CONTACT INFORMATION
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Arizona Geological Survey
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Tucson, Arizona 85701
520-770-3500
http://www.azgs.az.gov
inquiries@azgs.az.gov

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Richard Mieritz Mining Collection

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HEAD & TOCI, P. C.
ATTORNEYS AT LAW
117 EAST GURLEY STREET
PRESCOTT, ARIZONA 86301

SAM J. HEAD (1907-1968)
DONALD R. HEAD
PHILIP E. TOCI
JAMES B. MUSGROVE
MICHAEL R. MURPHY

MAILING ADDRESS
POST OFFICE BOX 591
TELEPHONE [602] 445-6860

April 2, 1974

Mr. Richard E. Mieritz
Mining Consultant
1634 W. Hazelwood Street
Phoenix, Arizona 85015

Re: Matador Exploration Ltd.

Dear Dick:

Enclosed please find the final statement from Boyles Bros. which I would ask that you review, sign and approve, if it is in order, and return it to us in the enclosed, self-addressed envelope.

Sincerely yours,

HEAD & TOCI, p.c.

By Donald R. Head

DRH:jmw
Encl: 1

approved and sent 4-5-74

April 5,1974

Matador Exploration
Att: Donald Head
P. O. Box 591
Prescott, Arizona, 86301

Dear Don:

Received your check for the invoice covering the Copper Cloud work. Thanks.

Enclosed please find the approved final invoice of Boyles Bros. Drilling Co. for the Hortensia Drilling.

I orginally received this invoice - original and copy - from Boyles Bros. on March 14th, signed it and approved the invoice and forwarded to your office on the same day, which should have been received by your office on the 15th.

None-the-less, I have approved the enclosed zerox copy of the invoice for payment.

Sincerely,

R. E. Mieritz
Mining Consultant.

May 1, 1970

cc: Client (2)
Bookkeeping
File

Mr. Sherwood B. Owens
Post Office Box 769
Tucson, Arizona 85702

Dear Mr. Owens:

We wish to confirm that we will supply consultant services, geophysical interpretation, reporting, equipment, field technicians and supplies to carry out the induced polarization survey as outlined below. It is in the Superior, Arizona area at a date to be arranged and estimated to be the first ten days of May, 1970. The expected duration of the survey is four days.

Interpretation and Reporting:

Recommendations regarding additional geophysical or geological investigations and exploratory drilling will be made as indicated by our interpretation of survey results. This presentation will be made in quadruplicate and will include maps and drawings showing the geophysical measurements, the location of anomalous zones and any surface features recorded by our field staff.

Conditions:

At the request of Mr. Owens, McPhar has agreed to I. P. survey four lines, each of which is 3,000 feet long. It is agreed that 500-foot dipole-dipole separations will be used, reading continuously from N^1 to N^5. Either of the following combinations of frequencies will be used: 0.3 and 2-1/2 Hz. or 0.125 and 1.25 Hz. The magnetometer survey will be done along the same lines at 100-foot intervals. The magnetic data will be shown in profile form only.

Field Crew:

McPhar will supply two geophysical technicians trained in the operation of the I. P. apparatus. McPhar will also supply one geophysical technician trained in the operation of the flux gate magnetometer.

Field Help:

Two additional helpers will be required to carry out the field operations. These men are hired by McPhar and charged for at salary cost plus 25% to cover such items as workmen's compensation, unemployment benefits, vacation pay, pension plans and handling expenses.

Equipment:

McPhar will supply one induced polarization unit of latest design.

Supplies:

McPhar will supply batteries, field wire and drafting supplies.

Materials for electrode preparation and gasoline for the motor-generator will be invoiced at cost.

Grid Control:

The preparation of control lines for the survey is the responsibility of the client. The lines should be prepared and marked in such a way as to allow easy location and access by the I. P. crew. Delays caused by unsuitable lines or by unfinished lines will be charged at the standby rate. Improperly cut or marked lines will impede the progress of the survey.

Charges:

The standard fee charged for the Induced Polarization survey is as follows:

Operating day - 1st 20 operating days - $265.00/day plus expenses
2nd 20 operating days - $255.00/day plus expenses

$255.00 per operating day rate or lowest prevailing rate will be charged for subsequent work done for the client during the following 6-month period.

The standard fee charged for the magnetometer survey is $125.00 per day for one man, plus expenses.

Travel, standby and bad weather days - $100.00/day plus expenses.

There will be no charge for time off or breakdown time.

The above rates include field work, drafting, maps, interpretation of results and reporting.

In the event that the survey involves less than 10 operating days, there will be an additional charge of $200.00.

Transportation:

Transportation expenses from Tucson, Arizona, to the field area and return plus travel expenses incurred while working in the field will be invoiced at cost plus 10%. Where applicable, the cost of transportation will be prorated with other clients in the area.

Local Transportation:

If local transportation is not provided by the client, McPhar will arrange for rental vehicles. It is understood that all time and expenses pertaining to renting, operating and maintaining these vehicles will be invoiced at cost plus 10%.

Expenses:

Living expenses incurred while traveling and in the field and other expenses such as telephone and telegraph, etc., will be invoiced at cost plus 10%.

Field Consultant Services:

Field consulting by senior professional personnel will be supplied at your request at the rate of $125.00 per day, plus expenses.

Insurance:

McPhar will maintain in force at their expense all insurance as specified below. McPhar authorizes Mr. Sherwood B. Owens to check directly with the companies or agencies specified below for proof of insurance.

a) Statutory Workmen's Compensation covering accidental injury or occupational disease (including death) sustained by employees during employment. McPhar employees are automatically covered by Kuhn Insurance Company, Tucson, Arizona, P.W.C. 9597498 and Nevada Industrial Commission No. 46094.

b) Comprehensive non-owned Automobile Liability Insurance with a limit of $1,000,000.00 by the Continental Insurance Company, Policy #XPCC 3-148279.

c) Comprehensive General Liability Insurance and Property Damage with a limit of $1,000,000.00 by the Continental Insurance Company, Policy #XPCC 3-148279.

Terms:

All charges are stated in U.S.A. funds, payable in Tucson.

Payment is requested according to the following schedules:

$1000.00 on signing the contract.

$1000.00 on commencement of the survey.

The remainder is due on delivery of the report or if a report is not required, on completion of field work.

McPhar reserves the right to discontinue the survey if payments are not received according to the above schedule.

Overdue accounts will bear interest at the rate of 1% per month.

If the foregoing meets with your approval, please signify by signing and returning the enclosed copy.

Yours very truly,

McPHAR GEOPHYSICS, INC.

Emil L. Winniski
Manager of Operations

ELW:vw

SIGNED:_____

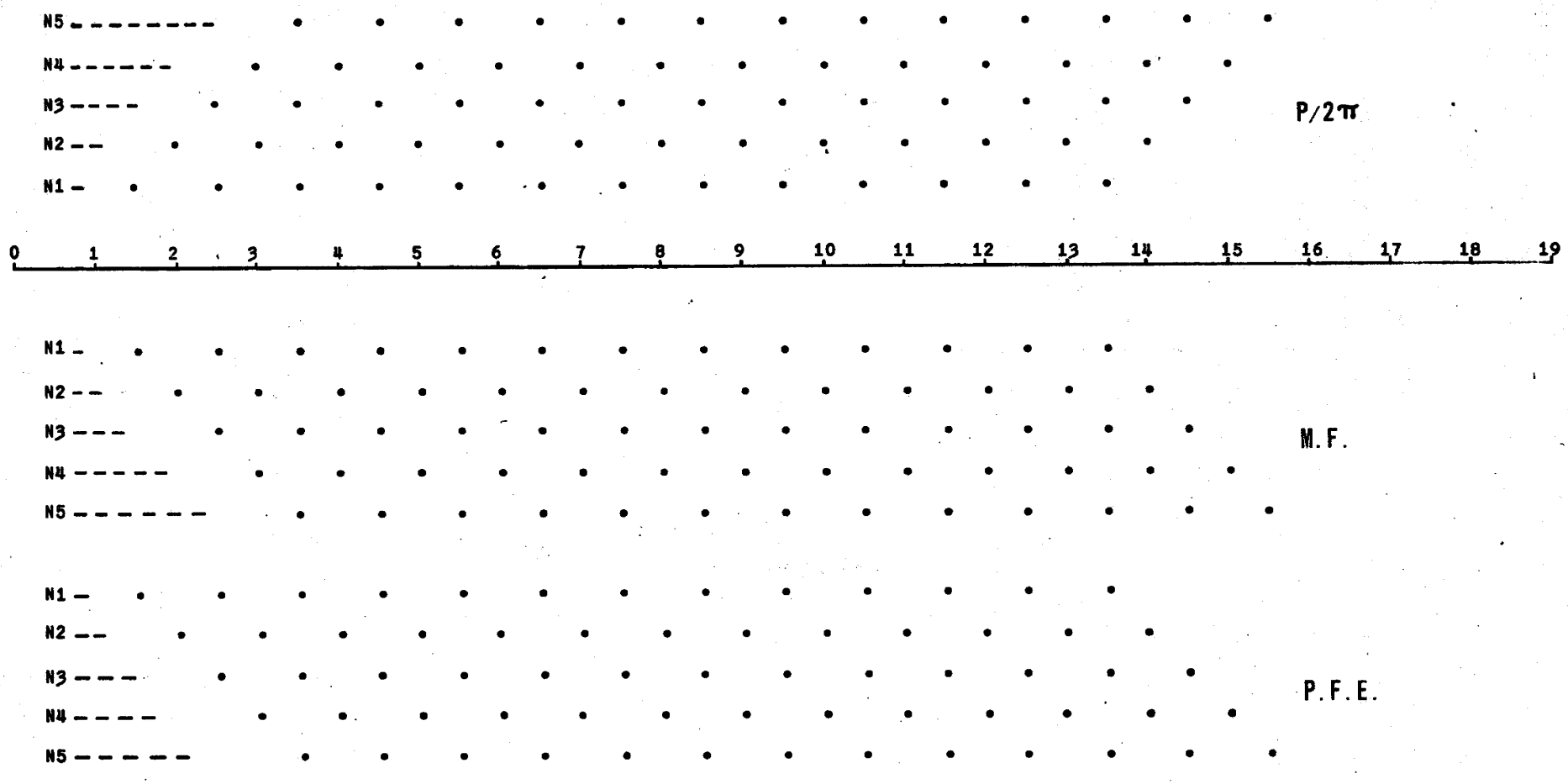
DATED:_____

PROJECT NO.: #I. P. 112

FIG. 1a

ESTIMATED MAXIMUM COVERAGE USING 1000' SPREADS

DIPOLE-DIPOLE ARRAY



TOTAL COVERAGE 19000'

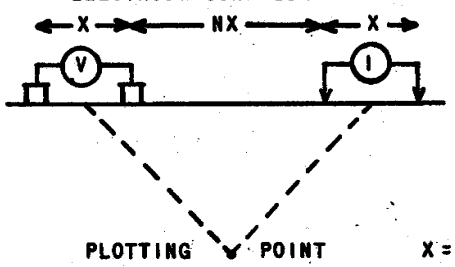
EFFECTIVE COVERAGE 13000'

P/2π APPARENT RESISTIVITY

M.F. METAL FACTOR

P.F.E. PERCENT FREQUENCY EFFECT

ELECTRODE CONFIGURATION

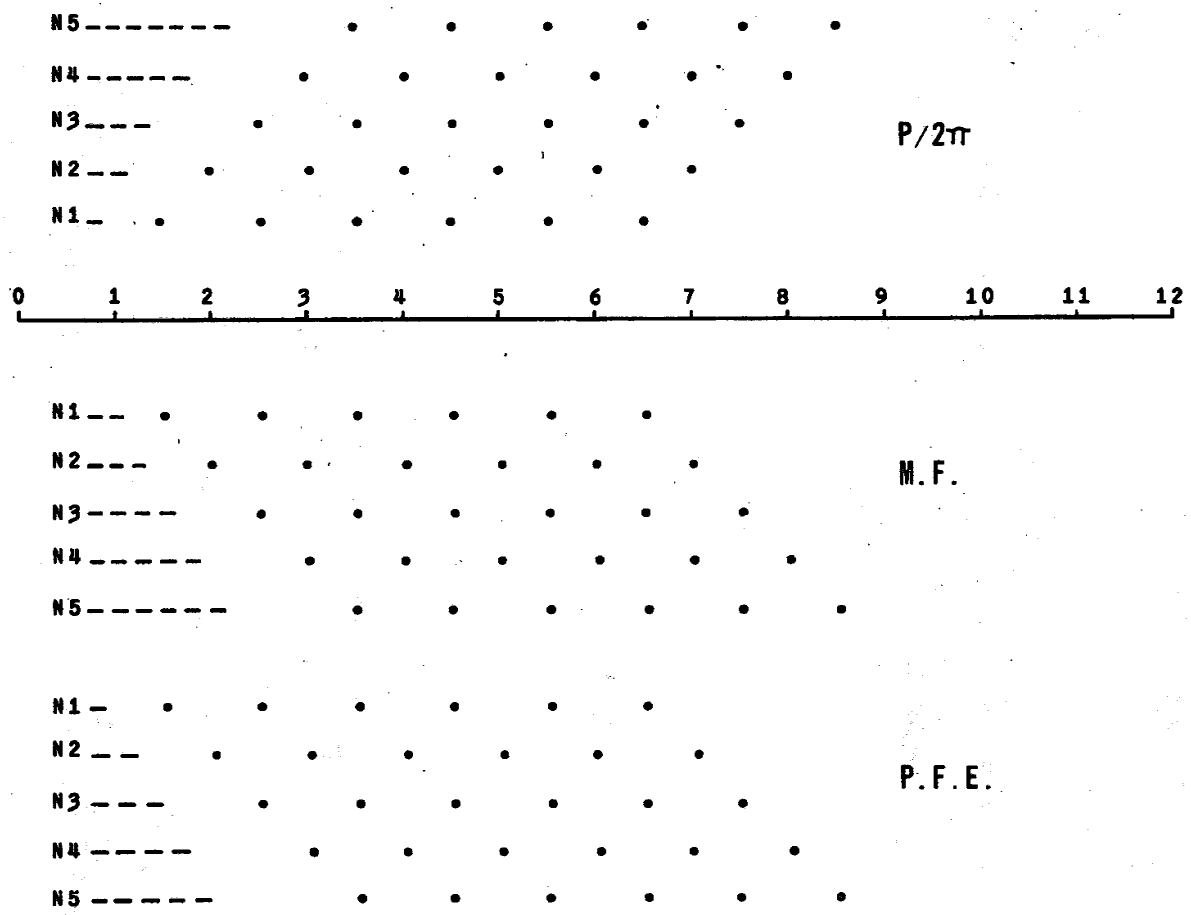


X = 1000'

FIG. 1b

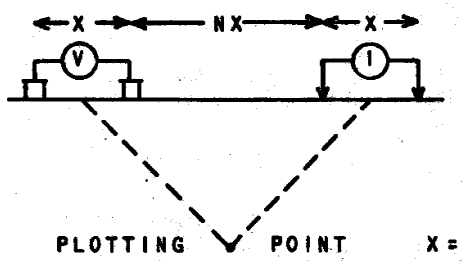
ESTIMATED MINIMUM COVERAGE USING 1000' SPREADS

DIPOLE-DIPOLE ARRAY



TOTAL COVERAGE 12000'
EFFECTIVE COVERAGE 6000'
P/2π APPARENT RESISTIVITY
M.F. METAL FACTOR
P.F.E. PERCENT FREQUENCY EFFECT

ELECTRODE CONFIGURATION

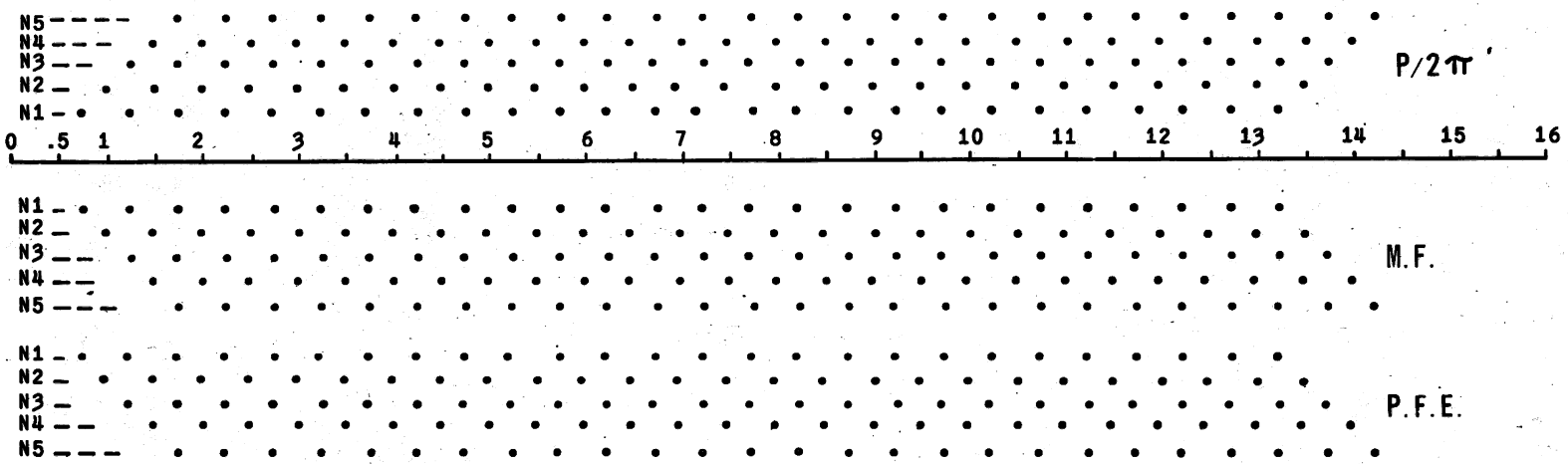


X = 1000'

FIG. 2a

ESTIMATED MAXIMUM COVERAGE USING 500' SPREADS

DIPOLE-DIPOLE ARRAY



TOTAL COVERAGE 16000'

EFFECTIVE COVERAGE 13000'

P/2π APPARENT RESISTIVITY

M.F. METAL FACTOR

P.F.E. PERCENT FREQUENCY EFFECT

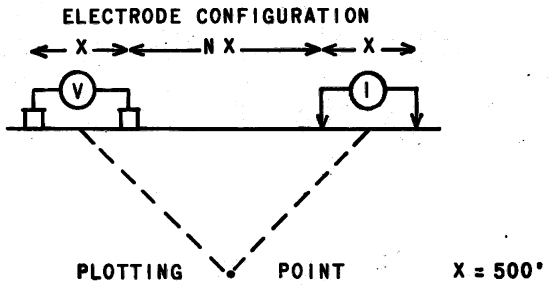
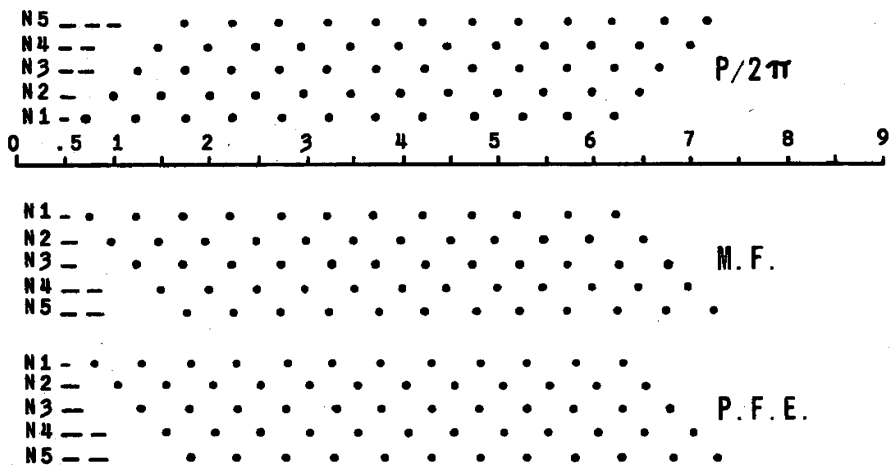


FIG. 2b

ESTIMATED MINIMUM COVERAGE USING 500' SPREADS

DIPOLE-DIPOLE ARRAY



TOTAL COVERAGE 9000'

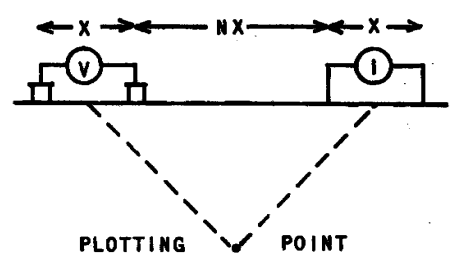
EFFECTIVE COVERAGE 6000'

P/2π APPARENT RESISTIVITY

M.F. METAL FACTOR

P.F.E. PERCENT FREQUENCY EFFECT

ELECTRODE CONFIGURATION



X = 500'

AN I. P. SURVEY COST BREAKDOWN

Based on the previous 2 years work done in the southwestern U. S., the cost per survey day would be between $400.00 to $425.00 per day and $260.00 to $280.00 per day for standby, travel or bad weather days.

This price includes:

1. A 4-man, fully trained I. P. crew.
2. One 4-wheel drive vehicle.
3. Four bound reports.

The daily price breakdown is as follows:

$265.00/day - for two fully trained geophysical technicians. or

$100.00/day - for all travel, standby and bad weather days.

$ 60.00/day - for two fully trained helpers.

$ 70.00/day - for 4 men - motel and living expenses.

$ 25.00/day - for one 4-wheel drive vehicle.

$ 5.00/day - for supplies, salt, foil, etc.

$425.00/day - TOTAL

Using Dipole-dipole spreads and reading continuously from N1 to N5 using frequencies 0.125 and 1.25 cycles per second. The effective line mile coverage varies with the spread used and the ruggedness of the area to be surveyed. This is the coverage we can expect:

A. Spreads from 500 to 1000 feet.

   1. Rugged terrain - inaccessible to 4-wheel drive 5 to 6 thousand feet.
   2. Rugged terrain - but 50% accessible to 4-wheel drive vehicle - 6 to 9 thousand feet.
   3. Over 80% accessible to 4-wheel drive vehicle 9 to 13 thousand feet.

B. Spreads from 300 to 400 feet.

   1. Rugged terrain - inaccessible to 4-wheel drive vehicle - 3.0 to 4.5 thousand feet.
   2. Rugged terrain - but 50% accessible to 4-wheel drive vehicle - 4.5 to 5.5 thousand feet.
   3. Over 80% accessible to 4-wheel vehicle 5.5 to 6.6 thousand feet.

C. Spreads from 100 to 200 feet.

1. Rugged terrain - inaccessible to 4-wheel drive vehicle - 1.2 to 2.4 thousand feet.

2. Rugged terrain - but 50% accessible to 4-wheel drive vehicle - 1.5 to 4.0 thousand feet.

3. Over 80% accessible to 4-wheel drive vehicle 1.5 to 5.0 thousand feet.

There are two factors that will increase or decrease your overall I.P. mile cost. (1) The number of line miles to be surveyed: - i.e., if the project is one of 20 line miles, overall line mile cost will decrease: if less than 10 line miles, overall cost will increase. (2) If the job is scheduled long enough in advance, mobilization is often prorated to one or more clients in a particular area.

Although 90% of our clients prefer the daily rates, McPhar is quite flexible in the variety of bids we will submit: - i.e., after a visual walking traverse over your property, I would bid on a line mile basis, or a package bid, stipulating "X" number of line miles to be surveyed.

DEFINITION OF EFFECTIVE COVERAGE

For any given dipole - dipole survey, say 500 foot spacing and reading out to 5N, the effective coverage is 500 feet, not the total receiver and transmitter coverage of 3500 feet.

McPHAR GEOPHYSICS INCORPORATED

ROBERT E. HOLT
PRESIDENT

818 WEST MIRACLE MILE • TUCSON, ARIZONA 85705
TELEPHONE (602) 624-2588

CANADIAN OFFICE
139 BOND AVENUE
DON MILLS, ONTARIO

June 22, 1970

Mr. Richard E. Mieritz
Mining Consultant
5822 North 22nd Place
Phoenix, Arizona 85016

Dear Mr. Mieritz:

Enclosed please find one copy of the final report on the induced polarization and resistivity survey on the Hortensia Claims, Superior Mining District, Pinal County, Arizona, for Mr. Sherwood B. Owens.

Sincerely,

McPHAR GEOPHYSICS, INC.

Anthony M. Hauck III

Anthony M. Hauck III
Chief Geophysicist

AMH:v

encls.

May 1, 1970

Mr. Sherwood B. Owens
Post Office Box 769
Tucson, Arizona 85702

Dear Mr. Owens:

Further to our telephone conversation of yesterday, McPhar can supply you with an induced polarization survey crew any time the first week of May, 1970.

I estimate that the four lines you discussed with Mr. Anthony M. Hauck III will take a maximum of four days to I. P. survey and two days to run our magnetometer survey. It will require one day to mobilize to the project and one day to return. The minimum cost of the survey, including reports, will be approximately $2,150. The maximum cost will be $2,500.

Enclosed is an I. P. cost and production estimate plus a contract to cover the proposed I. P. and magnetic survey. If you decide to do the survey, we will assume that this contract is binding. If you decide not to proceed, we will just scrap it.

Sincerely,

McPHAR GEOPHYSICS, INC.

Emil L. Winniski
Manager of Operations

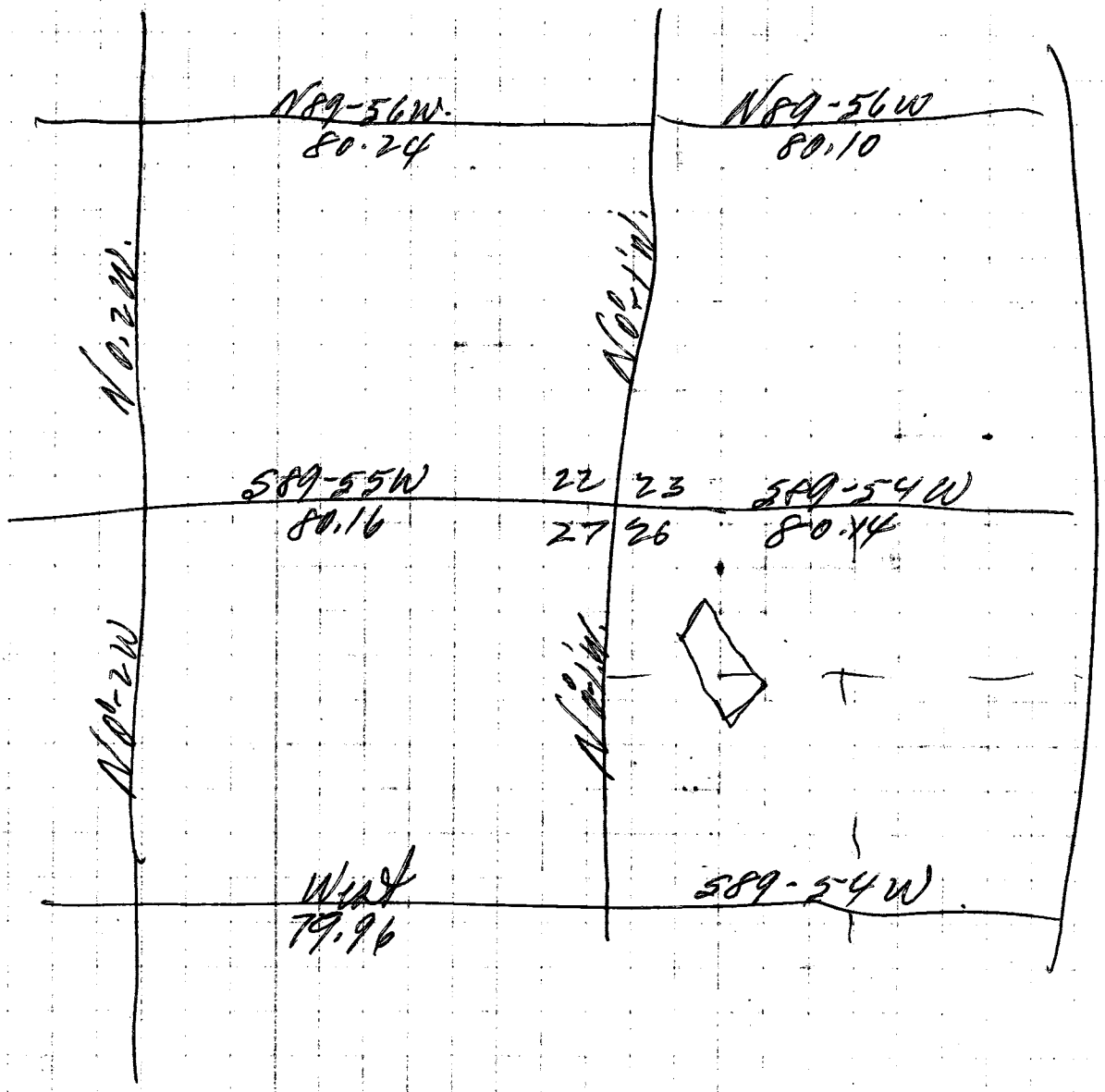
ELW:vw

encl.

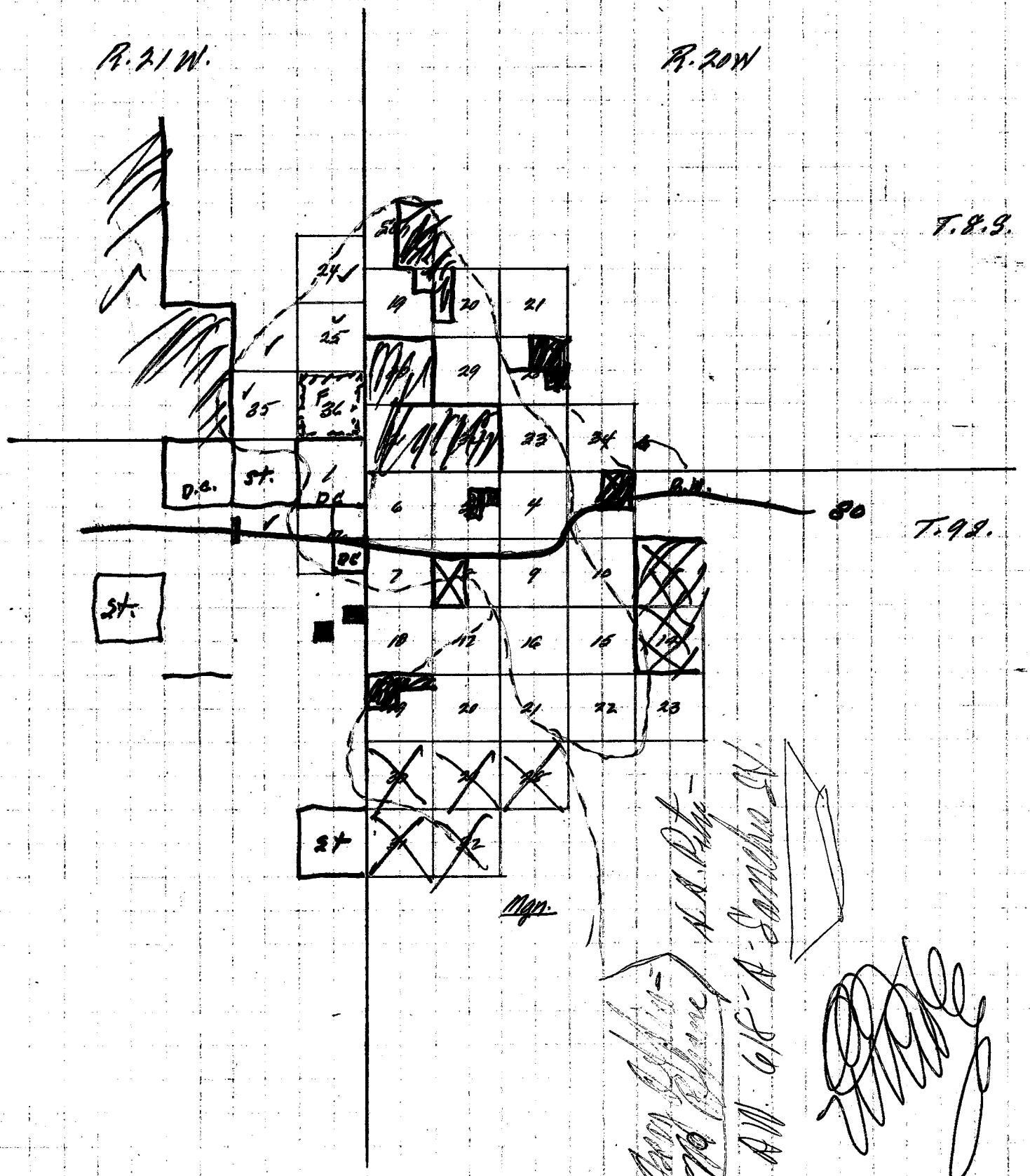
cc: Richard E. Mieritz

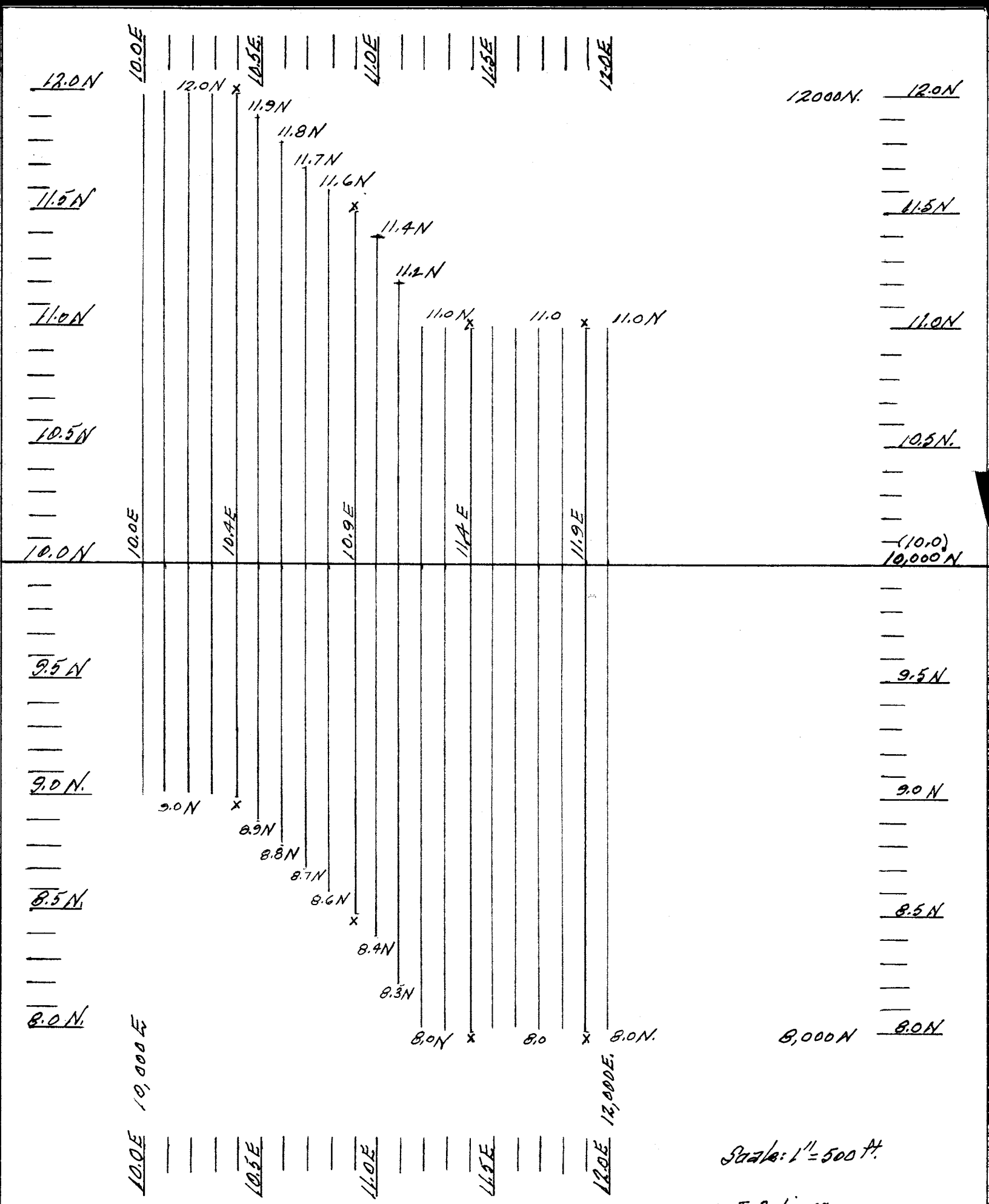
R. 12. E - T 18 $\frac{23|24}{26|25}$

$\frac{22|23}{27|26}$ Lit iron post - 2" dia - 3' - 27" in ground
Brass cap. Mid stone 2' base 1½' high. wg
on - stone marks bears N 61 E 9 chains
House along road (S. side

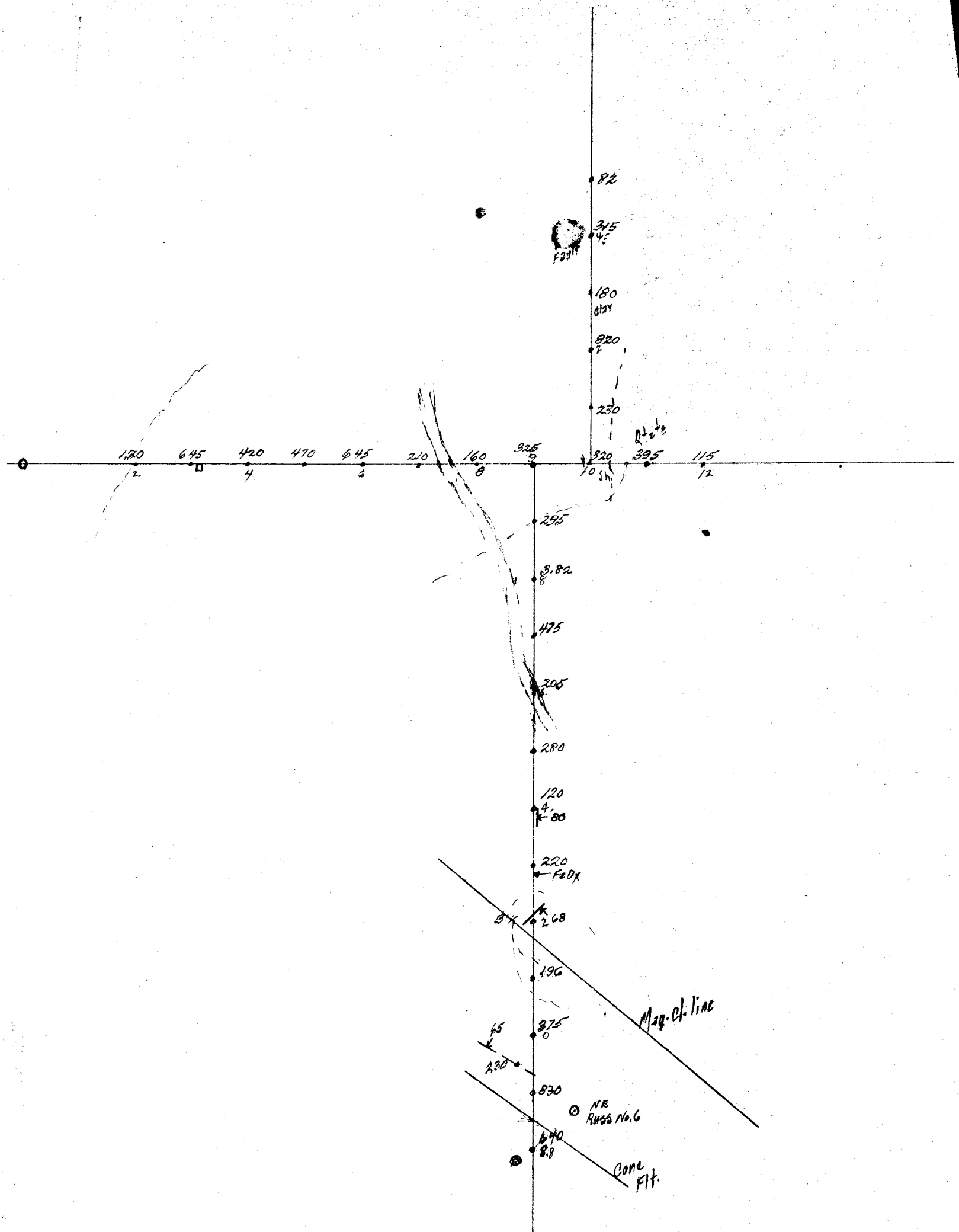


Fortuna - 15' quad.





Hortensia - R.E. Mierisch


82
315
FeOH
180
clay
820
230
Qtz
120
645
420
470
645
210
160
325
320
395
115
2
4
6
8
10
12
295
3.82
475
205
280
120
4.
80
220
FeOx
2.68
196
Mag. Ct. line
375
45
230
830
NB
Russ No. 6
640
8.8
Cone
Flt.

- Gauges - EFCO lab - Tucson.

171-	130	PPM Copper	2	10
172-	645		3	
173-	420		4	
174-	470		5	
175-	645		6	
176-	210		7	
177-	160		8	
178-	325		9	
179-	320		10	
180-	395		11	
181-	115		12	
182-	230		1	
183-	820		2	
184-	180		3	
185-	315		4	
186-	82 X		5	
187-	640		12	
188-	830 +		11	8
189-	230		10	9
190-	375		[illegible]	5
191-	196		[illegible] .50	
192-	—		[illegible]	
193-	220		[illegible]	
194-	120		6	
195-	280		5	
196-	205		4	
197-	475		3	
198-	382		2	
199-	295		1	

Fri - Mr Johnson from Holbrook
about Hoegler limestone -
Will call back -

J. DAVID LOWELL
CONSULTING GEOLOGIST

5211 N. ORACLE TUCSON, ARIZONA 85704 PHONE 887-5341

September 11, 1970

(a) Theme - Post mineral faults
(b)
(c) - they may want

Mr. George Freeman
P.O. Box 7277
Phoenix, Arizona 85011

Dear Mr. Freeman:

As you requested in our conversation of July 28, we have visited the Hortensia property in the Superior district and reviewed the exploration project proposed by Mr. R. E. Miertz. Our work has revealed several inconsistencies in the proposed project and we are recommending that the property not be optioned. — reject so they might option

what are they?

The Proposed Project

The program suggested by Mr. Miertz calls for 6,000 feet of initial drilling to test three closely spaced targets in the southeastern part of the property. The project is based on the following:

1. The proximity of the Hortensia property to the Magma mine.
2. The similarity of rock types and controlling structural features in the Magma mine and Hortensia property.
3. Hydrothermal alteration of the diabase in the target area.
4. The presence of limonite derived from sulfides.
5. Geochemical and geophysical anomalies in the target area.

The Magma Mine

Mineralization at the Magma mine consists of steeply dipping east-west veins which carry copper, zinc, gold and silver. The Magma vein and associated porphyry dikes cut Precambrian schist and sedimentary rocks as well as diabase and lower Paleozoic sedimentary rocks. The vein is 12-15 feet wide and has been explored to a depth of 4,800(?) feet and along its strike for 9,000 feet.

Postore faults, including the Main fault, Parallel fault, Silveride fault, Conley Spring fault and Concentrator fault, vary in strike from northwest to northeast and offset the older preore structures.

The Hortensia Property

The Hortensia property containing 43 unpatented lode claims is located about 1.5 miles north-northwest of the Magma mine. Precambrian Pinal schist as well as quartzite and Paleozoic diabase is well exposed on the property.

No faults or strong veins of preore age have been recognized, but several postore faults are present on the south side of the property. These include the Concentrator, the Silveride, the Parallel, and the Conley Spring faults.

Diabase and Precambrian sedimentary rocks are weakly altered and iron stained. Rock chip samples collected in the target area east of Silver King Road contain 35 to 155 ppm Cu and less than 1 ppm Mo. The highest copper values were found in quartzite and diabase along the Parallel fault, which strikes north-northwest across the south side of the Hortensia property.

Alteration of diabase in the target area has produced clay and chlorite. Quartzite in the same area shows slight recrystallization. Weak transported limonite is present especially in the strongly broken rocks near the Parallel fault, but indigenous limonite is very sparse and almost invariably formed after pyrite.

Evaluation and Recommendation

Having summarized very briefly the geology of the Superior district and the Hortensia property, it is possible to make a rather specific evaluation of the proposed exploration project.

The proximity of the Hortensia property to the Magma mine is favorable only in a general way since the mineralized structures sought are typically quite limited in areal extent. The similarity of rock types at Magma and Hortensia is also only slightly favorable because the same rock types are present throughout the Superior quadrangle. The absence of porphyry dikes or other Laramide intrusive rocks on the Hortensia property is distinctly unfavorable. where dike are one look.

not true concentrator

The faults present on the property are known to be of post-mineral age in the Magma area and consequently fail to qualify as possible ore controls. Projection of the preore Magma fault onto the property requires a right-angle turn and I know of no evidence that the structure makes such a turn or that it branches northwestward. The recently publish-d U.S.G.S. geologic map of the Superior quadrangle indicates that the Magma fault does not turn into the Hortensia property.

Hydrothermal alteration in the target area is generally weak, and limonite texture does not suggest the former presence of strong sulfides.

Our rock chip sampling on the Hortensia property suggests weakly anomalous values for copper and background values for molybdenum. The anomalies present appear to be related to post-mineral faults which strike northwest.

The previous soil sampling revealed several rather sharp anomalies having a definite southwest trend. Copper tends to be concentrated in soils which may explain the relatively high copper values obtained in the soil survey. The reason for the orientation of the anomalies, however, is uncertain. No faults, veins or other structures were recognized which might account for the configuration of the copper anomalies. It is probable that the soil samples reflect airborne contamination from the nearby smelter stack as well as copper being transported down Silver King Wash from the area of the Silver King mine.

The proposed correlation of geophysical anomalies with geologic structure appears consistent. However, the faults reflected by the survey are of post-mineral age and the lithologic contacts lack surface evidence of strong mineralization.

Because evidence suggesting strong mineralization was not observed on the Hortensia property and because productive structures in adjacent areas do not appear to extend into the Hortensia area we suggest that the property not be optioned.

Yours very truly,

L. Clark Arnold

L. Clark Arnold

LCA:H

References

Peterson, D. W., 1969, Geologic map of the Superior quadrangle, Pinal County, Arizona: U.S. Geological Survey.

Short, M. N. and others, !943, Geology and ore deposits of the Superior mining area, Arizona: Univ. of Ariz. Bureau of Mines Bull. 151.

Steel, H. S., 1952, Superior area, Arizona, in Ariz. Geol. Soc.-Geol Soc. America Guidebook Southern Arizona, p. 107-111.

1435 SO. 10TH AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE MA 2-0818

Duplicate

85702 Tucson, Arizona, May 1st, 1970

Sample Submitted by Mr. R E Mertz

Sample Marked	GOLD Ozs. per ton ore	GOLD Value per ton ore * $	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per Cent Wet Assay	Per Cent Wet Assay	Per Cent Wet Assay
# 169	0.005	0.17	0 2/10					
Nor Dump Samp.								

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec 31, 19 70
Arizona U.S.A.

* Gold Figured $35.00 per oz. Troy

Charges $ 2.50
comb. assay

Very respectfully,
Ben P. Jacobs

1435 SO. 10TH AVE.
P. O. BOX 1689

Duplicate

Jacobs Assay Office

Registered Assayers

PHONE MA 2-0818

85702 Tucson, Arizona, May 21st, 1970

Sample Submitted by Mr. R. E. Moritz

Sample Marked	GOLD Ozs. per ton ore	GOLD Value per ton ore * $	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per Cent Wet Assay	Per Cent Wet Assay	Per Cent Wet Assay
#1067				0 03/100				
Hor Char. Samp-Schist.								

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 70
Arizona U. S. A.

* Gold Figured $35.00 per oz. Troy

Charges $ 2.00

Very respectfully,

Ben P. Jacobs

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 No. 22nd Place
Phoenix, Arizona 85016

2-260864

R. Mieritz

REPORT NO. 701024
PROD. CODE
DATE SUBMITTED 4/29/70
DATE REPORTED 5/1/70

Sample No.	PPM Cu	Sample No.	PPM Cu
171	130	185	315
172	645	186	82
173	420	187	640
174	470	188	830
175	645	189	230
176	210	190	375
177	160	191	196
178	325	193	220
179	320	194	120
180	395	195	280
181	115	196	205
182	230	197	475
183	820	198	382
184	180	199	295

Signed

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

EFCO

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 N. 22nd Place
Phoenix, Arizona 85016

2-260864

R. E. Mieritz

REPORT NO. 701042
PROD. CODE
DATE SUBMITTED 5/18/70
DATE REPORTED 5/21/70

Sample No.			PPM Cu	
1003	11.3E	9.6N	320	
1004	11.2E	"	97	
1005	11.1E	"	560	
1006	11.0E	"	590	
1007	10.8E	"	425	
1008	10.7E	"	255	
1009	10.6E	"	470	
1010	10.5E	"	180	
1011	10.4E	"	226	
1012	10.4E	9.5N	430	
1013	10.3E	9.6N	151	
1014	10.2E	9.6N	320	
1015	10.4E	9.3N	320	
1016	10.3E	9.4N	68	
1017	10.4E	"	860	
1018	10.5E	"	510	
1019	10.6E	"	520	
1020	10.7E	"	161	
1021	10.8E	"	280	
1022	11.0E	"	345	
1023	11.1E	"	255	
1024	11.2E	"	+1000	0.11%
1025	11.3E	"	360	
1026	11.5E	"	120	
1027	11.6E	"	554	
1028	11.7E	"	195	
1029	11.8E	"	203	
1030	11.8E	9.2N	355	
1031	11.7E	"	725	
1032	11.6E	"	284	
1033	11.5E	"	495	

xxxxxxxxxxxxxxxxxxxxxxxxxxxx
Signed

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 N. 22nd Place
Phoenix, Arizona 85016

2-20-3564

R. E. Mieritz

REPORT NO. 701042
PROD. CODE
DATE SUBMITTED 5/18/70
DATE REPORTED 5/21/70

Sample No.			PPM Cu
1003	11.3E	9.6N	320
1004	11.2E	"	97
1005	11.1E	"	560
1006	11.0E	"	590
1007	10.9E	"	425
1008	10.7E	"	255
1009	10.6E	"	470
1010	10.5E	"	180
1011	10.4E	"	226
1012	10.4E	9.5N	430
1013	10.3E	9.6N	151
1014	10.2E	9.6N	820
1015	10.4E	9.8N	320
1016	10.8E	9.4N	68
1017	10.4E	"	860
1018	10.5E	"	510
1019	10.6E	"	320
1020	10.7E	"	161
1021	10.8E	"	280
1022	11.0E	"	345
1023	11.1E	"	255
1024	11.2E	"	+1000 0.110%
1025	11.3E	"	360
1026	11.5E	"	120
1027	11.6E	"	554
1028	11.7E	"	195
1029	11.8E	"	203
1030	11.8E	9.2N	355
1031	11.7E	"	725
1032	11.6E	"	284
1033	11.5E	"	495

Signed

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 N. 22nd Place
Phoenix, Arizona 85016

2-260864

R. E. Mieritz

REPORT NO. 701042
PROD. CODE
DATE SUBMITTED 5/18/70
DATE REPORTED 5/21/70

Sample No.	PPM Cu
1003	320
1004	97
1005	560
1006	590
1007	425
1008	255
1009	470
1010	180
1011	226
1012	430
1013	151
1014	320
1015	320
1016	68
1017	860
1018	510
1019	520
1020	161
1021	280
1022	345
1023	255
1024	+1000
1025	360
1026	120
1027	554
1028	195
1029	203
1030	355
1031	725
1032	284
1033	495

xxxxxxxxxxxxxxxxxxxxxxxxxxxx
xSigned

Richard E. Mieritz

701042

Sample No.	PPM Cu
1034	510
1035	201
1036	190
1037	484
1038	520
1039	+1000
1040	305
1041	239
1042	163
1043	180
1044	420
1045	484
1046	261
1047	166
1048	263
1049	208
1050	286
1051	310
1052	269
1053	51
1054	480
1055	105
1056	860
1057	135
1058	137
1059	435
1060	456
1061	354
1062	462
1063	132
1064	120
1065	196
1066	223

Geochemical Assay

Sample No.	% Cu
1024	0.11
1039	0.12

+ Indicates more than.

Richard E. Mieritz

701042

Sample No.			PPM Cu	
1034	11.3E	9.2N.	510	
1035	11.2E	"	201	
1036	11.1E	"	190	
1037	11.3E	9.0N	484	
1038	11.2E	"	520	
1039	11.1E	"	+1000	0.12%
1040	10.9E	10.1N	305	
1041	"	10.2N	239	
1042	"	10.3N	163	
1043	"	10.4N	180	
1044	"	10.5N	420	
1045	10.4E	10.1N	484	
1046	"	10.2N	261	
1047	10.5E	"	166	
1048	10.6E	"	263	
1049	10.7E	"	208	
1050	10.8E	"	286	
1051	11.1E	"	310	
1052	11.2E	"	269	
1053	11.3E	"	51	
1054	11.3E	10.4N	480	
1055	11.2E	10.4N	105	
1056	11.1E	"	860	
1057	10.8E	"	135	
1058	10.7E	"	137	
1059	10.9E	10.8N	435	
1060	"	10.9N	456	
1061	"	11.0N	354	
1062	"	11.1N	462	
1063	"	11.2N	132	
1064	"	11.3N	120	
1065	"	11.4N	196	
1066	"	11.5N	223	

Geochemical Assay

Sample No.	% Cu
1024	0.11
1039	0.12

+ Indicates more than.

61A

PUT IT IN WRITING

MEMORANDUM

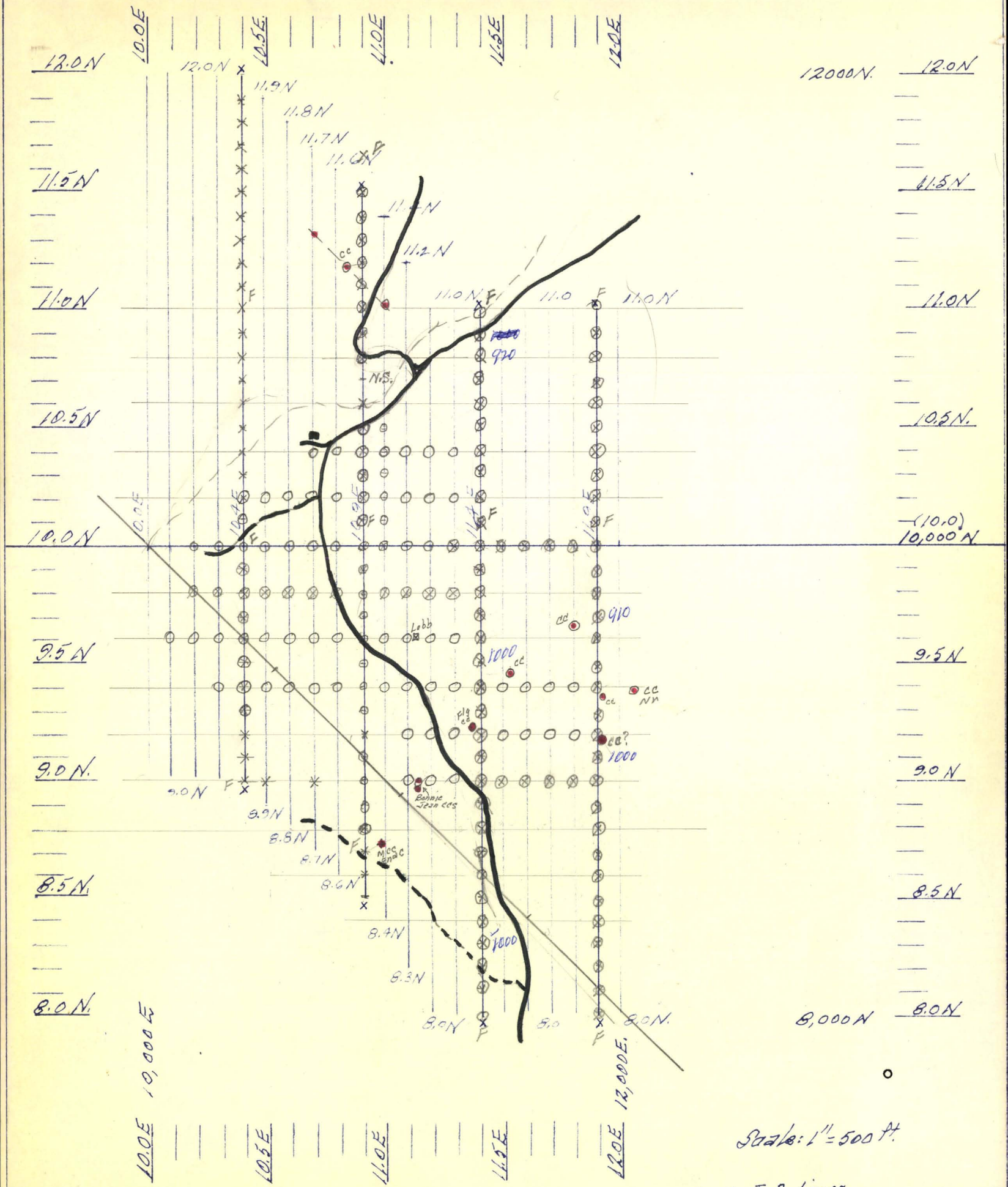
4:15 PM

May 18 1970

From R.E. Mieritz To Anthony M. Hauck III

As per our telephone conversation at noon this day - here with the geologic map I promised. It also shows the position of the lines run and the 100 foot spaced stations.

RM



Hortensia - R.E. Mieritz

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 N. 22nd Place
Phoenix, Arizona 85016

2-260864

R. E. Mieritz

REPORT NO. 701033
PROD. CODE
DATE SUBMITTED 5/11/70
DATE REPORTED 5/15/70

Sample No.	PPM Cu	Sample No.	PPM Cu	Sample No.	PPM Cu
1 11.4E 9.4N	880	26 11.9E 8.4N	340	51 11.9E 9.1N	1000
2 " 9.3N	652	27 " 8.3N	570	52 " 10.1N	280
3 " 9.2N	440	28 " 8.2N	410	53 " 10.2N	82
4 " 9.1N	366	29 " 8.1N	65	54 " 10.3N	410
5 " 9.0N	360	30 " 7.98N	400	55 " 10.4N	180
6 " 8.9N	580	31 10.0N 11.3E	280	56 " 10.5N	560
7 " 8.8N	430	32 " 11.4E	520	57 " 10.6N	280
8 " 8.7N	520	33 11.4E 9.9N	268	58 " 10.7N	270
9 " 8.6N	500	34 " 9.8N	280	59 " 10.8N	940
10 " 8.5N	270	35 " 9.7N	220	60 " 10.9N	410
11 " 8.4N	95	36 " 9.6N	300	61 " 11.0N	120
12 " 8.3N	+1000	37 " 9.5N	+1000	62 10.4E 9.9N	470
13 " 8.2N	570	38 10.0N 11.5E	260	63 " 9.7N	310
14 " 8.1N	350	39 " 11.6E	500	64 9.8N 10.2E	370
15 " 8.0N	650	40 " 11.7E	270	65 " 10.3E	350
11.5E *16 "A" 9.0N	170	41 " 11.8E	780	66 " 10.4E	920
11.6E *16 "B" "	310	42 " 11.9E	360	67 " 10.5E	770
11.7E 18 "	680	43 11.9E 9.9N	880	68 10.6E	680
11.8E 19 "	390	44 9.8N	410	69 10.7E	240
11.9E 20 "	400	45 9.7N	910	70 10.8E	470
21 11.9E 8.9N	390	46 9.6N	710	71 11.0E	460
22 " 8.8N	600	47 9.5N	290	72 11.1E	240
23 " 8.7N	330	48 9.4N	380	73 11.2E	220
24 " 8.6N	340	49 9.3N	870	74 11.3E	480
25 " 8.5N	560	50 9.2N	860		

Geochemical Assay

Sample No.	% Cu
12	0.14
37	0.14

+ Indicates more than.

Signed

A Division of Arizona Feeds

EFCO LABORATORIES
North Freeway at Ruthrauf Road P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 N. 22nd Place
Phoenix, Arizona 85016

2-260864

R. E. Mieritz

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PROD. CODE
DATE SUBMITTED 5/11/70
DATE REPORTED 5/15/70

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3 " 8.2N	440	28 " 8.2N	410	53 " 10.2N	82
4 " 8.1N	366	29 " 8.1N	65	54 " 10.3N	410
5 " 8.0N	360	30 " 7.98N	400	55 " 10.4N	180
6 " 8.9N	580	31 10.0N 11.3E	280	56 " 10.5N	560
7 " 8.8N	430	32 " 11.4E	520	57 " 10.6N	280
8 " 8.7N	520	33 11.4E 9.9N	268	58 " 10.7N	270
9 " 8.6N	500	34 " 9.8N	280	59 " 10.8N	940
10 " 8.5N	270	35 " 9.7N	220	60 " 10.9N	410
11 " 8.4N	95	36 " 9.6N	300	61 " 11.0N	120
12 " 8.3N	*1000	37 " 9.5N	*1000	62 10.4E 9.9N	470
13 " 8.2N	570	38 10.0N 11.5E	260	63 " 9.7N	310
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15 " 8.0N	650	40 " 11.7E	270	65 " 10.3E	350
11.0E 16 " 7.9N	170	41 " 11.8E	780	66 " 10.4E	920
11.0E 16 " "	310	42 " 11.9E	360	67 " 10.5E	770
11.1E 18 " "	680	43 11.9E 9.9N	880	68 " 10.6E	880
11.2E 19 " "	390	44 9.8N	410	69 10.7E	240
11.3E 20 " "	400	45 9.7N	910	70 10.8E	470
11.4E 21 11.9E 8.9N	390	46 9.6N	710	71 11.0E	460
22 " 8.8N	600	47 9.5N	290	72 11.1E	240
23 " 8.7N	330	48 9.4N	380	73 11.2E	220
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25 " 8.5N	560	50 9.2N	860		

Geochemical Assay

Sample No.	% Cu
12	0.14
37	0.14

* Indicates more than

Signed

EFCO

EFCO LABORATORIES
North Freeway at Ruthrauf Road - P. O. Box 5048
TUCSON, ARIZONA 85703
PHONE (602) 887-4241

Laboratory Analysis Report

Richard E. Mieritz
Mining Consultant
5822 No. 22nd Place
Phoenix, Arizona 85016

2-260864

R. Mieritz

REPORT NO. 701024
PROD. CODE
DATE SUBMITTED 4/29/70
DATE REPORTED 5/1/70

Sample No.	E	N	PPM Cu		Sample No.	E	N	PPM Cu	
171	10.2	10.0	130		185	11.0	10.4	315	
172	10.3	"	645		186	"	10.5	82	
173	10.4	"	420		187	10.9	8.8	640	
174	10.5	"	470		188	"	8.9	830	
175	10.6	"	645		N LOW 65°S 189	"	8.95	230	20'W.
176	10.7	"	210		190	"	9.00	375	
177	10.8	"	160		191	"	9.1	196	
178	10.9	"	325		193	"	9.3	220	
179	11.0	"	320		194	"	9.4	120	
180	11.1	"	395		195	"	9.5	280	
181	11.2	"	115		196	"	9.6	205	
182	11.0	10.1	230		197	"	9.7	475	
183		10.2	820		198	"	9.8	382	
184		10.3	180		199	"	9.9	295	

Signed

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TUCSON, ARIZONA 85703
PHONE (602) 887-4241

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Richard E. Mieritz
Mining Consultant
5822 No. 22nd Place
Phoenix, Arizona 85016

2-260864

R. Mieritz

REPORT NO. 701024
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DATE SUBMITTED 4/29/70
DATE REPORTED 5/1/70

Sample No.	PPM Cu	Sample No.	PPM Cu
171	130	185	315
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175	645	189	230
176	210	190	375
177	160	191	196
178	325	193	220
179	320	194	120
180	395	195	280
181	115	196	205
182	230	197	475
183	820	198	382
184	180	199	295

Signed

Bryant Construction Co.
843 Spray Street
Superior, Ariz.

March 6, 1974

Richard E. Mieritz
1634 W. Hazlewood St.
Phoenix, Ariz.

Superior Project:

1½ Yard Crawler Loader @ $25.00 Hr.

Jan. 26	level for drill site & mud tanks	4 hrs	$100.00
	mobilization on loader		40.00

International Dozer & Ripper @ $37.50 Hr.

Mar. 3	level drill sites & pits. Walk dozer from perlite to drill site & return	7 hrs	$262.50
	mobolization on dozer		60.00
	state tax 3%		13.87
		Total	$476.37

3/7/74

KIVA CONTAINER CORPORATION

2830 West Osborn Road • Phone 258-8383 • Phoenix, Arizona 85017
Area Code 602

MANUFACTURERS AND DESIGNERS OF CARTONS TO YOUR SPECIFICATIONS
VARIOUS STOCK SIZE CARTONS AVAILABLE

DATE 1-28 1974

SOLD TO: R E Murity

paid by check
74-114-

QUANTITY	ITEMS AND DESCRIPTION	PRICE PER M	AMOUNT	
100	NK cre box complete	883.00	88	30
100	RK cre box complete	751.00	75	10
	SUB TOTAL		163	40
	TAX		6	54
	TOTAL INVOICE		169	94

FOR RESALE ☐ ADD SALES TAX ✓ 4 % on

10631 RECEIVED ABOVE IN GOOD CONDITION BY

CUSTOMER COPY

DATE	SPACE	RENT	TAX	DEPOSIT	L.C. OTHER	TOTAL	RENTAL PERIOD	PREVIOUS BALANCE	CURRENT BALANCE	NAME	RECEIPT NO.
1-28-74	A 216	36.00	1.44	5.00	—	42.44	1-28-74 3-1-74	-0-	-0-	Richard E. Murity	2208

L43584M

2208

ALLSTATE U-LOK STORAGE

3636 Grand Avenue
Phone 277-4232
Phoenix, Arizona 85017

Received By Charlot Lowell

Water Readings

Date	Start	
1-30-74	35285	35297
2-6-74	35627	35634
2-11-74	35634	35645
	35654	35664
2-16-74	35664	35674
2-27-74	35676	35686
2-28-74	35686	35696

BOYLES BROS. DRILLING COMPANY
DRILLERS LOG

JOB _____ HOLE NO. _____

DRILLERS _____ MACHINE NO. _____

DATE	SHIFT	DRILLER	RODS IN HOLE	STICK UP	DEPTH	LENGTH OF RUN	CORE	ROCK	BIT NO.	MATERIALS USED: MUD	CEMENT	OTHER
		Before	4F	Then								
1/30	D	35285	35297									4795
2-6		35627	35629									
		35629	35634									
		35634										
2-11		35645										
		35654										
		35664										
2/16		35676										
		~~35674~~										
2/22		~~35676~~										
~~2/27~~ 2/27		35676	to	35686								
2/28		35686	to	35696								
2/2		35696										

March 2, 1974

Arizona Water Co.
P. O. Drawer "R"
Superior, Arizona, 85273

Att: Mr. William G. Delbridge

Dear Mr. Delbridge:

Please be advised that during the month of February we obtained the following loads of water from your supply in Superior.

The meter readings were as follows:

February 6, 1974	35627	to 35634	7 units
February 11, 1974	35634	to 35645	11 units
February 11, 1974	35654	to 35664	10 units
February 16, 1974	35664	to 35674	10 units
February 27, 1974	35676	to 35686	10 units

Please send the invoice for this water to me at the above address.

Sincerely yours,

R. E. Mieritz.

over charged
in Feb. $12.00
should be 1.00
6,000 = 6.00
over charged $5.00 - settled
on that. BW

February 4, 1974

Arizona Water Co.
P..O. Drawer "R"
Superior, Arizona, 85273

ATT: Mr. William G. Delbridge

Dear Mr. Delbridge:

Please be advised that during the month Of January we obtained one load of water from your supply in Superior.

The meter read as follows:

Start	35285
Finish	35297
Units	12

This water was obtained on January 30, 1974.

Please send the invoice for this water to me at the above address.

Sincerely yours,

R. E. Mieritz

CORE DRILLING
ROTARY DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

INVOICE DATE: March 9, 1974
ORDER NUMBER:
INVOICE NUMBER:
CONTRACT: 6-679
TERMS: Net 30 Days
LOCATION: Superior, Arizona

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B.C., Canada

Hole No.	From	To	Footage	Rate	Total
1 - Angle - NX	924	1000	76	11.20	851.20
	1000	1500	500	12.20	6,100.00
Retrieving Casing			1 Hr.	22.50	22.50
Casing left in hole - 10' Lengths - 4"			3 Pcs.	48.05	144.15
Materials Used:	Driscose		1 Sk.	65.90	65.90
	Dextrid (Baroid)		1 Sk.	29.70	29.70
	Disperse		1 Sk.	16.90	16.90
	Bit Lube (Magcobar)		2 Cans	8.46	16.92
	Caustic Soda		1 Sk.	11.35	11.35
Handling & Transporation Charge			15 %	140.77	21.12
Water Truck Rental - 325.00 per mo.			12 Days	10.83	129.96

Paid 3-14-74

9 late payment charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due dat e to the date we receive payment

ORE DRILLING
DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
LIMA, PERU cable: BOYLESCOP
MEXICO CITY, MEXICO telex: 001774546

INVOICE DATE: March 9, 1974
ORDER NUMBER:
INVOICE NUMBER:
CONTRACT: 6-679
TERMS: Net 30 Days
LOCATION: Superior, Arizona

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B.C., Canada

Hole No.	From	To	Footage	Rate	Total
Water Truck Mileage			23 Mi.	.25	5.75
			TOTAL BILLING		7,415.45

Late payment charge of 1% per month or the maximum amount permitted by law, whichever is lower, will be charged in the event payment is not made within the terms of this invoice. It will be computed from the due date to the date we receive payment.

DIAMOND CORE DRILLING
ROTARY DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT

Boyles Bros. DRILLING COMPANY

CONTRACTORS-ENGINEERS
General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE cable: BOYLESBROS
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ORDER NUMBER:
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CONTRACT: 6-679
TERMS:
LOCATION: Superior, Arizona

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B.C. Canada

Hole No.	From	To	Footage	Rate	Total
1-Angle-DX	924	1000	76	11.20	851.20
	1000	1500	500	12.20	6,100.00
Retrieving Casing			1 Hr.	22.50	22.50
Casing left in hole	10' LENGTH		~~38 Ft. 4"~~ 3	48.05	144.15
Materials Used:	Drscose		1 sk.	65.90	65.90
	Dextrid (BAROID)		1 sk.	~~27.70~~ 29.70	29.70
	Disperse		1 sk.	16.90	16.90
	Bit Luba (MAGCO BAR)		2 Cans	8.46	16.92
	Caustic Soda		1 sk.	11.35	11.35
Handling & Transportation Charge			15%	140.77	21.12
Water Truck Rental - 325.00 per Mo.			12 Days	10.83	129.96
Water Truck Mileage			23 Mi.	0.25	5.75
					7,415.45

9

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

DUPLICATE

Certificate No. 59259

TUCSON, ARIZONA 85702 Feb. 26" 1974

Sample Submitted by Mr. R E Murtz

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Mo. Per cent Wet Assay	Per cent Wet Assay
# 1158		$		Trace			
59				0.02			
60				0.03			
61				0.03			
62				Trace			
63				0.02		Trace	
64				0.02			
65				0.03			
66				Trace			
67				0.02			
68				0.04			
69				0.03			
70				0.02			
71				0.02			

REGISTERED ASSAYER
CERTIFICATE OF ASSAYER
1041
BENJAMIN P. JACOBS
Reg. 8149
Tucson, Ariz.

* Gold Figured $35.00 per oz. Troy

Charges $ 30.50

74

Very respectfully,

Ben P Jacobs

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Hardenburg DEPOSIT: COORDINATES: N. E.

BEARING: S.57°E ANGLE: -70° ELEV: 8070 TOTAL DEPTH: 1500

DATE STARTED: 2-2-74 DATE COMPLETED: 3-6-74 DRILLED BY: Boyles Bros.

HOLE DEPTH	LEVEL ELEV.	HOLE / REAM / CASING	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu	ASSAYS % Mo
10		4½"						
20								
30			30			30 Diabase - stg altd - wh & Blk - much FeO - some yel & Red - mostly Brown, many frac 30 to 50° to AX - show more Mar. 4-8" apart	0.02	
40		NX	41.5			40 - Mud-gouge - fault - occ 1' zones less alt'd. less FeO (red')		
50			48.5			Fault @ 57 - Breccia - ½"		
60			55.0					
70			60.0					
80			76.0			Fault 82.5	Rec. Bright Red min'd Pale yel min. 0.03	
90			92.5			Fault @ 92	Samp @ 15 over	
100			95			Fault @ 99 Br. 0° to AX. Brun FeOx	100	
110			112			Fault 112 & 115 Dia Fr 112-115 Broken - 118-119.5		
120			125			Dia more silic. from 125 - some frac have yel bin mat, more red bin than brown. frac about 1' apart. Calc veins - quite pure. 1/16-1/8"		
130			135				0.03	
140			143					
150			153				50	
160			165					
170			173.2			Blk min. @ 167-173 ck - less calcite seams - many FeO zones no frac tho. RK more blue gray - less white. (non mine)	Tr	
180			182					
190			191			1/8 - 1/2" Fe bands at all angles,		
200			198				211	
210			205					
220			214			More calcite seams from 214	0.02	Tr
230			219.5					
240			224					
250			229			Fault 234-35		
260			231					
270			235					
280			240					
290			245					
300			252			Fault 257-52, 259?	50	
310			259				0.02	
320			264					
330			273					
340			274					
350			280.5					
360			285					
370			290					
380			293			Pk hue to pk @ 298 (FeO) quite broken calc & in seam 292 frac up to 4" apart.		
390			299				310	
400			303					
			308			RK gry-wh @ 307 less FeO	0.03	
			312					
			316					
			321					
			328.5					
			335					
			345			Yellow min on frac 345 MoO?		
			355			- Fault gouge 356 more alt'd below fault. more calcite veinlets wider	50 Tr	
			367					
			370.5			take sample 368	.02	
			376					
			379					
			382					
			385					
			395			387 Fault zone - calcite filled, brecciated ± 18° to axis of core. 392 " " " also calc 398 3 Spks blue @ 393 - Az? yel metallic also - ck. (Phy)	0.04	

R.E.M.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Hortensia DEPOSIT: COORDINATES: N. E.

BEARING: S-57° E ANGLE: -70 ELEV: TOTAL DEPTH:

DATE STARTED: February 2, 1974 DATE COMPLETED: DRILLED BY: Boyles Bros.

HOLE DEPTH	LEVEL ELEV.	HOLE ——— REAM — — CASING ═══	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS %	ASSAYS %
			402			Badly broken-400-402, 406-07 Diabase green? pk brown bands.		
410			406 407 412			½" calc @ 408 many thin seams calc.		
420			421 423			greish calc. @ 419 Ba		
430			431 434					
440			444			Diabase bluish-grn		
450			450					
460			456 465			Fault 457-462 - mud places - Hy Red & Brown Fe. mod calc. Fairly brkn. Diabase Brun'h red in fault	.03	
470			473 476 478			Hy Red Fe (6") @ 470 much calc seams - throughout.		
480			485					
490			493			Diabase grn-blue coarse grn'd		
500			501 503.5			contact @ 499, 24° to Axis - Diabase - banded for 2' light & stks FeO (tan & Rd) Badly brkn 500 - to 512 spks py near contact	.02	
510			507 510 515 518			Brecciated - Matrix? grades lig bk to Blk @ 515. Much calc. seams.		
520			517 522			Band stks again @ 522, light, pk-Rd-brown. to 536 - Badly broken 529-35, 538-48 Blk 536-38, 544 - Much altd, soft, calc. seams.		
530			530 534					
540			538 542 544			Diabase dk grn 546 - more dense, fresh, fine grained. decrease in calc. more mafic minerals - also more red, brun FeO.	.02	
550			549					
560			565					
570			565 572			570 Fault - breccia, calc filled. mud, light gray RK. Fine grnd, v. much calc. Soft.		
580			580 585 587			1' Brown-tan porphyritic breccia, altd - FeO band @ 45° to axis @ 579. Brkn 570-88 583-88 Badly broken. Gry, soft RK (shale?) below 572. Branch (Bh?) 589-94 Blue-gry 594-601 -		
590			595 599.4			Brownish-gray 601-623 badly brkn 603-623, breccia, much mud 600	0.03	
600			605			603 drainage 20° to axis, hry dalcite. some frag's limex		
610			615			Fault		
620			621 625			623 625 - soft diabase 60° altd, fine grnd, breccia - (626 - Rd FeO 627) FeO seams more with calc seams.		
630			635					
640			639 642			644 Br. 1 ft. v. broken 637-690		
650			647.5	No Core		50	-	
660			653 654 675 660.5 669.5				Tr	
670			670 675			676 - Br 1 ft. pebbly beyond (sugary)		
680			683			685 - ½" FeO, 60° to Ax - yel brown Rd		
690			690 694			696 Varied colored, pk grn light orange gry, sugary - soft. Monzonite? or		
700			702			Sediments (banding 35°) 700		
710			710 715			715 - Highly altd below - like mud. to 736	0.02	
720			722					
730			731 736 738 743			736 ~~Basal~~ Diabase highly altd, much FeO & calc seams. to 743 743 - Diabase fresher but rotten - much calc little FeO.		
740			750 755			755 - 768 Fault - mud. Red-Brun FeO on RM. 768 - gry diab. Much calc. 50		
750			765					
760			775			~~Fault~~ 772 - Hy FeO zone to 785 Shale? mottled.	0.02	
770			783			785 greenish Diab.? FeO with Calc. seams. Many. Fresh diab.		
780			793					
790								
800								

R.E.M.

Composite Drill Log

Hole No. _____ TYPE DRILL HOLE: _____

PROPERTY: _____ DEPOSIT: _____ COORDINATES: N. _____ E. _____

BEARING: _____ ANGLE: _____ ELEV: _____ TOTAL DEPTH: _____

DATE STARTED: _____ DATE COMPLETED: _____ DRILLED BY: _____

HOLE DEPTH	LEVEL ELEV.	HOLE. —— REAM. — — CASING. = =	CORE PULLS	CORE REC.% (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS %	ASSAYS %
			803'					
10			813			811-2" Fault - Dk grn, much calc (Hy) Fresh mica to 843 (Pyroxenite)		
20			821			Hy Calc xls 826		
30			827					
40			835					
50			845 850 853			Hy alt'd 845-50 - with pieces pk porphyry, mud & gravelly; very broken 850-853	850	0.04
60			861			- 858 Gray Schist - void of calc - Fao etc.		
70			867					
80			875					
90			882					
100			890 894					
110			904				900	
120			914					
130			924			Schist		0.03
140			931					
150			941					
160			951 955				950	
170			965					
180			975					
190			985					
200			995					
210			1004				1000	Tr.
220			1014			small fault 1025		
230			1024 1026					0.03
240			1035					
250			1045			Qtz seams @ 1044 - some of which is pink & Red.		
260			1055			Sma'l Qtz seam 1053	1050	
270			1065			1067 - Thin Or-Brown Fe seams start - to 1072		
280			1074			1072 - Fault, gouge, brown-red.		Tr.
290			1084					
300			1094			Splintery 1090-92 Yel-Brown spks 1094-98	1100	
310			1104					
320			1114			Thin fract'd zone slip 1120		
330			1124			Some barren white Qtz seams, - some with very minor Fao.		0.02
340			1132					
350			1142				1150	
360			1152					
370			1161					
380			1171					
390			1180					
400			1190					
			1199					

R.E.M.

Composite Drill Log

Hole No. _____ TYPE DRILL HOLE _____

PROPERTY _____ DEPOSIT _____ COORDINATES N. _____ E. _____

BEARING _____ ANGLE _____ ELEV. _____ TOTAL DEPTH _____

DATE STARTED _____ DATE COMPLETED _____ DRILLED BY _____

HOLE DEPTH	LEVEL ELEV.	HOLE / REAM / CASING	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS %	ASSAYS %
			1205			1/2" to 4" Qtz seams 1202 to 1215		
1210			1210				0.02	
			1215			1215 Fine grnd schist below 1215		
1220			1224					
1230			1233			1232.5 - Fault, purplish gouge. 2 to 4" wide Qtz seams 1238-40 chloritic in spots. Schist thinly laminated for most part. Quite broken		
1240			1243					
1250			1249			1250		
			1254					
1260			1264					
1270			1274					
1280			1284					
1290			1294					
1300						1300		
			1304			1303-06 - Fault gouge		
1310			1311			occasional white barren qtz seams 2"-3" wide. small amt spec hem. Quite broken 1308-10, 1335-40		
1320			1321					
1330			1331					
1340			1338			1344 - 425 Coarse soft gray-blk (ch?) 60° to axis calcite xls. Some FeO & cal. stringers		
			1345					
1350						1350		
			1355			schist many FeO inclusions (org-brown) to 1353		
1360			1362					
1370			1370					
			1375					
1380			1385					
1390			1394			badly broken 1395-1405, some FeO on fault 1406		
1400			1401			1400		
1410			1408					
			1415					
1420			1423			1423 - Fault - Hy FeO, Breccia, broken, thin laminated, mud or gouge.		
1430			1429			1431		
			1435			schist, many FeO on laminations (thin) gives pk color to 1438		
1440			1441			broken 1443-49, schist darker gray below 1449, no FeO. (?)		
1450			1447			1450		
			1455					
1460			1461					
1470			1471					
			1476					
1480			1484			1481 - Grnish diabase calcite seams with FeO, org-brown-Red. Fair amt olivine.		
1490			1490					
			1495					
1500			1500			1500		
						TD-1500 - 2-6-74		
1510								
1520								
1530								
1540								
1550								
1560								
1570								
1580								
1590								
1600								

REM.

P. O. BOX 1889 PHONE 622-0813

Certificate No. 59259 TUCSON, ARIZONA 85702 Feb 26 1974

Sample Submitted by Mr. R E Muertz

SAMPLE MARKED	GOLD Value per ton	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Mo Per cent Wet Assay	Per cent Wet Assay
# 1158	$		Trace			
59			0.02			
60			0.03			
61			0.03			
62			Trace			
63			0.02		Trace	
64			0.02			
65			0.03			
66			Trace			
67			0.02			
68			0.04			
69			0.03			
70			0.02			
71			0.02			

REGISTERED ASSAYER CERTIFICATE EXPIRES 1041 BENJAMIN P. JACOBS DEC 31, 74

* Gold Figured $85.00 per oz. Troy

Charges $ 30.50

Very respectfully

Ben P Jacobs

1435 S. 10th AVE.

P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No 59264 TUCSON, ARIZONA 85702 Mar. 8 1974

Sample Submitted by Mr. R.E Muertz

SAMPLE MARKED	GOLD Value per ton	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
	$					
#1172			0.03			
73			Trace			
74			0.02			
75			0.02			
76			0.04			
77			0.03			
78			Trace			
79			0.03			
1180			Trace			
81			0.02			
1182			0.02			

REGISTERED ASSAYER CERTIFICATE EXPIRES 1041 BENJAMIN P. JACOBS DEC 31, 74 Arizona U.S.A.

* Gold Figured $85.00 per oz. Troy

Charges $ 32.00 Paid

Very respectfully

Ben P Jacobs

March 9, 1974

Matador Exploration Ltd.
Att: Murray Pesin, President
Suite 1606 Royal Centre
1055 W. Georgia St.
VancGuver, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
March 2 thru 9, 1974

Late Monday evening, March 4, Mr. Steve Radvak advised the writer that Matador did not wish to continue the diamond drilling on the Hortensia Project because it was "costing too much" and that a review should be made of the results of Drill Hole No. 1 and that percussion drilling of future holes was desired over that of diamond drilling. As a result, Diamond drill Hole was stopped at 1500 feet on March 6, and demobilization of the drill dig and accessory equipment was completed on March 8, 1974.

Drilling continued on Drill Hole No. 1 without operational-wise difficulities to the total depth of 1500 feet. The advance for the short period of drilling was 276 feet and this coupled with the previous total of 1224 adds to 1500 feet. In tabulated form this is:

Advance this period	276 feet
Advance to 3/1/74	1224 feet
Total to date	1500 feet
Total for Project	1500 feet.

Because Boyles Bros. Drilling Co. had an extra crew available, there were three shifts on the drill rig from Monday, March 4th to the completion of the drill hole on Wednesday and through the demobilization period. Prior to this extra shift, the drill operated on a two shift basis.

Analysis of Drilling Costs:

The writers October 31, 1973 Report for Matador on the Hortensia Project submitted an exploration expenditure of $20.00/ft. for diamond drilling including sampling and assaying, $5,000.- for drill site and road preparation and $9,000.- for Field Supervision (6 months), one drill shift per day, and contingencies.

Expenditures thus far include the following (next page)

Drill Contractors 1st Invoice	$ 812.87
Drill Contractors 2nd Invoice	10,614.53
Drill Contractors final Invoice (Estimated)	$ 7,450.-
Core Boxes, Phx. storage, Field trailer	$ 441.73
Assaying	$ 52.50
Estimated total	$ 19,371.63
Cost/Ft. 1500 Ft.	$ 12.91

Budget allowed $20.-/foot.

Field Supervision and Expenses, actual and estimated for period March 1 thru 9th. (total period Jan. 23 thru March 9, 1974) $ 4,660.-

Budget allowed $9,000.- based on one shift/day.

Cost per foot for drilling is well below the $20.00 estimated cost. The cost for Supervision and Expenses is very close to the estimated cost considering that two shifts were used on the drill rather than the one shift on which the estimated expenditure was based.

Analysis of Drill Hole Results:

The targets for Diamond Drill Hole No. 1 were the (1) surface geochem, the I.P. anomoly and (3) the long, narrow, very high magnetic anomoly, the latter two being shown on the attached portion of the Surface Map.

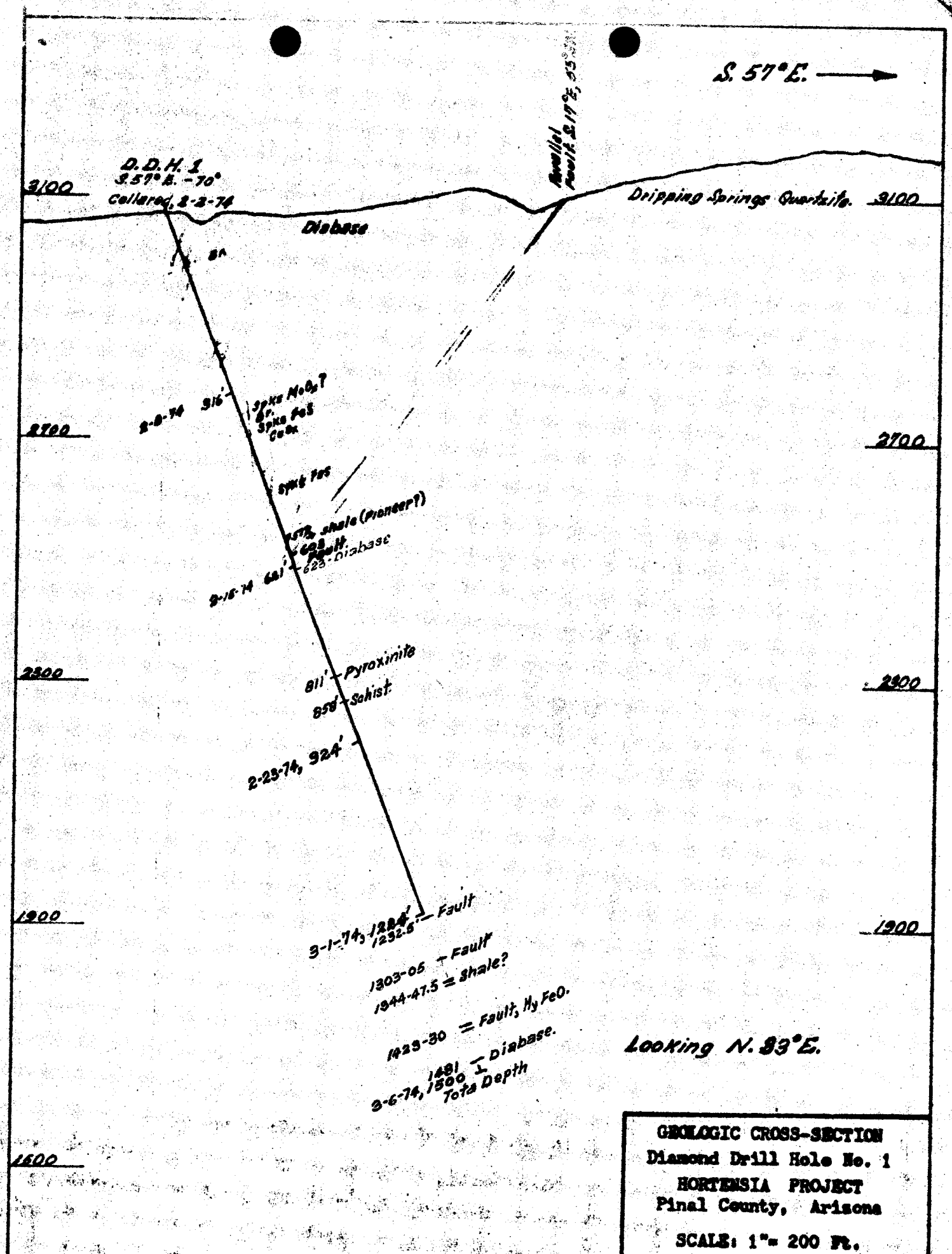
A review of the Composite Drill Log, attached to this report, indicates the Geo-Chem survey has persisted to the drilled depth, however, it also appears that the drill hole had not penetrated the "oxidized zone" of the area. The slight increase in copper values where some of the encountered faults were sampled and assayed indicate that the Faults were mineralized but that there has been almost complete leaching of the original copper values.

Since no excessive magnetite was observed in the core, the magnetic anomoly may well have been derived from the heavy gouge of the faults encountered at about 400 feet or 455 feet. (See Composite Log)

Evidence in the core to support the I.P. anomoly appears to be non-existant, consequently, the writer is at a loss to explain the anomoly obtained by McPhar Geophysics who conducted the I.P. and Magnetic surveys.

Diamond Drill Hole No. 2 was designed to test the general Geo-Chem anomoly in the area as well as the broad magnetic anomoly in the general area.

R. E. Mieritz,
Mining Consultant
Phoenix, Arizona.



GEOLOGIC CROSS-SECTION
Diamond Drill Hole No. 1
HORTENSIA PROJECT
Pinal County, Arizona

SCALE: 1" = 200 Ft.

Feb., 1974 **R. E. Mieritz**

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Hortensia DEPOSIT: _____ COORDINATES: N. _____ E. _____

BEARING: S. 57° E. ANGLE: -70° ELEV: 3070 feet TOTAL DEPTH: 1500 feet

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: March 6, 1974 DRILLED BY: Boyles Bros.

HOLE DEPTH	LEVEL ELEV.	HOLE / REAM / CASING	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS % Mo.
						No. overburden but no core for first 30 ft. Very broken, ground up.		
10, 20		N.C.						
30			30.0			30 Diabase, wh. & blk., stgly alt'd, much FeO,	0.02	
40		NXWL	35.0, 41.5			40 some yel and red, mostly brown. Many Frac. Fault, mud, gouge at 40 ft.		
50			48.5, 55.0			57 Fault, ½" breccia.		
60			60.0, 64.0					
70	3000		71.0, 76.0					
80			82.5			82.5 Fault Pcs, bright red mineral and pale yellow mineral.	0.03	
90			88.0, 92.0			92 Fault		
100			99.0			99 Fault, breccia 0° to axis. Brwn FeO_x		
110			111.0, 116.0			112, 115 Faults, diabase fresh. Broken 118-19.5		
120			125.0			Diabase more siliceous from 125 ft., some frac. have yel lim. now, more red lim. than brwn. Frac about 1" apart. Calcite seams, 1/16, 1/8" quite prevalent.	0.03	
130			135.0					
140			143.0					
150			153.0					
160			160.0, 165.0			Blk mineral 167-73, less calcite seams, many FeO seams but no frac though. Diabase more blue-gray now.	Tr.	
170			173.2					
180	2900		182.0					
190			191.0			1/8 to ½" FeO bands all angles.		
200			198.0, 205.0					
210			214.0			Many calcite seams from 214 ft.	0.02	Tr.
220			219.5, 224.0					
230			229.0, 235.0			234 Fault, 1 ft. wide.		
240			240.0, 245.0					
250			252.0			251 Fault, 1 ft. wide		
260			259.0, 264.0			259 Fault.	0.02	
270			273.0					
280	2800		280.5, 285.0					
290			290.0			293 Pink hue to rock at 293 feet (FeO?), quite broken, calcite seams, frac. about 4"		
300			299.0					
310			308.0, 316.0			307 Rock gray-white at 307, less FeO.	0.03	
320			321.0					
330			328.5, 335.0					
340			345.0			345 Yellow mineral on frac. (MoO)?		
350			355.0			356 Fault, more alt'd below fault, more calcite veinlets, wider.	Tr.	
360			362.0				0.02	
370			370.5, 376.0					
380			385.0			387 Fault, calcite, brecciated, ±10° to axis.	0.04	
390	2700		395.0			392 Fault, same as above. 3 spks blue min (Azurite), yel, metallic also.		
400								

REGISTERED GEOLOGIST CERTIFICATE NO. 7784 RICHARD E. MIERITZ Date Signed ..... ARIZONA, U.S.A.

R.E.M.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Hortensia DEPOSIT: _____ COORDINATES: N. _____ E. _____

BEARING: S. 57° E. ANGLE: -70° ELEV: 3070 feet TOTAL DEPTH: 1500 feet

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: March 6, 1974 DRILLED BY: Boyles, Bros.

HOLE DEPTH	LEVEL ELEV.	HOLE ——— REAM. — — CASING. = =	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS % Mo.
410		NXWL	402.0, 407.0, 412.0			Diabase with pink, brown bands in green matrix badly broken 400-02, 406-07.		
420			421.0			Greenish calcite at 419.		
430			431.0, 434.0			Diabase now bluish-green.		
440			444.0					
450			450.0			450		
460			456.0, 465.0			457–462 Fault, mud, Hy rd & brwn FeO, mod. calcite,	0.03	
470			473.0			Hy. red FeO band, 6" at 470 ft.		
480			478.0, 485.0			Much calcite seams throughout.		
490			493.0			Contact between blue-grn and light to blk		
500	2600		501.0, 507.0, 510.0			diabase, 24°, streaks tan, red FeO. Spks 500	0.02	
510			517.0			Py (pyrite) near contact., badly broken		
520			522.0			500 to 512. some brecciation, much calcite		
530			530.0, 534.0			seams to 518.		
540			538.0, 542.0					
550			549.0, 555.0			Diabase becomes dk grn at 546. 550	0.02	
560								
570			565.0, 578.0			570 Fault, breccia, mud, calcite, light gray rock		
580			580.0			fine grained, soft, 1 ft. brwn-tan porphyritic		
590			585.0, 595.0			breccia, alt'd, FeO band@ 579. Gry, soft rock below 572 (shale), brwnsh shale 589-94..		
600	2500					Bluish-gry 594-601. 600	0.03	
610			605.0			603 Brownish-gry 601-23, badly broken, mud. (Fault)		
620			615.0			Fault zone. Cleavage 70°, some frag. limey.		
630			625.0			623 Diabase, soft, gry, alt'd, fine grained, FeO		
640			635.0, 639.0, 644.0, 647.5			seams now in calcite seams. Red FeO 627. Very broken 637 to 690.		
650			654.0			650		
660			664.5				Tr..	
670			670.0, 675.0			676 676, 1 ft. breccia, sugary and pebbly beyond.		
680			683.0			½" FeO at 685, 60° to axis.		
690			690.0, 696.0			Varied colored, pk, gry, grn, light orange,		
700			702.0			696 soft, sugary monzonite? at 696, banding 700 35°		
710	2400		710.0, 715.0			Highly alt'd below 715, like mud to 736	0.02	
720			722.0					
730			731.0, 736.0			736 Diabase, highly alt'd, much FeO & calcite		
740			743.0			seams. @ 743 diabase fresh but rotten.		
750			750.0, 755.0			756 Fault, mud, red-brwn FeO on H.W. side.		
760			765.0			768 Diabase, gray, much calcite.		
770			775.0			Hy FeO zone 772-785, mottled, Shale?	0.02	
780			783.0			785 Diabase, greenish, many FeO with calcite seams		
790			793.0			fresh.		
800								

REGISTERED GEOLOGIST CERTIFICATE NO. 7784 RICHARD E. MIERTZ Date Signed ARIZONA, U.S.A.

REM

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Hortensia DEPOSIT: COORDINATES: N E

BEARING: S. 57° E. ANGLE: -70° ELEV: 3070 Feet TOTAL DEPTH: 1500 Feet

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: March 6, 1974 DRILLED BY: Boyles Bros.

HOLE DEPTH	LEVEL ELEV	HOLE / REAM / CASING	CORE PULLS	CORE REC. %	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS % Mo.
810	2300	NXWL	803.0			811.0 Fault, 2" wide, Dk grn rock below, (pyroxinite?), fresh mica to 843.		
820			813.0			Heavy calcite crystals, vugs at 826		
830			821.0					
840			827.0					
850			835.0			Stgly alt'd 845-50 with pcs pk Por, mud & gravelly, very broken 850-53.	0.04	
860			845.0			858.0 Schist, gray, void of calcite and FeO.		
870			850.0					
880			853.0					
890			861.0					
900			867.0					
910			875.0					
920	2200		882.0					
930			890.0					
940			894.0					
950			904.0					
960			914.0					
970			924.0					
980			931.0				0.03	
990			941.0					
1000			951.0					
1010			955.0					
1020	2100		965.0					
1030			975.0					
1040			985.0					
1050			995.0					
1060			1004.0				Tr.	
1070			1014.0					
1080			1024.0			1025 Small fault.	0.03	
1090			1026.0					
1100			1035.0					
1110			1045.0			Quartz seams 1044, some of which are pink and red.		
1120			1055.0					
1130	2000		1065.0			1067 Thin, orange-red-brwn FeO seams to 1072		
1140			1074.0			1072 Fault, gouge, brwn-red.	Tr.	
1150			1084.0					
1160			1094.0			Schist splintery 1090-92.		
1170			1104.0			Yel-brwn spks 1094-98		
1180			1114.0					
1190			1124.0			Thin frac & mud slip 1120. Some barren white qtz seams with minor FeO below.	0.02	
1200			1132.0					
			1142.0					
			1152.0					
			1161.0					
			1171.0					
			1180.0					
			1190.0					
			1198.0					

REGISTERED GEOLOGIST
CERTIFICATE NO. 7784
RICHARD E. MIERITZ
Date Signed.....
ARIZONA, U.S.A.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE Diamond

PROPERTY Hortensia DEPOSIT _____ COORDINATES N. _____ E _____

BEARING S. 57° E. ANGLE -70° ELEV. 3070 Feet TOTAL DEPTH 1500 Feet

DATE STARTED Feb. 2, 1974 DATE COMPLETED March 6, 1974 DRILLED BY Boyles Bros.

HOLE DEPTH	LEVEL ELEV	HOLE ——— REAM — — CASING ═══	CORE PULLS	CORE REC. %	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS % Mo.
1210		NXWL	1205.0			½ to 4" Qtz seams, 1202-15 ft.		
			1210.0					
			1215.0			1215 Fine grained schist below 1215.	0.02	
1220								
			1224.0					
1230	1900		1233.0			1232.5 Fault, purplish gouge, 2 to 4" wide. Qtz seams 1233-40. Chloritic is spots. Schist thinly laminated for most part. Quite broken. 1250		
1240								
			1243.0					
1250			1249.0					
			1254.0					
1260								
			1264.0					
1270								
			1274.0					
1280								
			1284.0					
1290								
			1294.0					
1300						1303-05 Fault gouge. 1300		
			1304.0					
1310			1311.0			Occasional shite barren Qtz seams 2-3" wide. Small amount of specular hematite. Quite broken 1308-10, 1335-40.		
1320			1321.0					
1330								
			1331.0					
1340	1800		1338.0					
			1345.0			1344 1347.5 Dense, soft, grn-blk (shale), 60° to axis. Some calcite veinlets with FeO. 1350		
1350								
			1355.0			Schist below 1347.5 with many veilets org-brwn FeO to 1353.		
1360			1362.0					
1370			1370.0					
			1375.0					
1380								
1390			1385.0					
			1394.0					
1400			1401.0			Badly broken 1395-1405, Some FeO on schistosity 1406-23. 1400		
1410			1408.0					
			1415.0					
1420			1423.0			1423 1430 Fault, hy FeO, breccia, broken, gouge, thinly laminatedwith much FeO on schistosity giving pinl color to 1438. Schist below 1430. Broken 1443-49. Schist darker gray below 1449, no FeO. 1450		
1430			1429.0					
			1435.0					
1440	1700		1441.0					
			1447.0					
1450								
			1455.0					
1460			1461.0					
1470								
			1471.0					
1480			1476.0					
			1484.0			1481 Diabase, greenish, calcite seams with org-brwn-red FeO. Fair amount olivine		
1490			1490.0					
			1495.0					
1500			1500.0					
1510						Total depth, 1500 feet. March 6, 1974.		
1520								
1530								
1540								
1550	1600							
1560								
1570								
1580								
1590								
1600								

REGISTERED GEOLOGIST
CERTIFICATE NO.
7784
RICHARD E.
MIERITZ
Date Signed.....
ARIZONA, U.S.A.

R.E.M.

1435 S.
P. O. BOX 3939

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

R.E.M.

Certificate No. 59264

TUCSON, ARIZONA 85702 Mar. 8 1974

Sample Submitted by Mr. R.E. Muertz

SAMPLE MARKED	Gold Per ton	GOLD Per ton	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
#1172 D.D.H. No 2		595-605		0.03			
73		654-664.5		Trace			
74		710-715		0.02			
75		765-775		0.02			
76		845-850		0.04			
77		924-931		0.03			
78		995-1004		Trace			
79		1024-1026		0.02			
1180		1065-1074		Trace			
81		1124-1132		0.02			
1182		1210-1215		0.02			

REGISTERED ASSAYER CERTIFICATE EXPIRES 1041 BENJAMIN P. JACOBS Dec. 31, 74 Arizona U.S.A.

* Gold Figured $35.00 per oz. Troy

Charges $ 22.00 Paid

Very respectfully, Ben P. Jacobs

1435 S. 10th AVE.
P. O. BOX 3939

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59259

TUCSON, ARIZONA 85702 Feb. 26th 1974

Sample Submitted by Mr. R.E. Muertz

SAMPLE MARKED	Gold Per ton	GOLD Per ton	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Mo Per cent Wet Assay	Per cent Wet Assay
#1158 Surface gouge		Fault - N. and		Trace.			
59 D.D.H. No 2		30-35		0.02			
60		76-82.5		0.03			
61		125-135		0.03			
62		165-178.2		Trace			
63		214-219.5		0.02		Trace	
64		259-264		0.02			
65		308-316		0.03			
66		345-355		Trace.			
67		362-370.5		0.02			
68		385-395		0.04			
69			456-465	0.03			
70			493-501	0.02			
71			542-549	0.02			

REGISTERED ASSAYER CERTIFICATE EXPIRES 1041 BENJAMIN P. JACOBS Dec. 74 Arizona U.S.A.

* Gold Figured $35.00 per oz. Troy

Charges $ 30.50

Very respectfully, Ben P. Jacobs

March 4, 1974

Matador Exploration Ltd.
Att: Murray Pezin, President
Suite 1606 Royal Centre
1055 W. Georgia St.
Vancouver, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
February 24 through March 1, 1974

Diamond drilling continued on Drill Hole No. 1 without operational-wise difficulties. The advance for the period was 300 feet and this coupled with the previous total footage of 924 feet is a to-date total of 1224 feet. In tabulated for, this is:

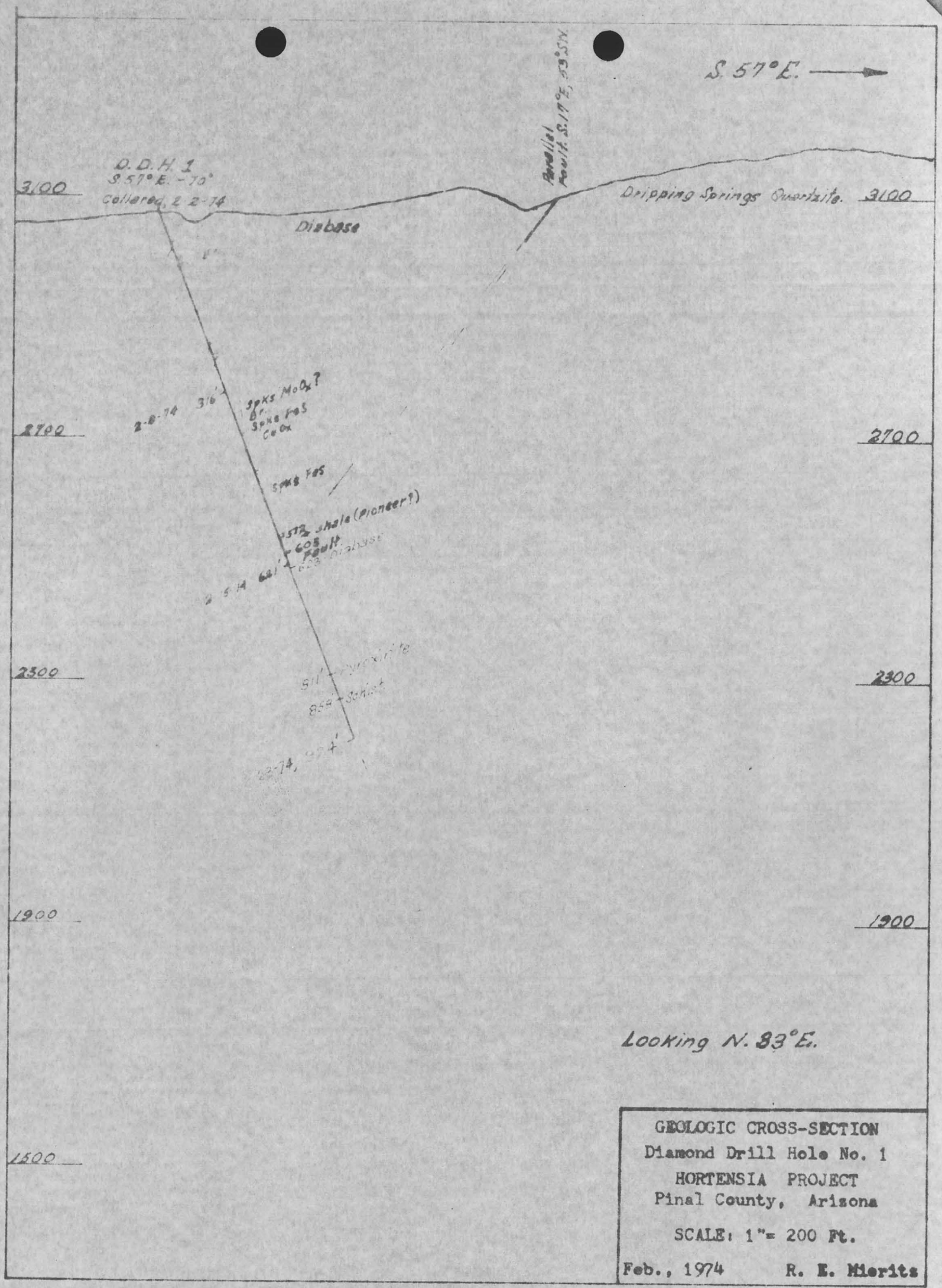
Advance this period	300 feet
Advance to 2/24/74	924 feet
Total to date	1,224 feet

The entire advance this week has been in the Pinal Schist which has been carrying a few barren quartz seams or stringers crossing the axis of the core at several different angles. A complete geologic log of the hole with intervalled sampling and assaying results is attached to this report.

Attached also are the assay certificate from the Registered Assayer, Tucson, Arizona. I have used this Assay Office since 1948 when supervising the Silver Bell copper Project for American Smelting and Refining Co., in Pima County, Arizona.

Hole No. 1 will be drilled to 1500 feet with the expectation of encountering, by projection, a fault between 1300 and 1400 feet, which is hoped will be mineralized at its intersection. This total depth should be reached the later part of the coming period.

R. E. Mieritz,
Mining Consultant
Phoenix, Arizona.



GEOLOGIC CROSS-SECTION
Diamond Drill Hole No. 1
HORTENSIA PROJECT
Pinal County, Arizona

SCALE: 1" = 200 Ft.

Feb., 1974 R. E. Mierits

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE Diamond

PROPERTY: Hortensia DEPOSIT: COORDINATES: N. E.

BEARING: S. 57° E. ANGLE: -70° ELEV: 3070 feet TOTAL DEPTH:

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: DRILLED BY: Boyles Bros.

HOLE DEPTH | LEVEL ELEV. | HOLE — REAM. — — CASING = = | CORE PULLS | CORE REC. % (20 40 60 80) | ROCK TYPE

N.C.

NXWL

30.0 35.0 41.5 48.5 55.0 60.0 64.0 71.0 76.0 82.5 88.0 95.0 103.0 111.0 116.0 125.0 135.0 143.0 153.0 160.0 165.0 173.2 182.0 191.0 198.0 205.0 214.0 219.5 224.0 229.0 235.0 240.0 245.0 252.0 259.0 264.0 273.0 280.5 285.0 290.0 299.0 308.0 316.0 321.0 328.5 335.0 345.0 355.0 362.0 370.5 376.0 385.0 395.0

GEOLOGIC DESCRIPTION & REMARKS

No. overburden but no core for first 30 ft.
Very broken, ground up.

30 Diabase, wh. & blk., stgly alt'd, much FeO,
40 some yel and red, mostly brown. Many Frac.
Fault, mud, gouge at 40 ft.
57 Fault, ½" breccia.

Pcs, bright red mineral and pale yellow mineral.

82.5 Fault
92 Fault
99 Fault, breccia 6° to axis. Brwn FeO_x

112 113 Faults, diabase fresh. Broken 118-19.5
Diabase more siliceous from 125 ft., some frac. have yel lim. now, more red lim. than brwn. Frac about 1" apart. Calcite seams, 1/16, 1/8" quite prevalent.

Blk mineral 167-73, less calcite seams, many FeO seams but no frac though. Diabase more blue-gray now.

1/8 to ½" FeO bands all angles.

Many calcite seams from 214 ft.

234 Fault, 1 ft. wide.

251 Fault, 1 ft. wide
259 Fault.

293 Pink hue to rock at 293 feet (FeO?), quite broken, calcite seams, frac. about 4"
307 Rock gray-white at 307, less FeO.

345 Yellow mineral on frac. (MoO)?

356 Fault, more alt'd below fault, more calcite veinlets, wider.

387 Fault, calcite, brecciated, ±10° to axis.
392 Fault, same as above.
3 spks blue min (Azurite), yel, metallic also.

ASSAYS

% Cu.	% Mo.
0.02	
0.03	
0.03	
Tr.	
0.02	Tr.
0.02	
0.03	
Tr.	
0.02	
0.04	

R.E.M.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE Diamond

PROPERTY: Hortensia DEPOSIT: COORDINATES: N. E.

BEARING: S. 57° E. ANGLE: -70° ELEV: 3070 feet TOTAL DEPTH:

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: DRILLED BY: Boyles, Bros.

HOLE DEPTH	LEVEL ELEV.	HOLE / REAM / CASING	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS %	ASSAYS %
410		NXWL	402.0			Diabase with pink, brown bands in green matrix badly broken 400-02, 406-07.		
420			407.0, 412.0, 421.0			Greenish calcite at 419.		
430			431.0			Diabase now bluish-green.		
440			434.0, 444.0					
450			450.0			450		
460			456.0, 465.0		457, 462	Fault, mud, Hy rd & brwn FeO, mod. calcite,	0.03	
470			473.0			Hy. red FeO band, 6" at 470 ft.		
480			478.0, 485.0			Much calcite seams throughout.		
490			493.0			Contact between blue-grn and light to blk		
500			501.0			diabase, 24°, streaks tan, red FeO. Spks 500	0.02	
510			507.0, 510.0			Py (pyrite) near contact., badly broken		
520			517.0, 522.0			500 to 512. some brecciation, much calcite		
530			530.0			seams to 518.		
540			534.0, 538.0, 542.0					
550			549.0, 555.0			Diabase becomes dk grn at 546. 550	0.02	
560								
570			565.0, 578.0		570	Fault, breccia, mud, calcite, light gray rock		
580			580.0			fine grained, soft, 1 ft. brwn-tan porphyritic		
590			585.0			breccia, alt'd, FeO band@ 579. Gry, soft rock		
600			595.0			below 572 (shale), brwnsh shale 589-94..		
610			605.0		603	Bluish-gry 594-601. 600 Brownish-gry 601-23, badly broken, mud. (Fault)	0.	
620			615.0			Fault zone. Cleavage 70°, some frag. limey.		
630			625.0		623	Diabase, soft, gry, alt'd, fine grained, FeO		
640			635.0, 639.0, 644.0			seams now in calcite seams. Red FeO 627.		
650			647.5			Very broken 637 to 690. 650		
660			654.0, 664.5					
670			670.0					
680			675.0, 683.0		676	676, 1 ft. breccia, sugary and pebbly beyond. ½" FeO at 685, 60° to axis.		
690			690.0			Varied colored, pk, gry, grn, light orange,		
700			696.0, 702.0		696	soft, sugary monzonite? at 696, banding 700 35°		
710			710.0, 715.0			Highly alt'd below 715, like mud to 736		
720			722.0					
730			731.0, 736.0		736	Diabase, highly alt'd, much FeO & calcite		
740			743.0			seams. @ 743 diabase fresh but rotten.		
750			750.0, 755.0			750		
760			765.0		756	Fault, mud, red-brwn FeO on H.W. side.		
770			775.0		768	Diabase, gray, much calcite.		
780			783.0			Hy FeO zone 772-785, mottled, Shale?		
790			793.0		785	Diabase, greenish, many FeO with calcite seams		
800						fresh.		

R.E.M.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE Diamond

PROPERTY: Hortensia DEPOSIT: _____ COORDINATES: N _____ E _____

BEARING: S. 57° E. ANGLE -70° ELEV: _____ TOTAL DEPTH: _____

DATE STARTED: Feb. 2, 1974 DATE COMPLETED: _____ DRILLED BY: Boyles Bros.

HOLE DEPTH	LEVEL ELEV	HOLE / REAM / CASING	CORE PULLS	CORE REC.%	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS %	ASSAYS %
810			808.0			811.0 Fault, 2" wide, Dk grn rock below, (pyroxinite?), fresh mica to 843.		
820			813.0			Heavy calcite crystals, vugs at 826		
830			821.0					
840			827.0			Stgly alt'd 845-50 with pcs pk Por, mud & gravelly, very broken 850-53.		
850			835.0			852.0 Schist, gray, void of calcite and FeO.		
860			845.0					
870			850.0					
880			853.0					
890			861.0					
900			867.0					
910			875.0					
920			882.0					
930			890.0					
940			894.0					
950			904.0					
960			914.0					
970			924.0					
980			931.0					
990			941.0					
1000			951.0					
1010			955.0					
1020			965.0					
1030			975.0					
1040			985.0					
1050			995.0					
1060			1004.0					
1070			1014.0					
1080			1024.0			1025 Small fault.		
1090			1026.0					
1100			1035.0					
1110			1045.0			Quartz seams 1044, some of which are pink and red.		
1120			1055.0					
1130			1065.0			1067 Thin, orange-red-brwn FeO seams to 1072		
1140			1074.0			1072 Fault, gouge, brwn-red.		
1150			1084.0					
1160			1094.0			Schist splintery 1090-92.		
1170			1104.0			Yel-brwn spks 1094-98		
1180			1114.0					
1190			1124.0			Thin frac & mud slip 1120. Some barren white qtz seams with minor FeO below.		
1200			1132.0					
			1142.0					
			1152.0					
			1161.0					
			1171.0					
			1180.0					
			1190.0					
			1192.0					

R.E.M

February 25, 1974

Matador Exploration Ltd.
Att: Murray Pezin, President
Suite 1606 Royal Centre
1055 W. Georgia St.
Vancouver, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
February 16 thru 23, 1974

Diamond drilling continued on Drill Hole No. 1 without operational-wise incident. The advance for this period was 303 feet and this coupled with the previous total footage of 621 feet for the previous periods is a total of 924 feet. In tabulated form, this is:

Advance this period	303 feet.
Previous total footage	621 feet.
Total to date.	924 feet.

The general geologic log of this hole to date is:

0 to 603 feet - Diabase of varying degrees of alteration containing many yellow, brown and red seams or zones of limonite. There are many faults and fractures in all directions. At 345 feet a minute amount of MoO_x was observed. At 393 feet a small amount of FeS as well as 3 specks of CuO_x were observed..The entire column contains many thin seams of calcite.

603 to 623 feet - Fault zone, Parallel Fault. Badly broken, much gouge and brecciated, containing diabase and Pioneer Shale which was penetrated from 572 to 603 feet.

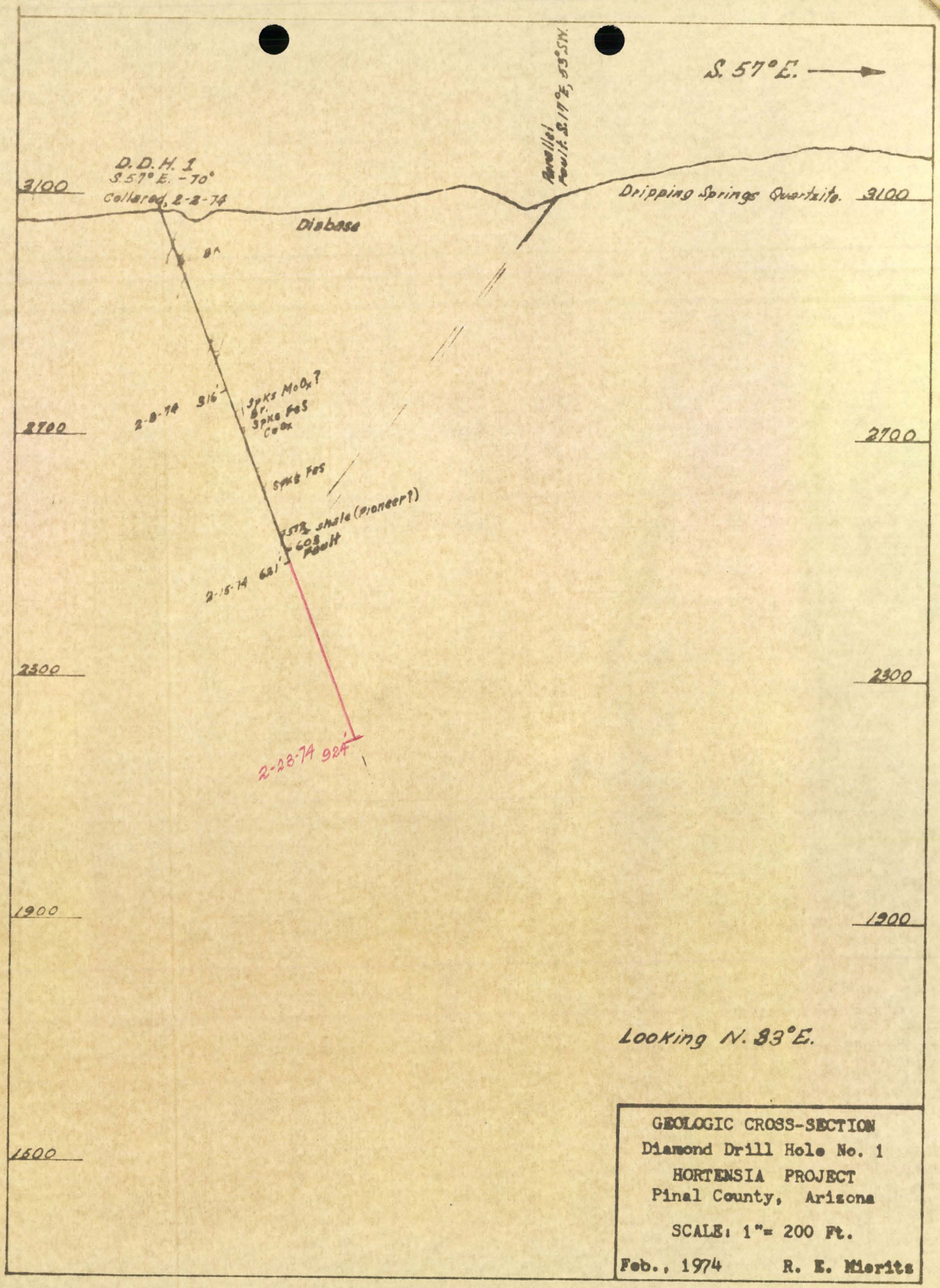
623 to 811 feet - Diabase, highly altered containing calcite seams with FeO_x on the walls between the calcite and diabase. Fault 755 to 768 feet.

811 to 858 feet - Pyroxinite, void of limonites, calcite.

858 to 924 feet - Schist. Void of calcite and FeO_x seams.

The hole has been samples at approximately 50 foot intervals but the results of these samples have not been received as yet. Same will be included in the Composite Drill Log which will be forwarded at the end of the next period.

R. E. Mierits,
Mining Consultant
Phoenix, Arizona.


S. 57° E.
Parallel Fault: S.17°E, 53°SW.
D.D.H. 1
S.57° E. - 70°
Collared, 2-8-74
3100
Dripping Springs Quartzite.
3100
Diabase
2-8-74 316'
Spks MoOx?
Br.
Spks FeS
CuOx
2700
2700
Spks FeS
Shale (Pioneer?)
COS
Fault
2-15-74 621'
2500
2300
2-28-74 924'
1900
1900
Looking N. 83°E.
1500
GEOLOGIC CROSS-SECTION
Diamond Drill Hole No. 1
HORTENSIA PROJECT
Pinal County, Arizona
SCALE: 1"= 200 Ft.
Feb., 1974
R. E. Mierits

February 16, 1974

Matador Exploration Ltd.
Att: Murray Pezin, President
1606 Royal Center
(Georgia & Berrard)
Vancouver, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
February 9 thru 15, 1974

Diamond drilling continued on Drill Hole No. 1 without operational-wise incident. The advance for this period was 305 feet and this coupled with the 316 feet for the first period is a total of 621 feet for the first half of February, 1974. In tabulated form, this is:

Advance this period	305 feet
Previous total footage	316 feet
Total to date.	621 feet.

The general geologic log of this hole to date is:

0 to 603 feet - Diabase of varying degrees of alteration containing many yellow, brown and red seams or zones of limonite. There are many faults showing slippage and many fractures in all directions. At 345 feet a minute amount of MoO_x was observed. At 393 feet a small amount of FeS (pyrite or pyrrhotite)(very minute grains) were observed as well as 3 specks of CuO_x (~~malachite~~ The entire column contains many thin seams of calcite.

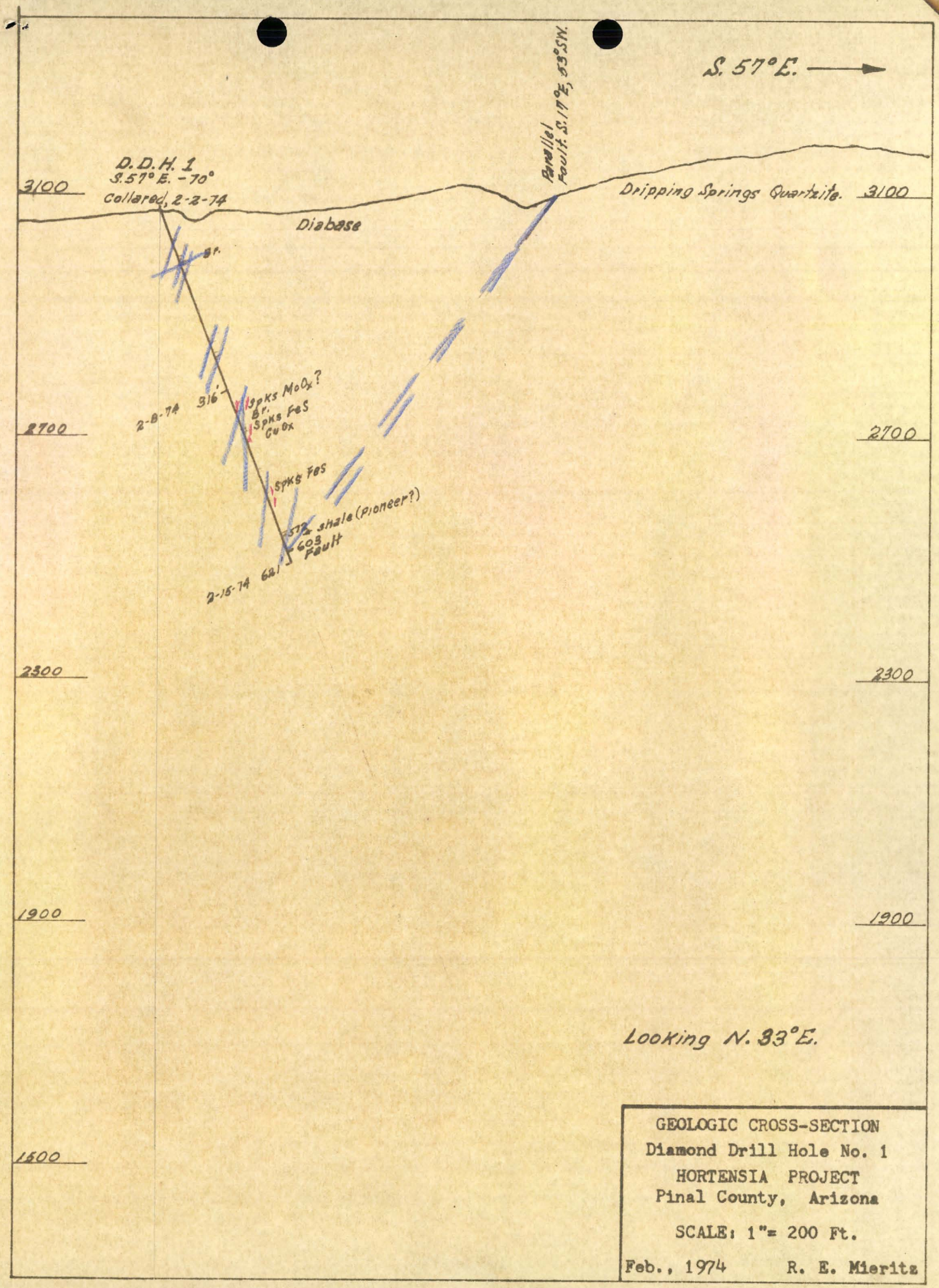
603 to 621 ft.- Fault zone, intersection of the Parallel Fault. This has not been fully penetrated. It is very badly broken up, contains very much gouge, is brecciated and contains fragments of diabase and ~~khale~~(?) Pioneer? Some fragments limey.

A more detailed log will be submitted the next period.

The drill hole was collared 4½ inch to 30 feet and cased. NXWL core size is now being used from 30 feet to the present bottom.

The writer will start to sample the drill hole core at approximately 50 foot intervals in order to obtain some indication of the copper content which is perhaps not visible to the eye but might be present.

R. E. Mieritz
Mining Consultant
Phoenix, Arizona.



GEOLOGIC CROSS-SECTION
Diamond Drill Hole No. 1
HORTENSIA PROJECT
Pinal County, Arizona

SCALE: 1" = 200 Ft.

Feb., 1974 R. E. Mieritz

February 10, 1974

Matador Exploration Ltd.
Att: Murray Pezin, President
1606 Royal Center
(Georgia & Berrard)
Vancouver, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
up to February 9, 1974

The drill and accessory equipment was moved onto the drill site on January 29 about mid-day. This is a "skid" type drill using a wood pole tripod, thus a little time is consumed in setting up. The hole was collared February 2 and reached a depth of 316 feet at the end of the second shift on Friday, February 8, 1974.

Drill operation will be that of a double shift, 7:00 AM to 3:00 PM to 11:00 PM, six days a week.

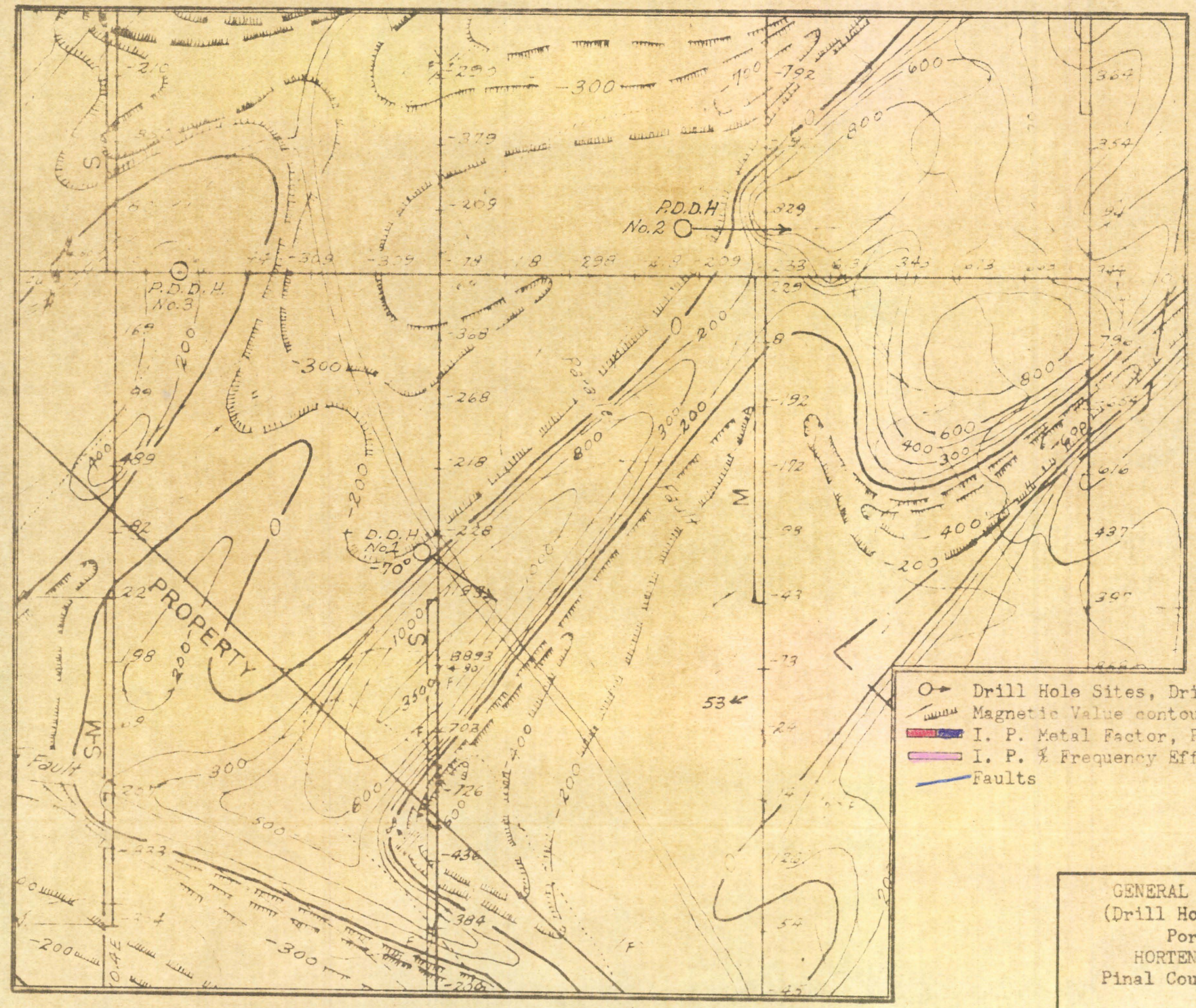
Core boxes were purchased from a local manufacturer of such boxes at a cost a lot less than that charged by the drilled contractor. The drill contractor will provide the writer with a daily shift report and in addition they will complete the writers own Drill Shift Report which provides for a bit more information, particulary as regards hole condition, sludge, core recovery, etc. Our Shift Report also provides core pull information.

Hole No. 1 is being drilled southeasterly (S. 57°E.) at -70° to the southeast to intersect the magnetic HIGH and also test the IP anomalous area. The attached Map shows the position of Hole No. 1 as well as the sites of Proposed Drill Holes Nos. 2 and 3.

To 316 feet the hole has encountered diabase with varying degrees of alteration and varying amounts of limonite of the red, brown, orange and to some extent yellow colors. Some minor faults have bee encountered but the significance of same is not known until the writer can prepare a section through the hole.

Core Security has been stressed to the drillers because of the close proximity and accessibility for the Magma personnel. A covered metal small trailer has been rented on a monthly basis for the storage of the core at the drill site and supplies as core boxes, etc. It is locked with the drillers having one key and the writer the other. A "Mini" storage room (10' x 10') has been rented in Phoenix where the core is logged and stored. The writer has the only key.

R. E. Mieritz
Mining Consultant
Phoenix, Arizona



LEGEND

- Drill Hole Sites, Drilling & Proposed
- Magnetic Value contour lines
- I. P. Metal Factor, Probable, Possible
- I. P. % Frequency Effect.
- Faults

GENERAL SURFACE MAP
(Drill Hole Locations)
Portion of
HORTENSIA CLAIMS
Pinal County, Arizona

Scale: 1"= 200 Ft.

Feb., 1974 R. E. Mieritz

Febkuary 1, 1974

Matador Exploration Ltd.
Att: Murray Pezin, President
2078 Springer Ave.
Burnaby 2, B. C., Canada

HORTENSIA PROJECT
WEEKLY PROGRESS REPORT
Jan. 26 thru Feb. 1, 1974

On January 20, 1974 the writer was advised that a drilling contract would be let to Boyles Bros Drilling Co. for the purpose of drilling some deep holes on the Hortensia property in Pinal County, Arizona, northwest of the town of Superior. At the same time Mr. Larry Page advised I was to Supervise this drilling project.

Since then, the writer has made arrangements for drilling water, had a drilling site prepared, rented a Mini-storage area in Phoenix tobe used as core storage and to be able to log the core geologically and complete any core splitting that may be necessary.

The drill and accessory equipment was moved onto the drill site on January 29 about mid-day. This is a "skid" type drill using a wood pole tripod, thus, a little time is consumed in setting up. The hole may have been collared late this afternoon after my departure for Phoenix, or it would be collared the first thing tomorrow morning. Drill operation will be that of double shift, 7:00AM to 3:00PM to 11:00PM., six days a week.

The writer also purchased core boxes at a price of 40 to 52 cents less per box than that charged by the drill contractor. We shall receive a copy of the Drill Contractors Shift Report and they have been requested to fill out "our" Drill Shift Report which provides for a bit more information, particularly as regards hole condition, sludge etc. Our Shift report also provides core pull information.

The hole is being drilled southeasterly at a -70° angle to the southeast to intersect the magnetic HIGH and also test the IP anomalous area. The next report will provide a "location Map" showing the position of the hole, the surface features and the objectives for the drill hole.

Core security has been stressed to the drillers because of the close proximity and accessibility for the Magma personnel.

R. E. Mieritz,
Mining Consultant
Phoenix, Arizona.

December 30, 1973

Cutlass Exploration Ltd.
Matador Exploration Ltd.
Mr. Lawrence Page
1840 - 777 Hornsby Street
Vancouver, 1, B. C., Canada

Dear Larry:

Steve Radvak asked me to get some bids on diamond drilling on the Pinal Copper Co. property and also on the Hortensia property for Matador Exploration.

A few days later Steve changed his mind on the Pinal Copper diamond drilling but that was after I had already taken the representative of Metler Bros Drilling Co. to the property. We completed the visit to the two properties in one day.

On January 2, 1974, I am taking a representative of Boyles Bros. Drilling Co. to the Hortensia property for a bid for Matador Exploration.. As soon as I have that bid, I shall forward to you. My thought at the moment is that Metler Bros will be the lowest because they do not have all the overhead that Boyles do. Metler is a good drilling Co.

When I have completed the trip to the Hortensia with theBoyles Bros. man, I shall forward an invoice for the time consumed.

Steve indicated that one or two of the Directors of the respective companys should sign the Bid-Agreement or contract.

Hope you had a very Merry Christmas and a Happy New Year.

Best to you in 74.

R. E. Mieritz
Mining Consultant,
Phoenix, Arisona

METLER BROS. DRILLING CORP.
4001 E. ILLINOIS
TUCSON, ARIZONA 85714

December 27, 1973

Matador Exploration Ltd.
1840-777 Hornby Street
Vancouver, B. C. Canada

Gentlemen:

The undersigned herewith proposes as follows to perform approximately 3,000 feet of core drilling at your property near Superior, Arizona under the following terms and conditions.

1. Mobilization & Demobilization - $1.50 per mile from our Tucson yard and return.

2. Drilling, overburden - $5.00 per foot.

Drilling,	NX	BX
0' to 500'	$ 9.75	$ 9.50 per foot
500' to 1000'	10.75	10.50 " "
1000' to 1500'	12.25	12.00 " "
1500' to 2000'	13.75	13.50 " "

3. Reaming, if required, $5.00 per foot.

4. Materials and Supplies: Drilling fluids, chemicals and cement used will be charged at cost plus 10% f.o.b. drill site. Core boxes - $1.25 each.

5. Other contingencies: Water Truck - $400.00 per month plus $.25 per mile for hauling water from your source. Installing and removing casing, cementing and drilling cement and lost circulation will be charged at $25.00 per hour. Casing lost or ordered left in place will be charged at cost plus 10%. Delays or standby time caused by your Company will be charged at $20.00 per hour.

6. Access roads and drill sites to be prepared in advance by your Company.

(cont'd)

7. Terms of payment - cash deposit required, then, bi-monthly 15 days from date of invoice.

Thank you for the opportunity to quote on this project. If it is acceptable, please sign as indicated below and return the original to us.

Yours truly,

METLER BROS. DRILLING CORP.

Don Rodriguez,
Vice President

DR/mn

ACCEPTED: _____

_____

cc: Richard B. Mieritz
1634 W. Haselwood St.
Phoenix, Arizona 85015

METLER BROS. DRILLING CORP.
4001 E. ILLINOIS
TUCSON, ARIZONA 85714

December 27, 1973

Cutlass Exploration Ltd.
1840-777 Hornby Street
Vancouver, B.C. Canada

Gentlemen:

The undersigned herewith proposes as follows to perform approximately 3,000 feet of core drilling at your Pinal Copper Property near Casa Grande, Arizona under the following terms and conditions.

1. Mobilization & Demobilization - $1.50 per mile from our Tucson yard and return.

2. Drilling, overburden - $5.00 per foot

Drilling,	NX	BX
0' to 500'	$ 9.50	$ 9.25 per foot
500' to 1000'	10.50	10.25 " "
1000' to 1500'	12.00	11.75 " "
1500' to 2000'	13.50	13.25 " "

3. Reaming, if required - $5.00 per foot.

4. Materials and Supplies: Drilling fluids, chemicals and cement used will be charged at cost plus 10% f.o.b. drill site. Core boxes - $1.25 each.

5. Other contingencies: Water truck - $400.00 per month plus $.25 per mile for hauling water from your source. Installing and removing casing, cementing and drilling cement and lost circulation will be charged at $25.00 per hour. Casing lost or ordered left in place will be charged at cost plus 10%. Delays or standby time caused by your Company will be charged at $20.00 per hour.

6. Access roads and drill sites to be prepared in advance by your Company.

(cont'd)

7. Terms of payment - cash deposit required, then bi-monthly 15 days from date of invoice.

Thank you for the opportunity to quote on this project. If it is acceptable, please sign as indicated below and return the original to us.

Yours truly,

METLER BROS. DRILLING CORP.

Don Rodriguez, Vice President

DR/an

ACCEPTED _____

_____

CC: Richard E. Mieritz
1634 W. Haselwood St.
Phoenix, Arizona 85015

DIAMOND CORE DRILLING
ROTARY DRILLING
GROUTING
FOUNDATION TESTING
DIAMOND DRILLING EQUIPMENT
DRILLING ADDITIVES

Boyles Bros. DRILLING COMPANY
CONTRACTORS-ENGINEERS

General Offices and Plant
1624 Pioneer Road P. O. Box 58 Phone (801) 487-3671
SALT LAKE CITY, UTAH 84110
Cable: BOYLESCO
Telex: 388-321

BRANCH OFFICES
PHOENIX, ARIZONA
GOLDEN, COLORADO
SPARKS, NEVADA
SPOKANE, WASHINGTON
MURFREESBORO, TENNESSEE
IRONWOOD, MICHIGAN
SANTIAGO, CHILE
cable: BOYLESBROS
LIMA, PERU
cable: BOYLESCOP
MEXICO CITY, MEXICO
telex: 001774546

BEN L. AUSTIN
MANAGER DRILLING OPERATIONS

January 11, 1974

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B. C., Canada

Attention: Richard E. Mieritz
Mining Engineer and Geologist
1634 West Hazelwood Street
Phoenix, Arizona 85015

Gentlemen:

We have examined the area near Superior, Arizona, on which Matador Exploration Ltd. proposes to do core drilling.

For drilling approximately three holes each, 1,500 feet deep, we submit the proposal contained in Exhibit A.

Since Boyles Bros. Drilling Company has not previously done business with Matador Exploration Ltd., we would require that $15,000.00 be placed in escrow before our drilling equipment is mobilized onto the job site. This money would be applied as outlined in Paragraph 4 of Section B of the attached agreement.

Thank you for asking Boyles to submit a price quotation on your work. If there are any questions about this proposal, please feel free to call us.

Please sign the two (2) copies of the agreement, and one (1) copy of Exhibit A and return to us for our signature, and we will return one (1) copy for your files.

Very truly yours,

B. L. Austin

BLA:bg
Encls.
cc: S. L. Mathews

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 19 74 _____, by and between MATADOR EXPLORATION LTD., hereinafter referred to as "Company," and BOYLES BROS. DRILLING COMPANY, a Utah corporation, with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "Contractor."

The Company has requested the Contractor and the Contractor has agreed to perform certain work and/or drilling and other services as hereinafter set forth, subject always to the terms, conditions and provisions herein contained.

In consideration of the payment of the amounts herein stipulated and in consideration of the mutual agreements hereinafter contained, the parties hereby agree as follows:

A. THE CONTRACTOR AGREES:

1. To do the work and provide the services and materials as particularly set forth in Exhibit "A" attached hereto and made a part hereof at the rates set forth therein.

2. Labor and Machinery.

(a) To supply all necessary equipment, industrial diamonds, diamond drill machinery, power therefor, and labor; all labor, diamond wear loss, and all other operating expenses, except as hereinafter specifically provided, shall be at the Contractor's cost and expense.

(b) To supply all necessary rotary drill equipment, separate compressor if required, down-the-hole hammer or drill collars, down-the-hole or tricone bits, labor, and fuel. All operating expenses except as herein specifically provided shall be at the Contractor's cost and expense.

3. Size of Core and Recovery.

(a) That all core holes shall be drilled with double tube core barrels of sizes provided for in Exhibit "A" attached hereto, and that the drill crew shall exercise reasonable care and precaution to recover as high a percentage of core as the nature of the grounds drilled will permit, and shall deliver all such core at the drill site to the person or persons designated by the Company.

2

(b) That all non-core holes shall be drilled in the manner and size provided for in Exhibit "A" attached, and if required by Exhibit "A", the crews shall collect dust or wash samples and shall deliver them at the drill site to the person or persons designated by the Company.

4. Depth and Measurement of Holes and Completion Thereof.

(a) That no hole shall exceed the maximum depth set forth in Exhibit "A" attached hereto, and Contractor shall use its best endeavors to complete all holes according to the specifications, but should cavities or loose or caving material be encountered of such a nature as to prevent successful completion of any hole, it does not guarantee to drill to any certain depth, but shall drill as deep as practicable, under the conditions, and shall be paid for such hole or holes at the rates specified for all footage completed.

(b) That in the event other work or deeper drilling, other than is provided herein, is desired by the Company, such other work or drilling shall be performed under conditions and at such rates as may be agreed upon in a written instrument supplemental to the within agreement, and such other work or drilling shall not be performed until such supplemental agreement is in writing and executed by the parties.

(c) That measurements of all drill holes shall be from the original contour of the ground except in such cases where the Company prepares drill stations, in which event measurements shall be from the collar of holes.

5. Employer's Liability and Workmen's Compensation.

That it shall be subject to and operate under all applicable Federal and State Enactments regarding Employer's Liability, Workmen's Compensation, Federal Social Security and Unemployment Compensation Insurance, expressly covenanting and agreeing that its employees engage on the work herein undertaken to be done by it are not and shall not be treated or considered as the servants or employees of the Company.

6. Safety Requirements.

That in the prosecution of the work covered by this contract, it shall use such methods as are reasonably consistent with safety, both as concerns its officers, agents and employees, and the property of the Company, its officers, agents and employees, and the public in general.

B. THE COMPANY AGREES:

2

1. Location of Work and of Holes and Safekeeping of Core.

That prior to any operation it shall have determined the location of the work to be performed by the Contractor and the location, depth, and angle of each drill hole, and shall have made provisions for the safekeeping of all cores and sludges to be recovered. It shall provide containers for the storage of said samples unless specific arrangements that the Contractor supply containers are listed in attachment "A", and shall keep such records as may be deemed advisable in respect to same.

2. Drilling Under Extraordinary Conditions.

That in the event it becomes necessary to drill from any location where barges or the driving of piles are required for foundation, it will furnish and supply all such foundations to the satisfaction of the Contractor.

3. Indemnity for Delays.

That it will save harmless and indemnify the Contractor for and against any delays caused through or by any negligence or fault on its part, its officers or employees, to the extent and in the amount of all labor and expense bills incurred by the Contractor during and by reason of such delays, provided, however, that in the case of underground or surface drilling where the Company supplies power for drilling, the Contractor agrees to accept the usual mine operating conditions, relieving the Company of liability for loss of time occasioned by power interruptions or occasioned by any other cause beyond the Company's control.

4. Terms of Payment.

(a) Contractor shall invoice the Company at the end of each calendar month for work done during such period and the Company will make payments to the Contractor for such work at the rates and according to the terms herein specified, within ten days after presentation of invoice.

(b) That upon execution of this agreement it shall deposit with the Contractor the sum of $ 15,000.00 , it being specifically agreed that such sum or any portion thereof may be drawn upon by the Contractor at any time the Company shall be in arrears of any of the payments as hereinbefore provided, and if the full amount of such deposit is not drawn upon, then such deposit shall apply as far as possible on the final payment and any portion of said deposit remaining after final settlement hereunder shall forthwith be released by the Contractor to the Company.

5. Occupation of Streets, Alleys, and Public Places.

2

That whenever, in the performance of the work hereunder or in preparation for same, it may be necessary to occupy, use or obstruct any street, highway, private way or public place, or to do anything whatever in connection with public property, or whenever it shall be necessary in order to comply with building laws or local, state or national ordinances, laws or regulations, it shall procure, free of all cost and expense to the Contractor, all necessary permits or permission therefor, and it shall indemnify and save harmless the Contractor from and against all liability, costs or expenses resulting from the failure to secure such permits or permission.

6. Right of Entry and Removal of Property.

(a) To provide at its own expense, all rights of way, both of ingress and egress, and the peaceable possession of all real property that may be required in connection with said work, including real property upon which all necessary temporary buildings and other facilities may be erected, or placed, and to save the Contractor harmless from any and all damages, claims, demands, costs or charges of whatsoever kind or character incident to the occupation and use of said real property.

(b) That upon completion of such work by the Contractor, the Contractor shall have the right to remove, within a reasonable length of time, all temporary buildings and other fixtures, trade fixtures, machinery, equipment, appliances and facilities placed upon such real property.

7. To obtain at its cost all necessary federal, state, county and city and other licenses and permits required for the performance of the work herein.

C. IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE COMPANY AND THE CONTRACTOR:

1. Transportation of Crews and Equipment.

That the Contractor shall pay all cost and expense in connection with transportation of crews and equipment to the property and return on completion of work under this agreement.

2. Commencement and Execution of Work.

Work under this agreement shall commence within 30 days after notice to proceed.

3. Force Majeure.

2

That neither party to the agreement shall be liable for any loss or damage caused by reason of strikes, accidents, acts of God, action of the elements, or any other causes beyond its control.

4. Supplement Agreement.

That no representations, promises, agreements or understandings other than those contained herein shall be binding upon the parties hereto, except where the same are set forth under a written instrument supplemental to or superseding the within agreement and such instrument shall be duly executed by the parties hereto.

5. Notice.

(a) Any notice required to be given by the Company shall be in writing and shall be properly given if such writing is delivered personally to or mailed by registered mail addressed to the Contractor as follows:

Boyles Bros. Drilling Company
1624 Pioneer Road
P. O. Box 58
Salt Lake City, Utah 84110

(b) Any notice required to be given by the Contractor shall be in writing and shall be properly given if such writing is delivered personally to or mailed by registered mail to the Company as follows:

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B. C., Canada

6. Laws Applicable.

This agreement shall be interpreted and any dispute arising hereunder shall be determined in accordance with the laws of the State of Utah.

7. Assignments.

This agreement shall be binding upon and shall inure to the benefits of the parties hereto, their respective successors and assigns, provided, however, that the same shall not be assignable by the Company until the consent in writing of the Contractor shall have first been had and obtained thereto.

2

8. The party defaulting under any of the provisions of this agreement shall be liable to the other party for all costs and attorney's fees incurred by the other party in enforcing the terms of this agreement or recovering damages for the breach thereof.

IN WITNESS WHEREOF, the Agreement has been executed by the parties hereto the day and year first above written.

BOYLES BROS. DRILLING COMPANY

ATTEST:

_____ _____

Secretary

Its _____

MATADOR EXPLORATION, LTD.

ATTEST:

_____ _____

_____ _____

2

BOYLES BROS. DRILLING CO.

Matador Exploration, Ltd.
1840-777 Hornsby Street
Vancouver 1, B.C., Canada

January 11, 1974

Attention: Richard E. Mieritz
Mining Engineer and Geologist
1634 West Hazelwood Street
Phoenix, Arizona 85015

EXHIBIT "A"

Price Schedule for Matador Exploration, Ltd. property near Superior, Arizona.

1. Mobilization and demobilization, lump sum - $750.00.

2. Core Drilling - Vertical Holes

	NC or Collar	NXWL	BXWL
0 to 500 feet	$10.50	$ 9.50	$ 9.25
500 to 1,000 "		9.85	9.65
1,000 to 1,500 "		10.50	10.20
1,500 to 2,000		11.35	11.20

3. Core Drilling - Angle holes vertical to 45°

	NC or Collar	NXWL	BXWL
0 to 500 feet	$11.40	$10.20	$ 9.95
500 to 1,000 "		11.20	11.00
1,000 to 1,500 "		12.20	12.00
1,500 to 2,000 "		13.60	13.45

4. The following items to be charged at the rate of $22.50 per hour:

   4.1 Cementing and placing lost circulation material, if required.
   4.2 Survey and standby time at your request.
   4.3 Delays caused by actions on your part and not the fault of Boyles.
   4.4 Installing or retrieving casing, if required.
   4.5 Tearing down, moving, and setting up over new hole in excess of eight hours per hole.

5. Water truck rental will be charged at the rate of $325.00 per month plus $.25 per mile. Water to be hauled by Boyles from your source of supply.

January 11, 1974

6. Cement, drilling mud, mud additives, and lost circulation materials consumed will be charged at our published list prices plus 15% for handling and transportation to the job site. Core boxes will be charged at $1.50 each.

7. Casing lost in the hole or left in the hole at your request will be charged at our published list prices f.o.b. job site.

8. Drill roads and drill sites are to be supplied free of cost to Boyles Bros. Any environmental responsibility relating to the construction, use or reclamation of same shall be the responsibility of Matador Exploration. Boyles Bros. will, however, remove all trash and loose material, leaving drill sites in a clean and orderly condition.

9. Boyles Bros. certifies it has or will have licenses to do contract work in the state of Arizona. All other licenses, land and water use permits, environmental reports, state reports relating to hole plugging, etc. shall be the responsibility of Matador Exploration. Boyles Bros. shall cooperate with and give technical assistance if requested for your compliance with these regulations.

10. Boyles Bros. shall drill at the location, angle and to the depths specified by the representative of Matador Exploration and shall be held harmless for all liability claims which may arise from normal activity related to this contract. Boyles Bros. agree to accept responsibility for the irresponsible acts of their employees and for the liability which may result from these acts.

11. The prices in this schedule will remain firm for a period of 60 days at which time, if the contract has not been accepted, Boyles Bros. Drilling Company reserves the right to revise any prices or conditions of this offer.

_____

BLA:bg

ACCEPTED:
Matador Exploration, Ltd.

By: _____
Date: _____