6000 0141 (0760)

Mike
see for double springs

Bill
see for Calico etc

Bob
see for Temell MTs

WALKER RESERVATION EXPLORATION PROPOSAL FOR NON-IRON MINERALS

Occidental International and Minerals Corporation

February 10, 1967

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TO : Tom Wachtell - Vice President
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FROM : Ron Haxby - Mining and Computer Applications Eng.

RE : WALKER RESERVATION EXPLORATION PROPOSAL

INTRODUCTION

This report summarizes the exploration costs for several non-iron mineral prospects within the Walker Indian Reservation, Nevada. The commodities are copper, gold, silver, sulfur, dry lake minerals and brine.

The exploration procedures and costs are separated into "PHASES" as outlined by Mr. R.C. Mayberry in his December 17,1966 report to Dr. Hammer.

In some instances there is sufficient geologic information to estimate costs and capital expenditures through PHASE III, in other cases this is not possible.

It is difficult to estimate the size and capital cost of a mine before the deposit is drilled out. However, certain geologic features indicate the presence of a small or large deposit. In most of the proposed prospects, an estimate of size is included. Table I relates the size of an orebody to the estimated time (in years) and capital expenditure necessary to put the ore deposit into production.

It is assumed that at least one field geologist will be assigned to each prospect. This will permit a rapid evaluation and comparison of all areas. If, however, just two geologists are available for the complete job, the evaluation will take longer.

TABLE I

EXPLORATION TARGETS

	Small open pit copper deposit	Large open pit copper deposit	Small underground gold mine
Reserves	15 mt*	100 mt.	1 mt.
Grade	1.0% Cu	0.8% Cu	.33 oz Au.
Exploration period	2.0 years	3.0 years	1.0 years
Pre-production period	2.0 years	3.0 years	1.5 years
Annual production	1.3 mt/yr.	7.0 mt/yr.	100,000 t/yr.
Life of mine	12 years	14 years	10 years
Capital cost for Mine and Plant	$5.2 m*	$80 m	$900,000
Annual profit before taxes, amor., deplec.	$2.6 m	$13.4 m	$455,000/yr.

* = million ton (mt)

** = million (m)

The salaries and living expenses for professional personnel are not included in the calculations. As a rule of thumb, it costs about $65.00/day to keep a man in the field (includes wages, room, and board). Personnel costs are actually rather small with respect to the total investment.

Table II summarizes the cost for each prospect. Each prospect will be re-evaluated at certain economic "cutoff" points. If the exploration information indicates the target does not exist the project will be terminated. The "cutoff" increments are as follows:

Phase	"Cutoff" Points
I	$ 5,000 increments
IIA	$10,000
IIB	$15,000
III	$20,000

Map #1 shows the location of the various prospects.

TABLE II

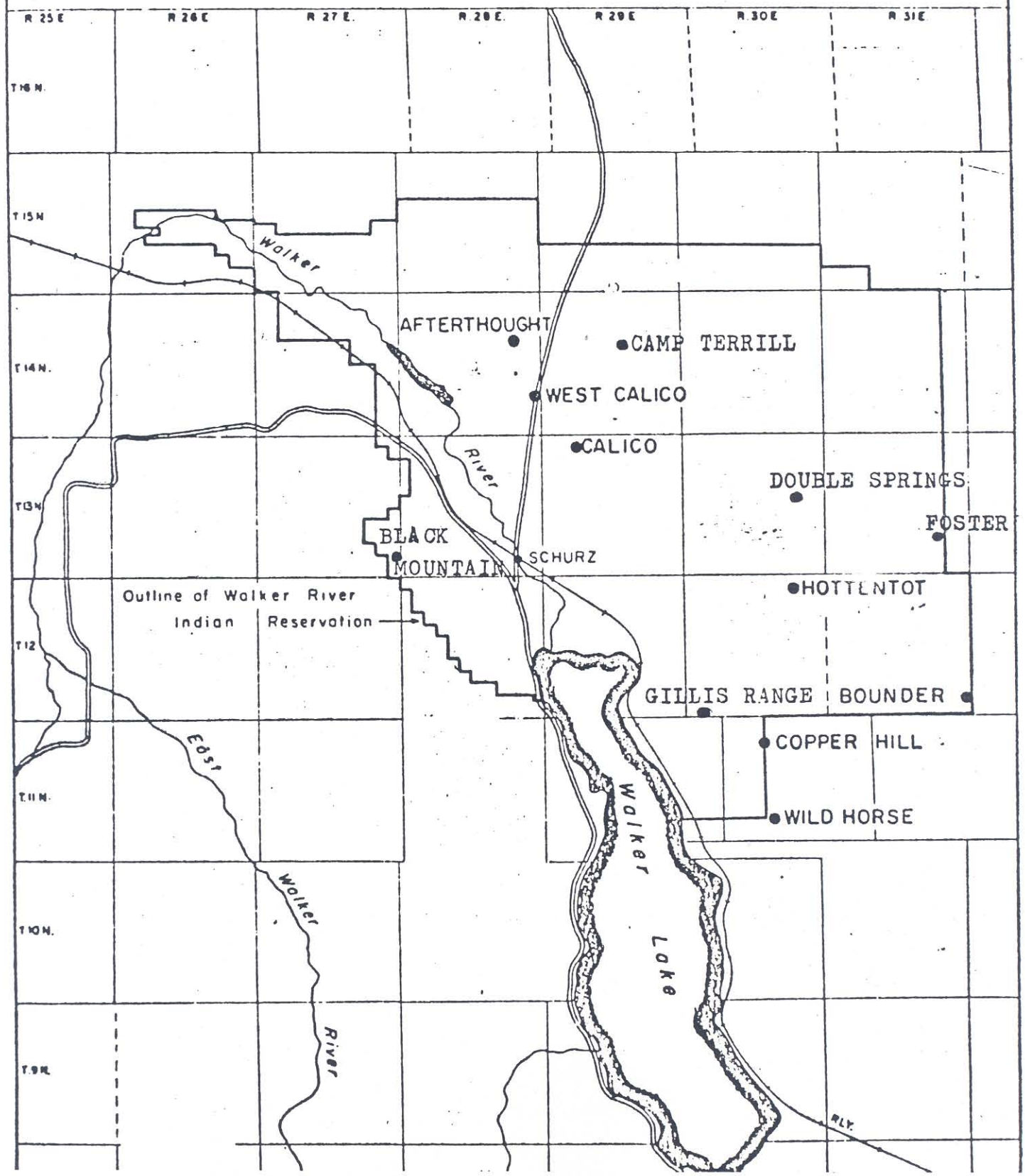
EXPLORATION EXPENDITURES

Project	$ Phase I	$ Phase IIA	$ Phase IIB	$ Phase III	$ Final Eval.	$ Feasibility
1. Regional Gravity survey of the reservation	8,700					
2. Black Mountain Copper Prospect	10,000	57,000	195,000	500,000	10,000	100,000
3. West Calico	10,000	54,000	192.000	500,000	10,000	100,000
4. Calico Copper	completed	102,000	400,000	500,000	10,000	100,000
5. Camp Terril	10,000	31,000	192,000	500,000	10,000	100,000
6. Afterthought	1,500					
7. Hottentot	4,500					
8. Copper Hill	3,000					
9. Wild Horse Canyon	1,300					
10. Double Springs	10,000	54,000	192,000	500,000	10,000	100,000
11. Gillis Front Range	1,300					
12. Foster	800					
13. Dry Lakes and Brines	5,000					
	$66,100	$298,000	$1,171,000	$2,500,000	$50,000	$500,000

Note: In general, add 20% for professional geologic supervision.

WALKER RESERVATION PROSPECT LOCATIONS

Map #1



DESCRIPTION OF THE RESERVATION PROSPECTS

Regional Gravity Survey of the Reservation

80% of the Reservation is covered by post-mineral volcanics and some of these areas have magnetic anomalies, (the Calico iron zone for example). An anomaly may be a high or a low. A high anomaly may represent a magnetic iron mass and a low is sometimes associated with copper deposits as at Yerrington, Nevada. Anomalies, however, are also associated with differences in rock type or structure. A gravity survey will aid in determining whether the magnetic anomaly is related to a potential mineral deposit or a structural feature (which may be important in itself).

Costs:

PHASE I

Perform a regional gravity survey of the Reservation on one-mile centers. The job will be contracted to a geophysical consultant.

Time: 2 months $8,700

Black Mountain Copper Prospect

Potential: A large open pit copper deposit.

Mineral: Chalcopyrite (CuS_2) and molybdenite (MoS_2).

The Black Mountain area is a copper-molybdenum prospect. This prospect is located along the west boundary of the Reservation and is adjacent to a copper prospect being drilled by Bear Creek Mining Co.

Costs:

PHASE I

a. Geologic mapping
b. Geo-chemistry
c. I.P. survey

PHASE I (con't)

d. Underground mapping	
e. Claim status work	
f. Consultants evaluation	
Total	$10,000

Time: 2 months

PHASE IIA

a. Re-timber underground workings	$4,000
b. Drill underground longholes	1,200
c. Longhole assays	400
d. Computer analyses	1,500
e. 3 diamond drill holes	45,000
f. Assays	4,500
g. Misc.	400
Total	$57,000

Time: 3 months

PHASE IIB

a. 12 drill holes	$171,000
b. Assays	11,000
c. Metallurgical testing	4,000
d. Computer trend surfaces analyses	5,000
e. Ore reserve calculations	2,000
f. Interim report	2,000
	$195,000

Time: 1 year

PHASE III

a. Development drilling for delineating ore reserves	$500,000

Time: 1 year

FINAL EVALUATION	$10,000
DETAILED FEASIBILITY	$100,000
TOTAL EXPENDITURE UPON COMPLETION OF PROJECT	$872,000

West Calico

Potential: A large open pit or underground copper deposit.

Mineral: Chalcopyrite ($CuFeS_2$).

West Calico includes the area west of drill hole WC-1 and extends to Calico hole CA-4 which presently is being deepened.

This area is interesting because it has a magnetic low and an I.P. high anomaly. WC-1 intersected weak pyrite mineralization, however, the main anomaly is 2,000 ft. further west.

Costs:

PHASE I

a. Geologic mapping		
b. A detailed gravity survey		
c. Air photo interpretation		
d. Consultants evaluation		
	Total	$10,000

Time: 2 months

PHASE IIA

a. 3 drill holes		$45,000
b. Assays		4,500
c. Reserve calculations		2,000
d. Computer analyses		1,500
e. Report		1,000
	Total	$54,000

Time: 4 months

PHASE IIB

a. 12 drill holes		$170,000
b. Assays		11,000
c. Metallurgical tests		4,000
d. Computer trend surface analyses		5,000
e. Interim Report		2,000
	Total	$192,000

PHASE III

a. Development drilling for delineation of ore reserves	$500,000
FINAL EVALUATION	10,000
DETAILED FEASIBILITY	100,000
TOTAL EXPENDITURE UPON COMPLETION OF THE PROJECT	$866,000

Calico Copper

Potential: A large underground copper mine

Mineral: Chalcopyrite ($CuFeS_2$)

The Calico Copper prospect refers to the copper discovery in Calico drill hole CA-3. The mineralization is at 2,500 ft. and drill holes cost from $25,000 to $35,000 each.

PHASE I

Completed

PHASE IIA

a. Drill 3 holes	$90,000
b. Assays	6,000
c. Reserve calculations	2,000
d. Computer trend surface analyses	1,500
e. Consultants evaluation	1,000
f. Report	1,500
	$102,000

Time: 6 months

PHASE IIB

a. 12 drill holes	$360,000
b. Assays	26,000
c. Metallurgical tests	4,000

PHASE IIB (con't)

d. Computer trend surface analyses	$5,000
e. Report	2,000
f. Misc	8,000
Total	$400,000

Time: 1.5 years

PHASE III

a. Development drilling for delineation of ore reserves.	$500,000

Time: 1 year

FINAL EVALUATION	$10,000
DETAILED FEASIBILITY	$100,000
TOTAL EXPENDITURE UPON COMPLETION OF PROJECT	$1,112,000

* Camp Terrill

Potential: A small open-pit or underground gold-silver mine.

Minerals: Gold, Silver

Camp Terril is an abandoned gold-silver area. It is of interest because it is associated with two magnetic lows and basement rock alteration is widespread. Preliminary geochem analyses indicate a higher than background gold-silver content.

PHASE I

a. Geologic mapping	
b. Detailed gravity survey	
c. IP survey	
d. Geochemical survey	
e. Claim status work	
Total	$10,000

Time: 2 months

Camp Terril(Con't)

PHASE IIA

a. 3 drill holes	$25,000
b. Assays	1,500
c. Ore reserve calculations	2,000
d. Computer trend surface analyses	1,500
e. Report	1,000
Total	$31,000

Time: 3 months

PHASE IIB

a. 12 drill holes	$170,000
b. Assays	11,000
c. Metallurgical tests	4,000
d. Computer trend surface analyses	5,000
e. Report	2,000
	$192,000

Time: 1 year

PHASE III

a. Development drilling for delineation of ore reserves.	$500,000
FINAL EVALUATION	$10,000
DETAILED FEASIBILITY	$100,000
TOTAL EXPENDITURE UPON COMPLETION OF PROJECT	$843,000

Afterthought

Potential: A small open pit or underground copper mine.

Mineral: Chalcopyrite ($CuFeS_2$).

The Afterthought prospect has been mapped, surveyed by I.P., and drilled for copper. The results are negative, however, it is possible the I.P. anomaly has not been thoroughly tested. This prospect merits further geologic examination with possible drilling recommendations because it is on strike with the major northwest structure related to the Calico Iron area.

Costs:

PHASE I

a. Re-examination of geology(structural features), drill core, and I.P. results. $1,000

b. Possibly a detailed gravity survey 500

Total $1,500

Time: 1 month

PHASE II

Results dependent on PHASE I

Time: 2 weeks.

Hottentot

Potential: A small open pit or underground copper mine.

Mineral: Chalcopyrite ($CuFeS_2$) and copper oxides.

The Hottentot area is a iron prospect, with copper possibilities. Extensive geology, magnetics, I.P. and drilling has been performed. A small (225,000 tons) of hematite iron has been drilled out. The area deserves a geologic re-evaluation and correlation of magnetic low anomalies to regional structures.

Hottentot (con't)

PHASE I

a. Geologic mapping		$1,000
b. I.P.		
c. Detailed gravity		2,000
d. Computer analyses		1,500
	Total	$4,500

Time: 3 weeks

Copper Hill

Potential: A small copper open pit. Possibilities of a small sulfur pit.

Mineral: Chalcopyrite ($CuFeS_2$), Elemental sulfur.

The Copper Hill area is a copper prospect. It has been surveyed with magnetics and I.P. One hole has been drilled with negative results. However, the hole was not drilled in the I.P. anomaly. In addition, there is an interesting occurrence of native sulfur.

The prospect deserves further geologic investigation.

Costs:

PHASE I

a. Geologic mapping		$1,500
b. Trenching		1,000
c. Claim status legal work		500
	Total	$3,000

Favorable results may justify more expenditures.

Time: 1 month.

Wild Horse Canyon

Potential: A small copper-silver open pit

Mineral: Chalcopyrite($CuFeS_2$), Silver.

The Wild Horse area is a copper-silver prospect. An I.P. survey has been run and a hole drilled with negative results. The area is characterized by a widespread alteration area which should be geo-chemically sampled. The widespread alteration area deserves further examination.

Costs:

PHASE I

a. Geologic mapping	$500
b. Geo-chemical sampling	300
c. Claim status work	500
	$1,300

Favorable results may justify continuing into a PHASE II program

Time: 3 weeks

* Double Springs

Potential: Copper - Size unknown

The Double Springs area is completely covered by post-minerals rock and is considered a copper prospect because it has a magnetic low and is at a major structural intersection. Mineralized outcrops occur to the south and east.

Costs:

PHASE I

a. Geologic mapping	$500
b. Air photo interpretation	300
c. Detailed gravity survey	1,000
d. Consultants	1,000
Total	$10,000

Time: 2 months

Double Springs (con't)

PHASE IIA

a. Drill 3 holes 3000 ft.		$45,000
b. Assay		4,500
c. Computer analyses		1,500
d. Report		1,000
e. Reserves		2,000
	Total	$54,000

Time: 6 months

PHASE IIB

a. 12 drill holes		$170,000
b. Assays		11,000
c. Metallurgical testing		4,000
d. Computer trend analyses		5,000
e. Reserves		2,000
	Total	$192,000

PHASE III

a. Development drilling for delineation of ore reserves	$500,000
FINAL EVALUATION	$10,000
DETAILED FEASIBILITY	$100,000
TOTAL EXPENDITURE UPON COMPLETION OF PROJECT	$866,000

Gillis Front Range

Potential: Copper Size unknown

The Gillis Front Range area is a copper prospect. There is a Laramide granitic intrusive in contact with carbonate rocks. The contact shows minor copper mineralization and can be projected under the pediment.

Costs:

PHASE I

a. Geologic mapping	$1,000
b. Geo-chemistry	300
Total	$1,300

Target areas may justify a PHASE IIA program.

Time: 1 month

Foster

Potential: Copper, Size unknown

The Foster area is a copper-lead prospect.

Costs:

PHASE I

a. Geologic mapping	$500
b. Geo-chmeistry	300
Total	$800

Time: 1 month

Dry Lakes and Brines

Potential: Non-metallic solid phase or brines

Minerals: Sodium sulfate, sodium carbonate, potassium chloride, borax.

There are several shallow dry lakes within the reservation boundaries. Little is known about the minerals in the lakes. A preliminary sampling program is recommended. The regional gravity survey will provide information on the depth of the lake beds.

Costs:

PHASE I

a. Geologic mapping
b. Surface and drill core samples $5,000

Time: 3 weeks