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Arizona Department of Mines and Mineral Resources Mining Collection

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02/24/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: SHEEP HILL CINDER PIT

ALTERNATE NAMES:

COCONINO COUNTY MILS NUMBER: 136

LOCATION: TOWNSHIP 21 N RANGE 8 E SECTION 5 QUARTER SE
LATITUDE: N 35DEG 13MIN 43SEC LONGITUDE: W 111DEG 33MIN 40SEC
TOPO MAP NAME: FLAGSTAFF EAST - 7.5 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:
PUMICE CINDERS

BIBLIOGRAPHY:
ADMMR SHEEP HILL CINDER QUARRY FILE

02/24/88

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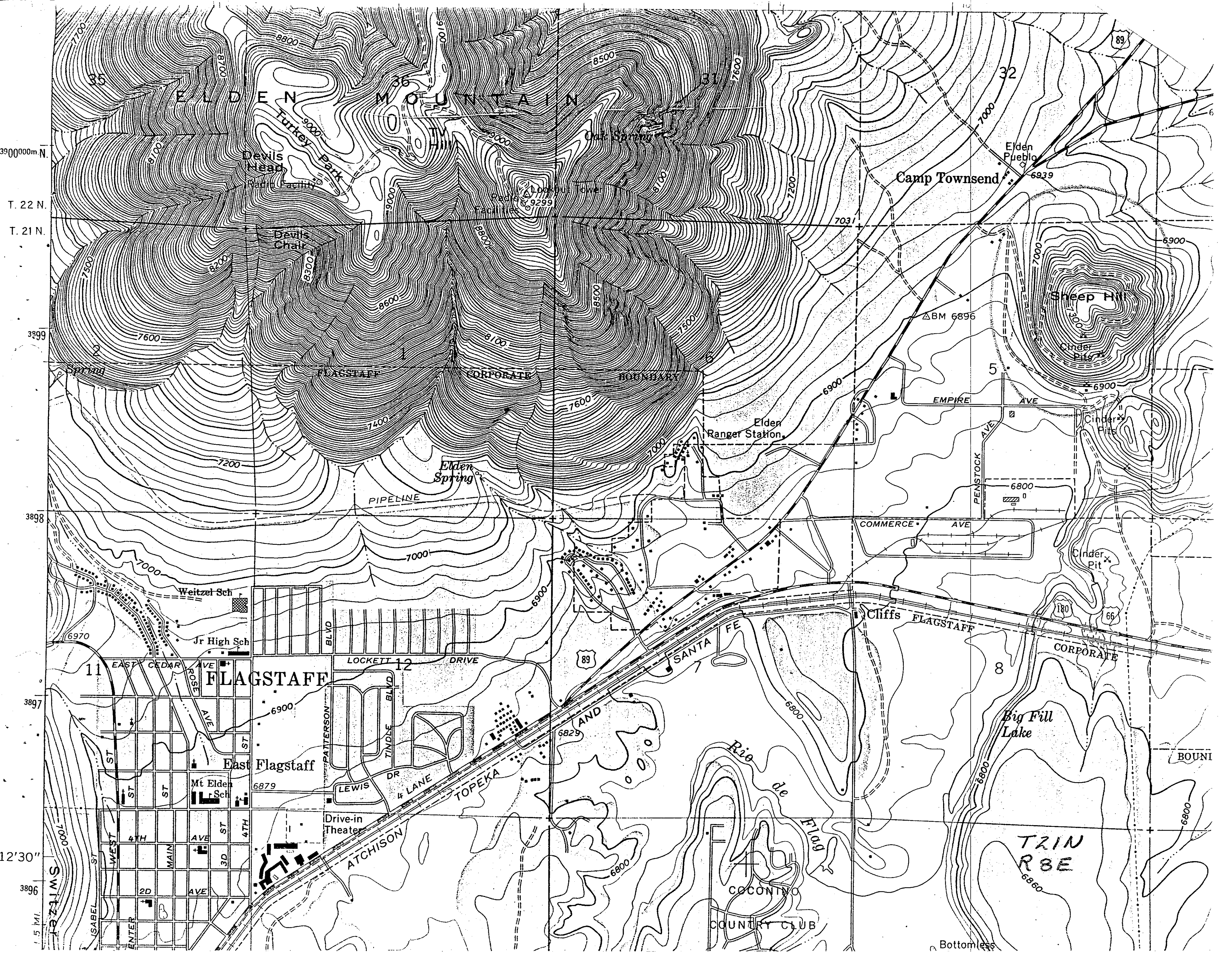
MARUM INT CO. FILE


ELDEN MOUNTAIN
Turkey Park
Devils Head
Radio Facility
TV Hill
Oak Spring
Lookout Tower
Radio Facilities
9299
Devils Chair
Elden Pueblo
Camp Townsend
6939
7031
Sheep Hill
Cinder Pits
BM 6896
FLAGSTAFF CORPORATE BOUNDARY
Spring
Elden Ranger Station
EMPIRE AVE
PENSTOCK AVE
COMMERCE AVE
Elden Spring
PIPELINE
Cinder Pit
Weitzel Sch
Jr High Sch
EAST CEDAR AVE
ROSE AVE
FLAGSTAFF
LOCKETT DRIVE
BLVD
Cliffs
FLAGSTAFF CORPORATE
SANTA FE AND TOPEKA
ATCHISON
89
180
66
East Flagstaff
Mt Elden Sch
6879
PATTERSON
TINDLE BLVD
LEWIS DR
4 LANE
Drive-in Theater
6829
Rio de Flag
Big Fill Lake
BOUN
T21N R8E
4TH AVE
2D AVE
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ISABEL ST
MAIN ST
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SHEEP HILL CINDER PIT COCONINO COUNTY

RRB WR 3/25/88: Ken Broadhead, Research Supervisor, Reno Research Center, US Bureau of Mines, Reno, NV reported by phone that the sample that I sent him from the Sheep Hill Cinder Pit assayed below the detection limits for gold and silver (i.e. less than .005 oz/ton Au and less than .1 oz/ton Ag). This sample consisted of the pieces that were handed to me by Floyd Bleak when I visited Sheep Hill February 18, 1988. He said that he would now run a chloride leach test just to satisfy any doubts held by those who claim that all the gold vaporizes in a fire assay although he discounts such a happening as unlikely. As soon as the X-ray, mineralogical, fire assay and chloride leach test results are available he will send them to me.

RRB WR 4/8/88: Charles Simpson, Research Analyst, Scottsdale, called for information about Mariah's operation at Sheep Hill in Flagstaff. He reports that Mariah now claims to have four patents on an in-situ solution mining process that they will announce April 15. He also reports that Mariah claims that Sheep Hill is the largest gold ore body in the world.

RRB WR 4/15/88: Dave Rabb called after receiving my letter. He said that he talked to Dr. Henrie about his work on Sheep Hill (file) Cinders. Dr. Henrie told him that he did his work on a black magnetic concentrate and not on the raw sample from the pit. Using his method the assay was 0.3 oz/ton.

TO: John H. Jett, Director

FROM: Richard R. Beard, Mining Engineer

SUBJECT: Weekly Report - Week Ending February 26, 1988

Lynn Roberts who identified herself as a broker with Berg Management Group of Las Vegas, NV which is selling shares in the Cinder Mountain Mining Project (Houston Corporation) called to ask my opinion of its chances for success in producing precious metals. I told her that I am unaware of any assay by a reliable registered assayer that shows commercial quantities of precious metals in any volcanic cinders in the Flagstaff area. Later Mary McKay of the Securities Division, Corporation Commission called to ask what I had told Ms. Roberts since she called them and was quite upset. Still later George Meek who is also selling shares in Cinder Mountain called and asked for a copy of Jim Youell's report which I sent him. Mr. Meek had discussed this project with me before he started selling these shares but decided to sell them regardless.

Wrote letter to Salt Lake City Research Center, Bureau of Mines requesting information on their involvement, if any, in developing an assaying technique for PM's in cinders.

Dr. Spencer Titley at the University of Arizona reported that Mariah International hired him to do a report on their volcanic cinder property. He took samples in the company of Mariah representatives and had them assayed by Jacobs and by Skyline in Tucson. He had them run by regular fire assay, AA, cyanide and by Mariahs process. One sample assayed at 0.1 gram per ton gold and several assayed about 1.0 gram per ton silver. Since he didn't report the results that Mariah wanted they refused to pay him for his work. Upon his recommendation Dave Rabb did some work for them also and they refused to pay him as well. Dr. Titley said that the would send me a copy of his report.

Discussed the Oro Grande with Kevinne Moran, Tucson Daily Citizen and sent her information pertaining to it.

Donna Porter and Floyd Bleak of Mariah International called to express their displeasure at my comments about their proposed operation to produce precious metals from the Sheep Hill Cinder Pit in Flagstaff. Mr. Bleak said that he will set up a meeting with John Jett, Ken Phillips, Dr. Henrie, Dr. Baki and me. He also said that he intended to sue me for damages to his company.

Mark Schroeder, Tucson says that he has clients who have invested in Mariah International and wanted to know if they were being investigated. I referred him to Corporation Commission, Securities Division.

Jim Remaley, P.O. Box 1750, Camp Verde, AZ 86322 reports that he has leased the Silver Streak Mine, Yavapai Co. This is apparently the Victor Group (f). He now wants to interest an exploration or mining company in the

Arizona Department of Mines and Mineral Resources

VERBAL INFORMATION SUMMARY

May be Reproduced

1. Information from: Floyd Bleak & Donna Porter of Mariah International, Inc.
   Address: 1661 E. Camelback Rd., Suite 250, Phoenix, AZ 85016
2. Mine: Sheep Hill Cinder Quarry 3. ADMMR Mine File
4. County: Coconino 5. District Flagstaff
6. Township 21N Range 8E Sec(s) 5
7. Location: Flagstaff, AZ MILS - 136
8. No. of Claims - Patented Unpatented
9. Owner (if different from above)
10. Address:
11. Operating Company:
12. Pertinent People and/or Firm:
13. Commodities: Cinders (gold, silver PGM)
14. Operational Status: Pilot plant & lab to be brought from Las Vegas
15. Summary of information received, comments, etc.:

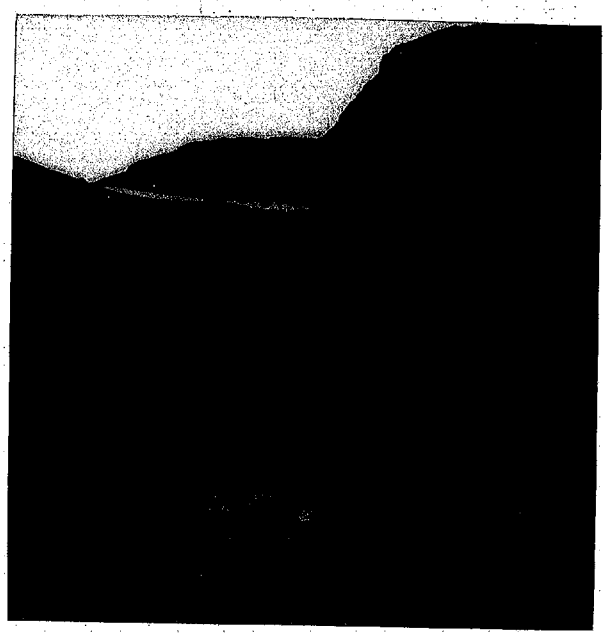
Ms. Porter provided me with a report "Analysis of Cinder Cone Materials" by Dr. Baki Yarar of the Colorado School of Mines and a report on Mariah's work on the same subject.

Mr. Bleak said that they had recently acquired the property out of bankruptcy court and that Dr. Thomas Henrie had recovered from 0.25 to 0.75 oz/ton gold at their pilot plant in Las Vegas, NV using a chlorine leach after making a table concentrate. He also said that this "ore" will not assay by standard procedures but that the Bureau of Mines Salt Lake City Research Center is going to publish an assaying procedure for it based on Dr. Henrie's work.

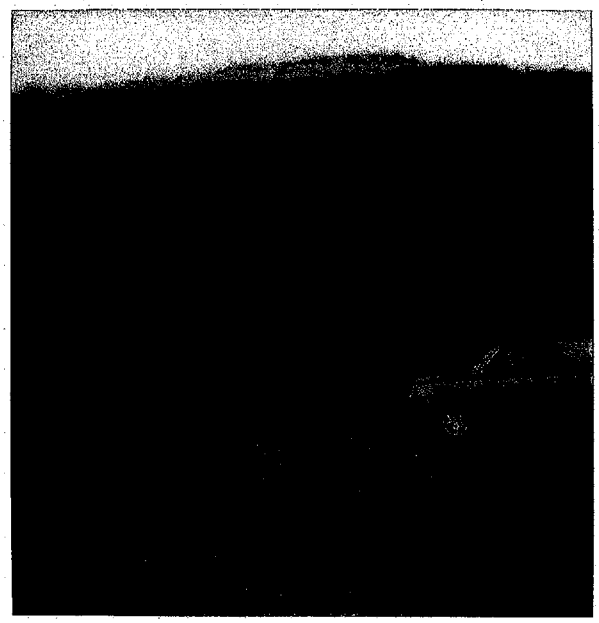
Geo-Earth Resources is an Arizona company wholly owned by Mariah International Inc. of Utah and Nevada. Cimerron Corporation was a shell taken over by Mariah. Guild-Mark Industries, Inc. is a Delaware Corp. 44% owned by Mariah. The Sheep Hill Project is a joint venture by Mariah and Guild-Mark.

Date: 2/19/88

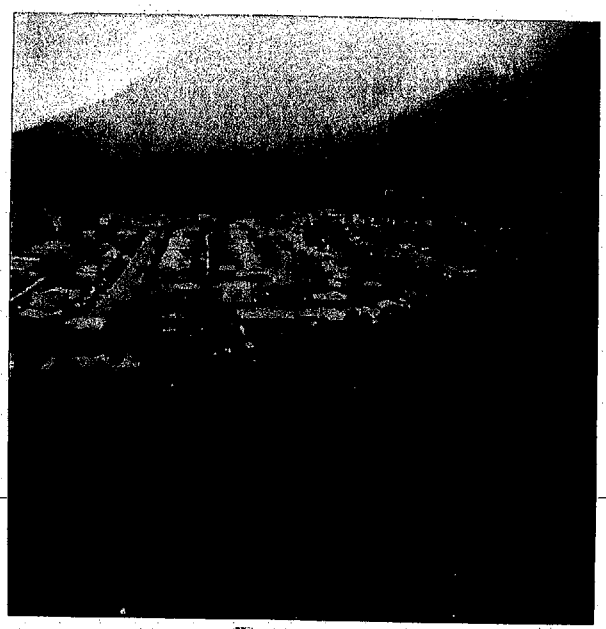
(Signature) Richard R. Beard ADMMR



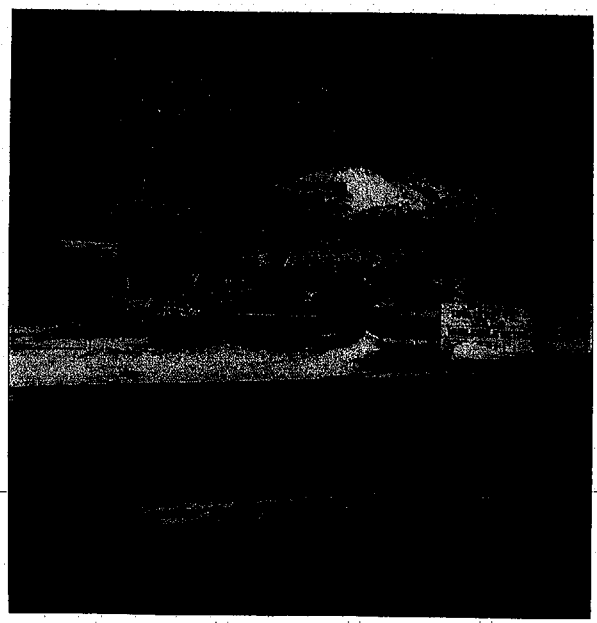
Sheep Hill Cinder Pit
Maviat Int. Inc 2/10/88



Sheep Hill Cinder Quarry
Maviat Int. Inc. 2/18/88



Flagstaff from Sheep Hill
Cinder Quarry 2/18/88



Sheep Hill Cinder Quarry
from Flagstaff 2/19/88

A-187-51

Sheep Hill Cinder Quarry
from Flagstaff - 2/19/88

A-187-50

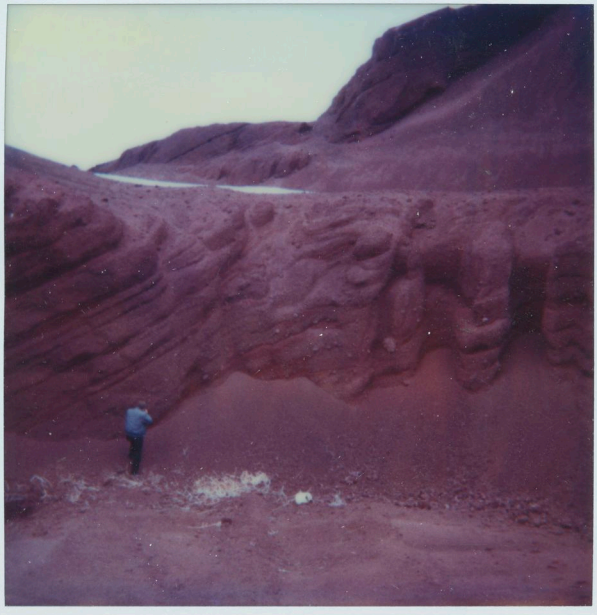
Flagstaff from Sheep Hill
Cinder Quarry 2/18/88

A-187-49

Sheep Hill Cinder Quarry

Mariah Int. Inc. 2/18/88

A-187-48



Sheep Hill Cinder Pit

Marial Int. Inc 2/10/88

Arizona Department of Mines and Mineral Resources

VERBAL INFORMATION SUMMARY

1. Information from: Ken Hodgson

2. Address: 2995 Jamaica Blvd., South Lake Havasu City, AZ 86403

3. Phone: 453-7305

4. Mine file: Sheep Hill

5. County: Coconino

6. Summary of information received:

Mr. Hodgson reported that Mariah International has been shipping cinders to the "Grubstake Mill" at the Minneapolis Mine (file). Grubstake leases the Minneapolis from Ken and Rita Hodgson.

Date: 3/14/89

Engineer: Ken A. Phillips

PHONE: (602) 829-1529

ALVIN C. JOHNSON, JR., PH.D.
EXPLORATION GEOCHEMIST
1707 EAST WEBER DRIVE, SUITE 8
TEMPE, ARIZONA 85281

10/5/89

To WHom It May Concern:

Following is a summary of the fire-assay procedure that was developed for the Sheep Hill ore deposit located near Flagstaff, Arizona. The entire procedure was observed and recorded by Mr. J. H. Quay, P.E.

1. Thoroughly mix 5 or 10 grams of finely ground ore with 5 or 10 grams, respectively, of PbO. Place in a clay crucible and fuse at 850°C for 45 minutes.
2. Remove fusion from crucible and grind in a morter and pestle. Mix thoroughly with the following flux:
   a. 30 gram Na_2CO_3
   b. 30 gram borax
   c. 40 gram litharge (PbO)
   d. 5 gram SiO_2
   e. 5 gram flour
3. Replace the above charge in the same clay crucible and fuse at 1050 to 1100°C for 1 hour.
4. Pour melt into cast iron mold. Clean the slag from the lead button.
5. Cupel at 850°C.

The following table summarizes 11 fire assays using the above procedure on the Sheep Hill ore. Samples 1-5 were done using 10 grams of ore. Samples 6-11 were done using 5 grams of ore.

Sample No.	Ag(Troy oz/ton)	Au(Troy oz/ton)
1	143.14	0.36
2	53.60	0.36
3	0.50	ND
4	trace	ND
5	trace	ND
6	646.63	2.04
7	trace	ND
8	trace	ND
9	91.08	0.50
10	trace	ND
11	trace	ND
Average	85.00	0.30

Respectively submitted,

Alvin C. Johnson, Jr., Ph.D.

Sheep Hill (F)

Mariah International, Inc.

P. O. Box 22268
Flagstaff, AZ 86002

2724 E. Lakin
(602) 526-6483

July 10, 1989

Dear Shareholders:

In prior correspondence we indicated to you that there four phases in the development of a successful precious metal operation:

a) the discovery of a precious metal property,
b) the leaching process necessary to put that precious metal content into solution
c) the recovery of mineral values from that pregnant solution, and
d) the refinement and sale of those recovered mineral values.

We have also reported that the Company had successfully completed the first two phases and that the third and fourth phases were being worked on in a pilot plant environment.

Your Company is now in a position to tell you that it has successfully completed the recovery of mineral values from the pregnant solution and has successfully been able to refine such mineral values.

Dr. Thomas A. Henrie, our consultant and the head of our Technical Advisory Committee, in a letter to the Company dated July 7, 1989 stated,

> *"The pilot plant operation has, on the whole, been successful. All phases of precious metal extraction from the volcanic ash have been demonstrated.*
>
> *Utilizing the process that has been developed will effectively treat complex ores such as those contained on the Sheep Hill property and will, in my judgment, recover the gold and silver values that exist in the ore."*

In a separate communique, Ron Atwood of Advanced Processing Technologies, Inc. concurs with Dr. Henrie. Mr. Atwood was intimately involved with the initial recovery proceedings.

The Company has hired Advanced Processing Technologies, Inc. (Dr. Jan D. Miller and Ronald L. Atwood) to operate the plant on a day to day basis while our Technical Advisory Committee concentrates on upgrading our procedures.

The Company increased the Technical Advisory Committee to six members who are:

Dr. Thomas A. Henrie	Clyde Davis
R. Wrethel Spendlove	Dr. Jan D. Miller
Ronald L. Atwood	William Gaye

Our management team will be working on the economics of our operation so that we may maximize the worth of the Company. Some areas that will be addressed are: *1) determination of production techniques and plant design; 2) refinement and enhancement; and 3) verification of reserves.*

Based upon our initial recovery, management is very optimistic about the profit potential of the Sheep Hill Joint Venture. As areas develop, we will keep you informed.

The Board of Directors would like to thank the Technical Advisory Committee and our shareholders for their continued support.

Your Board of Directors

Sheep Hill (F)

Mariah International, Inc.

P. O. Box 22268 Flagstaff, Arizona 86002 (602) 526-6483

April 12, 1989

Dear Shareholders,

At a joint meeting of the Board of Directors of Mariah International, Inc. and Guild Mark Industries, Inc. held on March 31, 1989, Mr. Howard Eckersley resigned as President of both companies stating that he felt the companies are in need of a more active President and health reasons prevent him from serving as actively as needed. While Mr. Eckersley will continue to serve on the Board as a Director, he felt that it would be in the best interest of the companies to have this position filled by an active business executive with experienced negotiating skills.

Mr. Nelson Barry was nominated to serve as the new President for both companies and was accepted by unanimous vote. Mr. Barry is a partner in the noted law firm of Bishop, Barry, Howe, Haney and Ryder in San Francisco. His specialty is toxic and environmental litigation and securities fraud litigation. He received his Bachelor of Science degree from the University of California in 1949 and his law degree from Hastings College of Law in San Francisco in 1952. He was admitted to the State Bar of California in January of 1953. The companies are pleased to welcome Mr. Barry to his new Presidential posts.

The Board of Directors appointed Mr. Doug Newell as Comptroller of the companies. As Comptroller, Mr. Newell will oversee operational financial records and budgets. Mr. Newell is also a partner in the Flag Gold-Ten Ltd. Partnership. He received his Bachelor of Arts degree from Western Reserve University in Cleveland, Ohio in 1956 and has been a practicing CPA since 1960. He is certified both in Ohio and Arizona. Mr. Newell was the past partner-in-charge of the Phoenix office of Deloitte, Haskins and Sells. He currently owns his own consulting firm and serves as a Director on the Boards of several publicly listed companies. Mariah, Guild Mark and the Jt. Venture look forward to working with Mr. Newell in his new position.

As a result of continuing discussions with the Nevada Securities Division and due in part to the efforts made by Mariah International, Inc. in obtaining advice from KPMG Peat Marwick regarding the treatment of certain transactions in the Mariah 1988 audited financial statements, the Nevada Securities Division has agreed to cancel its request for a new audit and is allowing Mariah to wait until its normal accounting year end (4/30/89) to obtain a certified audit. This was welcome news as a "midstream" audit would have been both disruptive and expensive.

The Joint Venture has retained the services of Advanced Processing Technologies, Inc. on a consulting basis to review our recovery process and make recommendations as deemed advisable. Their company is to provide to us the services of Ron L. Atwood, formerly of Newmont Mining Company, and Dr. Jan D. Miller with whom you are familiar from our prior reports.

Following up our previous announcement on the pilot facility, the parts have arrived to make the necessary repairs to the pilot plant. We will provide you with updated information on the operational status of the plant and progress on the recovery process as significant developments occur.

Sincerely,

Nelson C. Barry
President

Sheep Hill (F)

Mariah International, Inc.

P. O. Box 22268 Flagstaff, Arizona 86002 (602) 526-6483

March 9, 1989

Dear Shareholders,

In previous reports to shareholders you were advised of the Joint Venture between Mariah International, Inc. and Guild Mark Industries, Inc. in connection with acquiring 118 acres of cinder cone in Flagstaff, Arizona.

As you know, we completed a 150 ton pilot plant on the property to assess the feasibility of processing precious metal in cinder cone which laboratory tests proved to exist in the ore.

Since our first historic run through as reported in our last report to shareholders, we have experienced some technical problems and mechanical breakdowns which have prevented us from duplicating the success that we achieved in our laboratory experiments. Cold weather hampered the leaching process and the fineness of the gold in solution creates a unique chemical circumstance in producing a Dore bar (a metal bar containing only a percentage of gold and other precious minerals) in which the gold can be stabilized.

The leaching process has been redesigned to cope with the seasonal weather to the extent that very significant quantities of gold are being extracted from the ore and into solution. Such analyses have been authenticated by Dr. Jan Miller and Dr. Tom Henrie whose reports have been previously forwarded to you. Subsequent assays of the pregnant leach solution continue to affirm our success in this regard and to confirm that the Sheep Hill cinder cone contains significant quantities of gold. However, we continue to experience technical difficulties in drawing the precious metal out of the pregnant solution and securing same into a Dore bar that tests for measurable amounts of gold under traditional methods.

Our entire process of dealing with the pregnant solution is under current review by the Technical Advisory Board and is receiving their full attention. We believe that we will soon be able to deliver a Dore bar of acceptable standards to a selected refinery. We will keep you advised of our progress as significant developments occur.

Regarding the complaint Mariah filed with the State of Arizona challenging their denial of our applications for Prospecting Permits, the State has proposed a settlement which the Board is now considering.

On February 10, 1989, the Arizona Department of Environmental Quality issued an extension on the temporary permit for water disposal until such time as a decision is rendered on the permanent permit, thereby allowing the operation on Sheep Hill to continue. Unfortunately, a breakdown in a critical operational part has forced us to discontinue the leaching process until repairs and/or replacements have been accomplished. We look forward to the repair process being accomplished by the end of March at which time operations will resume.

Further questions on our progress may be directed to Mariah Guild Mark Joint Venture at (602) 526-6483.

Board of Directors

Sheep Hill (5)

Mariah International, Inc.

P. O. Box 22268 Flagstaff, Arizona 86002 (602) 526-6483

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Board of Directors

Attorney General
1275 WEST WASHINGTON
Phoenix, Arizona 85007
Robert K. Corbin

May 3, 1988

Edmund F. Richardson
ROBBINS & GREEN, P.A.
3300 N. Central, Suite 1800
Phoenix, AZ 85012-0000

RE: March 1, 1988 Claim By Mariah International
Against Department of Mines and Mineral Resources
A. G. File No. CIV88-0410
Risk Management Claim No. 68148

Dear Mr. Richardson:

I am writing this letter on behalf of the Department of Mines and Mineral Resources and its employee Richard Beard in response to your letter of March 1, 1988. The claims of defamation made in that letter are completely unsupportable and there is no basis for a retraction of any statements made.

The objectives and duties of the Department are set forth in A.R.S. § 27-101.01 et seq. The Department is charged with the duty of collecting and disseminating information regarding the mineral resources of the State and the investment of capital in those resources. In discharge of that duty, officials of the Department must respond to inquiries concerning specific mining activities. Department officials' responses to those inquiries are based on their extensive knowledge and experience in the field and are always accompanied with the disclaimer that the Department can in no way guarantee the presence or absence of any particular mineral.

Mr. Beard responded to any inquiries concerning the various cinder properties in keeping with the policies of the Department. Based upon his knowledge of geology in general and the cinder properties in particular, it is his opinion that the the presence of gold in those properties is unlikely. That opinion is supported by findings of the Bureau of Mines of the

United States Department of the Interior after examining a sample from Mariah's property which was handed to Mr. Beard by Mr. Floyd Bleak. The findings are set forth in the April 1, 1988 letter from K. G. Broadhead, a copy of which is enclosed.

Government officials acting within the scope of their duties are immune from suits for defamation if they are of the reasonable belief that their statements are true. Chamberlain v. Mathis, 151 Ariz. 551, 729 P.2d 905 (1986); A.R.S. § 41-621.H. Any statements made by Mr. Beard were completely within the scope of his duties and were made with both the subjective and objective belief in their truth. Parenthetically, Mr. Beard never made the statement that Mariah International, Inc. and Guild Mark Industries, Inc. were being investigated by this office for fraudulently dealing with the public.

It is the goal of the Department to encourage the development of the mineral resources of this State. The presence of gold in your client's properties would be welcome news to Department officials who have no motive to discourage investment in Arizona's mining industry. Any comments made by Mr. Beard were based on his extensive knowledge and experience and were completely in keeping with the spirit of his duties as a Department official. In light of all the circumstances surrounding those comments, your claim of defamation is completely meritless.

Sincerely,

PATRICIA J. BOLAND
Assistant Attorney General

PJB:jaf
cc: Melinda Garrahan
Leroy Kissinger
John Birkemeier
Jim Murray

SAMPLE ANALYSIS REPORT

Samples submitted by BROADHEAD
GZ-131

Date of Request 3/8/88
Date Received by Fire Assay 3/8/88
Month Day Year

Sample#	Au	Ag	Sample#	Au	Ag	Sample#	Au	Ag
GZ-131	—	—						

Remarks: _____

Reported as: A. g/l element oxide B. mg/ml C. % D. ppm E. oz/ton unless otherwise noted

Analyst F. Godsey Date Completed 3/22/88
Month Date Year

Au - , less than 0.003 oz/ton
Ag - , less than .05 oz/ton

Mineralogy Lab Report

Sample No. GZ-131 Date 3/8

Submitted by: Broadhead

Sample consists of shard-like particles of Fe-rich volcanic glass containing phenocrysts mainly of plagioclase feldspar and magnetite-ilmenite. There appears to be a fair amount of compositional variation in the matrix.

Analyst: JJ Date 3/21

SAMPLE ANALYSIS REPORT

Samples submitted by: Broadhead Date: 3/8/88

Sample Number	XRD
62131	Major Feldspar, Amorphous; Minor Fe_2O_3, Mg_2SiO_4
	XRF
	semiquantitative estimate of elements Z > 10 calculated as oxides.
	% element
	Mg Al Si K Ca Ti Cr Mn
	4. 11. 23. .8 6. 1. .04 .09
	Fe Zn Sr Zr
	8. .07 .1 .01

Remarks:

X-Ray Emission Qualitative
M-major m-minor t-trace

X-Ray Diffraction Qualitative
S-strong I-intermediate W-weak

Analyst KB Date 3/15/88

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 1310

ELEMENT	WEIGHT %	OXIDE %
NA	1.62	2.18
MG	0.00	0.01
AL	15.30	28.92
SI	25.23	53.98
K	0.29	0.35
CA	9.31	13.03
TI	0.10	0.17
CR	0.06	0.08
FE	1.00	1.29
O	47.08	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:23:48

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 1310

ELEMENT	WEIGHT %	OXIDE %
NA	0.91	1.23
MG	5.84	9.69
AL	2.62	4.96
SI	0.53	1.14
K	0.00	0.00
CA	0.40	0.56
TI	11.99	20.00
CR	1.83	2.67
FE	46.44	59.75
O	29.42	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:24:09

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131A

ELEMENT	WEIGHT %	OXIDE %
NA	1.10	1.49
MG	4.97	8.23
AL	5.07	9.58
SI	23.23	49.69
K	0.90	1.09
CA	11.47	16.05
TI	1.34	2.23
CR	0.03	0.05
FE	9.01	11.59
O	42.88	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:22:52

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131B

ELEMENT	WEIGHT %	OXIDE %
NA	0.71	0.96
MG	2.86	4.74
AL	3.69	6.98
SI	0.80	1.70
K	0.01	0.01
CA	0.55	0.77
TI	7.45	12.43
CR	1.40	2.05
FE	54.68	70.35
O	27.84	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:23:13

H. Clyde Davis

GEOLOGIC AND MINING CONSULTANTS

H. Clyde Davis
2454 North Timpview Drive
Provo, UT 84604
Phone: 374-5389 (801)

September 28, 1987

Mariah International, Inc.
1701 W. Charleston, Suite 510
Las Vegas, NV 89102

Dear Mr. Burr:

Calculations on Scoria (cinder-ash) located northwest of Flagstaff, Arizona. With reference to the letter and report from the Colorado School of Mines, pertaining to the sampling of five areas, I have used a U.S.G.S. topographic map 7.5 minute series quadrangle to determine the calculations from where samples were taken. Each of the five areas are divided in quadrants pertaining to the calculation of the cinders using the base of the hill or mountain without going into depth on my indicated reserves.

Quarry A or number one is located in the SW¼ of Sec. 7, T28N, R5E MDBM. 1850' width, 4000' long, 260' depth, based on 1500 # per cubic yard calculates to 53,444,000 tons.

Quarry B is located as Ebert Mountain primarily in the SW ¼ Section 11, T25N, R4E, MDBM. Using the figures of 4,800' wide 4,500' long and 250' deep based on 1,500# per cubic yard calculates to be 150,000,000 tons.

Quarry C is located in the NE ¼, Section 17, T25N, R4E, MDBM. Calculations of 3,500' long, 1,500' wide, and 180' deep based on 1,500# per cubic yard calculates to be 26,250,000 tons.

Quarry D is located in the NE ¼ of Section 35, T25N, R5E MDBM. Calculations of 5,000'long, 4,000' wide, 300' deep based on 1,500# per cubic yard calculates to be 166,666,666 tons.

Quarry E, is located in the NE ¼ of Section 6, T24N, R5E MDBM. Calculations of 4,000' wide, 4,200' long, and 250' deep based on 1,500# per cubic yard calculates to be 116,666,000 tons.

This makes a inferred reserve of 513,026,000 tons, which is not a drilled or blocked reserve but with the open pit and the sample methods, considering the cinder is uniform would be fairly accurate tons. Also, with an additional 50 feet in depth of the former calculations or area would give a possible indication of 750,000,000 tons reserve of the Scoria (cinder) material located as map indicated from NW of Flagstaff, Arizona. A 100' in depth would make a possible reserve of over 1 billion tons in the 5 areas.

Sincerely,

Clyde Davis
Director Mineral Resources

cp/85#1

FINAL REPORT

Submitted to:

Mr. A. Takemoto
Cimarron Corporation/Mariah International
Suite 1701, W. Charleston
Las Vegas, Nevada 89102

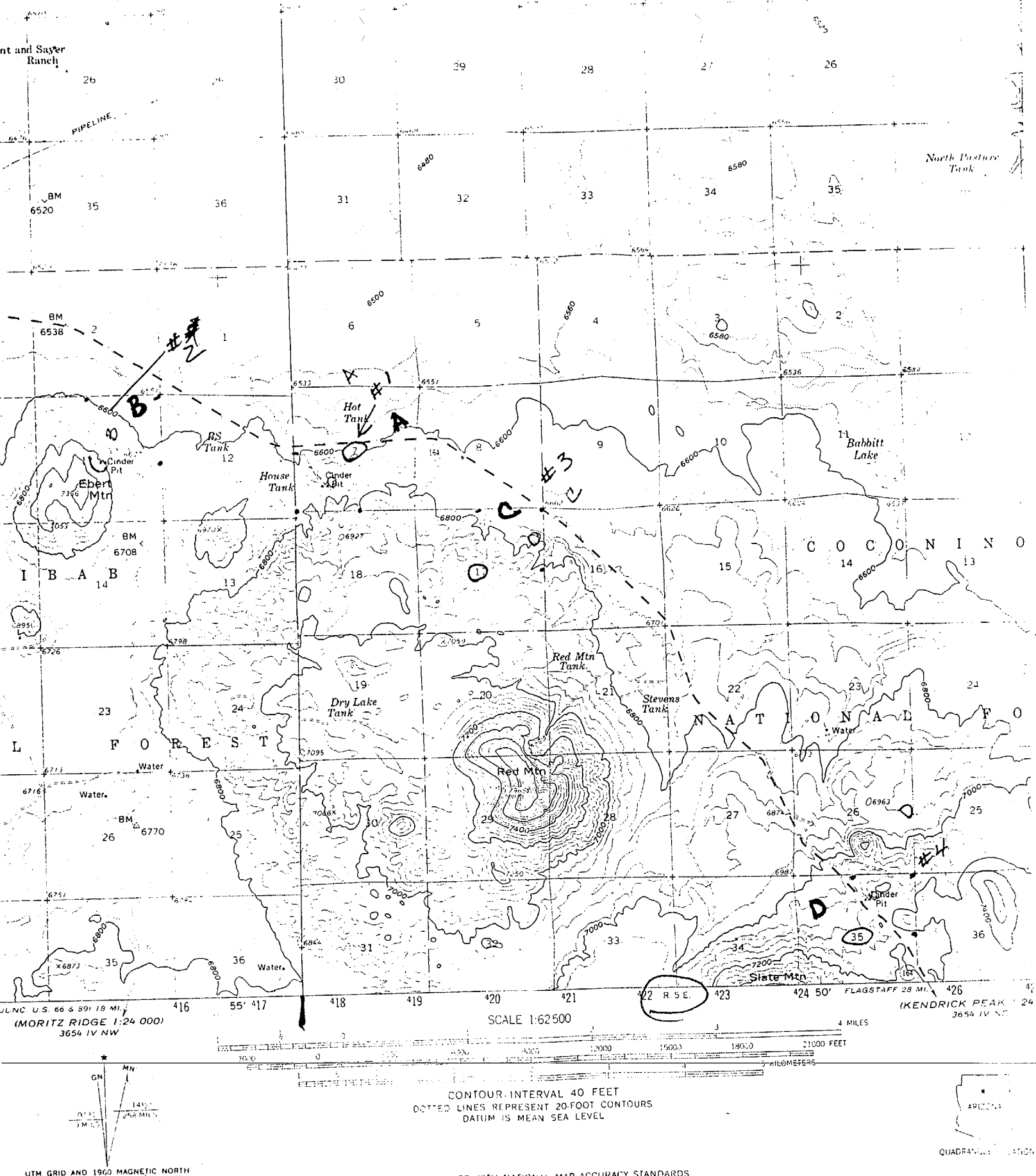
"ANALYSIS OF CINDER CONE MATERIALS"

CSM Project No. 2522/4-49044

Principal Investigator:

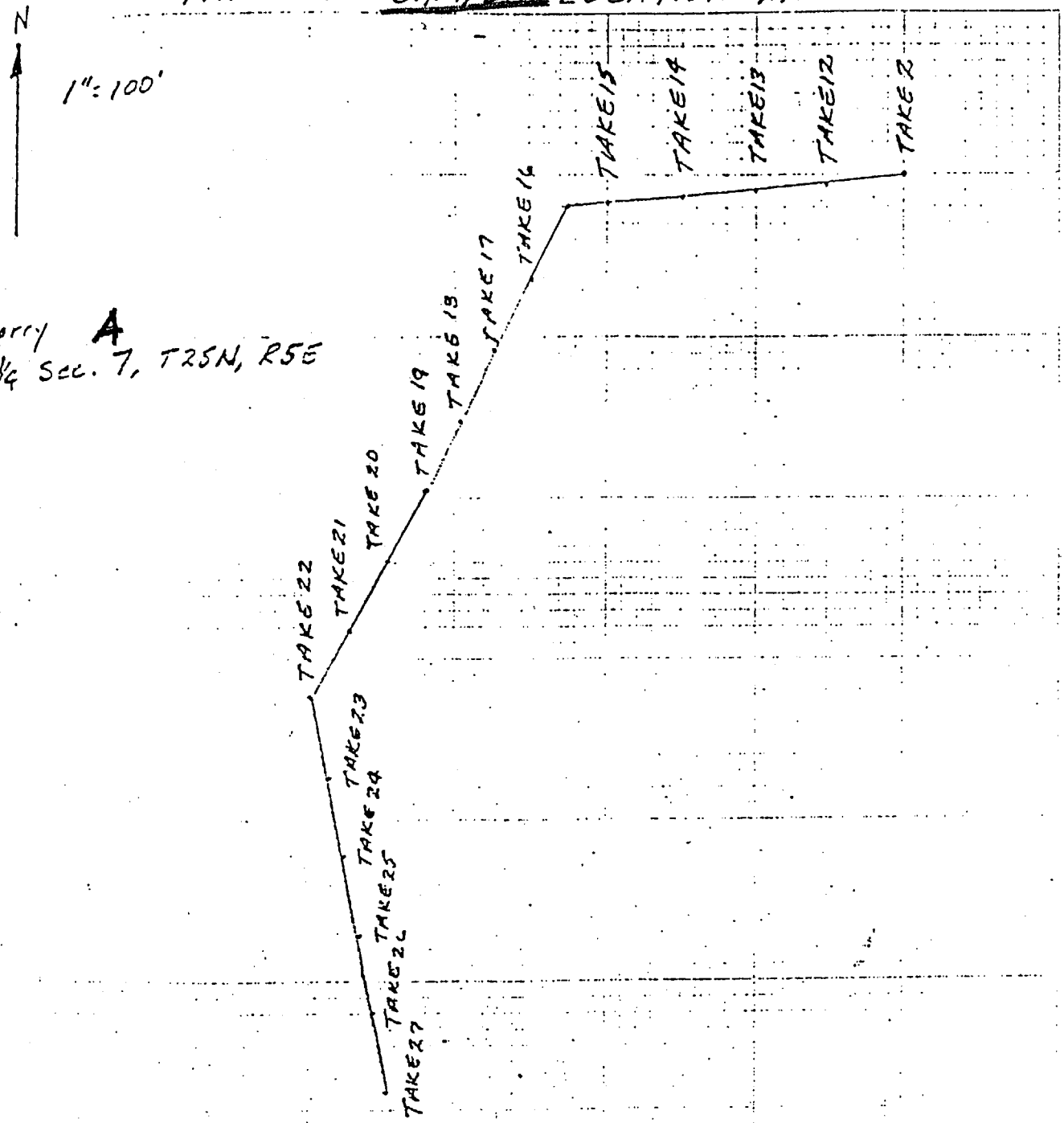
Baki Yarar
Professor
Department of Metallurgical Engineering
Colorado School of Mines,
Golden, Colorado 80401

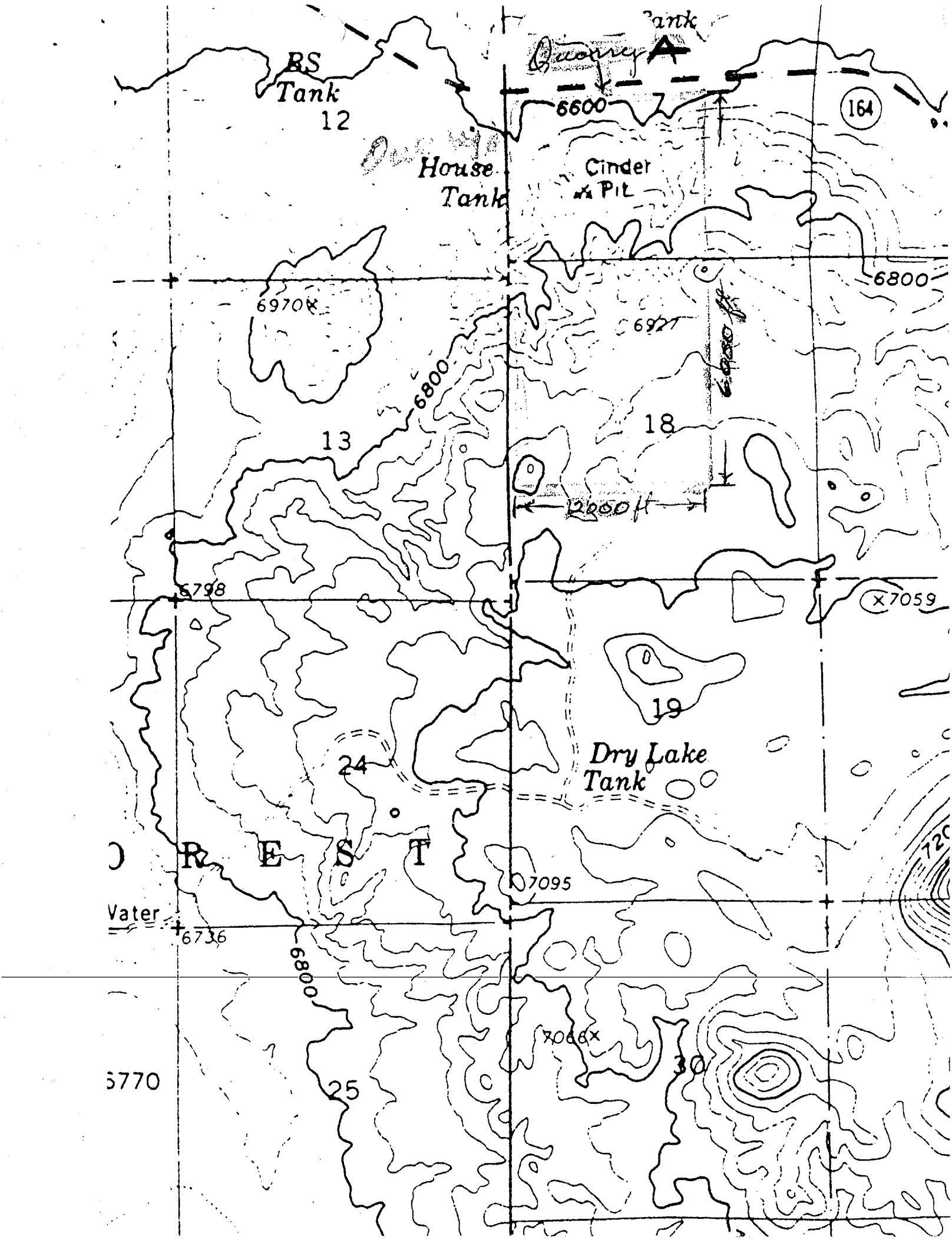
Final Report Date: September 1, 1987



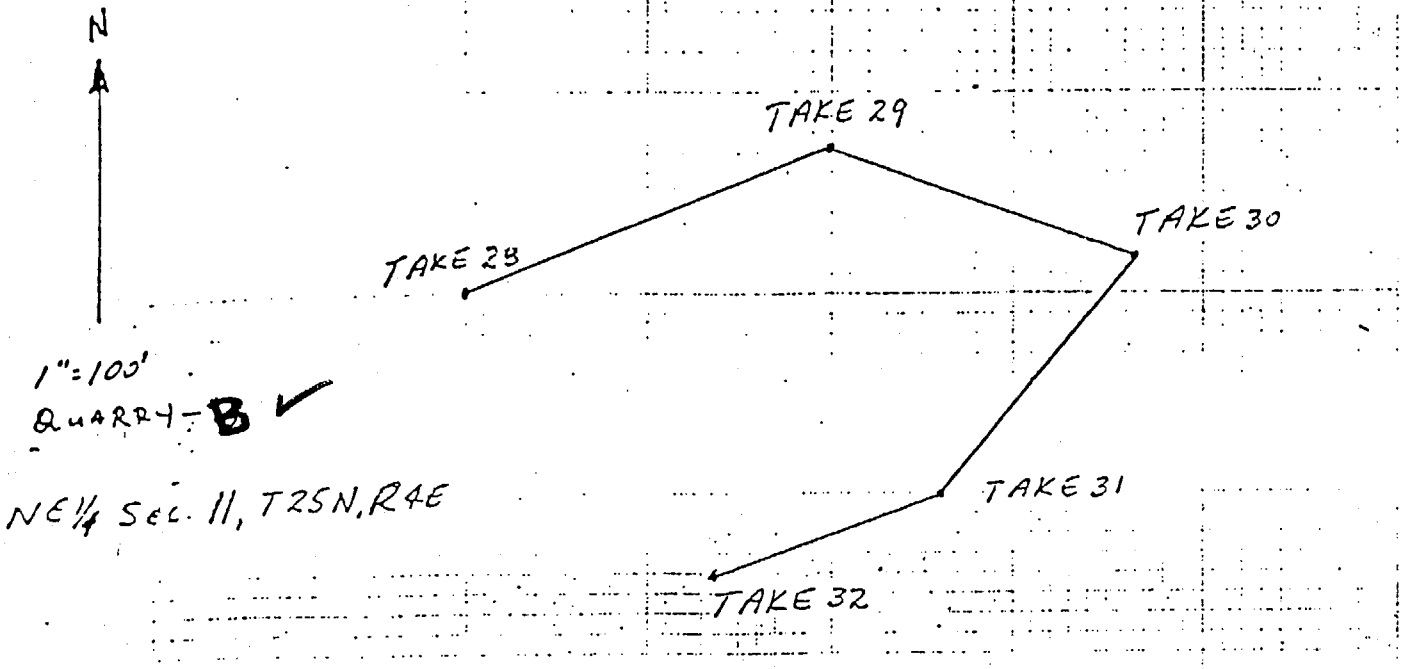
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

TAKEMOTO SAMPLE LOCATION MAP



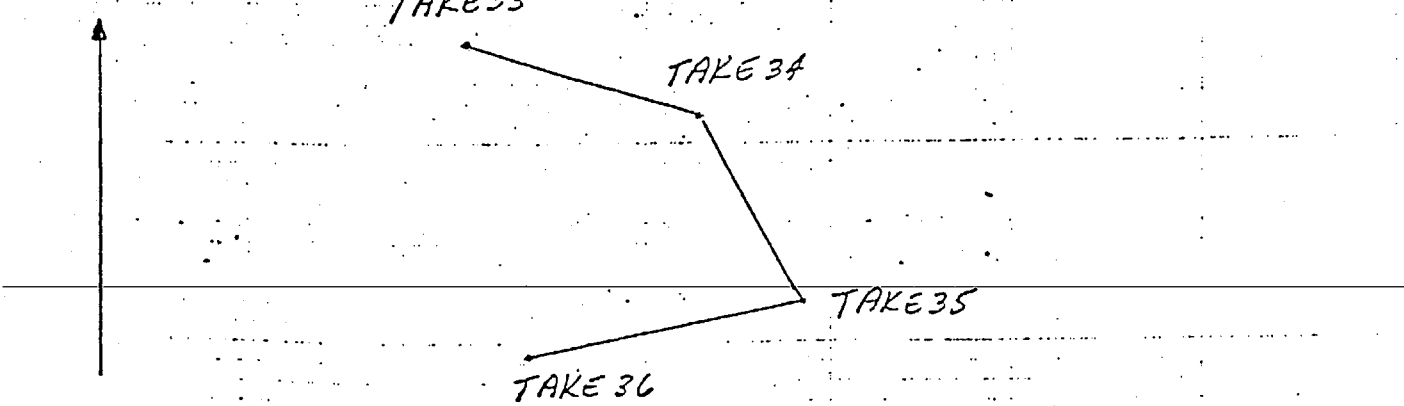

RS
Tank
12
House
Tank
Cinder
Pit
6600
164
6800
6970
6927
6800
13
18
2200 ft
6798
7059
19
Dry Lake
Tank
24
R E S T
7095
Vater
6736
6800
7066
30
5770
25

TAKEMOTO SAMPLE LOCATION MAP



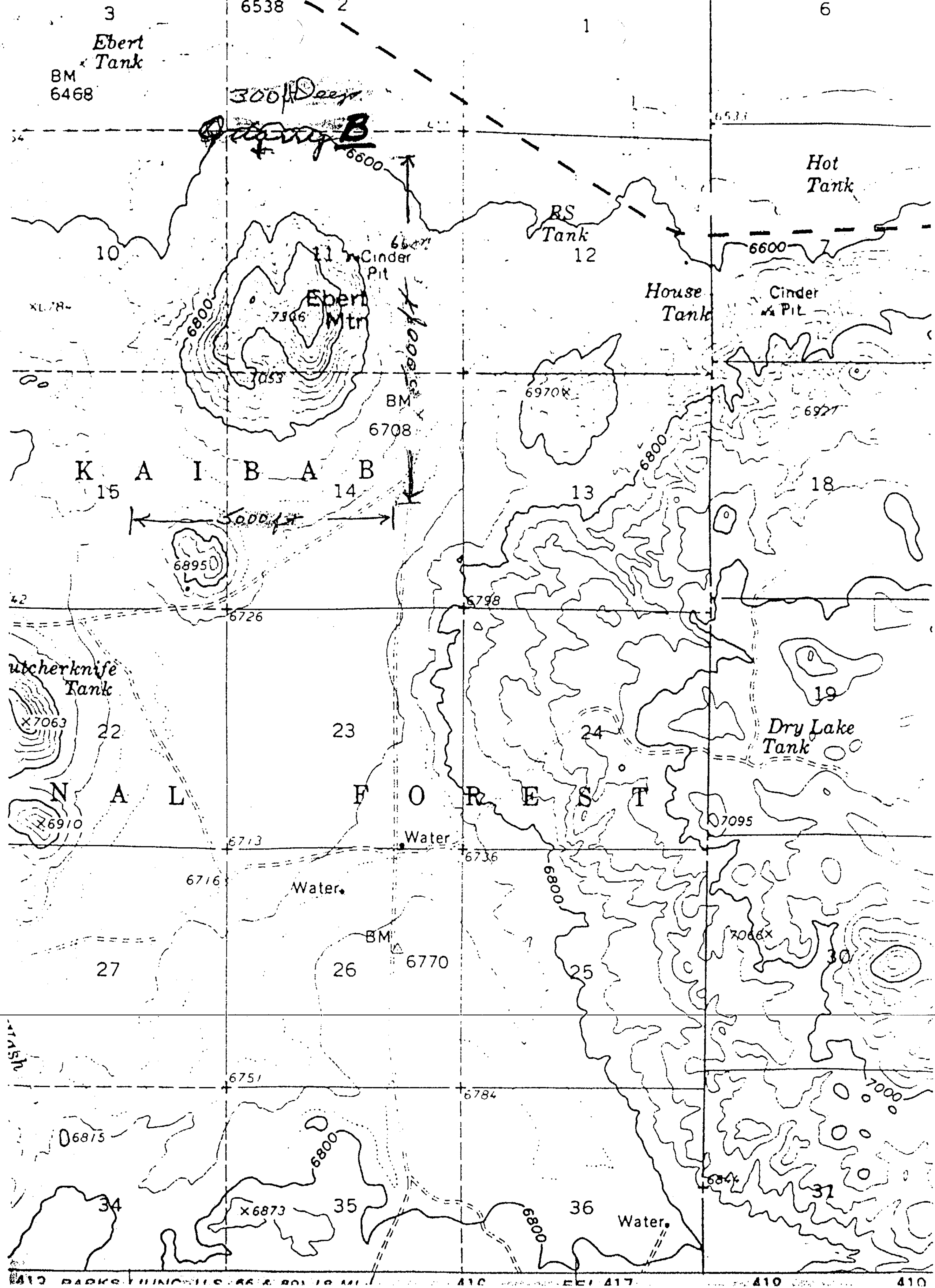
QUARRY - B

NE¼ Sec. 11, T25N, R4E



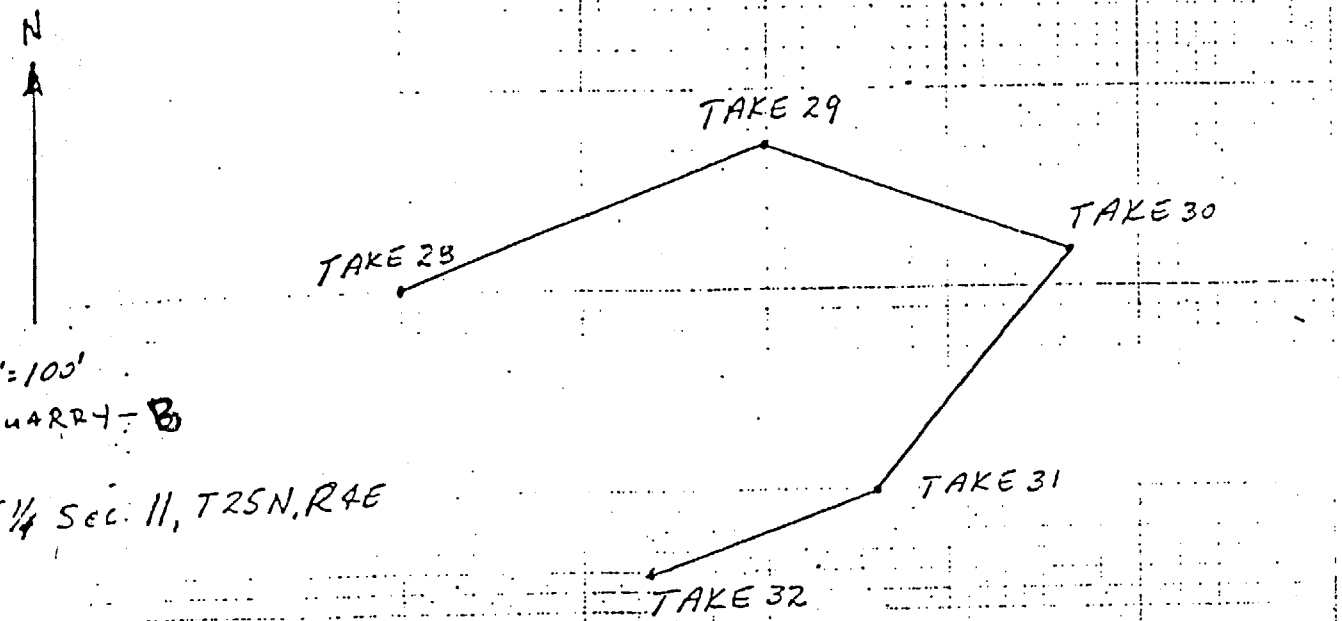
Quarry - C

NE¼ Sec. 17, T25N, R5E



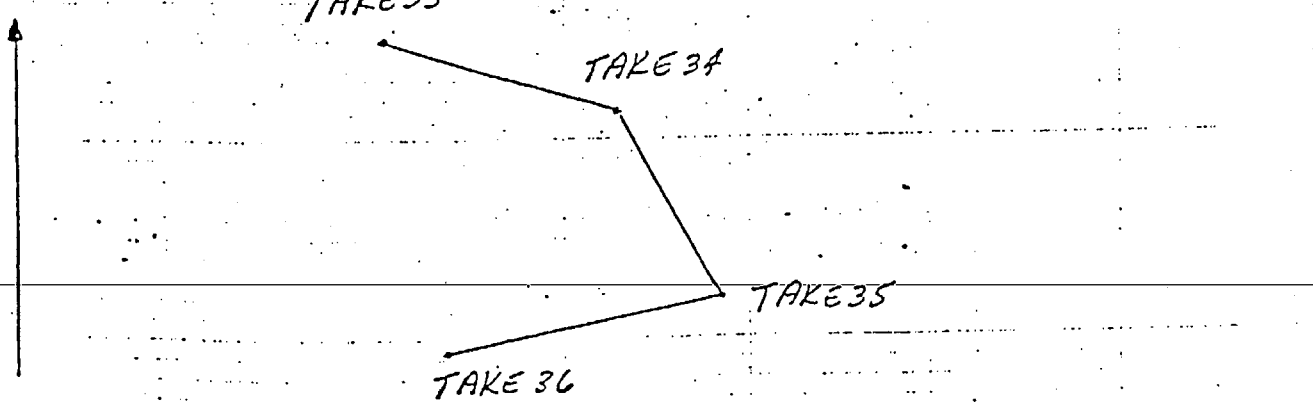
6538
Ebert Tank
BM 6468
300 ft Deep
B
6600
Hot Tank
RS Tank
Cinder Pit
Ebert Mtn
7306
7053
6800
House Tank
Cinder Pit
6927
6970
BM 6708
5000 ft
6000 ft
K A I B A B
N A L F O R E S T
6895
6726
6798
Butcherknife Tank
7063
6910
Dry Lake Tank
7095
6713
Water
6736
6716
Water
BM 6770
7066
6751
6784
7000
6815
6873
Water
3
2
1
6
10
11
12
7
15
14
13
18
22
23
24
19
27
26
25
30
34
35
36
31

TAKEMOTO SAMPLE LOCATION MAP



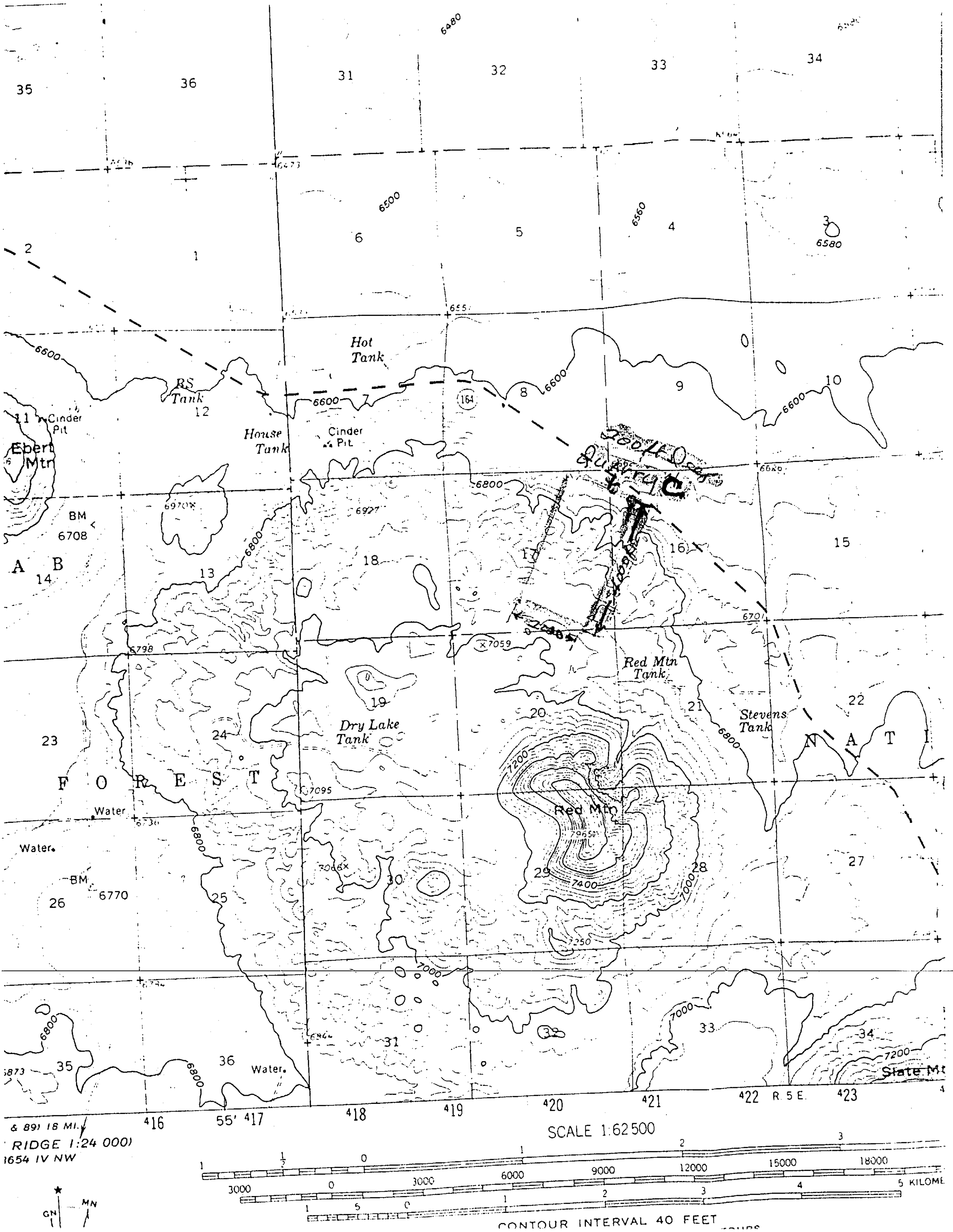
QUARRY - B

NE¼ Sec. 11, T25N, R4E

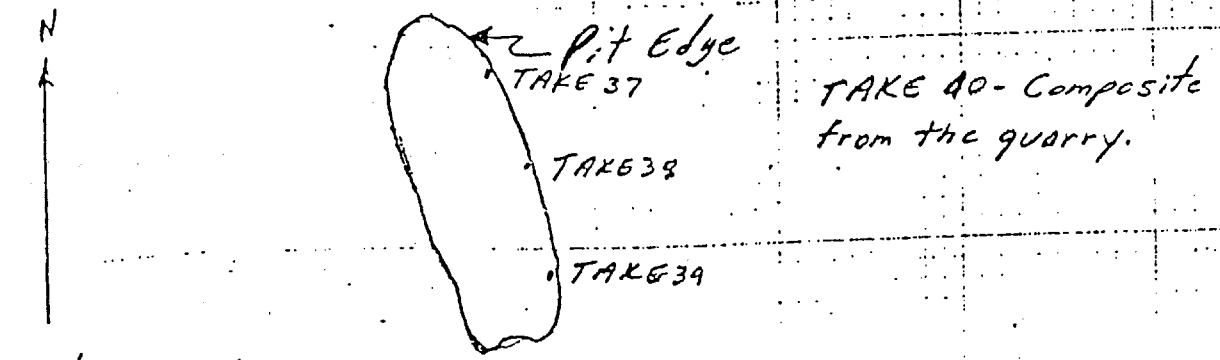


Quarry C

NE¼ Sec. 17, T25N, R5E


Hot Tank
RS Tank
House Tank
Cinder Pit
Ebert Mtn
BM 6708
Dry Lake Tank
Red Mtn Tank
Stevens Tank
Red Mtn
7400
7200
7000
6800
6600
6500
Water
BM 6770
Slate Mt
F O R E S T
N A T I
R. 5 E.
& 891 18 MI.
RIDGE 1:24 000)
1654 IV NW
SCALE 1:62 500
CONTOUR INTERVAL 40 FEET
5 KILOMETERS

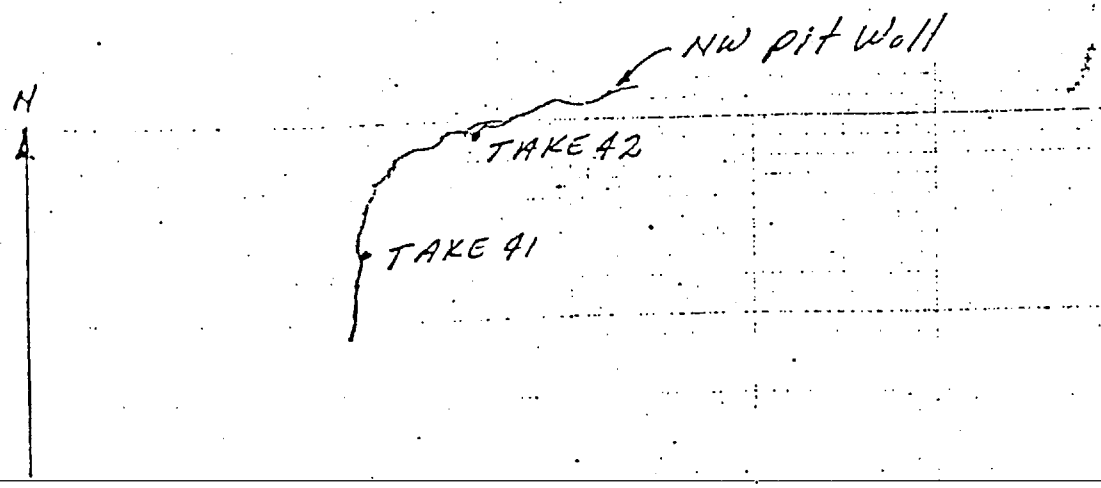
TAKEMOTO SAMPLE LOCATION MAP



1" = 100'

Quarry D

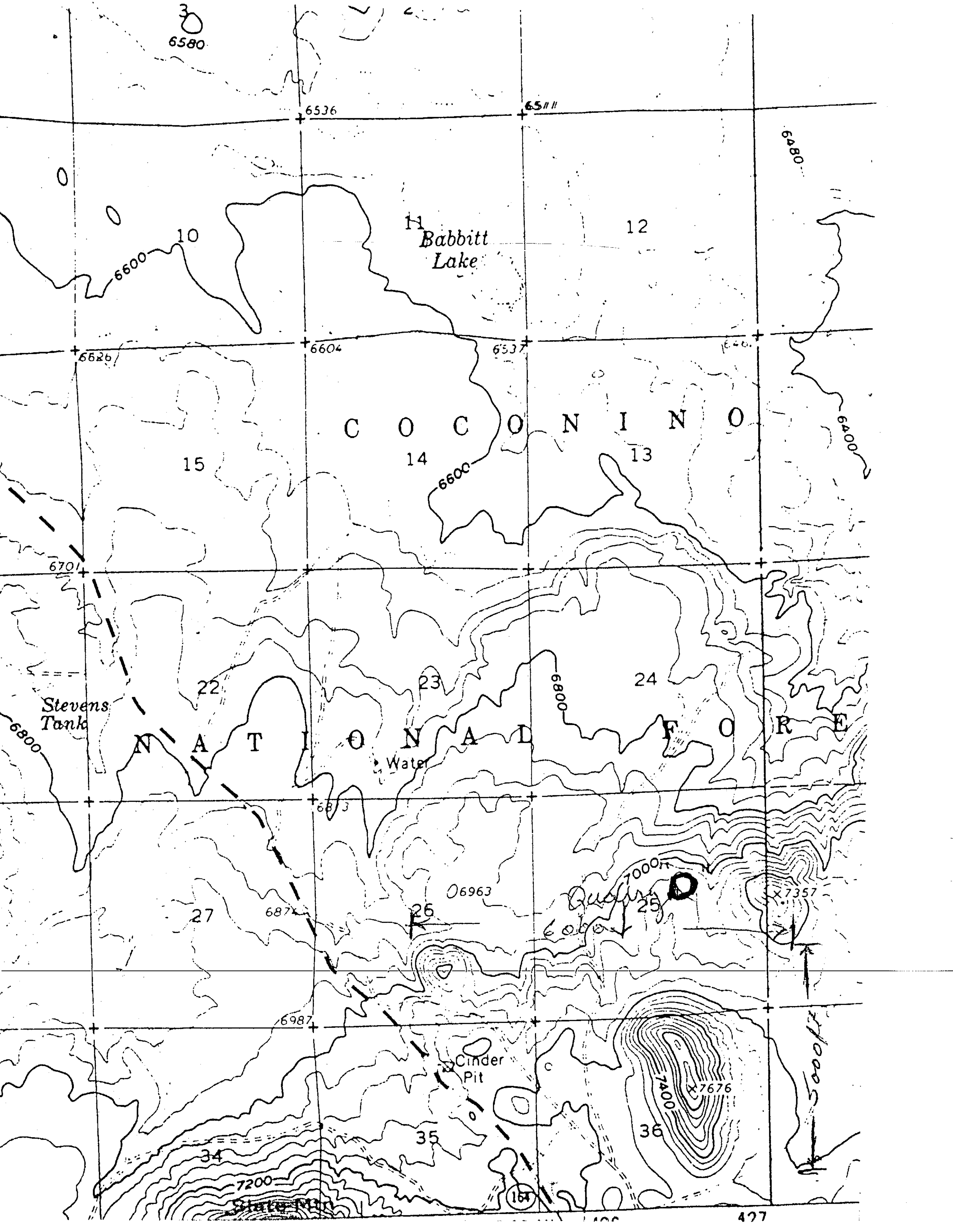
E 1/2, Sec. 35, T25N, R5E



1" = 100'

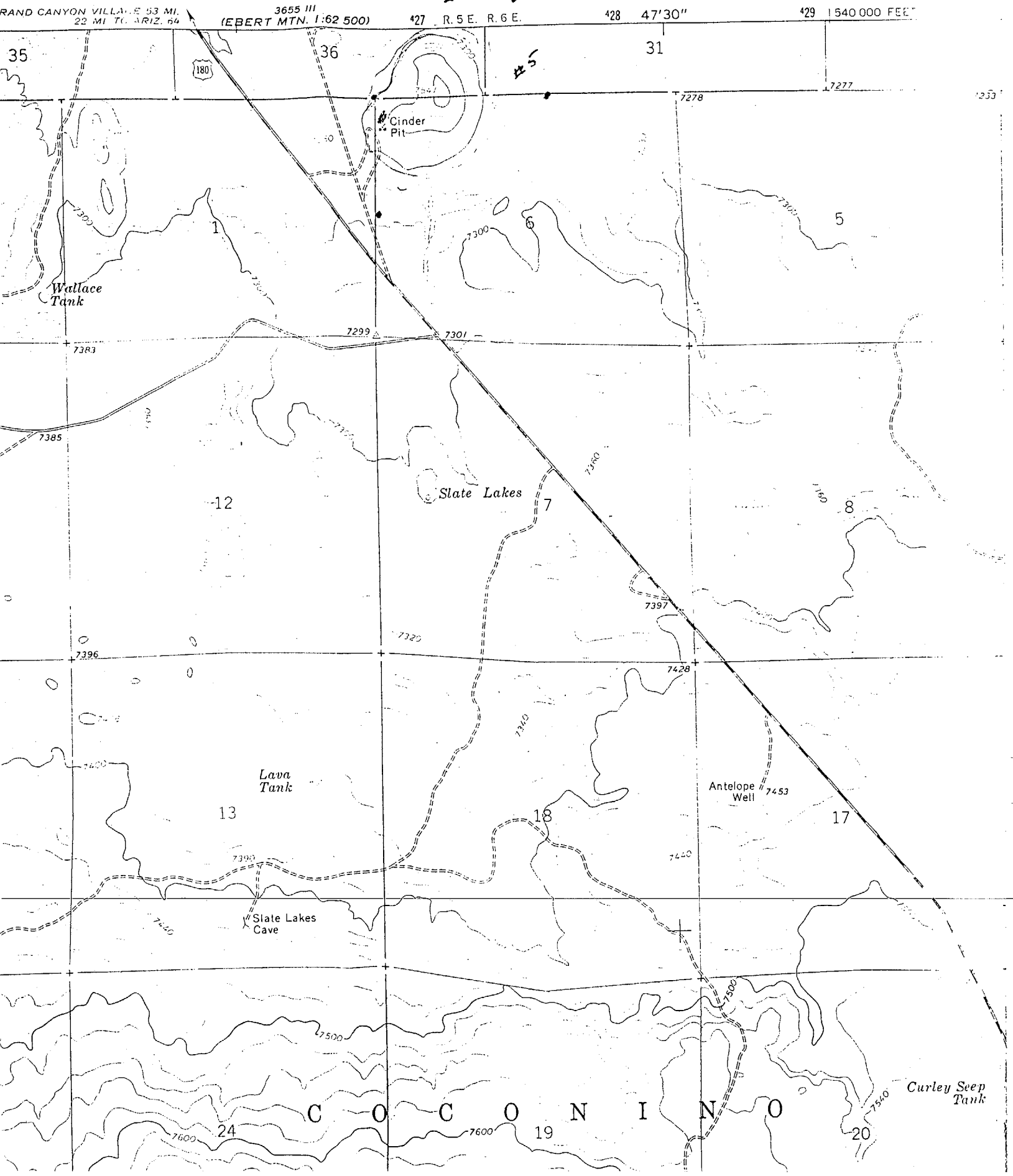
Quarry E

NW 1/4 Sec 6, T24N, R6E

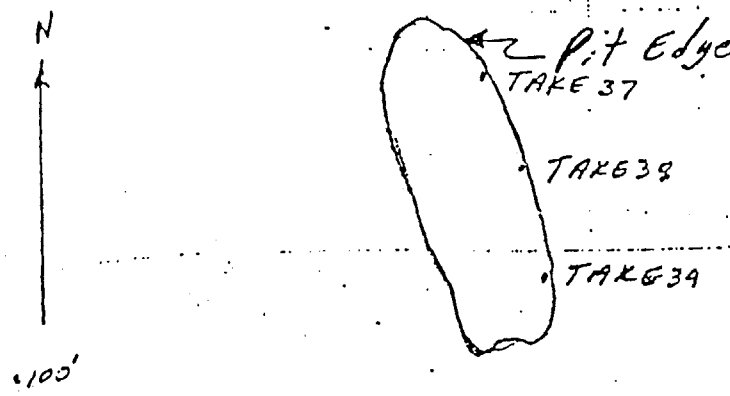


3
6580
6536
6480
10
6600
11
Babbitt
Lake
12
6626
6604
6537
C O C O N I N O
15
14
6600
13
6400
6701
22
23
6800
24
Stevens
Tank
6800
N A T I O N A L F O R E
Water
7000ft
D
6963
26
25
27
6987
Cinder
Pit
7400
7676
7357
36
35
34
7200
Slate Mtn
164
427

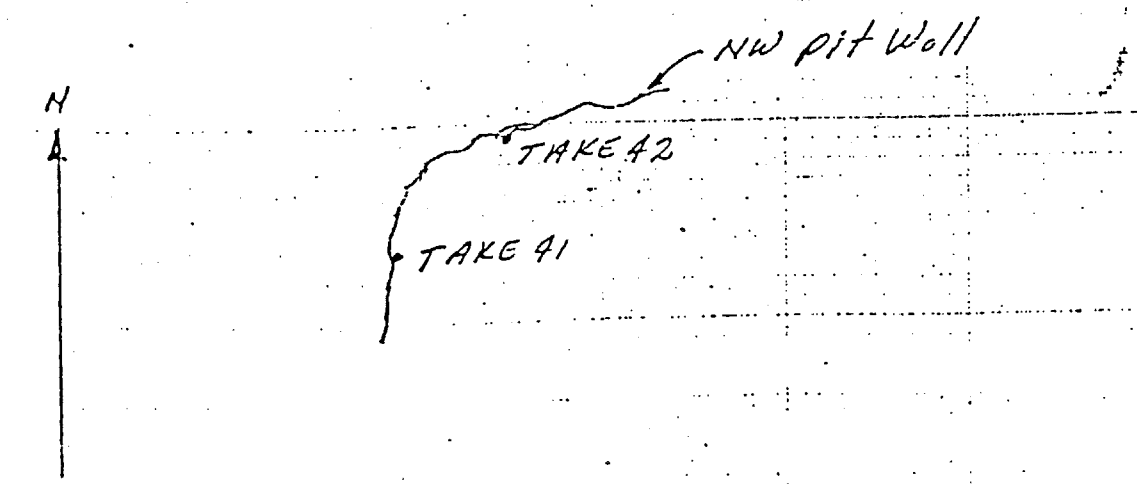
#5 E


RAND CANYON VILLAGE 53 MI.
22 MI TO ARIZ. 64
3655 III
(EBERT MTN. 1:62 500)
427
R. 5 E.
R. 6 E.
428
47'30"
429
1 540 000 FEET
35
36
31
#5
180
7277
7278
Cinder Pit
1
6
5
7300
Wallace Tank
7299
7301
7383
7385
12
Slate Lakes
7
8
7360
7397
7396
7428
7320
7340
7400
Lava Tank
13
18
17
Antelope Well
7453
7390
7440
Slate Lakes Cave
7500
7600
24
19
20
7540
Curley Seep Tank
C O C O N I N O

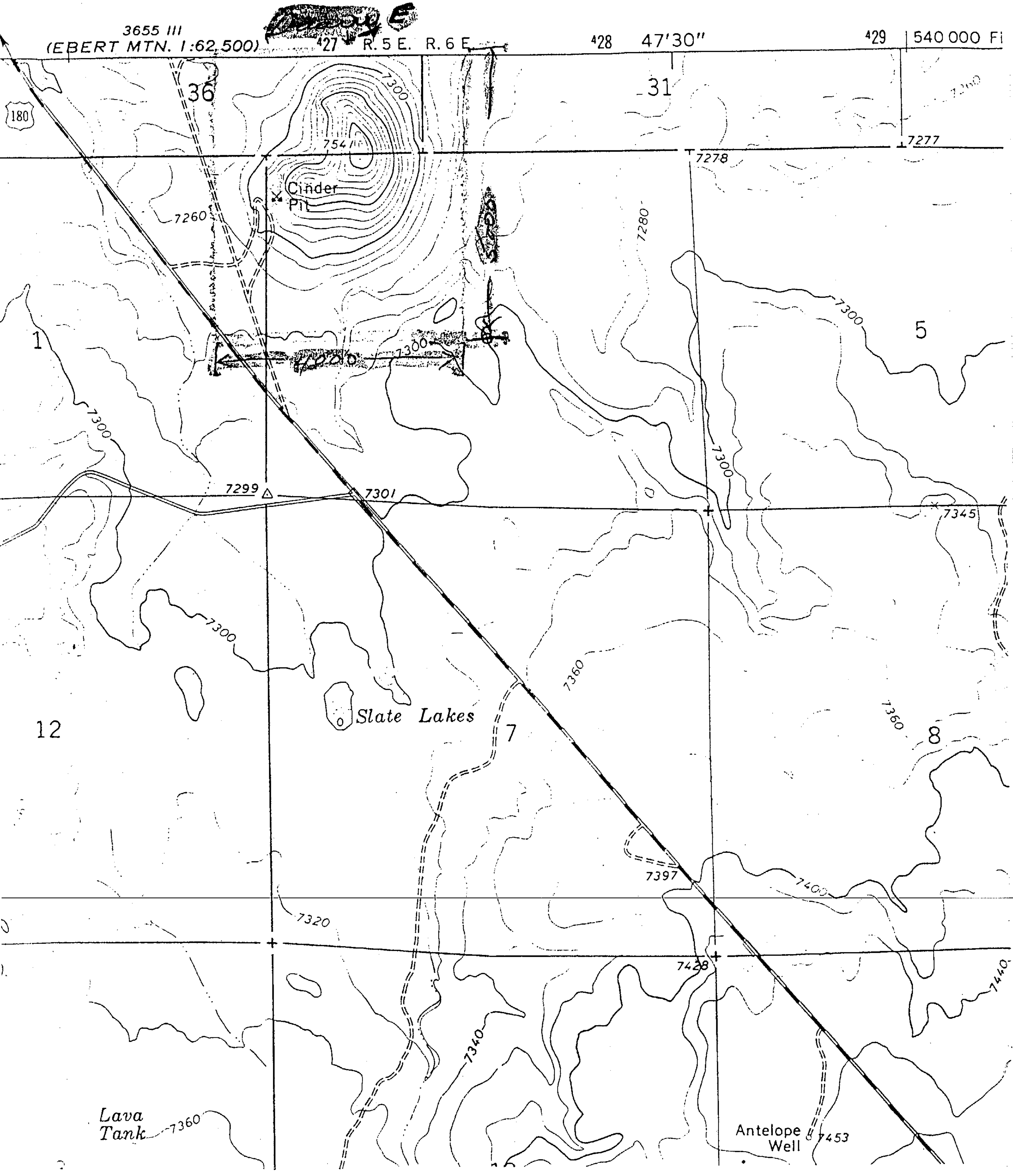
TAKEMOTO SAMPLE LOCATION MAP



Quarry-D
E1/4, Sec. 35, T25N, R5E



Quarry-E ✓
NW1/4 Sec 6, T24N, R6E


3655 III
(EBERT MTN. 1:62,500)
427
R. 5 E.
R. 6 E.
428
47'30"
429
540 000 FT
36
31
180
7300
7541
Cinder Pit
7260
7280
7278
7277
1
5
1400
7299
7301
7345
12
Slate Lakes
7
8
7360
7397
7400
7320
7428
7440
7340
Lava Tank
Antelope Well
7453

Mariah International, Inc.
1701 W. Charleston, Suite 510 • Las Vegas, Nevada 89102
(702) 382-8103
Phoenix, Arizona — (602) 898-3118

FOR IMMEDIATE RELEASE

August 26, 1987

Colorado School Of Mines Report

Dear Stockholder:

On August 21, 1987, we received an interim letter from the Colorado School of Mines Metallurgical Engineering Department in response to Mariah's written request for an up-date on the results of samples collected for analysis from Mariah's mining leases(attached). While many independent assays have been conducted on samples from Mariah's leases to-date, we were pleased to receive this additional confirmation of prior assay results from such a reputable source.

Additional Information

As always, we will continue to provide all information to shareholders as quickly as possible after our receipt. We thank you for your interest and continuing support in our endeavors.

CSM

Colorado School of Mines
Golden, Colorado 80401
303/273-3770

Metallurgical Engineering Department

August 20, 1987

Mr. A. Takemoto
1840 W. Amelita, Suite 1024
Mesa, AZ 85202

Re: CSM project 4-49044 Analysis of Cinder Cone Materials

Dear Mr. Takemoto:

Thank you for your letter dated August 19, 1987, enquiring about our progress on your project.

We have conducted mineralogical, SEM, EDX, AA and a number of gravity concentration procedures on the samples we have collected in the field earlier this summer from your property in Arizona.

While I am in the process of putting together the report, which should be ready in a few weeks, the following will outline some highlights of our findings:

- The materials collected in the field contain gold and silver values in varying proportions ranging between 2.4 ppm (∿ 0.072 oz/mt) and 21.2 ppm (∿ 0.68 oz/mt). They also contain small quantities of silver which we have detected during our microscopic work but have not quantitatively analyzed for.

- Gold and silver were observed to be in the native form, for which we have electron microscopic and energy dispersive x-ray data.

- Beside gold and silver, metallic minerals which we have identified as lead sulfide, iron sulfide, zinc sulfide and a smaller quantity of copper sulfide are present in your ore.

- The preliminary concentration experiments we carried out indicated that concentrates assaying higher gold content than the table feed could be obtained. The optimization of these tests can be undertaken if you commission us to do so.

Documentary data of our findings, with the maps and description of the field work that we did will be presented to you in the actual report itself.

I hope this information helps. With kind regards.

Yours sincerely,

B. Yarar
Professor

· MARIAH INT. (F)

DRAFT OF OPERATING PLAN 12/15/87

NOTICE OF INTENTION TO OPERATE/BASIC OPERATING PLAN
(Ref. 36 CFR 228, FSM 2817)

Forest Service--Unit No. 03
Contract #
2817
Date Rec'd: Date Approved:

INSTRUCTIONS TO OPERATORS. Items 1 through 6 and 12 constitute a Notice of Intention; items 1 through 12 constitute a Basic Operating Plan. Please complete in as much detail as possible and furnish to District Ranger's office. Additional sheets may be used if necessary.

NOTICE: To the extent authorized by law this information will be held confidential. As an agency of the Federal Government, the USDA Forest Service is required to comply with the Freedom of Information Act.

NOTICE IS HEREBY given that the undersigned intends to conduct prospecting, mining, or milling operation, etc. on the lands described below, and in the manner indicated.

1. Operator(s): Address(es) Telephone No(s).
Name(s)
GEO-EARTH RESOURCES, INC., A WHOLLY OWNED SUBSIDIARY OF MARIAH INTERNATIONAL, INC. — 1661 E. CAMELBACK RD., #250 PHOENIX, AZ 85016 — (602) 279-2098

2. Area of Operation:
National Forest: KAIBAB — State: Arizona — Mining District: DOG KNOBS
Ranger District: CHALENDER — County: COCONINO — T. 25N, R. 5E Sec. 7 SW 1/4 G&SRM

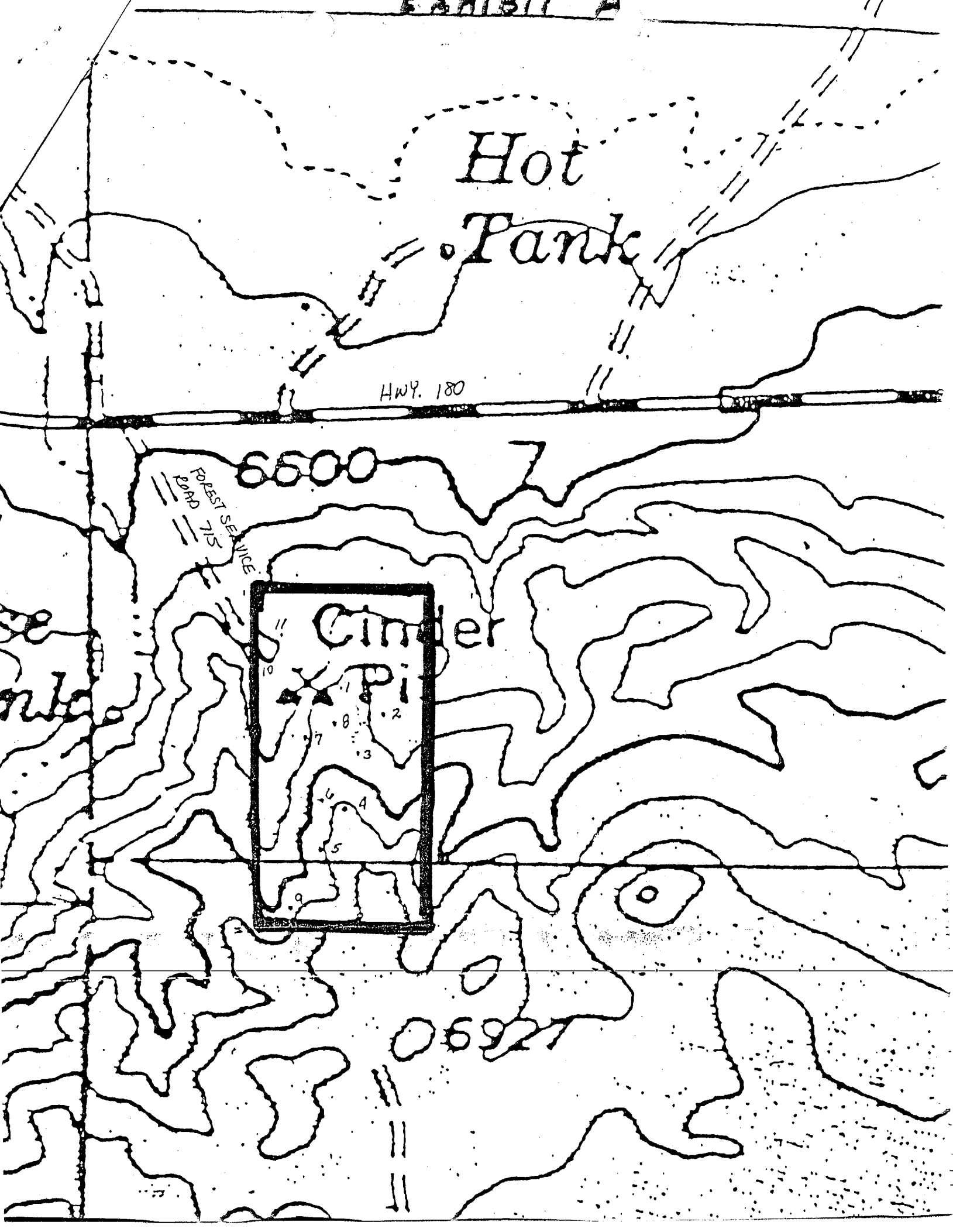
3. Access:
The proposed route of access to the operation is (describe route from point of entry into National Forest, using road numbers when possible): ENTER FOREST SERVICE ROAD #715 OFF U.S. HWY. 180. (SEE MAP & ATTACHED ROAD PLANS - EXHIBIT A)

The following means of transport will be used (4-wheel drive vehicle, tractor, pickup, etc): 4 WHEEL DRIVE VEHICLES, PICK-UPS, AUTOS, TRUCKS

(NOTE: Construction, reconstruction, or restoration of a road across National Forest System lands as a means of access to mining claims must be authorized separately by Special Use Permit).

4. Type of Proposed Operation:
Describe the type of proposed surface disturbing activities, such as trenching, bulldozer exploration, drill road construction, tunnel site development, etc.

BULLDOZER RIPPING, LOADERS, LOADING TRUCKS WITH RIPPED MATERIAL


Hot
Tank
HWY. 180
6500
FOREST SERVICE
ROAD 715
Cinder
Pi
6927

Mariah International, Inc.

Post Office Box 22268
Flagstaff, Arizona 86002
(602) 526-6483

FOR IMMEDIATE RELEASE

Mariah International, Inc., is pleased to announce that on May 21, 1988, it entered into an agreement with an Arizona Limited Partnership to construct and leaseback an ore processing mill on its Sheep Hill Joint Venture property located at Flagstaff, Arizona.

Construction of said plant is currently in process with the Company's anticipated completion date being the last quarter of 1988.

Mariah acquired an additional thirty five unpatented volcanic precious metal mining claims in the Flagstaff area. Mariah now has in excess of six thousand acres of mineral rights on volcanic precious metals deposits with additional claims in the process of being acquired.

Memo to: Files 3/1/88

From: R.R. Beard, Min. Engr.

Subject: Precious Metals in Volcanic Cinders

On this date John Gutierrez, Zone Office, U.S. Forest Service called. He reported that he had called Dr. Baki Yavar of the Colorado School of Mines to ask about his report on precious metals in volcanic cinders in the Flagstaff area. Dr. Yavar told him that the report was confidential and that the Forest Service should not have a copy. When Mr. Gutrerrez told him that the report was being used to promote several "precious metals in volcanic cinders" promotions Dr. Yavar said, "Garbage! The don't have that much gold in those cinders."

Memo to: Files Date 3/7/88

From: R.R. Beard, Min Engr.

Subject: Precious Metals in Volcanic Cinders

On this date I placed a call to Dr. Baki Yarar at the Colorado School of Mines to inquire about his report concerning precious metals in volcanic cinders which is being used as promotional material by Floyd Bleak of Mariah International and Geo-Earth Resources.

Dr. Yarar defended his reports by saying that just because everyone was taught in geology classes that precious metals should not be found in this environment, it is assumed that "Yarar is full of shit!" He stands behind the work that he did, however. He also said that he is fed up with the whole affair and that he spends too much time answering inquiries from brokers, investors, government employees, etc. He said that he tells investors that since the promoter is breaking his agreement by using this report that he is probably screwing the investor also.

Dr. Yarar said that he agreed to do this work under contracts which contain confidentiality clauses. The clients signed agreements that they would not use the reports, his name, or the name of the Colorado School of Mines in any manner in connection with their companies or properties. He, in turn, agreed to hold all

of his work confidential. He specifically said that he had a letter from Floyd Bleak agreeing not to use his report, his name or the name of the Colorado School of Mines in anyway to promote his properties or companies. He added that I should tell Mr. Bleak that he was a bastard for exploiting all three and putting Dr. Yarar in this position.

Dr. Yarar's reports are based on work that he did on material that he collected from Merriam Crater and from an area about 35 miles WNW of Merriam Crater and that it has no relation to nor can it be extrapolated to any material or areas beyond the samples taken. He also said that he did no economic studies of these or any other samples and that he takes no position concerning the economic viability of processing any volcanic cinders to extract precious metals.

Dr. Yarar said that he agreed to present a paper at the Symposium on Precious and Rare Metals in Albuquerque this April as a way out of the mess he's in. His paper will outline his work, show exactly what it pertains to and disclaim any application of it economically to these or to any other

volcanic cinders. He will then have something that he can give to any interested parties without violating his agreement to keep his work confidential.

I got the impression that he wishes that he had never become involved in this project and that he has been badly misused by the promoters and has been subjected to undue criticism by people in the industry that are not aware of all of the facts in the case. I sincerely hope that his paper at Albuquerque will settle this issue once and for all and we can all get back to doing our jobs

Basa Corres.

STATE OF ARIZONA
DEPARTMENT OF MINES AND MINERAL RESOURCES

August 25, 1986

Dr. William Copeland, Dept. Head
Dept. of Metallurgical Engineering
Colorado School of Mines
15th & Illinois Streets
Golden, CO 80401

Dear Dr. Copeland:

For the past couple of years there has been a rash of mining claims filed on volcanic cinder cones in the vicinity of Flagstaff, Williams and Springerville, Arizona. There have been reports of sampling programs and pilot tests which indicate commercial quantities of gold and platinum group metals.

The basis for all this activity and promotion is apparently a very elusive report of research conducted by or in conjunction with the Colorado School of Mines. This research is said to prove that these volcanic cinder cones contain gold and platinum group metals in commercial quantities which cannot be detected by standard assaying techniques. Although this report has been cited numerous times no one has been able to produce a copy.

I know of two major mining companies which have checked these cinder cones out on the strength of this very elusive report. They both, understandably, wish to remain anonymous. One had their metallurgists observe the procedure from the sampling through the assaying which indicated commercial ore. They could not repeat the results, however, when they took the rejects back to their own laboratory and followed the same procedure. Neither of these major companies or any of several other operators have as yet demonstrated the capability of actually producing any precious metals from these cinders.

If you are aware of any research involving volcanic cinders or of a report of any such project by the Colorado School of Mines or by any other reputable institution, I would greatly appreciate information on how to obtain a copy. If you have no knowledge of the existence of such a report, that information would also be appreciated.

I have enclosed a copy of a brief description of this departments duties and services to the public. Also enclosed is our publications list. If I can be of any service to you, please feel free to ask.

Sincerely,

Richard R. Beard
Mining Engineer

RRB:sk

Mineral Building
State Fairgrounds
Phoenix, Arizona 85007
(602) 255-3791

416 W. Congress
Suite 161
Tucson, Arizona 85701
(602) 628-5399

Colorado School of Mines
Golden, Colorado 80401
303/273-3770

Metallurgical Engineering Department
August 29, 1986

Mr. Richard R. Beard
Mining Engineer
State of Arizona
Department of Mines and
Mineral Resources
Mineral Building
State Fairgrounds
Phoenix, AZ 85007

RE: Your letter of August 25, 1986 to Dr. W. D. Copeland

Dear Mr. Beard:

I am pleased to respond to your letter, reference above, as a person who has an active research program in the subject matter. While you would be in a better position to know the activities in the field, the following is presented to show the scope of our work in this area.

We regularly receive numerous enquiries and consultation requests from reputable companies as well as ordinary members of the public on a host of subjects. In the last few years a number of ore samples, said to be cinder cone materials originating in the Springerville and Flagstaff regions of Arizona have also been submitted.

I am presently the principal investigator of a Colorado School of Mines Research project entitled:

"Concentration and Extraction of Value Elements of Merrill and Merriam Properties of WMR by Flotation, CSM Project #ORS-202-399"

The project is funded by WMR: Western Mining and Resources, Inc. of Flagstaff, Arizona and the monitor is Mr. Randy A. Davies.

As far as the term "cinder cone" applies, none of the samples I have so far looked at produced precious metals, except the one which came from the "Merriam Crater of the San Francisco Volcanic Area near Flagstaff, Arizona".

In this case as part of Project 202-399 cited above, I have personally supervised the digging of a 17 metric ton sample and brought a large part of it here to Golden for this research.

In accordance with our contract with WMR, I have so far submitted a progress report and an interim report both dated June 1986.

Briefly; my research has unequivocally shown that the 17 m. t. sample I collected in the field contains gold and silver in the native form (also some electrum) as well as native copper which also exists in sulfide form, in heavily weathered volcanic rubble. Other elements which have been shown to exist in weathered sulfides are zinc, lead, and iron in the form of pyrite.

One of the members of my research team, who is a geologist, (Dr. G.L.P.) and I have prepared a manuscript reporting our findings, which will be submitted for publication pending sponsor approval.

The processes of concentration we have applied are essentially textbook material, and consist of flotation preceded by pre-concentration by gravity methods. Flotation concentrates have consistently given fire assay beads which would work out as up to 80 oz/t. X-Ray analysis of such beads usually shows the gold to silver ratio to be around 3/1. Some of such beads also contain a small percentage of copper. Presently, we are conducting leaching tests.

In recognition of the fact that a stigma appears to be attached to the term "cinder cone", and to avoid generalizations not based on actual research, I frequently explain the following to persons enquiring about the subject matter:

> "The fact that it is called a cinder cone or that it happens to be the property of company X does not qualify a property to be a gold mine." Therefore, presently, I prefer referring to the subject of my current work as "The Sample Taken from Merriam Crater".

In principle my reports cited above, document the information generated from the Merriam Crater sample and outlined above. This information should be a sufficient substitute for a full report. Nonetheless, I would find it perfectly acceptable to provide copies of these reports if Mr. R. A. Davies, the project monitor, were to agree that this is in accordance with our contract.

Regarding the economics of the concentration/extraction process, we are hoping that the next phase of the study will be a funded project which would look at this aspect of the matter. Naturally, our proposal to the sponsors will request information about the size of the orebody to facilitate the extrapolation of bench-scale findings to calculations.

I hope this letter clarifies some of the queries in your letter. It will be a pleasure to assist you in any way possible if you write or call us at (303) 273-3770.

Yours sincerely,

B. Yarar
Professor of Metallurgical
Engineering

cc: Dr. W. D. Copeland

STATE OF ARIZONA
DEPARTMENT OF MINES AND MINERAL RESOURCES

October 14, 1986

Dr. Baki Yrar
Professor of Metallurgical Engineering
Metallurgical Engineering Department
Colorado School of Mines
Golden, Colorado 80401

Dear Dr. Yrar:

Re: 6SM Project #ORS 202-399, et cetera

Thank you for your reply to my inquiry regarding precious metals in volcanic cinder cones. As an employee of a state agency whose primary function is to aid in the promotion and development of the mineral resources of Arizona, I certainly do not want to hinder in any way research into any untapped source of mineral wealth. On the other hand, neither do I want to encourage investment into processes which are not viable or which are possibly fraudulent. This is the reason that I have been trying to ascertain the credibility of the numerous reports of precious metals in volcanic cinder cones. Apparently your research on behalf of Western Mining and Resources, Inc. has been used as the basis for legitimatizing cinder cone "ore" bodies by several less than credible promoters. This in no way reflects upon your efforts, however, and should not discourage the continuation of your investigations.

Mr. Davies called me after my letter of August 25 and expressed consternation that I exhibited a negative attitude concerning his project. I must confess that my skepticism was reflected in that letter but I had no idea which particular project, if any, was involved and I hope that you did not take umbrage at my attitude. To be perfectly frank, I was surprised to learn that research was being conducted by any institution into this phenomenon.

Unfortunately I know of no other way to acquire pertinent information than to ask seemingly negative questions. I therefore respectfully request the answers to the following questions. Please disregard any that may compromise your duty to protect the interests of your sponsor.

1. Does a basically standard fire assay detect precious metals in the head material? If not, have you formulated an explanation of why not?

2. What is the mineralogy of the concentrate? What are the gangue minerals as well as the ore minerals?

3. What is the concentration ratio? You mention 80 oz.per ton in the concentrate but how does that relate to the head ore?

4. I hesitate to ask but since platinum is frequently mentioned in regard to volcanic cinder cone deposits, have you found any detectable platinum during your research?

Mineral Building
State Fairgrounds
Phoenix, Arizona 85007
(602) 255-3791

416 W. Congress
Suite 161
Tucson, Arizona 85701
(602) 628-5399

5. Would it be possible and ethical to supply me with a list of the samples of volcanic cinders from Arizona that produced negative results? I am interested in the location from which each sample came as precise as possible and the name of the person or company that submitted it. If this would betray a confidence I'll respect your reluctance to reply.

Although you indicate that the economics of the process have not yet been ascertained, Mr. Davies seems to think that all he needs to start production is financing. If this is true and your report would support such a conclusion, perhaps you could use your influence with Mr Davies to urge him to permit the publication of your report. I feel certain that financial backing would be much easier to obtain if all of the facts and figures were open to the scrutiny of the potential investors. In these days of ubiquitous fraudulent investment schemes, responsible investors tend to be wary of operations using secret processes. This, I must confess, is an attitude that I try to engender in those with whom I have contact.

Thank you again for your cooperation and please let me know how to get a copy of your report if it is released. If I can be of any service to you please feel free to ask.

Sincerely,

Richard R. Beard
Mining Engineer

RRB:at

Sheeps Hill

Mariah International, Inc.

1701 W. Charleston, Suite 510 • 1661 E. Camelback Rd., Suite 250
Las Vegas, Nevada 89102 Phoenix, Arizona 85016
(702) 382-8103 (602) 279-2098

APRIL 12, 1988

DEAR SHAREHOLDER:

WE HAVE ENCLOSED THE LATEST REPORT FROM DR. HENRIE, CHAIRMAN OF THE COMPANYS' TECHNICAL ADVISORY BOARD. WE ARE VERY PLEASED WITH THE EXCELLENT RESULTS OF THIS REPORT, WHICH CONTINUES TO CONFIRM AND SUPPORT THE OPINION OF THE BOARD OF DIRECTORS THAT THIS IS THE RICHEST OPEN PIT, PRECIOUS METAL DISCOVERY EVER EXPLORED IN THE UNITED STATES.

MARIAH HAS RECENTLY LEASED AN OFFICE AND LABORATORY FACILITY ADJACENT TO THE SHEEPS HILL PROPERTY LOCATED AT 5650 NORTH DODGE IN FLAGSTAFF, ARIZONA, 86004. THE PHOENIX OFFICE IS IN THE PROCESS OF BEING TRANSFERED TO THIS FACILITY AND THE NEW PHONE NUMBER FOR OUR FLAGSTAFF FACILITY IS (602) 526-6483.

THE COMPANY HAS ENGAGED AN EARTH MOVING CONTRACTOR AND THE PRELIMINARY MILL SITE PREPARATION IS PRESENTLY UNDERWAY AT THE SHEEPS HILL PROPERTY WITH AN EXTENSIVE AMOUNT OF DIRT BEING RELOCATED FOR CONSTRUCTION OF THE ORE PROCESSING MILL AND REFINING FACILITY.

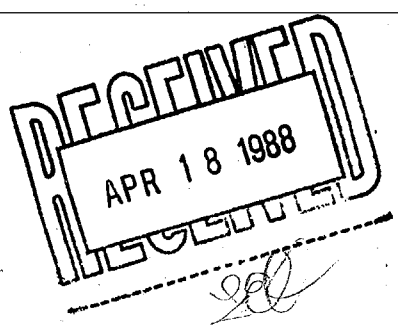
THE COMPANY BOARD OF DIRECTORS HAS CALLED FOR THE MARIAH ANNUAL STOCKHOLDERS MEETING TO BE HELD AT THE LITTLE AMERICAN HOTEL IN FLAGSTAFF, ARIZONA ON MAY 21, 1988 AT 11:00 A.M. WITH A TOUR OF OUR FLAGSTAFF FACILITY AT 9:00 A.M. WE WOULD ENCOURAGE YOU TO MAKE NECESSARY TRAVEL ARRANGEMENTS IF YOU PLAN TO ATTEND. DETAILED INFORMATION AND PROXY STATEMENTS WILL BE FORTHCOMING FOR ALL STOCKHOLDERS OF RECORD AS OF APRIL 30, 1988.

WE ARE MEETING OUR TIMETABLES AND GOALS AND INTEND TO BE INTO PRODUCTION IN THE LAST QUARTER OF 1988. WE THANK YOU FOR YOUR CONTINUING SUPPORT.

BOARD OF DIRECTORS
MARIAH INTERNATIONAL, INC.

ENCL./DR. HENRIES' REPORT
ACB/MC

ARIZONA DEPT. OF MINES & MINERAL RESOURCES
STATE OFFICE BUILDING
416 W. CONGRESS, ROOM 161
TUCSON, ARIZONA 85701



the HENRIE group

50 South Main, Suite 975 / Salt Lake City, Utah 84144 / (801) 531-6877

March 29, 1988

Board of Directors
Mariah International, Inc.
Valley Bank Plaza, 14th Floor
300 South Fourth Street
Las Vegas, Nevada 89101

Re: Sheep Hill Project

Gentlemen:

This report shall serve as an update of the report given to you on February 2, 1988.

Since that date various additional samples taken from the Sheep Hill mine (which may or may not reflect values on the property as a whole) have been fire assayed. In addition, various leach tests have been conducted on these samples. Both the fire assays and the leach tests have shown consistent levels of at least .75 ounces of recoverable gold per ton.

As a result of the further metallurgical testing that has been conducted, and with the aid of Wrethal Spendlove, I have developed a flow sheet for a mill. Utilizing an innovative, yet sound, metallurgical recovery process, it is my opinion that this mill can produce significant quantities of gold and silver in a cost-effective manner, if the quality of ore in the projected reserves remains consistent with the levels demonstrated in the aforementioned paragraph.

Sincerely,

Thomas A Henrie

Thomas A. Henrie, PhD
Project Consultant

TAH/mb

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?type s1/3/1-2

1/3/1
1467628 87-34501
Vapor species over Te precious metal minerals
Helle, S.; Wildeman, T.; Yarar, B.
Univ. Concepcion, CHL; Colo. Sch. Mines, USA
Journal of Metals 39: 1, 1987 14-17p.
Country of Publ.: United States
ISSN: 0022-2674
Languages: English
illus., 1 table

1/3/2
1287641 85-29314
Size-surface energy relationships in the flotation upgrading of oil shale
Yarar, B.; Hemphill, G. P.
Colo. Sch. Mines, Dep. Metall. Eng., Golden, CO, USA
Proceedings, 1983 Eastern oil shale symposium
Vyas, K. C.(chairperson)
Davy McKee Corp., Cleveland, OH, USA
1983 Eastern oil shale symposium, Lexington, KY, United States, Nov.

Sheep Mt. Mine File

October 15, 1987

David D. Rabb, P.E.
5213 Oracle
Tucson, AZ 85704

Mr. Peter D. Ehrenhaft
Bryan, Cave, McPheeters & Roberts
1015 15th Street NW
Washington, DC 20005-2689

RE: Mariah Int./Cimmaron

Dear Mr. Ehrenhaft:

Per instructions from Dr. Dick Schaeffer of Phoenix, I am submitting results of a study requested by him and Dr. Spencer Titley on the subject of gold in the Flagstaff cinders. Dr. Titley gave me a copy of a report by Prof. Baki Yarar regarding various analysis of samples from the site.

There has never been in the twenty or so years of my association with the Arizona Bureau of Mines and assaying in this state, an authenticated, proven occurrence of a significant concentration of gold, silver and/or platinum group metals (PGM) in volcanic cinders in the Flagstaff area. Similar to the volcanic tuffs, ash flows and ignimbrites on the Nevada Test Site (NTS), north of Las Vegas, there may be a trace of precious metals in a certain horizon, but, like sea water, the cost of recovery far outweighs any values present. I was associated with mining and metallurgical investigations on the Test Site for many years, and I believe an explanation for some of the results in the report given to me may be as follows.

Instrument analysis methods, either by atomic absorption, neutron activation, plasma analysis or whatever, usually follow a dissolution by aqua regia. This well-known analytical method is employed frequently by industry for process control. However all analysis are routinely checked or verified by comparison with "standard" samples or "blanks". These standards are prepared using the same background solutions as encountered in the process. If one employs, let us say, distilled water in place of a host solution with the same background, then there can be misleading readings.

In any case, the standards should always be checked by several fire assays to prove equal and reproducible results. The U. S. National Bureau of Standards, the U. S. Bureau of Mines, and all major analytical labs routinely check their standards by fire assays.

I suggest, and this has been proven a number of times in the past twenty years by the U. S. Bureau of Mines, the Colorado School of Mines Research Foundation, the Arizona Bureau of Mines, Mountain States Engineering, Skyline Analytical and others, that there may be a misleading interpretation of results of some instrument analysis because:

1. the standard used for calibration was a synthetic standard which did not contain all the many other elements found in the unknown. Therefore, a distorted reading resulted and a misleading interpretation. The interfering elements modify the instrument readings.

2. At NTS, similar volcanic ejecta showed slight traces of gold that were quite homogeneous along certain horizons of the same geologic age. The lack of consistent reproducible assay results from the Flagstaff material may indicate problems in assay techniques and perhaps unreliable analyses.

A conclusion is that the presence of gold is sometimes reported as the result of assays by atomic absorption equipment or a similar apparatus. There are sometimes definite proven interferences that can be mistakenly identified as gold with NO gold in the sample. Perkins-Elmer, in the 'Manual of Analytical Methods for Atomic Absorption Spectrophotometry', make this statement: "Interferences have been found even in an acetylene flame on gold and platinum."

To prove the reliability of any assay procedure I suggest the following tests: First, make up three suites of samples. One suite goes to the operator who claims to find gold and/or PGM where standard fire assays cannot find it. The second suite goes to a certified or registered assayer of your choice and the third is held for umpire use later, if desired.

Each suite consists of:

1. Three placebos or blanks made up of chemically pure (C. P.) silica or any absolutely barren material.
2. Three samples of a known proven standard ore. This will be a naturally occuring ore of about the same mineral content as the unknown ore to be tested. The precious

metal content has been checked and verified many times by several assayers.

3. Three samples of a standard synthetic preparation made from barren material; e.g., C.P. silica, plus precisely measured additions of pure gold, silver and/or PGM.

4. Five very carefully prepared, very well pulverized, extremely well mixed and precisely cut samples all from one batch of the unknown sample. In this case, cinders. There will be 15 such samples, five for each suite.

All samples are numbered out of sequence and some may be slightly disguised with some coloring. Of course, records are kept so as to identify each sample after all tests are finished.

In the ten or so times in the past 20 years that this procedure was employed at the Arizona Bureau, not one of the processes or people tested passed even one part of this 4-part test.

Precious metals (PM) were reported in the blanks, PM were not found in the standards and, most important, in the five unknown samples there was a distinct absence of reproducibility. Results varied considerably from one sample to another.

On the other hand, the FA analytical results were consistently on target as they should be. So, you can draw your own conclusions.

Remember, the gold is of no value unless you can extract it safely (EPA approved) and at a profit. Any strong acid, aqua regia-type process would be expensive to build, expensive to maintain and expensive to operate. Plus you may have difficulities

with permitting authorities.

I have never seen nor heard of the successful operation of one of these gold recovery plants which employ strong acids to dissolve the gold. Reason: costs and safety considerations.

Another point is that a chemically sound, proven qualitative test for gold, the Purple of Cassius test, does NOT show appreciable gold in the Flagstaff cinder samples. This Cassius test is recognized as one of the best, sensitive, chemical tests to detect the presence of gold in any material.

Also, careful spectrographic, does not indicate significant gold in any samples, but it is recognized that the limit of detection is very limited.

Remember also that gold in ore is of no value unless it can be extracted, in a salable form, safely and at a profit. I do not understand how any secret extraction process can recover gold from material so low in grade that fire assays do not indicate the metal in the ore.

I recommend that if anyone were to proceed with a study of extraction of PM from cinders that

1. A one-ton, or better still, a ten-ton-per-day pilot plant be designed and operated on a closed-cycle run of at least 30 days.

2. All gold in the heads fed to this test run should be saved and become the property of the party financing the operations.*

*E.G.: 10 tpdy x 0.05 opt x 30 days = 15 ounces of gold to be recovered by operator.

3. A performance bond be set aside as a guarantee of plant and flowsheet performance.

4. A cost-accounting record be kept for the 30-day run covering utilities, reagents, amortized plant costs, labor, taxes, insurance, refining and all related expenses.

I strongly recommend that any prospective investor should approach any such venture very carefully.

Check samples and assays with certified standard fire assays, not instrument assays. Do not use synthetic standards.

Insist on a performance bond, duplicate sampling of a pilot run and require that all metals recovered become property of the investor(s).

I do not understand how these PM can show up in their assays and not in fire assays, and why the standard, historically proven Purple of Cassius tests do not show appreciable values present. Also, standard spectrophotometry tests do not agree with those reported instrument analyses. In addition, I believe the lack of reproducibility is significant indication of unreliability.

In summary, I cannot see any believable basis for the postulation that the Mariah Flagstaff cinders have any significant, economically recoverable precious metal values. Forget it.

If there are questions or if you or any of your people wish to discuss any particulars further, please let me know.

Thank you for your consideration.

Sincerely,

David D. Rabb

David D. Rabb
Metallurgist

DDR/tmh

cc: Dr. Spencer Titley
Dr. Dick Schaeffer
Dr. Orlo Childs

Mariah International, Inc.

P. O. Box 22268 Flagstaff, Arizona 86002 (602) 526-6483

March 9, 1989

Dear Shareholders,

In previous reports to shareholders you were advised of the Joint Venture between Mariah International, Inc. and Guild Mark Industries, Inc. in connection with acquiring 118 acres of cinder cone in Flagstaff, Arizona.

As you know, we completed a 150 ton pilot plant on the property to assess the feasibility of processing precious metal in cinder cone which laboratory tests proved to exist in the ore.

Since our first historic run through as reported in our last report to shareholders, we have experienced some technical problems and mechanical breakdowns which have prevented us from duplicating the success that we achieved in our laboratory experiments. Cold weather hampered the leaching process and the fineness of the gold in solution creates a unique chemical circumstance in producing a Dore bar (a metal bar containing only a percentage of gold and other precious minerals) in which the gold can be stabilized.

The leaching process has been redesigned to cope with the seasonal weather to the extent that very significant quantities of gold are being extracted from the ore and into solution. Such analyses have been authenticated by Dr. Jan Miller and Dr. Tom Henrie whose reports have been previously forwarded to you. Subsequent assays of the pregnant leach solution continue to affirm our success in this regard and to confirm that the Sheep Hill cinder cone contains significant quantities of gold. However, we continue to experience technical difficulties in drawing the precious metal out of the pregnant solution and securing same into a Dore bar that tests for measurable amounts of gold under traditional methods.

Our entire process of dealing with the pregnant solution is under current review by the Technical Advisory Board and is receiving their full attention. We believe that we will soon be able to deliver a Dore bar of acceptable standards to a selected refinery. We will keep you advised of our progress as significant developments occur.

Regarding the complaint Mariah filed with the State of Arizona challenging their denial of our applications for Prospecting Permits, the State has proposed a settlement which the Board is now considering.

On February 10, 1989, the Arizona Department of Environmental Quality issued an extension on the temporary permit for water disposal until such time as a decision is rendered on the permanent permit, thereby allowing the operation on Sheep Hill to continue. Unfortunately, a breakdown in a critical operational part has forced us to discontinue the leaching process until repairs and/or replacements have been accomplished. We look forward to the repair process being accomplished by the end of March at which time operations will resume.

Further questions on our progress may be directed to Mariah Guild Mark Joint Venture at (602) 526-6483.

Board of Directors

J. D. Miller
1886 Atkin Avenue
Salt Lake City, UT 84106
December 28, 1988

Mr. Floyd Bleak, Vice President
Mariah Guildmark Joint Venture
5650 North Dodge Avenue
Flagstaff, Arizona 86004

Dear Mr. Bleak:

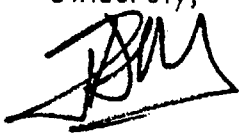
At the request of Mr. Lynn Burr I visited and reviewed the Flagstaff pilot plant operations of Mariah Guildmark on December 20, 1988. During this trip I had opportunity to tour and examine the Sheep Hill mine site, the leaching plant operations and the recovery circuit. The process/analytical development is a courageous effort in view of the many negative reports on the presence of gold in Arizona cinder cones. I was impressed with all phases of the rather large pilot operation and particularly so when it was reported to me that the operation had been assembled in about three months at a total cost of less than one million dollars - clearly excellent value for invested capital. The process is metallurgically sound.

During my tour of plant operations I supervised the sampling of the pregnant leach solution at 10:20 am and then returned to the analytical laboratory to supervise analysis of the sample. The analytical procedure was reviewed and found to be sound. A 150 ml sample of the pregnant leach solution ultimately yielded a 25 mg bead upon cupellation. A blank solution was run simultaneously for control (no bead of any significance was recovered from the control sample). The 25 mg bead recovered from the 150 ml sample of the pregnant leach solution was taken to Salt Lake City where it was analyzed and found to contain at least 20% gold.

In my opinion this metallurgical pilot plant effort at Sheep Hill under the direction of Dr. T. Henrie has demonstrated what appears to be an important technological breakthrough in the processing of refractory gold ores. Of course process economics must be evaluated and confirmed but at this time I expect the operation to be quite successful.

In conclusion, I should say that the staff cooperated with me fully and answered all questions regarding process details and analytical procedures.

Sincerely,



J. D. Miller
Professor of Metallurgy

c.c. J. L. Burr

GUILD MARK
INDUSTRIES INCORPORATED

A Mining & Milling Corporation

TO THE SHAREHOLDERS OF GUILD MARK INDUSTRIES, INC.:

In previous correspondence you were informed that your Company, Guild Mark Industries, Inc. (Guild Mark) and Mariah International, Inc. (Mariah) formed a 50% - 50% joint venture named the Mariah-Guild Mark Joint Venture (Joint Venture). This Joint Venture holds fee simple title to approximately 118 acres of property in Flagstaff, Arizona. This property is a cinder cone that has been mined in the past for cinder block.

At the May Stockholders Meeting you were informed that Guild Mark, Mariah and the Joint Venture entered into an agreement with Flag Gold-Ten Limited Partnership to provide working capital of $125,000 each to Mariah and Guild-Mark and to build, at a cost not to exceed $500,000, a 150 ton pilot plant on the Sheep Hill Project site in order to determine the commercial feasibility of processing the precious metals, if any, located on the Sheep Hill site. The pilot plant was to be completed during the last quarter of 1988.

As a final step in the completion of the pilot plant, ore was run through the pilot plant on November 16, 1988 to test its operability. Using industry accepted practices, the Company performed several assays on the pregnant solution that was generated from this test. The assays showed gold content of at least .50 ounces of gold per ton. It should be noted that these tests are preliminary in nature and they do not necessarily reflect the results that will be obtained when the pilot plant is fully operational. It is anticipated that the pilot plant will become fully operational in the very near future. You will receive reports of future tests as they are made available.

In order to conduct any testing or processing on the site, it was necessary to obtain permits from various governmental authorities. On November 16, 1988 the Company received initial approval for testing from the City of Flagstaff pending final approval by the city of a 180 day temporary use permit. We do not anticipate any problems in obtaining this 180 day permit. In addition, it was necessary to have a "water disposal" permit from the Arizona Department of Environmental Quality. At the moment, we have a temporary three-month permit issued to the Project. This will allow us to do all necessary testing needed to complete our processing of a permanent water permit. We believe that the permanent permit process will take between three months and one year to complete. This will mean that the plant will possibly be shut down for a period of time after the three month period is up.

If the testing during our temporary permit time (three months) provides us with further positive information, we anticipate the expansion of the 150 ton per day pilot plant. The additional construction can be completed during a six to nine month period of time so that upon issuance of the permanent permit, we can immediately begin a larger scale processing schedule.

Guild Mark has also had some discussions with the Nevada Securities Department relating to previous information given to various brokers and shareholders. The Department would like us to clarify various information. In that regard, enclosed please find a release on the matter.

If you have any questions, please call the Company at (602) 526-6483.

We continue to serve you as responsible directors and are extremely pleased to inform you of our success at Sheep Hill.

Your Directors
November 21, 1988

P.O. Box 22268 Flagstaff, Arizona 86002 (602)526-6483

The Company also obtained from the State of Arizona, Department of Environmental Quality, a temporary ground water quality protection permit. The permit allows the Company to operate the Pilot Plant for a three (3) month period, from the date of issuance. The permit is dated November 10, 1988. The Company is currently in the process of applying for a permanent groundwater quality protection permit. It is anticipated that it will take a minimum of six (6) months to obtain this permit. Therefore, it is anticipated that the Pilot Plant can be operational for at most three (3) months prior to a shutdown period which may last three (3) months or longer.

In addition to the above described permits, the Arizona State Mining Inspector has visited the Pilot Plant site and has suggested certain safety measures which the Company has incorporated. Those safety measures are completed to the satisfaction of the State Mining Inspector.

2. MINING CLAIMS ON FEDERAL LAND:

As disclosed in prior communications, the Company entered into a mining lease for several mining claims in Coconino County, Arizona. The lessors of this property are all stockholders, directors, or officers of Guild Mark or related thereto. Guild Mark has stated that the gold values in these properties are found in cinders.

The Nevada Securities Division believes the classification of cinders under the 1872 General Mining Laws and the Surplus Resource Act of 1955 is a material fact requiring disclosure. Under current federal law, cinders are classified as "common variety minerals." Common variety minerals are wide-spread deposits with a low per unit value such as sand, gravel, stone, pumice, pumicite, clay, and other similar material. As such, the Forest Service does not recognize cinders as being locatable and subject to mining claims. While Guild Mark may challenge the classification of cinders as common variety minerals, the Nevada Securities Division feels the administrative process of reclassification could take anywhere from 1 to 5 years. Without such reclassification, Guild Mark may not mine these claims.

3. THE SHEEP HILL ACQUISTION:

In prior releases, the Company's acquisition of Sheep Hill was disclosed. Those releases did not disclose that the Seller (LV Professionals) has partners who are affiliated with Guild Mark. Jeffrey L. Burr is the managing general partner of LV Professionals and at the time of the sale was functioning, and continues to function, as an attorney for Guild Mark and is a shareholder. In addition, F. Gard Jameson, a general partner of LV Professionals at the time of the sale, was and continues to be a director and officer of the Company.

Further, that Note does not disclose that the Sheep Hill property had been recently purchased by LV Professionals for $710,000 and was appraised, by an independent appraiser, as worth $715,000. Mariah-Guild Mark Joint Venture purchased Sheep Hill from LV Professionals in this affiliated transaction for $1.5 million.

4. ALTON C. BINGHAM:

In several Company releases including its due diligence reports, the resume of Alton C. Bingham was included as a director of the Corporation and former officer. The resume failed to disclose that Mr. Bingham had his CPA license revoked by the State of Nevada on June 26, 1980 for the mishandling of clients' funds. Mr. Bingham submitted his resignation from the Board of Directors on October 24, 1988.

5. ASSAY REPORTS:

The Securities Division believes it to be a material fact that should be disclosed to its shareholders that the Company is aware of independent laboratory assays which indicate that there is an insignificant amount of recoverable gold, if any, in the cinders on the property that the Company owns. In fact, the vast majority, if not all, of the major labs that have used standard fire assay techniques have found only traces of gold in cinder material.

6. UNAUTHORIZED USE OF INDEPENDENT REPORTS:

The Company did, in its last information package, refer to a report compiled by Sell, Huish & Associates, Inc. and included two pages of this report in its information package. The Company did not have authority to use this report and will not use it in the future. Further, the Securities Division believes that the pages included in the Guild Mark information materials misrepresented the findings of that report. The Securities Division has requested Guild Mark to inform its shareholders that this report was compiled to determine the "highest and best use" of the Sheep Hill property and appraise the land on that basis. The conclusion of that report was that the "highest and best use" of Sheep Hill is in the future speculation on the cinder industry by removal of the cinder cone over the next 20 to 40 years and re-sale of the residual land for mixed use development beyond the year 2010. The accompanying appraisal was for less than half the purchase price paid by Guild Mark to LV Professionals.

7. REFINERIES:

In its prior information packages, the Company stated that "the Company will sell its precious metal ore concentrates to existing refineries, Johnson Matthey and Engelhard Metals." The Company did not then have any contracts with either of those refineries, or any other refinery, to sell or otherwise dispose of its precious metal ore concentrates. The Company wishes to clarify the fact that these refineries were only mentioned as potential companies which could process its ore concentrates if it became necessary.

Colorado School of Mines
Golden, Colorado 80401
303/273-3770

Metallurgical Engineering Department

August 20, 1987

Mr. A. Takemoto
1840 W. Amelita, Suite 1024
Mesa, AZ 85202

Re: CSM project 4-49044 Analysis of Cinder Cone Materials

Dear Mr. Takemoto:

Thank you for your letter dated August 19, 1987, enquiring about our progress on your project.

We have conducted mineralogical, SEM, EDX, AA and a number of gravity concentration procedures on the samples we have collected in the field earlier this summer from your property in Arizona.

While I am in the process of putting together the report, which should be ready in a few weeks, the following will outline some highlights of our findings:

- The materials collected in the field contain gold and silver values in varying proportions ranging between 2.4 ppm ($\sim$ 0.072 oz/mt) and 21.2 ppm ($\sim$ 0.68 oz/mt). They also contain small quantities of silver which we have detected during our microscopic work but have not quantitatively analyzed for.

- Gold and silver were observed to be in the native form, for which we have electron microscopic and energy dispersive x-ray data.

- Beside gold and silver, metallic minerals which we have identified as lead sulfide, iron sulfide, zinc sulfide and a smaller quantity of copper sulfide are present in your ore.

- The preliminary concentration experiments we carried out indicated that concentrates assaying higher gold content than the table feed could be obtained. The optimization of these tests can be undertaken if you commission us to do so.

Documentary data of our findings, with the maps and description of the field work that we did will be presented to you in the actual report itself.

I hope this information helps. With kind regards.

Yours sincerely,

B. Yarar
Professor

United States Department of the Interior

BUREAU OF MINES

RENO RESEARCH CENTER

1605 EVANS AVENUE
RENO, NEVADA 89512-2295

April 1, 1988

Richard Beard
Department of Mines and Mineral Resources
416 W. Congress, Suite 190
Tucson, AZ 85701

Dear Dick,

We have examined and analyzed the cinder sample which you submitted March 2, 1988. Initially I had it analyzed by x-ray fluorescence and diffraction and had our mineralogist look at it optically and by scanning electron microscopy and microprobe so that we were absolutely sure of the nature of the material. We then ran one assay ton sample by fire assay for gold and silver. The results were negative, that is, less than 0.003 oz ton gold and less than 0.05 oz/ton silver. Since in a fire assay for gold the platinum group metals, platinum, rhodium, and iridium, will report along with the gold, that means the combined amounts are less than 0.003 oz/ton.

I have received a copy of B. Yarrar's report and have read it over very carefully. This report boils down to the fact that Dr. Yarrar has offhandedly dismissed the fire assay results of a commercial lab that he himself had picked and relied completely on his own unproven analytical method. Admittedly, gold particles were found in one pan concentrate but no numerical corroborative analytical data are presented for the pan concentrate, that is the pan concentrate was not analyzed for its total gold content. Since the sample was rather small I have been hesitant to use it all up doing useless tests. For the small amount remaining I would like to follow the Yarrar report and try to duplicate his results. I will let you know what the outcome is. If you have any questions or need any further work please don't hesitate to call me.

These analyses are based on the sample as received. The Federal Bureau of Mines claims no knowledge of the geographic source, type of deposit, method of sampling, or means of sample preparation.

Sincerely,

K. G. Broadhead
Research Supervisor

Enclosure(s)

SAMPLE ANALYSIS REPORT

Samples submitted by BROADHEAD
GZ-131

Date of Request 3/8/88
Date Received by Fire Assay 3/8/88
Month Day Year

Sample#	Au	Ag	Sample#	Au	Ag	Sample#	Au	Ag
GZ-131	—	—						

Remarks: _____

Reported as: A. g/l element oxide B. mg/ml C. % D. ppm E. (oz/ton) unless otherwise noted

Analyst F. Godsey Date Completed 3/22/88
Month Date Year

Au – , less than 0.003 oz/ton
Ag – , less than .05 oz/ton

SAMPLE ANALYSIS REPORT

Samples submitted by: Broadhead Date: 3/8/88

Sample Number	
	XRD
62131	Major Feldspar, Amorphous, Minor Fe_2O_3, Mg_2SiO_4
	XRF
	semiquantitative estimate of elements $Z > 10$ calculated as oxides.
	% element
	Mg Al Si K Ca Ti Cr Mn
	4. 11. 23. .8 6. 1. .04 .09
	Fe Zn Sr Zr
	8. .07 .1 .01

Remarks:

X-Ray Emission Qualitative
M-major m-minor t-trace

X-Ray Diffraction Qualitative
S-strong I-intermediate W-weak

Analyst KB Date 3/15/88

Mineralogy Lab Report

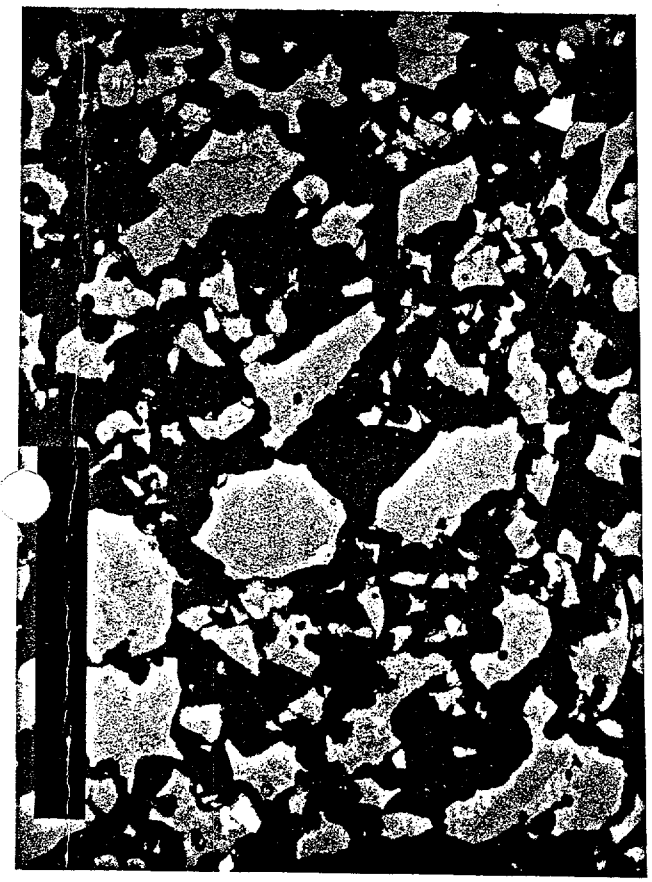
Sample No. GZ-131 Date 3/8

Submitted by: Brandhard

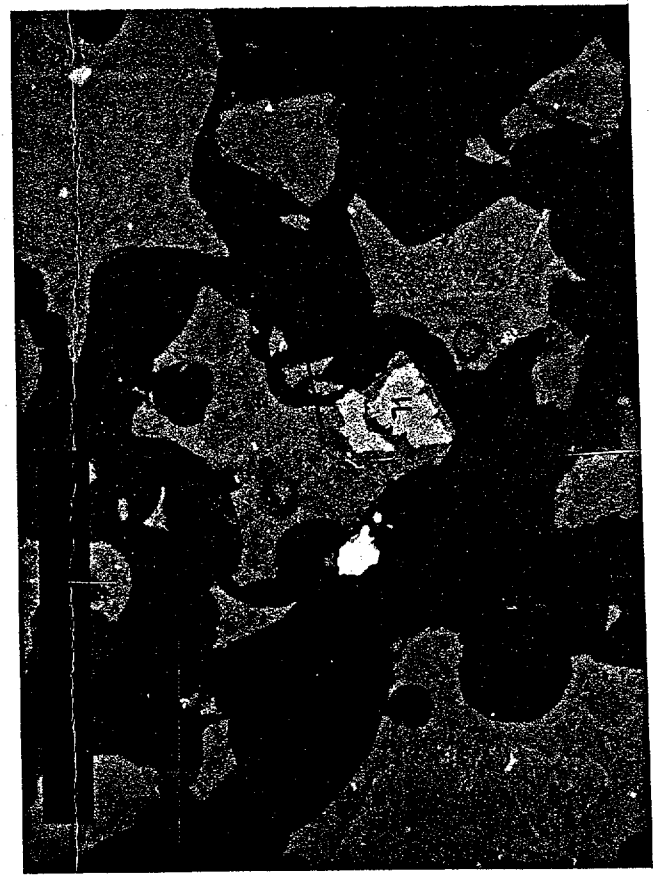
Sample consists of shard-like particles of Fe-rich volcanic glass containing phenocrysts mainly of plagioclase feldspar and magnetite-ilmenite. There appears to be a fair amount of compositional variation in the matrix.

Analyst: JJ Date 3/21

1000 20 0131 01



100 20 0131 02



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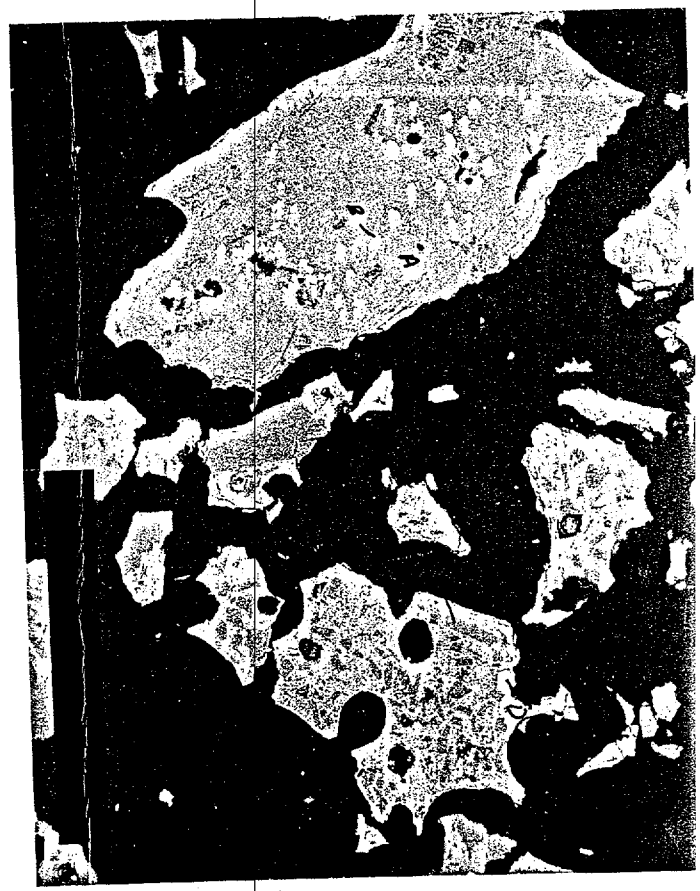

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131C

ELEMENT	WEIGHT %	OXIDE %
NA	1.62	2.18
MG	0.00	0.01
AL	15.30	28.92
SI	25.23	53.98
K	0.29	0.35
CA	9.31	13.03
TI	0.10	0.17
CR	0.06	0.08
FE	1.00	1.29
O	47.08	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:23:48

BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131D

ELEMENT	WEIGHT %	OXIDE %
NA	0.91	1.23
MG	5.84	9.69
AL	2.62	4.96
SI	0.53	1.14
K	0.00	0.00
CA	0.40	0.56
TI	11.99	20.00
CR	1.83	2.67
FE	46.44	59.75
O	29.42	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

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BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131A

ELEMENT	WEIGHT %	OXIDE %
NA	1.10	1.49
MG	4.97	8.23
AL	5.07	9.58
SI	23.23	49.69
K	0.90	1.09
CA	11.47	16.05
TI	1.34	2.23
CR	0.03	0.05
FE	9.01	11.59
O	42.88	
TOTAL	100.00	100.00

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BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
SPECTRUM: 131B

ELEMENT	WEIGHT %	OXIDE %
NA	0.71	0.96
MG	2.86	4.74
AL	3.69	6.98
SI	0.80	1.70
K	0.01	0.01
CA	0.55	0.77
TI	7.45	12.43
CR	1.40	2.05
FE	54.68	70.35
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22-MAR-88 12:23:13

Mariah International, Inc.

INTRODUCTION

MARIAH INTERNATIONAL, INC. is an emerging developer of volcanic precious metal deposits with active prospects in Arizona. As part of its overall business plan, the company is seeking to obtain an appropriate facility to mill and process its ore reserves. Once the processing facility has been obtained, Mariah plans to begin production. It will ship and process its own ore and intends to acquire joint venture contracts to process ore from other mining sources. The company has developed a strong management and technical team to assure effective and efficient results.

OPEN PIT PRECIOUS METALS MINING OPERATIONS

Since the ore exists on the surface and is massive, very little overburden removal will be necessary. In fact, what dirt exists above the ore body is negligible. Mining will be easily accomplished utilizing bulldozers to strip the overburden aside, rip the surface and pile the ore. Front end loaders will then load the ore onto haulage trucks and transport to the flotation mill.

The method of concentration is conventional flotation / gravity milling to concentrate the precious metal values. Laboratory and pilot scale testing indicates a concentration factor of 30 to 1 raw ore to concentrates. After flotation milling, the concentrates are dried and roasted at 1000 degrees F.

The precious metals are extracted from the roasted concentrates utilizing agitated leach tanks. The values from the precious metal-laden solution is then extracted utilizing state-of-the-art high surface, dual compartment electrowinning (electoplating) cells. The polarity in the elctrowinning cells is then reversed and the precious metals are plated onto steel wool. The steel wool is dried and mixed with flux and smelted to a precious metal dore' bar containing chiefly the gold, sliver and platinum group. The resulting dore' bars are then suitable for refining to 9999 fine bullion or for direct sale to buyers or refineries. Further, recent research indicates there is a market for the by-products of the process.

MINING POTENTIAL

The precious metals mining property is situated approximately 30 miles northwest of Flagstaff, Arizona. Access to the property is via a one-half mile dirt road from a county maintained 2-lane paved highway. The extent of the ore body showing is massive with reserves recently assessed as follows by geologic mining consultant Clyde Davis:

Inferred ore reserves 53,000,000 tons
Probable ore reserves 500,000,000 tons

The block of claims includes three (3) 160 acre mining claims. Many assays have been preformed to date on random samples from the property with results falling well within the commercial grade range. As further verification, the company retained Davy McKee Engineering and The Colorado School of Mines to sample and analyze the ore. The results from both sources were favorable, and again well with in commercial grade.

Additional sites are being evaluated at both domestic and international locations.

United States Department of the Interior

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April 1, 1988

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Department of Mines and Mineral Resources
416 W. Congress, Suite 190
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Sincerely,

K. G. Broadhead
Research Supervisor

Enclosure(s)

SAMPLE ANALYSIS REPORT

Samples submitted by BROADHEAD

GZ-131

Date of Request 3/8/88

Date Received by Fire Assay 3/8/88

Month Day Year

Sample#	Au	Ag	Sample#	Au	Ag	Sample#	Au	Ag
GZ-131	—	—						

Remarks:

Reported as: A. g/l element oxide B. mg/ml C. % D. ppm E. oz/ton

unless otherwise noted

Analyst F. Godsey Date Completed 3/22/88

Month Date Year

Au - , less than 0.003 oz/ton

Ag - , less than .05 oz/ton

SAMPLE ANALYSIS REPORT

Samples submitted by: Broadhead Date: 3/8/88

Sample Number	
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	XRF
	semiquantitative estimate of elements Z > 10 calculated as oxides.
	% element
	Mg Al Si K Ca Ti Cr Mn
	4. 11. 23. .8 6. 1. .04 .09
	Fe Zn Sr Zr
	8. .07 .1 .01

Remarks:

X-Ray Emission Qualitative
M-major m-minor t-trace

X-Ray Diffraction Qualitative
S-strong I-intermediate W-weak

Analyst KB Date 3/15/88

Mineralogy Lab Report

Sample No. GZ-131 Date 3/8

Submitted by: Broadhead

Sample consists of shard-like particles of Fe-rich volcanic glass containing phenocrysts mainly of plagioclase feldspar and magnetite-ilmenite. There appears to be a fair amount of compositional variation in the matrix.

Analyst: JJ Date 3/21

10 1510 02 000

20 1510 02 001

30 1510 02 001

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SPECTRUM: 13(C)

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O COMPUTED BY STOICHIOMETRY

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BSAM: RESULT OF ANALYSIS OF BULK SAMPLE
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ELEMENT	WEIGHT %	OXIDE %
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AL	5.87	9.58
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TI	7.45	12.43
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FE	54.68	70.35
O	27.84	
TOTAL	100.00	100.00

O COMPUTED BY STOICHIOMETRY

22-MAR-88 12:23:13

"Western Minerals Activity Report" Jan. 1989

Sheep Hill (F)

Mariah International, Inc.

Post Office Box 22268
Flagstaff, Arizona 86002
(602) 526-6483

January 12, 1989

Dear Shareholder:

1988 was a very exciting and challenging year for Mariah International, Inc. We began the year with the purchase of our Sheep Hill property in Flagstaff, Arizona, consisting of 118 acres. In early February, the Technical Advisory Committee was formed, with Dr. Tom Henrie, noted metallurgist and former chief scientist for the Bureau of Mines, at its head. During the first quarter, a multitude of tests were performed under Dr. Henrie's direction. In a report issued to the Board of Directors, Dr. Henrie confirmed the Company's belief that commercially feasible quantities of precious metals existed in the Sheep Hill ore. Thanks to Dr. Henrie's innovative procedures, the Company was able to document a pioneering approach to the recovery of precious metals in cinder ore.

Having assessed the commercial viability of its process, the Technical Advisory Committee proceeded to design a pilot plant to field test the viability of this new mining operation. A joint venture was formed with Guild Mark Industries, Inc., co-owner of the Sheep Hill property, to mine the ore. An agreement was then made with an Arizona limited partnership to construct the pilot plant on the site of Sheep Hill. A local contractor was then hired to immediately commence construction. The plant was completed in November 1988 and the first run was processed on November 16, 1988. Testing of pregnant solution generated by the process has yielded results comparable to those obtained in prior laboratory tests conducted prior to construction.

In spite of the Company's success, however, it still has met with a lot of skepticism. In an effort to alleviate the skepticism that has been leveled at the Company, Dr. Jan Miller, an outside consultant and noted metallurgist, was retained in December to review the operation of the Company's pilot plant. His review was limited to an opinion on the soundness of the metallurgical process involved and to supervise an independent test of the pregnant leach solution. We enclose herein his report for your review under date of December 28, 1988.

Your Board and Officers are pleased with the progress made during 1988 and are satisfied that with the instrumental help of the Technical Advisory Committee it has demonstrated the existence of precious metal values in Sheep Hill cinder ores.

We are also satisfied that we have learned how to leach those values into solution. As the Board of Directors looks towards 1989, it sees the following challenges ahead:

1) Obtaining a permanent permit from the Arizona Department of Environmental Quality, as our temporary permit expires in early February. The permit process has been commenced and the Company is hopeful that it will be obtained in the near future so that operations may continue unabated.

2) Completing the development of its precious metal operation. Four phases exist in the development of a successful precious metal operation:

a) the discovery of a precious metal property,
b) the leaching process necessary to put that precious metal content into solution,
c) the recovery of mineral values from that pregnant solution, and
d) the refinement and sale of those recovered mineral values.

The Company has successfully completed the first two phases of its operation. Dr. Henrie has expressed satisfaction with the achievement of a new technology capable of extracting the mineral values contained in cinder ore, and the ability to put those values into solution (pregnant solution). The Company is now working on completing the third and fourth phases of its process. The Company has successfully produced, with its electrolytic process utilizing a copper screen, several bars containing up to 20% of gold value. We are working on the completion of the third and fourth phase of the process as a top priority. Our Technical Advisory Committee is confident that with some amount of experimental adjustment in the recovery process, this problem will be laid to rest.

As soon as the Company accumulates a sufficient quantity of bars and is able to reduce the copper content of those bars, which it expects to do in the near future, the Company will be able to take its production to a refinery for processing and sale. The Company will inform you of that event and its results as soon as it takes place.

In order to complete the successful development of its mineral property, Mariah International has entered into an approved private offering of restricted securities. The Company anticipates that this offering, which will raise between $500,000 and $750,000 in equity capital, will be sufficient to carry it through the final phases of its development.

At its January Board meeting, the Company elected a new Board member, Nelson C. Barry. Mr. Barry has been a shareholder in the Company for some time and brings a strong experiential background to the Company. Mr. Barry is a senior partner of

Sheep Hill Pilot Plant

Bishop, Barry, Howe, Haney & Ryder, a highly regarded law firm with offices in San Francisco and Century City. Mr. Barry's background in securities law and environmental law will be very helpful to the Company.

As a final note, shareholders have expressed concern regarding the Nevada Securities Division request for a new audit. This request resulted primarily from the Securities Division review of two transactions reported in the Company's annual audit. The Company has requested a review of these transactions by a Big Eight accounting firm. The accountants preliminarily have indicated that these transactions were properly reported in accordance with generally accepted accounting principles. It is the hope of the Board that once the written report is available and presented to the Nevada Securities Division, it will provide a sufficient response to the concerns of the Nevada Securities Division.

Recently, the Board agreed to effect a change of transfer agents. Stock transfers are now being handled by:

Intercontinental Transfer
2200 East Patrick Lane, Suite 1
Las Vegas, NV 89119
702/798-4740

In conclusion, your Board of Directors and Officers are excited about the prospects in 1989. In the opinion of the Company's Technical Advisory Committee, the major hurdles of extracting precious metal values from cinder ore have been crossed. We look forward to communicating our progress to you throughout the coming year. We wish you and yours a happy 1989.

Yours truly,

Board of Directors

J. D. Miller
1886 Atkin Avenue
Salt Lake City, UT 84106
December 28, 1988

Mr. Floyd Bleak, Vice President
Mariah Guildmark Joint Venture
5650 North Dodge Avenue
Flagstaff, Arizona 86004

Dear Mr. Bleak:

At the request of Mr. Lynn Burr I visited and reviewed the Flagstaff pilot plant operations of Mariah Guildmark on December 20, 1988. During this trip I had opportunity to tour and examine the Sheep Hill mine site, the leaching plant operations and the recovery circuit. The process/analytical development is a courageous effort in view of the many negative reports on the presence of gold in Arizona cinder cones. I was impressed with all phases of the rather large pilot operation and particularly so when it was reported to me that the operation had been assembled in about three months at a total cost of less than one million dollars - clearly excellent value for invested capital. The process is metallurgically sound.

Who supplied the ore & operated the leaching to make the "preg" leach solution?

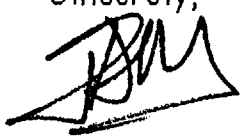
During my tour of plant operations I supervised the sampling of the pregnant leach solution at 10:20 am and then returned to the analytical laboratory to supervise analysis of the sample. The analytical procedure was reviewed and found to be sound. A 150 ml sample of the pregnant leach solution ultimately yielded a 25 mg bead upon cupellation. A blank solution was run simultaneously for control (no bead of any significance was recovered from the control sample). The 25 mg bead recovered from the 150 ml sample of the pregnant leach solution was taken to Salt Lake City where it was analyzed and found to contain at least 20% gold.

5 mg of Au
approx .0002 Oz
equiv to .033 mg/l gold
(pretty weak)

In my opinion this metallurgical pilot plant effort at Sheep Hill under the direction of Dr. T. Henrie has demonstrated what appears to be an important technological breakthrough in the processing of refractory gold ores. Of course process economics must be evaluated and confirmed but at this time I expect the operation to be quite successful.

In conclusion, I should say that the staff cooperated with me fully and answered all questions regarding process details and analytical procedures.

Sincerely,



J. D. Miller
Professor of Metallurgy

c.c. J. L. Burr

BIOGRAPHICAL SKETCH

J. D. Miller received his B.S. degree, graduating with Distinction, from the Pennsylvania State University. His graduate degrees (M.S. and Ph.D.) in Metallurgical Engineering were earned at the Colorado School of Mines. Dr. Miller, who has been a research engineer with the Anaconda Company and at the Lawrence Livermore Laboratories as well as a consultant to industry and government agencies, joined the Metallurgy and Metallurgical Engineering faculty at the University of Utah in 1968 and currently holds the rank of Professor. In addition, he is the Director of the USBM Generic Center on Comminution and is the Associate Director of the Center for Advanced Coal Technology. He has been actively involved in research on the processing of coal and mineral resources. He has received the departmental teaching excellence award on two occasions and is well known for his numerous technical contributions in the areas of coal preparation, mineral processing, and hydrometallurgy. Recently his research activities have been directed toward gold recovery from alkaline cyanide solutions, advanced coal flotation technology, liberation analysis by x-ray computed tomography, and the development of the air-sparged hydrocyclone for fast flotation in a centrifugal field. He serves on the editorial boards of several technical journals, including Coal Preparation, International Journal of Mineral Processing, Hydrometallurgy, and Solvent Extraction and Ion Exchange.

Professor Miller has been presented the Marcus A. Grossman Award by The Metallurgical Society and the American Society for Metals for his significant hydrometallurgy research in the area of cementation reactions and is the eleventh recipient of the Van Diest Gold Medal given periodically by the Colorado School of Mines to alumni who have distinguished themselves in the mineral industry. Tar sand research contributions under his supervision were recognized with the Taggart Award of SME in 1986, and he was selected as an AIME Henry Krumb Lecturer for 1987. Dr. Miller is a member of American Chemical Society, Fine Particle Society, The Metallurgical Society and the Society of Mining Engineers. He has served on the SME Board of Directors and is a Past-Chairman of the Mineral Processing Division of SME. Recognition during the past year includes:

Stefanko Award, Coal Division, Society of Mining Engineers, 1988 - best paper award for research on the selective flotation of fossil resins.

Extractive Metallurgy Technology Award, The Metallurgical Society, 1988 - best paper award for research on the solvation extraction of gold from alkaline cyanide solutions.

SHEEP Hill file

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In order to complete the successful development of its mineral property, Mariah International has entered into an approved private offering of restricted securities. The Company anticipates that this offering, which will raise between $500,000 and $750,000 in equity capital, will be sufficient to carry it through the final phases of its development.

At its January Board meeting, the Company elected a new Board member, Nelson C. Barry. Mr. Barry has been a shareholder in the Company for some time and brings a strong experiential background to the Company. Mr. Barry is a senior partner of

Bishop, Barry, Howe, Haney & Ryder, a highly regarded law firm with offices in San Francisco and Century City. Mr. Barry's background in securities law and environmental law will be very helpful to the Company.

As a final note, shareholders have expressed concern regarding the Nevada Securities Division request for a new audit. This request resulted primarily from the Securities Division review of two transactions reported in the Company's annual audit. The Company has requested a review of these transactions by a Big Eight accounting firm. The accountants preliminarily have indicated that these transactions were properly reported in accordance with generally accepted accounting principles. It is the hope of the Board that once the written report is available and presented to the Nevada Securities Division, it will provide a sufficient response to the concerns of the Nevada Securities Division.

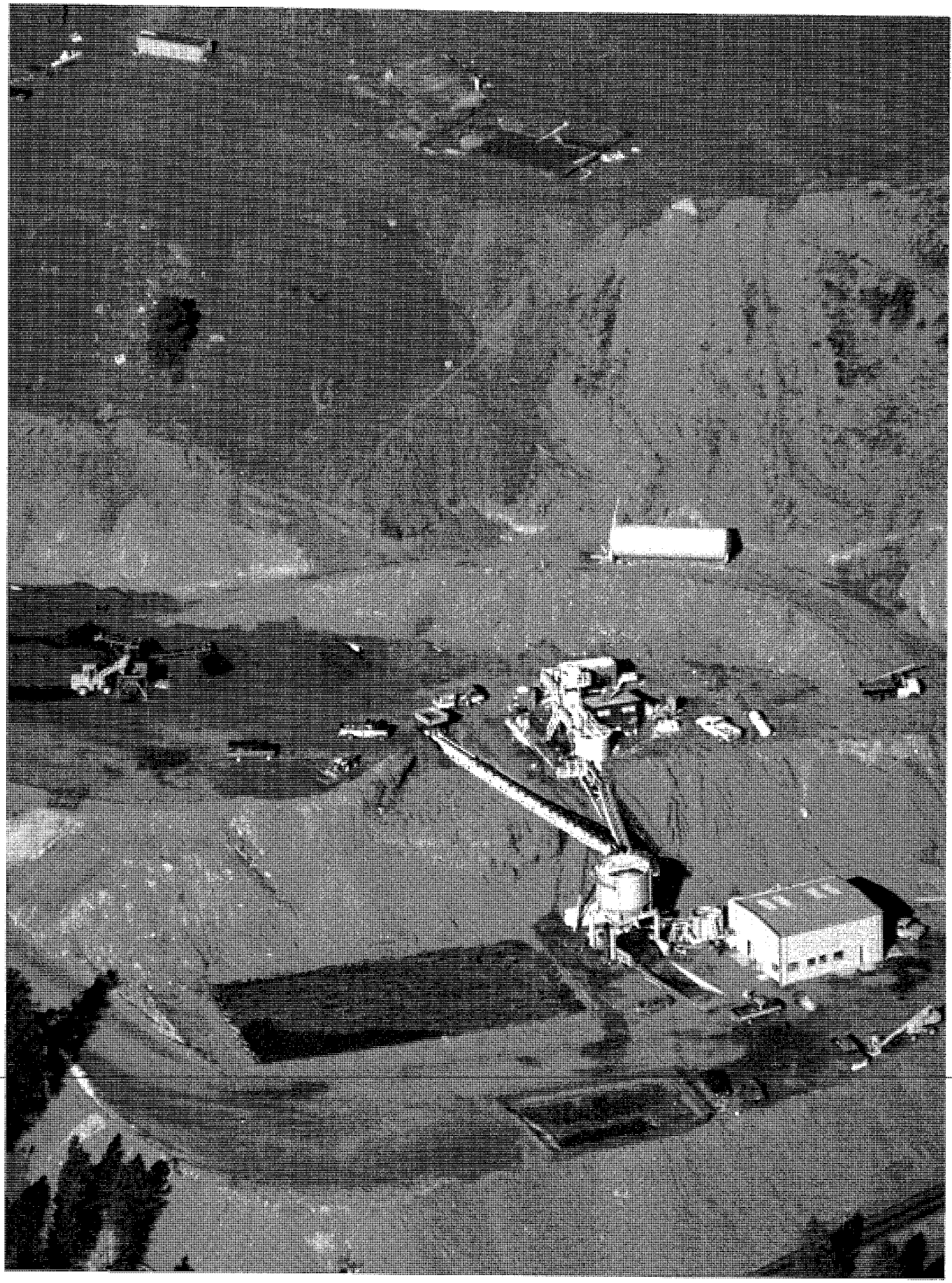
Recently, the Board agreed to effect a change of transfer agents. Stock transfers are now being handled by:

Intercontinental Transfer
2200 East Patrick Lane, Suite 1
Las Vegas, NV 89119
702/798-4740

In conclusion, your Board of Directors and Officers are excited about the prospects in 1989. In the opinion of the Company's Technical Advisory Committee, the major hurdles of extracting precious metal values from cinder ore have been crossed. We look forward to communicating our progress to you throughout the coming year. We wish you and yours a happy 1989.

Yours truly,

Board of Directors



Sheep Hill Pilot Plant

J. D. Miller
1886 Atkin Avenue
Salt Lake City, UT 84106
December 28, 1988

Mr. Floyd Bleak, Vice President
Mariah Guildmark Joint Venture
5650 North Dodge Avenue
Flagstaff, Arizona 86004

Dear Mr. Bleak:

At the request of Mr. Lynn Burr I visited and reviewed the Flagstaff pilot plant operations of Mariah Guildmark on December 20, 1988. During this trip I had opportunity to tour and examine the Sheep Hill mine site, the leaching plant operations and the recovery circuit. The process/analytical development is a courageous effort in view of the many negative reports on the presence of gold in Arizona cinder cones. I was impressed with all phases of the rather large pilot operation and particularly so when it was reported to me that the operation had been assembled in about three months at a total cost of less than one million dollars - clearly excellent value for invested capital. The process is metallurgically sound.

During my tour of plant operations I supervised the sampling of the pregnant leach solution at 10:20 am and then returned to the analytical laboratory to supervise analysis of the sample. The analytical procedure was reviewed and found to be sound. A 150 ml sample of the pregnant leach solution ultimately yielded a 25 mg bead upon cupellation. A blank solution was run simultaneously for control (no bead of any significance was recovered from the control sample). The 25 mg bead recovered from the 150 ml sample of the pregnant leach solution was taken to Salt Lake City where it was analyzed and found to contain at least 20% gold.

BIOGRAPHICAL SKETCH

J. D. Miller received his B.S. degree, graduating with Distinction, from the Pennsylvania State University. His graduate degrees (M.S. and Ph.D.) in Metallurgical Engineering were earned at the Colorado School of Mines. Dr. Miller, who has been a research engineer with the Anaconda Company and at the Lawrence Livermore Laboratories as well as a consultant to industry and government agencies, joined the Metallurgy and Metallurgical Engineering faculty at the University of Utah in 1968 and currently holds the rank of Professor. In addition, he is the Director of the USBM Generic Center on Comminution and is the Associate Director of the Center for Advanced Coal Technology. He has been actively involved in research on the processing of coal and mineral resources. He has received the departmental teaching excellence award on two occasions and is well known for his numerous technical contributions in the areas of coal preparation, mineral processing, and hydrometallurgy. Recently his research activities have been directed toward gold recovery from alkaline cyanide solutions, advanced coal flotation technology, liberation analysis by x-ray computed tomography, and the development of the air-sparged hydrocyclone for fast flotation in a centrifugal field. He serves on the editorial boards of several technical journals, including Coal Preparation, International Journal of Mineral Processing, Hydrometallurgy, and Solvent Extraction and Ion Exchange.

Professor Miller has been presented the Marcus A. Grossman Award by The Metallurgical Society and the American Society for Metals for his significant hydrometallurgy research in the area of cementation reactions and is the eleventh recipient of the Van Diest Gold Medal given periodically by the Colorado School of Mines to alumni who have distinguished themselves in the mineral industry. Tar sand research contributions under his supervision were recognized with the Taggart Award of SME in 1986, and he was selected as an AIME Henry Krumb Lecturer for 1987. Dr. Miller is a member of American Chemical Society, Fine Particle Society, The Metallurgical Society and the Society of Mining Engineers. He has served on the SME Board of Directors and is a Past-Chairman of the Mineral Processing Division of SME. Recognition during the past year includes:

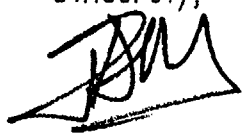
Stefanko Award, Coal Division, Society of Mining Engineers, 1988 - best paper award for research on the selective flotation of fossil resins.

Extractive Metallurgy Technology Award, The Metallurgical Society, 1988 - best paper award for research on the solvation extraction of gold from alkaline cyanide solutions.

In my opinion this metallurgical pilot plant effort at Sheep Hill under the direction of Dr. T. Henrie has demonstrated what appears to be an important technological breakthrough in the processing of refractory gold ores. Of course process economics must be evaluated and confirmed but at this time I expect the operation to be quite successful.

In conclusion, I should say that the staff cooperated with me fully and answered all questions regarding process details and analytical procedures.

Sincerely,



J. D. Miller
Professor of Metallurgy

c.c. J. L. Burr

Sheep Hill Cinder Pit (f)

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

NOTICE OF ISSUANCE OF A TEMPORARY GROUNDWATER QUALITY PROTECTION PERMIT

Pursuant to Arizona Administrative Code, Title 9, Chapter 20, Article 2, the Director of the Arizona Department of Environmental Quality has issued a Temporary Groundwater Quality Protection Permit(s) to the following applicant, valid for a period, not to exceed three (3) months, subject to certain special and general conditions.

Public Notice No. 118-80AZGW — On or about
Sheep Hill Mine Pilot Plant — November 18, 1988
Mariah/Guild Mark Joint Venture
5650 North Dodge Avenue
Flagstaff, Arizona 86002
Temporary Groundwater Quality
Protection Permit No. G-0020-03T

The permittee is authorized to operate a nondischarge hydrometallurgical precious metal recovery pilot plant facility for three (3) months to determine the effectiveness of an experimental noncyanide leaching circuit utilizing an activated rock-salt leach solution in a vat leaching operation. The facility is located at the Sheep Hill Cinder Cone on the east side of Flagstaff, Arizona (T 21 N, R 8 E, Sec. 5, N 1/4, SE 1/4). The Temporary Groundwater Quality Protection Permit shall regulate the containment of the leach solution to be used in the vat leaching circuit and the disposal of the rinsed tailings on an impervious lined spent ore disposal area. The facility shall be constructed and maintained in such a manner as to prevent discharge of any pollutants to the land surface or subsurface which may have an adverse impact on the vadose zone or groundwater.

The permit and supporting documents are available for public review Monday through Friday, 8:00 a.m. to 5:00 p.m. at the Arizona Department of Environmental Quality, Water Permits Unit, 2005 North Central Avenue, Phoenix, Arizona 85004.

Persons may submit comments or request a public hearing on the temporary permit in writing to ADEQ at the above address within thirty (30) days from the date of this notice. Public hearing requests must include the reason for such request.

OFFICE OF THE ATTORNEY GENERAL

MEMORANDUM

TO: LEROY KISSINGER
DIRECTOR, DEPARTMENT OF MINES AND MINERAL RESOURCES

FROM: PATRICIA J. BOLAND
ASSISTANT ATTORNEY GENERAL

RE: PROPOSED LETTER TO MARIAH'S ATTORNEY

DATE: APRIL 27, 1988

Enclosed is a draft of the letter I propose to send to Mariah's attorney. Please contact me after you have had a chance to review it and we can discuss any changes you feel advisable.

PJB:jaf
cc: Ken Phillips
Dick Beard
3121A.5

DRAFT

April 27, 1988

Edmund F. Richardson
ROBBINS & GREEN, P.A.
3300 N. Central, Suite 1800
Phoenix, AZ 85012-0000

RE: March 1, 1988 Claim By Mariah International
Against Department of Mines and Mineral Resources
A. G. File No. CIV88-0410
Risk Management Claim No. 68148

Dear Mr. Richardson:

I am writing this letter on behalf of the Department of Mines and Mineral Resources and its employee Richard Beard in response to your letter of March 1, 1988. The claims of defamation made in that letter are completely unsupportable and there is no basis for a retraction of any statements made.

The objectives and duties of the Department are set forth in A.R.S. § 27-101.01 et seq. The Department is charged with the duty of collecting and disseminating information regarding the mineral resources of the State and the investment of capital in those resources. In discharge of that duty, officials of the Department must respond to inquiries concerning

specific mining activities. Department officials' responses to those inquiries are based on their extensive knowledge and experience in the field and are always accompanied with the disclaimer that the Department can in no way guarantee the presence or absence of any particular mineral.

Mr. Beard responded to any inquiries concerning the various cinder properties in keeping with the policies of the Department. Based upon his knowledge of geology in general and the cinder properties in particular, it is his opinion that the the presence of gold in those properties is unlikely. That opinion is supported by the findings of the Bureau of Mines of the United States Department of the Interior after examining a sample ~~taken by~~ given to by Mr. Bleak Mr. Beard from Mariah's property. The findings are set forth in the April 1, 1988 letter from K. G. Broadhead, a copy of which is enclosed.

Government officials acting within the scope of their duties are immune from suits for defamation if they are of the reasonable belief that their statements are true. Chamberlain v. Mathis, 151 Ariz. 551, 729 P.2d 905 (1986); A.R.S. § 41-621.H. Any statements made by Mr. Beard were completely within the scope of his duties and were made with both the subjective and objective belief in their truth. Parenthetically, Mr. Beard never made the statement that Mariah International, Inc. and Guild Mark Industries, Inc. were being investigated by this

office for fraudulently dealing with the public.

It is the goal of the Department to encourage the development of the mineral resources of this State. The presence of gold in your client's properties would be welcome news to Department officials who have no motive to discourage investment in Arizona's mining industry. Any comments made by Mr. Beard were based on his extensive knowledge and experience and were completely in keeping with the spirit of his duties as a Department official. In light of all the circumstances surrounding those comments, your claim of defamation is completely meritless.

Sincerely,

PATRICIA J. BOLAND
Assistant Attorney General

PJB:jaf
cc: Melinda Garrahan
Leroy Kissinger
John Birkemeier
Jim Murray

3121A.1-3

Sheep 1 2 (F)

File

October 15, 1987

David D. Rabb, P.E.
5213 Oracle
Tucson, AZ 85704

Mr. Peter D. Ehrenhaft
Bryan, Cave, McPheeters & Roberts
1015 15th Street NW
Washington, DC 20005-2689

RE: Mariah Int./Cimmaron

Dear Mr. Ehrenhaft:

Per instructions from Dr. Dick Schaeffer of Phoenix, I am submitting results of a study requested by him and Dr. Spencer Titley on the subject of gold in the Flagstaff cinders. Dr. Titley gave me a copy of a report by Prof. Baki Yarar regarding various analysis of samples from the site.

There has never been in the twenty or so years of my association with the Arizona Bureau of Mines and assaying in this state, an authenticated, proven occurrence of a significant concentration of gold, silver and/or platinum group metals (PGM) in volcanic cinders in the Flagstaff area. Similar to the volcanic tuffs, ash flows and ignimbrites on the Nevada Test Site (NTS), north of Las Vegas, there may be a trace of precious metals in a certain horizon, but, like sea water, the cost of recovery far outweighs any values present. I was associated with mining and metallurgical investigations on the Test Site for many years, and I believe an explanation for some of the results in the report given to me may be as follows.

Instrument analysis methods, either by atomic absorption, neutron activation, plasma analysis or whatever, usually follow a dissolution by aqua regia. This well-known analytical method is employed frequently by industry for process control. However all analysis are routinely checked or verified by comparison with "standard" samples or "blanks". These standards are prepared using the same background solutions as encountered in the process. If one employs, let us say, distilled water in place of a host solution with the same background, then there can be misleading readings.

In any case, the standards should always be checked by several fire assays to prove equal and reproducible results. The U. S. National Bureau of Standards, the U. S. Bureau of Mines, and all major analytical labs routinely check their standards by fire assays.

I suggest, and this has been proven a number of times in the past twenty years by the U. S. Bureau of Mines, the Colorado School of Mines Research Foundation, the Arizona Bureau of Mines, Mountain States Engineering, Skyline Analytical and others, that there may be a misleading interpretation of results of some instrument analysis because:

1. the standard used for calibration was a synthetic standard which did not contain all the many other elements found in the unknown. Therefore, a distorted reading resulted and a misleading interpretation. The interfering elements modify the instrument readings.

2. At NTS, similar volcanic ejecta showed slight traces of gold that were quite homogeneous along certain horizons of the same geologic age. The lack of consistent reproducible assay results from the Flagstaff material may indicate problems in assay techniques and perhaps unreliable analyses.

A conclusion is that the presence of gold is sometimes reported as the result of assays by atomic absorption equipment or a similar apparatus. There are sometimes definite proven interferences that can be mistakenly identified as gold with NO gold in the sample. Perkins-Elmer, in the "Manual of Analytical Methods for Atomic Absorption Spectrophotometry', make this statement: "Interferences have been found even in an acetylene flame on gold and platinum."

To prove the reliability of any assay procedure I suggest the following tests: First, make up three suites of samples. One suite goes to the operator who claims to find gold and/or PGM where standard fire assays cannot find it. The second suite goes to a certified or registered assayer of your choice and the third is held for umpire use later, if desired.

Each suite consists of:

1. Three placebos or blanks made up of chemically pure (C. P.) silica or any absolutely barren material.

2. Three samples of a known proven standard ore. This will be a naturally occuring ore of about the same mineral content as the unknown ore to be tested. The precious

metal content has been checked and verified many times by several assayers.

3. Three samples of a standard synthetic preparation made from barren material; e.g., C.P. silica, plus precisely measured additions of pure gold, silver and/or PGM.

4. Five very carefully prepared, very well pulverized, extremely well mixed and precisely cut samples all from one batch of the unknown sample. In this case, cinders. There will be 15 such samples, five for each suite.

All samples are numbered out of sequence and some may be slightly disguised with some coloring. Of course, records are kept so as to identify each sample after all tests are finished.

In the ten or so times in the past 20 years that this procedure was employed at the Arizona Bureau, not one of the processes or people tested passed even one part of this 4-part test.

Precious metals (PM) were reported in the blanks, PM were not found in the standards and, most important, in the five unknown samples there was a distinct absence of reproducibility. Results varied considerably from one sample to another.

On the other hand, the FA analytical results were consistently on target as they should be. So, you can draw your own conclusions.

Remember, the gold is of no value unless you can extract it safely (EPA approved) and at a profit. Any strong acid, aqua regia-type process would be expensive to build, expensive to maintain and expensive to operate. Plus you may have difficulities

with permitting authorities.

I have never seen nor heard of the successful operation of one of these gold recovery plants which employ strong acids to dissolve the gold. Reason: costs and safety considerations.

Another point is that a chemically sound, proven qualitative test for gold, the Purple of Cassius test, does NOT show appreciable gold in the Flagstaff cinder samples. This Cassius test is recognized as one of the best, sensitive, chemical tests to detect the presence of gold in any material.

Also, careful spectrographic, does not indicate significant gold in any samples, but it is recognized that the limit of detection is very limited.

Remember also that gold in ore is of no value unless it can be extracted, in a salable form, safely and at a profit. I do not understand how any secret extraction process can recover gold from material so low in grade that fire assays do not indicate the metal in the ore.

I recommend that if anyone were to proceed with a study of extraction of PM from cinders that

1. A one-ton, or better still, a ten-ton-per-day pilot plant be designed and operated on a closed-cycle run of at least 30 days.

2. All gold in the heads fed to this test run should be saved and become the property of the party financing the operations.*

*E.G.: 10 tpdy x 0.05 opt x 30 days = 15 ounces of gold to be recovered by operator.

3. A performance bond be set aside as a guarantee of plant and flowsheet performance.

4. A cost-accounting record be kept for the 30-day run covering utilities, reagents, amortized plant costs, labor, taxes, insurance, refining and all related expenses.

I strongly recommend that any prospective investor should approach any such venture very carefully.

Check samples and assays with certified standard fire assays, not instrument assays. Do not use synthetic standards.

Insist on a performance bond, duplicate sampling of a pilot run and require that all metals recovered become property of the investor(s).

I do not understand how these PM can show up in their assays and not in fire assays, and why the standard, historically proven Purple of Cassius tests do not show appreciable values present. Also, standard spectrophotometry tests do not agree with those reported instrument analyses. In addition, I believe the lack of reproducibility is significant indication of unreliability.

In summary, I cannot see any believable basis for the postulation that the Mariah Flagstaff cinders have any significant, economically recoverable precious metal values. Forget it.

If there are questions or if you or any of your people wish to discuss any particulars further, please let me know.

Thank you for your consideration.

Sincerely,

David D. Rabb
Metallurgist

DDR/tmh

cc: Dr. Spencer Titley
Dr. Dick Schaeffer
Dr. Orlo Childs

Sheep Hill (F)

Mariah International, Inc.

1701 W. Charleston, Suite 510 • 1661 E. Camelback Rd., Suite 250
Las Vegas, Nevada 89102 Phoenix, Arizona 85016
(702) 382-8103 (602) 279-2098

APRIL 12, 1988

DEAR SHAREHOLDER:

WE HAVE ENCLOSED THE LATEST REPORT FROM DR. HENRIE, CHAIRMAN OF THE COMPANYS' TECHNICAL ADVISORY BOARD. WE ARE VERY PLEASED WITH THE EXCELLENT RESULTS OF THIS REPORT, WHICH CONTINUES TO CONFIRM AND SUPPORT THE OPINION OF THE BOARD OF DIRECTORS THAT THIS IS THE RICHEST OPEN PIT, PRECIOUS METAL DISCOVERY EVER EXPLORED IN THE UNITED STATES.

MARIAH HAS RECENTLY LEASED AN OFFICE AND LABORATORY FACILITY ADJACENT TO THE SHEEPS HILL PROPERTY LOCATED AT 5650 NORTH DODGE IN FLAGSTAFF, ARIZONA, 86004. THE PHOENIX OFFICE IS IN THE PROCESS OF BEING TRANSFERED TO THIS FACILITY AND THE NEW PHONE NUMBER FOR OUR FLAGSTAFF FACILITY IS (602) 526-6483.

THE COMPANY HAS ENGAGED AN EARTH MOVING CONTRACTOR AND THE PRELIMINARY MILL SITE PREPARATION IS PRESENTLY UNDERWAY AT THE SHEEPS HILL PROPERTY WITH AN EXTENSIVE AMOUNT OF DIRT BEING RELOCATED FOR CONSTRUCTION OF THE ORE PROCESSING MILL AND REFINING FACILITY.

THE COMPANY BOARD OF DIRECTORS HAS CALLED FOR THE MARIAH ANNUAL STOCKHOLDERS MEETING TO BE HELD AT THE LITTLE AMERICAN HOTEL IN FLAGSTAFF, ARIZONA ON MAY 21, 1988 AT 11:00 A.M. WITH A TOUR OF OUR FLAGSTAFF FACILITY AT 9:00 A.M. WE WOULD ENCOURAGE YOU TO MAKE NECESSARY TRAVEL ARRANGEMENTS IF YOU PLAN TO ATTEND. DETAILED INFORMATION AND PROXY STATEMENTS WILL BE FORTHCOMING FOR ALL STOCKHOLDERS OF RECORD AS OF APRIL 30, 1988.

WE ARE MEETING OUR TIMETABLES AND GOALS AND INTEND TO BE INTO PRODUCTION IN THE LAST QUARTER OF 1988. WE THANK YOU FOR YOUR CONTINUING SUPPORT.

BOARD OF DIRECTORS
MARIAH INTERNATIONAL, INC.

ENCL./DR. HENRIES' REPORT
ACB/MC

The HENRIE group

50 South Main, Suite 975 / Salt Lake City, Utah 84144 / (801) 531-6877

March 29, 1988

Board of Directors
Mariah International, Inc.
Valley Bank Plaza, 14th Floor
300 South Fourth Street
Las Vegas, Nevada 89101

Re: Sheep Hill Project

Gentlemen:

This report shall serve as an update of the report given to you on February 2, 1988.

Since that date various additional samples taken from the Sheep Hill mine (which may or may not reflect values on the property as a whole) have been fire assayed. In addition, various leach tests have been conducted on these samples. Both the fire assays and the leach tests have shown consistent levels of at least .75 ounces of recoverable gold per ton.

As a result of the further metallurgical testing that has been conducted, and with the aid of Wrethal Spendlove, I have developed a flow sheet for a mill. Utilizing an innovative, yet sound, metallurgical recovery process, it is my opinion that this mill can produce significant quantities of gold and silver in a cost-effective manner, if the quality of ore in the projected reserves remains consistent with the levels demonstrated in the aforementioned paragraph.

Sincerely,

Thomas A Henrie

Thomas A. Henrie, PhD
Project Consultant

TAH/mb

United States Department of the Interior

BUREAU OF MINES
729 ARAPEEN DRIVE
SALT LAKE CITY, UTAH 84108
Salt Lake City Research Center

SHEEP HILL CINDER QUARRY (FILE) COCONINO
MARIAH Co (FILE)

March 7, 1988

Richard R. Beard, Mining Engineer
Department of Mines and Mineral Resources
Mineral Building, State Fairgrounds
Phoenix, AZ 85007

Dear Mr. Beard:

I respond to your inquiry of February 24, 1988, regarding Mariah International and Dr. Thomas Henrie, as follows:

1. We--Salt Lake City Research Center, U. S. Bureau of Mines--are not "working on a project" to develop a fire assay method specific to the cinder cone materials from Mariah's claims. Our involvement to date has been to run a few fire assays and SEM examinations for Dr. Henrie. This is no more than we do occasionally for others who come to us for assistance in matters pertaining to the precious metals.

2. We did not develop, nor do we plan to develop or publish a fire assay method.

Dr. Henrie has visited the Center several times for assistance. We have provided accurate weights and SEM examinations of several dore' beads that have ostensibly come from the Mariah property. His beads have ranged from 50:50 to 75:25 Au:Ag, and have weighed from 2 to 5 mg. He has stated that if the cinder material is fire assayed using a regular procedure, i.e. at standard temperature and time conditions, the assays are low compared to those obtained when using his special conditions. In his special method, the initial fusion temperature is lower, and is held lower until the sample quits frothing. (Frothing is considerable in both methods.) Then the temperature is increased and the assay is completed normally. We have conducted assays to compare the regular and the special method.

On one sample, an assay of approximately 2 O/T combined AuAg was obtained from a half-assay-ton sample when the regular assay was used. When the special assay was conducted on a one-assay-ton sample, the assay was about 6 O/T.

Neither fusion was inquarted. On another occasion, three new samples plus the original sample were assayed. This time, half-assay-ton samples were inquarted with about 3 mg of silver, and were assayed using the special conditions. Something went wrong with these assays. The inquarts were not recovered. Dore' weights were on the order of 0.4 mg.

The last time Dr. Henrie was here, he had a gold bead that weighed 240 mg. He described it as the result of combining the dore's from 82 one-assay-ton assays, parting out the silver, and remelting. He wanted an SEM determination of purity. The SEM showed the bead to be about 95 pct gold and 5 pct silver; there was no Pt. The gold level averages out to about 3 oz/T.

Since receiving your letter, we have performed some qualitative testing in our mineralogy lab. Three of the four samples discussed above were panned several times and the concentrates were mounted and examined by SEM. All contained fine gold. Particle sizes ranged from 0.2 to 2 microns. The sample that had produced the 6-mg dore' had enough gold that the mineralogist described it as a very rich ore relative to today's common ores. One other sample was almost as rich. The third sample appeared at first to be barren, but with diligent searching of the mounted specimen, two or three particles were found. All three samples contained native silver in significant amounts.

Because of the conflicting nature of our data, and because we have no verified histories or any control of any sample prior to the time it was brought to our lab, we offer no conclusion as to the presence or absence of precious metals on Mariah's claims.

I am sure that I have not answered all your concerns in this matter, but I do hope I have clarified our position. If I can be of further assistance, please feel free to write or call. If you wish to discuss the assay work in more detail, I suggest that you call Al Whitehead, who heads up our analytical labs. My number is (801) 524-5350, and Mr. Whitehead's is (801) 524-6110.

Sincerely,

Stephen D. Hill

Stephen D. Hill
Research Director

Arizona Department of Mines and Mineral Resources

VERBAL INFORMATION SUMMARY

May be Reproduced

1. Information from: Floyd Bleak & Donna Porter of Mariah International, Inc.
   Address: 1661 E. Camelback Rd., Suite 250, Phoenix, AZ 85016
2. Mine: Sheep Hill Cinder Quarry 3. ADMMR Mine File
4. County: Coconino 5. District Flagstaff
6. Township 21N Range 8E Sec(s) 5
7. Location: Flagstaff, AZ MILS - 136*
8. No. of Claims - Patented Unpatented
9. Owner (if different from above)
10. Address:
11. Operating Company:
12. Pertinent People and/or Firm:
13. Commodities: Cinders (gold, silver PGM)
14. Operational Status: Pilot plant & lab to be brought from Las Vegas
15. Summary of information received, comments, etc.:

Ms. Porter provided me with a report "Analysis of Cinder Cone Materials" by Dr. Baki Yarar of the Colorado School of Mines and a report on Mariah's work on the same subject.

Mr. Bleak said that they had recently acquired the property out of bankruptcy court and that Dr. Thomas Henrie had recovered from 0.25 to 0.75 oz/ton gold at their pilot plant in Las Vegas, NV using a chlorine leach after making a table concentrate. He also said that this "ore" will not assay by standard procedures but that the Bureau of Mines Salt Lake City Research Center is going to publish an assaying procedure for it based on Dr. Henrie's work.

Geo-Earth Resources is an Arizona company wholly owned by Mariah International Inc. of Utah and Nevada. Cimerron Corporation was a shell taken over by Mariah. Guild-Mark Industries, Inc. is a Delaware Corp. 44% owned by Mariah. The Sheep Hill Project is a joint venture by Mariah and Guild-Mark.

Date: 2/19/88 (Signature) Richard R. Beard ADMMR

Mariah International, Inc.

1701 W. Charleston, Suite 510 • 1661 E. Camelback Rd., Suite 250
Las Vegas, Nevada 89102 Phoenix, Arizona 85016
(702) 382-8103 (602) 279-2098

FEBRUARY 15, 1988

SHEEP HILL PROJECT

A JOINT VENTURE OF
MARIAH INTERNATIONAL, INC., & GUILD MARK INDUSTRIES, INC.

MARIAH INTERNATIONAL, INC., AND ITS SISTER COMPANY, GUILD MARK INDUSTRIES, INC. (JOINT VENTURE PARTNERS) HAVE CONDUCTED INTENSIVE GEOLOGICAL EVALUATIONS OF VOLCANIC FORMATIONS IN THE FLAGSTAFF AREA, AND HAVE CONCLUDED THAT THE RECENTLY ACQUIRED SHEEP HILL VOLCANIC DEPOSIT DESERVES MAJOR EXPLORATION AND DEVELOPMENT.

ASSAYS AND METALLURGICAL TESTING CONDUCTED TO DATE ON THE SHEEP HILL PROJECT ORES INDICATE RECOVERABLE VALUES RANGING BETWEEN .25 TO .75 OUNCES OF GOLD PER TON.

THE PREVIOUS OWNERS OF THE SHEEP HILL PROPERTY WERE IN THE QUARRY BUSINESS AND AS OF A RESULT THEY LEFT IN PLACE OVER ONE MILLION TONS OF 1/8 MINUS SCREENED ORE. THIS ORE REQUIRES MINIMAL, IF ANY, CRUSHING CAPABILITIES AND WILL SUBSTANTIALLY REDUCE THE COMPANY'S TIME TABLES AND COSTS TO PROCESS THIS ORE.

RESERVE REPORTS ON THE SHEEP HILL PROPERTY REFLECTS OVER THIRTY MILLION TONS OF PROBABLE IN-PLACE ORE RESERVES.

Mariah International, Inc.

1701 W. Charleston, Suite 510 • 1661 E. Camelback Rd., Suite 250
Las Vegas, Nevada 89102 Phoenix, Arizona 85016
(702) 382-8103 (602) 279-2098

FEBRUARY 5, 1988

MARIAH INTERNATIONAL IS PLEASED TO ANNOUNCE THAT ON JANUARY 29, 1988, IT ENTERED INTO AN AGREEMENT TO PURCHASE AN UNDIVIDED ONE HALF INTEREST IN A PRIVATE PATENTED CINDER MINE LOCATED IN FLAGSTAFF, AZ, COMMONLY KNOWN AS SHEEP HILL. THE OTHER ONE HALF OF THE PROPERTY WAS PURCHASED BY GUILD-MARK INDUSTRIES, INC. (A SISTER COMPANY). THE PROPERTY CONSISTS OF APPROXIMATELY ONE HUNDRED SEVENTEEN ACRES AND IS LOCATED AT TRAIL'S END-ROAD AND DODGE AVENUE, FLAGSTAFF, AZ.

BASED ON A RECENT REPORT PREPARED BY SELL, HUISH & ASSO., INC. OF TEMPE AZ., THE PROPERTY CONTAINS OVER FIFTEEN MILLION CUBIC YARDS OF CINDERS AND APPROXIMATELY FIFTEEN MILLION CUBIC YARDS OF CINDER SAND. THE PROPERTY HAS BEEN OPERATED AS A CINDER MINE FOR SEVERAL YEARS. A MAJORITY OF THE PROPERTY IS LOCATED IN FLAGSTAFF CITY LIMITS AND IS ZONED FOR HEAVY INDUSTRIAL USE (I-3) WHICH PERMITS CINDER MINING AND EXTRACTION.

THE PURCHASE PRICE OF MARIAHS ONE HALF (½) INTEREST IN SAID PROPERTY IS AS FOLLOWS:

DOWN PAYMENT	$	-0-
SECURED NOTES PAYABLE		470,000
ISSUANCE OF MARIAH COMMON STOCK		280,000
TOTAL PURCHASE PRICE	$	750,000

SELLERS RETAIN A TWO PERCENT (2%) GROSS ROYALTY ON MINERAL RIGHTS.

BEFORE FINALIZING THIS PURCHASE, OUR LAB CONDUCTED SEVERAL TESTS ON THE PROPERTY AND FOUND SUBSTANTIAL QUANITITIES OF GOLD AND OTHER PRECIOUS METALS. FIRE ASSAYS AS WELL AS MODIFIED LEACH TESTS WERE CONDUCTED. DR. TOM HENRIE AND WRETHAL SPENDLOVE OF THE TECHNICAL BOARD ARE COMPILING A MORE DETAILED REPORT WHICH WILL BE AVAILABLE AT THE END OF FEBRUARY.

THE BOARD OF DIRECTORS ARE VERY EXCITED ABOUT THE PURCHASE FOR SEVERAL REASONS:

1. THIS PROPERTY IS PRIVATE AND THE CORPORATION WILL HAVE A FEE SIMPLE INTEREST IN IT.

2. THE TERMS OF PURCHASE ALLOW FOR A VERY LOW CASH OUTLAY UNTIL MARCH, 1989, THUS PROVIDING THE TIME NECESSARY TO GET INTO PRODUCTION.

3. MARIAH IS POOLING RESOURCES WITH GUILD-MARK INDUSTRIES, INC, AND HAS FORMED A JOINT VENTURE WITH THAT CORPORATION TO ASSURE PROMPT PRODUCTION CAPABILITY.

4. THE PROPERTY HAS ALREADY BEEN ZONED AND APPROVED FOR MINING THUS BYPASSING SEVERAL TIME CONSUMING REGULATORY STEPS. ALL NECESSARY UTILITIES ARE READILY AVAILABLE ON SITE.

5. THE METALLURGICAL TESTS CONDUCTED BY THE COMPANYS' TECHNICAL BOARD ON SAID PROPERTIES HAS PROVEN TO HAVE THE HIGHEST PRECIOUS METAL CONTENTS OF ALL THE OTHER PROPERTIES TESTED IN THE SURROUNDING AREA.

2/3/1 Compendex Plus.
02324712 Monthly No: E 7710103094
BULK AND SURFACE CHARACTERIZATION OF LATERITE BY VARIOUS PHYSICO-CHEMICAL METHODS.
Sen, Ranen; Takahashi, Katsuyuki; Fortin, Randy; Spottiswood, David J.; Yarar, Baki
Colorado Sch of Mines, Golden, CO, USA
Source: International Journal of Mineral Processing v 19 n 1-4 May 1987, Proc of the Int Symp on Laterite, Tokyo, Jpn, Oct 14-17 1985 p 43-67
CODEN: IJMPBL ISSN: 0301-7516

2/3/2
02311842 Monthly No: EI8709087802
SURFACE CHARACTERIZATION OF RED MUD.
Takahashi, Katsuyuki; Yarar, Baki; Spottiswood, David J.; Sen, Renen
Colorado Sch of Mines, CO, USA
Source: Nippon Kogyo Kaishi/Journal of the Mining and Metallurgical Institute of Japan v 103 n 1189 Mar 1987 p 183-188
CODEN: NIKKA9 ISSN: 0369-4194

2/3/3
02188699 Monthly No: EI8704041514
VAPOR SPECIES OVER TE PRECIOUS METAL MINERALS.
Helle, Sonia; Wildeman, Thomas; Yarar, Baki
Source: Journal of Metals v 39 n 1 Jan 1987 p 14-17
CODEN: JOMTAA ISSN: 0022-2674

2/3/4
00835716 Monthly No: EI7907049524 E.I. Yearly No: EI79009909
Upgrading of Boron Ores and Colemanite Flotation.
WZBOGACANIE RUD BORU I PROCES FLOTACJI KOLEMANITU.
Yarar, Baki; Mager, Jerzy
Wydzial Chem Uniw Tech, Ankarze, Pol
Source: Przemysl Chemiczny v 58 n 2 Feb 1979 p 98-101
CODEN: PRCHAB ISSN: 0033-2496

2/3/5
00597982 Monthly No: EI7701005945 E.I. Yearly No: EI77078087
SEPARATION OF SILICA AND MAGNESITE BY SELECTIVE COAGULATION AND FLOCCULATION.
Yarar, Baki; Ozgur, Tulay
Middle East Tech Univ, Ankara, Turk
Source: Filtration and Separation v 13 n 5 Sept-Oct 1976 p 443-444, 446
CODEN: FSEPAA ISSN: 0015-1882
?se4

S3 1 AU="YARAR, BAKI (ED.)"
? type 3/3/1

3/3/1
01448429 Monthly No: EIM8310-072741
INTERFACIAL PHENOMENA IN MINERAL PROCESSING: PROCEEDINGS OF THE ENGINEERING FOUNDATION CONFERENCE.
Yarar, Baki (Ed.); Spottiswood, David J. (Ed.)

39204-17-7