern flanks of the Victorio Mountains, a small range a few miles south of Gage, N. Mex. The mean altitude is about 4,500 feet. The area is not rugged, being rather level to the south where the property overlaps the Nelson plain.

Vegetation is sparse consisting largely of greasewood and other desert plants. There is no timber suitable for mining use.

The area is semi-desert and there are no permanent streams, but water may be developed by wells. The depth to the water table is unknown but considerable water was reported at a depth of 450 feet in an old shaft about a mile southeast of the Ogre-Bogle claims.

Precipitation averages about 12 inches per year, largely as summer thunder showers. Snows and cold are not severe, although summer temperatures are in excess of 100 degrees.

There is one small shack on the property as well as a few old buildings on adjoining properties. Other than these, the nearest housing would be at Gage where limited accommodations are available, and at Deming, N. Mex., about 24 miles east of the property, where sufficient accommodations are available.

A small single-phase power line terminates on the property and a natural gas pipe line passes about one-fourth mile south of the mine.

HISTORY AND PRODUCTION

No ore has been produced from the Ogre and Bogle claims although a recent located claim of the group, the Merlock, embraces the old Irish Rose claim where appreciable wolframite (hubnerite) was produced. It is reported that $70,000 worth of tungsten ore was produced from the Irish Rose. This figure seems excessive. During 1943 one hundred thirty-three tons of low-grade ore were sold to the Metals Reserve Corp. stockpile at Deming, while some higher grade sorted material was sold directly to trade channels. The average grade of the stockpiled ore was 0.78 percent WO_3. Some lead-zinc-silver ores may have been produced from the Ogre-Bogle group but the quantity was small. Considerable silver-lead ore was produced from Mine Hill, southeast of the Ogre-Bogle group.

OWNERSHIP AND EXTENT

There are five unpatented lode claims in the Ogre-Bogle group. These are the Ogre, Bogle, Merelock, Yehee and Kloi. These claims all have been located since 1946, by Donald S. Tedford, the applicant for the development loan.

DESCRIPTION OF THE DEPOSITS

The oldest rocks in the area are lower Paleozoic Montoya limestones of Ordovician age. These are overlain by the Fusselman (Silurian) limestone, the Gym (Permian) limestone, and a series of conglomerates, sandstones and shales, in part quartzitic, that are tentatively classed as the Lobo (Triassic?) formation.

A recent communication from the applicant discloses a new proposal for exploration and the sum desired is $2,500. The applicant lists the following items of equipment.

3 Compressors, 25 cfm	$ 609
3 Motors, 5 hp	660
1 Jackhammer	300
Pipe, 900 ft., 2-inch	585
Pipe, 300 ft., 1½-inch	120
Building	125
Hose, freight, steel, tees, unions, etc.	101
Total	$2,500

Transportation presents no problem as roads reach the property. There are no severe grades to the railroad and only slight maintenance would be necessary.

Manpower presents no problem as the applicant proposes to operate the mill himself and have a contracter with earth-moving equipment stockpile the ore at the mill.

Limited power is available but wells must be sunk for water.

PRODUCTION PLAN

The applicant does not state the quantity of ore to be milled during any given period of time but a glance at the equipment costs in the previous section indicates a small operation. However, most or all of the mining is planned in areas in which the tungsten mineral is scheelite. This mineral is difficult to recover by gravity methods and it is believed that a poor recovery would be made in the applicant's proposed gravity mill. This is borne out by panning the samples, where only a small fraction of the scheelite is recovered in a low-grade concentrate.

Overlying these sedimentary rocks are andesite flows that contain considerable agglomerate at the base.

Structure may be complicated in areas buried by alluvium. The sedimentary beds in the northern part of the area dip to the north while those in the south dip southerly but local variations were noted. It is likely that east-west trending faults of considerable magnitude occur under the alluvium that covers considerable portions of the Yahoo, Bogle and Morelock claims.

Intrusives are few, consisting of small dikes and one small stocklike body.

Metamorphism is widespread in area but seems to be confined to one or a very few beds of the Gym limestone. This metamorphism consists of tactitization. The scheelite occurs in the tactite. On the Ogre and Bogle claims, the limestone is altered to caliche and contains small amounts of scheelite.

On the Morelock claim, a quartz vein strikes northerly and contains wolframite (hubnerite). All tungsten production from the area was from this quartz vein. The mine was known in the past as the Irish Rose.

ORE RESERVES

Only a little exploratory work has been done in widely separated points on the Ogre-Bogle group of claims. Ore reserves are based on Bureau of Mines sampling of these exposures.

There are no measured reserves. Indicated reserves are tabulated as follows:

Claim	Tons	Assay Percent WO_3
Ogre & Bogle	720	0.04
Yahoo	320	0.18
Eloi	160	0.25
Total	1,200	0.10%

Inferred reserves may be appreciable but data are lacking. Considerable exploratory work and sampling is necessary to extend the indicated reserves.

PRESENT STATUS

The Ogre-Bogle claims are inactive at the present time. The applicant for Governmental aid is awaiting the decision of the Defense Minerals Administration before doing any further work on the property.

The tungsten deposits on the claims are exposed by about twenty test pits, most of which are shallow and are concentrated in a small area on the Ogre and Bogle claims. Outside of this area single pits explore the deposits (except the old Irish Rose mine which is now on the applicant's Morelock claim). Work was concentrated on the Ogre and Bogle area because, although very low in grade, the material is easily mined with a bulldozer.

There is no equipment on the property other than a small shack. A single phase power line reaches the property, but only a small amount of power is available.

PROJECT PROPOSALS

The applicant proposed to install a small mill, and by contracting most of the mining, and operating the mill himself, to produce tungsten concentrates. The following list of mill equipment and prices was submitted by the applicant in his final development request.

Equipment	Cost
Crusher	$1,450
Rolls	875
Ball mill	600
Table	1,050
Jig	350
Rocker	150
Well pump	250
Sump pump	250
Motors, 22 hp	1,200
Total	$6,175

In addition to the mill equipment, the following items were listed.

1 Well	$ 900
Compressor	600
Pipe	350
Tools, belts & accessories.	450
Rock drill	350
Estimated freight	325
Building	800
Installation	600
Total	$4,375

These sums make a total of $10,750. A study of the above costs show that much secondhand equipment is being considered and some of the costs seem unreasonably low.

COST OF PROJECT

The original application was for $7,500, later raised to $9,000, and now $10,750 is desired to do the things listed in the original docket. From the indicated ore reserves there are a total of 2,520 pounds of WO_3, which at $3.10 per pound equals $7,812. This is not enou gh to repay the development loan.

That there may be more tungsten on the claims can not be denied but considerable exploratory as well as metallurgical work is necessary before this tungsten may be considered available. The applicant has submitted an application for exploration in the amount of $2,500.

CONCLUSIONS

The following conclusions seem justified from a study of the data pertaining to the Ogre-Bogle group of claims:

1. There are no measurable reserves;
2. Indicated reserves are small and low in grade;
3. The indicated reserves contain insufficient value to repay the requested development loan;
4. These reserves may be increased by additional exploratory work;
5. It is doubtful if the planned mill would recover sufficient tungsten (scheelite) to be a metallurgical success;
6. The applicant has recently submitted a proposal for exploration, costing $2,500.

RECOMMENDATIONS

Based on the foregoing conclusions, it is recommended that the application for a development loan, Docket DMA-243, be denied.

A small amount of additional exploratory work could be recommended, but the present proposal submitted by the applicant is too indefinite. A supplementary report will be submitted when a definite proposal is worked out with the applicant.