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~~Sept 2, 1970~~



A PRELIMINARY REPORT

on the

CAPITAL COST ESTIMATES

for

MINE DEVELOPMENT

and

PROCESS PLANT EQUIPMENT

PURCHASE AND ERECTION

for

PRODUCING Mica-Lite ABSORBENT

by

FRECHETTE INDUSTRIES, INC.

PHOENIX, ARIZONA

by

R. E. Meritt  
Mining Consultant  
Phoenix, Arizona

September 2, 1970

## INTRODUCTION:

As requested and authorized by Mr. L. Frechette of Frechette Industries, Inc., Phoenix, Arizona, the following report has been prepared to indicate the financial requirement in itemized form for a Project to produce a marketable Oil Absorbent. Included here are costs for (1) exploration and development of the vermiculite rich mica raw material deposit under lease to Frechette Ind., (2) accessibility to the mine property and pre-mine preparation, (3) mining of initial 5000 tons raw material and (4) process plant equipment purchase, construction and erection costs.

The following operation phases of work must be completed:

- (1) Combination access and main-line haulage road construction, drill hole locations and mine pit road construction. Such construction to utilize rented dozer and grader.
- (2) Core drilling of the deposit by a drill contractor. An estimated 1200 feet of drilling to be completed by drilling 9 to 12 or more holes.
- (3) Consulting supervision by the writer of the above two phases.
- (4) Process Plant equipment purchase, construction and erection.
- (5) Consulting supervision by the writer of the above phase.

The writer estimates a concurrent total time period of six to eight weeks for phases (1) and (2). That for phase (4) (construction and erection) is estimated at 8 to 12 weeks, commencing about four weeks after start of phases (1) and (2), a total then of 4 to 4½ months of "dead work".

## SUMMARY:

The anticipated estimated expenditures for completion of the four phases to which this report is limited and based on new equipment prices (except for the kiln), delivered in Phoenix, tax and freight included, are as follows:

Road Construction, etc	\$ 5,820.-
Mine Exploration & Development	\$ 19,750.-
Production of 5,000 tons raw material-del'd to Plant	\$ 16,120.-
Process Plant (Equipment purchase)	\$ 80,056.-
Process Plant (Construction and erection)	\$ 12,080.-
Total	<u>\$133,826.-</u>
Say	\$135,000.-

These projected costs are substantiated by included letters from the suppliers, contractors, renters of equipment. Estimates of time are based on the writers experience and knowledge in similar phases on other projects and such estimate does reflect costs. These costs do not include the bagging equipment and its installation.

Except for mining costs for the 5,000 tons raw material and delivery costs to the plant, no provision for operating costs have been included --such costs being allocated to "working capital".

It should be noted that substantial savings may be had by the use of good used equipment which is now in moderate supply.



EXPENDITURE DETAILS:

The following outlines and lists the projected anticipated costs, most of which are supported by present day quotations from equipment suppliers, drilling contractor and equipment rental service. Such supporting evidence is included in this report. The writer has estimated time for minor construction, etc as well as road work and the mining of 5,000 tons of raw material.

Road Construction, etc. (Map No. 1, green and brown color)

Approximately 3 miles access and mine road, drill locations and Surge Pile construction.

140 hours Dozer time @ \$28.00/hr.	\$ 3,920.-
50 hours Grader time @ \$18.00/hr.	\$ 900.-
Supervision and Expenses (2 weeks)	\$ 1,000.-
	<hr/>
	\$ 5,820.-

Core Drilling (Exploration and Development)

Mobilization	\$ 250.-
1200 ft. @ \$10.60/ft.	\$12,720.-
25% Extras, casing, cementing, etc	\$ 3,200.-
Water truck rental and mileage	\$ 900.-
Core Boxes	\$ 180.-
Supervision and Expenses	\$ 2,500.-
	<hr/>
	\$19,750.-

*2500*  
*11,250*

Mining 5,000 Tons

140 hours Dozer time @ \$28.00/hr.	\$ 3,920.-
F. E. Loader rental	\$ 1,200.-
Trucking to Plant, \$2.00/ton	\$10,000.-
Supervision and Expenses	\$ 1,000.-
	<hr/>
	\$16,120.-

Process Plant Equipment (To Bagging Section)

Pan Feeder, complete	\$ 8,340.-
1024 Jaw Crusher, complete	\$13,350.-
2416 Roll Crusher, complete	\$12,260.-
Tax and freight on above	\$ 2,631.-
3x10 Vibrating Screen Incl. tax & Fght.	\$ 2,703.-
5-10 ft. Conveyors @ \$2,075 ea.	\$10,375.-
2-24 ft. Conveyor @ \$2,330 ea.	\$ 4,660.-
1-30 ft. Conveyor @	\$ 3,220.-
1-20 ft. Bucket Elevator, complete	\$ 2,410.-
1-40 ft. Bucket Elevator, complete	\$ 2,965.-
1-65 ft. Bucket Elevator, complete	\$ 4,480.-
1 Distributing Unit for Tanks	\$ 510.-
4-0-12-8 Storage tanks @ \$2,163.00	\$ 8,652.-
1-1" steel storage tank (Allison)	\$ 2,000.-
Rotary Kiln, used, Keller Machinery	\$ 1,500.-
	<hr/>
	\$ 80,056.-

Construction, erection and Supervision	\$ 12,080.-
Total	<hr/>
	\$133,826.-
Say	\$135,000.-



Because these are quoted prices, for the most part, the overall estimate should be quite reasonable. No contingency factor was included for an underestimation. In these days of rapidly changing prices for equipment, rentals and labor, etc., it is suggested that a contingency factor of 15% be considered and put into reserve, or that approximately \$20,000.- be set aside for these phases of the Project.

Prices quoted by the suppliers are, ofcourse, subject to change without notice, unless so specified, consequently, the writer can not be responsible for any such revision.

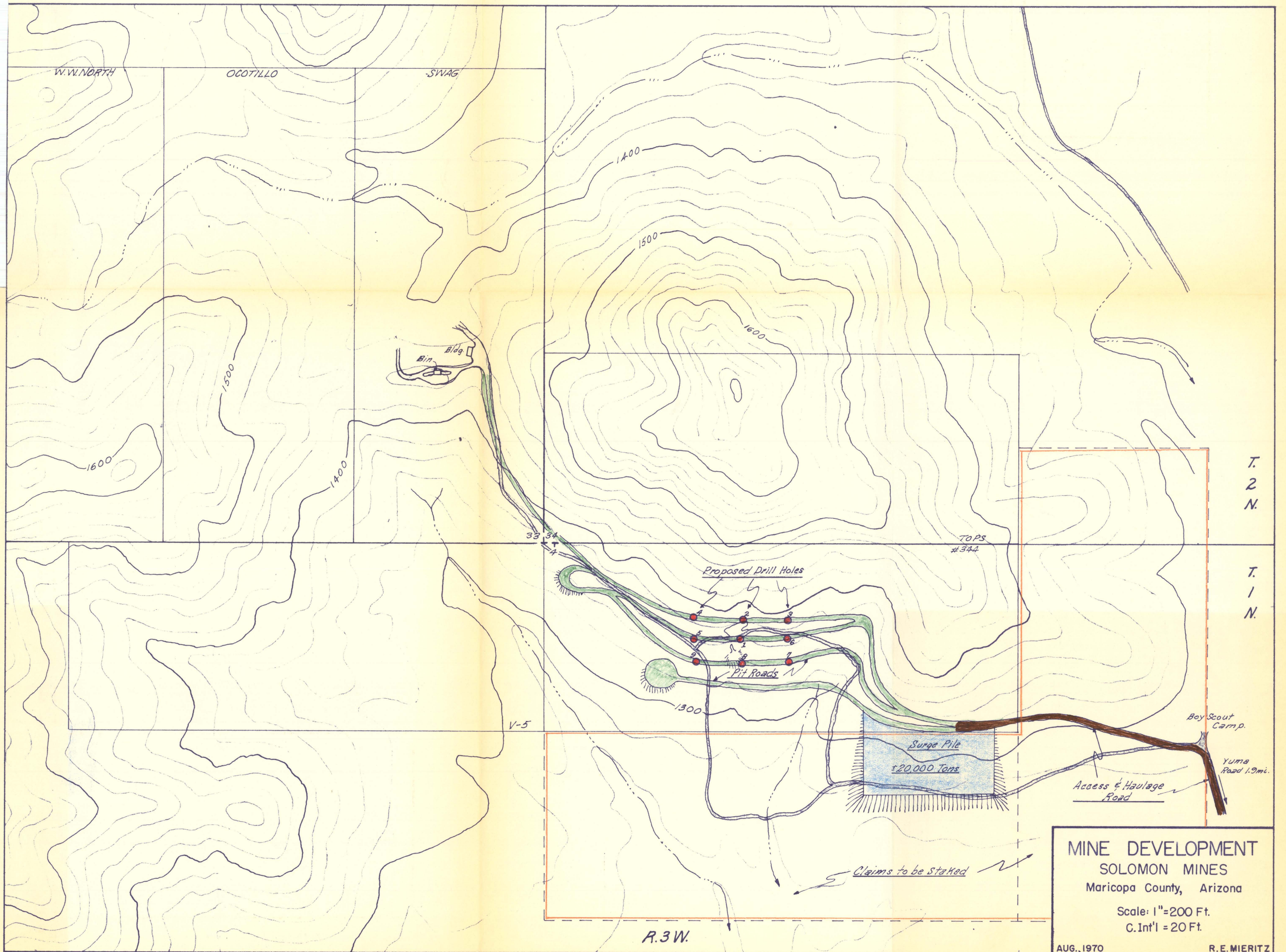
Respectfully submitted,

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R. E. Hieritz,  
Mining Consultant  
Phoenix, Arizona

September 2, 1970



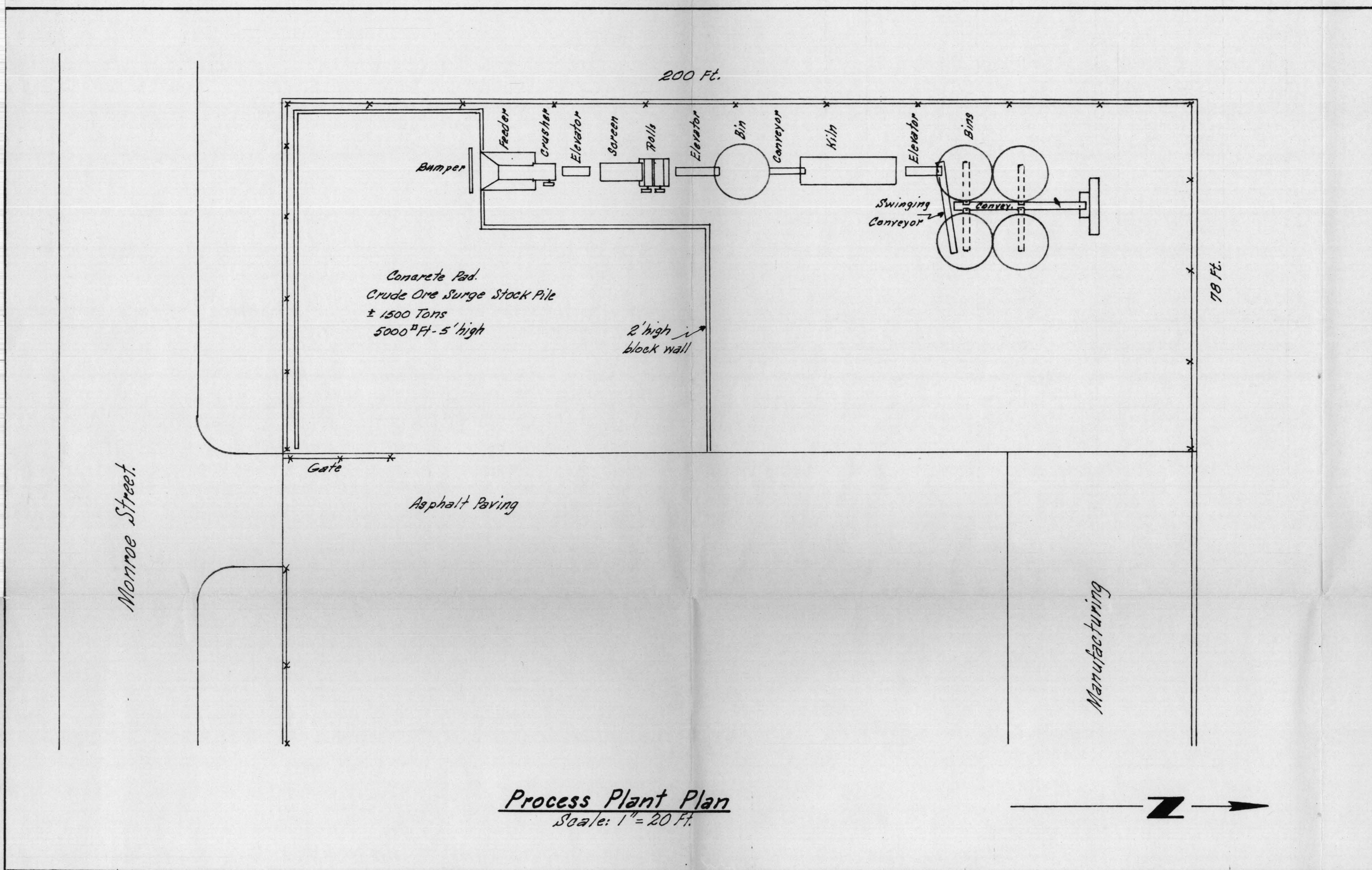


MINE DEVELOPMENT  
 SOLOMON MINES  
 Maricopa County, Arizona  
 Scale: 1"=200 Ft.  
 C. Int'l = 20 Ft.

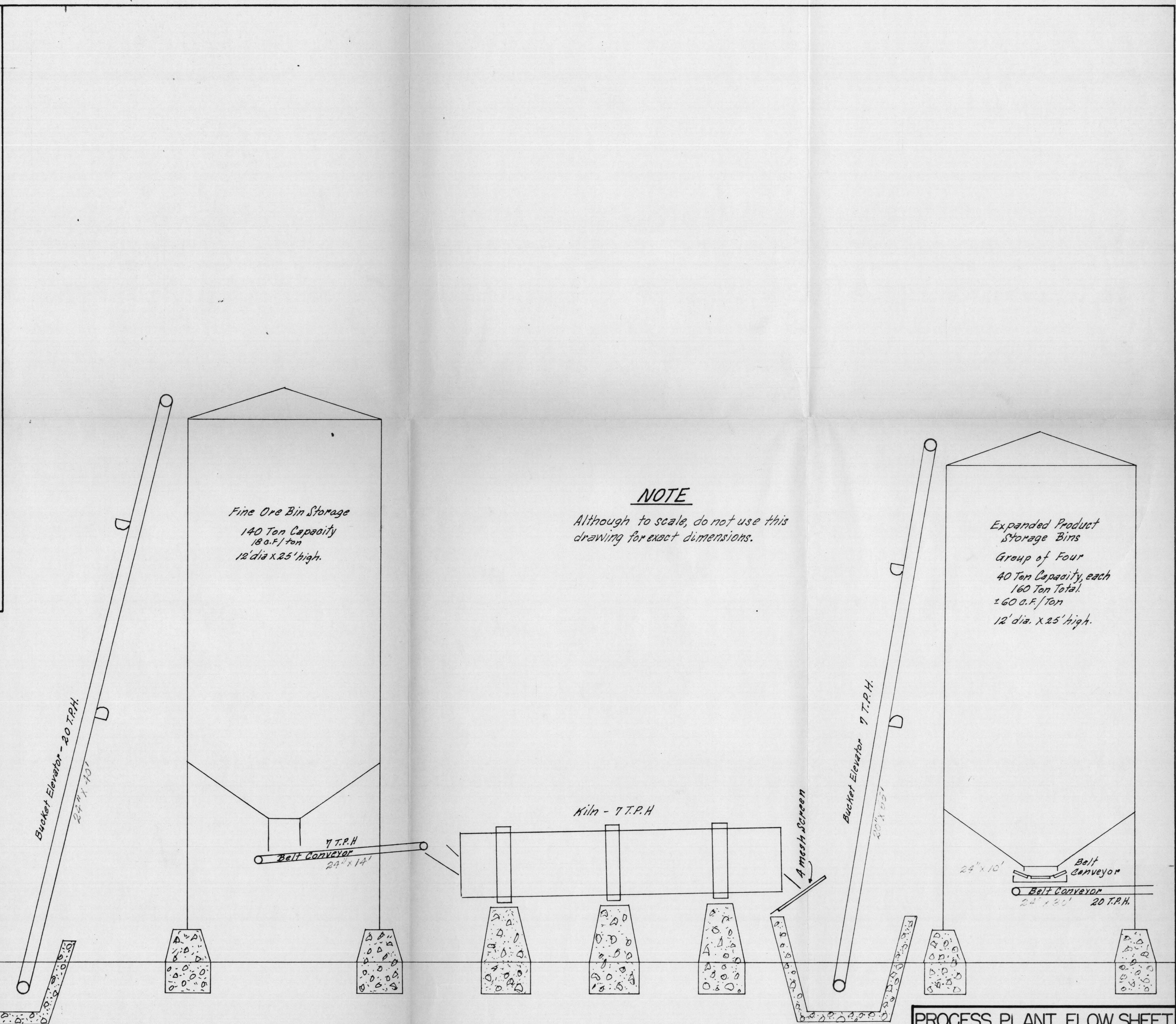
AUG., 1970 R. E. MIERITZ

MAP No 1





**Process Plant Plan**  
Scale: 1" = 20 Ft.



**NOTE**  
Although to scale, do not use this drawing for exact dimensions.

**Process Plant Elevation**  
Scale: 1/4" = 1 Ft.  
1" = 4 Ft.

**PROCESS PLANT FLOW SHEET**  
FRECHETTE INDUSTRIES INC.  
Phoenix, Arizona  
Scale: As Indicated  
AUG., 1970  
R.E. MIERITZ



## INTRODUCTION:

MICA-LITE is an oilabsorbent produced from a vermiculite rich pyroxene rock located in a nearby mining property. Up to now, it has been processed by a time-consuming crude and expensive method which inevitably led to its being marketed on a limited scale by Solomons Mines, an Arizona corporation headquartered in Phoenix. Following the death of Mr. D. L. Solomon in 1968, the operation was leased by Mr. L. Frechette, former salesman during Mr. Solomon's control. He implemented a substantial increase in sales without going beyond Phoenix and vicinity until the local demand alone exceeded the production capacity of the existing facilities.

To keep up with the growing local demand and assume even a conservative share of markets beyond presently restricted limits, there is an opportunity here, with prompt returns indicated, for capital to install an up-to-date and economical processing facility. In this connection it might be mentioned that the long term lease obtained by Frechette Industries is available to the operating corporation. The way is now clear to provide an efficient mining operation, a modern low operating cost plant - both necessary to provide an adequate base for increased sales and wider distribution of an important established product.

## SCOPE OF REPORT:

This report covers the planning, design, time factors, projected estimates, financial requirements and cash flow for the following phases:

### Mine

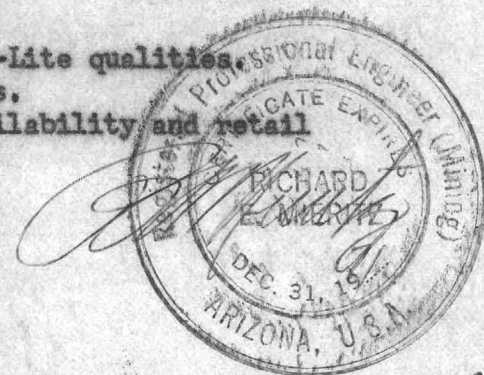
- (1) Exploration and development of a mineral deposit by drilling to prove the existence of a source and supply of an acceptable and processable vermiculitic pyroxene raw material for at least a five year period.
- (2) Prepare deposit for mining, construct haulage roads and a surge pile area.
- (3) Mine and transport 25,000 tons of raw material to the Plant area, this being the first years supply or requirement.

### Process Plant

- (1) Plant equipment purchase
- (2) Plant area preparation, install/erect plant machinery and equipment, construct necessary buildings.
- (3) Process plant trial operation to make minor operating adjustments for greatest efficient operational procedures, equipment-wise and labor-wise and continue plant operation at a capacity equal to or in excess of market sales buildup.

### Marketing

- (1) Local marketing, national marketing, Mica-Lite qualities
- (2) Sales organization and distributor outlets.
- (3) Competitive products, their qualities, availability and retail prices.
- (4) Product testimonials.



THE MINE  
1914





THE MINE - (Raw material source and supply):

The Property

Mrs. D. L. Solomon, Phoenix, is the owner of six standard lode mining claims of good legal standing, located by her late husband, in Sections 33 and 34 of T. 2 N., R. 3 W. and Section 4 of T. 1 N., R. 3 W. of the G. & S. R. B. & N., White Tank Mountains, Maricopa County, Arizona, approximately 30 miles by road west of the proposed plant site at 59th Ave. and Buckeye Road (old), actually Van Buren Street. This is an industrial zoned area of Phoenix. (See Map No. 1, INDEX MAP and Map No. 2, SOLOMON MINES PROPERTY).

The writer is very knowledgeable of the property due to his close legal acquaintance with Mr. Solomon and the frequent visits to the property as a personal and professional friend as early as year 1961, shortly after Mr. Solomon located the claims.

After discovering that the vermiculite rich pyroxene rock would exfoliate on heating and had absorbing qualities, Mr. Solomon produced the marketable product as an oil absorbent under the copyright or registered name of MICA-LITE. Mr. Solomon utilized a flame thrower pointed toward the small pit bank containing the vermiculite rich rock, hand screened the exfoliated material and bagging same. This method was time consuming, expensive and of small quantity production. Mr. Solomons death halted the effort.

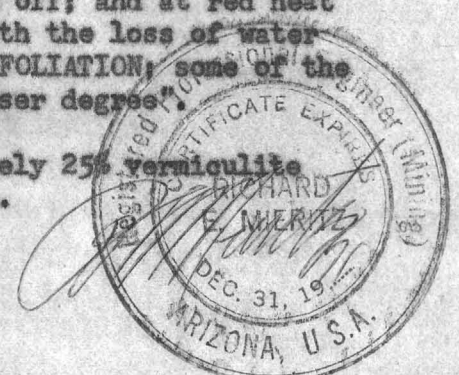
Geology and Ore Reserves

The claimed area hosts such rocks as Pre-Cambrian gneiss, granite, pegmatite dikes, quartz dikes and the vermiculite rich rock - a pyroxene. The latter (vermiculite rich pyroxene) appears to outcrop in many places within the property and this is due to its irregular outline and contacts with the gneiss and other rocks. The vermiculitic rock appears to occur as lenses, layers, large and small dikes and large irregular outlined masses. It is these large irregular masses which will provide the required ore reserves. (See Map No. 3 - SURFACE MAP)

Quoting in part from Danas Textbook of Mineralogy, Fourth Edition, Page 674 - "The VERMICULITE GROUP includes a number of micaceous minerals, all hydrated silicates, in part closely related to the chlorites, but varying somewhat widely in composition. They are alteration products of the micas biotite, phlogopite, etc and retain more or less perfectly the micaceous cleavage. Many of them are of a more or less indefinite chemical nature and the composition varies with that of the original mineral and with the degree of alteration".

"The laminae in general are soft, pliable and inelastic. Heated to 100 to 110°E, most of the vermiculites lose considerable water which is probably hygroscopic; at 300° another portion is often given off; and at red heat a somewhat larger amount is expelled. Connected with the loss of water upon ignition is the common physical character of EXFOLIATION, some of the kinds show this to a marked degree, others to a lesser degree".

The Solomons Mines raw material contains approximately 25% vermiculite in a host rock of pyroxene and minor other minerals.





The writer prepared a February 16, 1970 Preliminary Estimate of Geologic Ore Reserves (Vermiculite) on the Solomon property for Frechette Industries. Now, as then, any ore reserve figure can only fall into the category of "inference", however, the operating corporation has designed a drill program to explore the deposit and develop a proven ore reserve of at least 250,000 tons of vermiculite rich rock. This tonnage would be in excess of a five year reserve and requirement for a five year plant operation. This tonnage also would have an in place value in excess of \$20,000,000., or, profit-wise in excess of \$6,000,000.- for a five year period, - before taxes, but after all operating expenses.

Because ore reserve tonnages of vermiculite rich rock are, at this time, geologic inferences, the corporation intends to drill the property at strategic locations to initially develop, prove and "block out" an ore reserve of at least 250,000 tons to assure the corporation of a five year supply of the raw material. Geologic evidence points to the fact that in excess of 600,000 tons of raw material can eventually be proven to exist within the property. (See Map No. 3 - SURFACE MAP).

The drilling program planned is for approximately 1000 feet of hole in ten to twelve holes varying in depth from 80 to 100 feet. Drill holes will be so located as a pattern to assure that the continuity of the material exists as thought to be - in mass - and as such, then amenable to low cost open pit mining. (See Map No. 4 - MINE DEVELOPMENT). The work and expense of access drill roads and drilling of the development holes to prove the tonnage target is for the account of the operating corporation and such work would be completed and the results submitted to the financial institution prior to the physical final approval of the funds requested. This exploration program is estimated to cost the corporation approximately \$25,000.-.

#### Pre-Mine Preparation:

With the advent of a favorable decision to move forward on the Project, pre-mine construction as well as pre-equipment plant site preparation and process plant equipment ordering can all commence almost immediately.

Pre-mine preparation consists of constructing main line haulage road (2 miles), pit roads, bench level approach roads, a small amount of overburden removal and a 25,000 ton surge pile area. This work is identified by the brown and tan coloring on Map No. 4 - MINE DEVELOPMENT. A portion of this work was "roughed in" during the drilling program.

The pre-mine work involves dozer and operator rental and grader and operator rental. A time period of three weeks is anticipated. (See CASH FLOW RECAP SCHEDULE at end of section covering OPERATING COSTS. The financial requirement breakdown is:

Dozer rental, 168 hours @ \$28.-/hr.	\$ 4,704.-
Grader rental, 40 hours @ \$18.-/hr.	\$ 720.-

#### Mining Raw Material (Ore):

Mining of the raw material will be by open pit, low cost method using a dozer equipped with rippers for breakage of the material and a  $1\frac{1}{2}$  cu. yd. front end loader for transportation to surge pile and truck loading.





Drilling and blasting for rock breakage should not be required. These earth moving units can be rented and therefor would not become a continuous liability to the corporation.

Mining of 25,000 tons - a years supply - would be completed in approximately three months. The production not required immediately to feed the process plant would be stockpiled on the "surge pile" area.

It is estimated that 25,000 tons of raw material can be mined and stockpiled at the mine area with the following equipment in the time allotted and at the following total cost.

Dozer, 510 hours @ \$28.-/hr.	\$ 14,280.-
Loader rental, \$1200.-/mo.	\$ 3,600.-
Operator, loader, \$900.-/mo.	\$ 2,700.-
Fuel, oil, repairs, etc, for loader	\$ 1,840.-
	<hr/>
	\$ 22,420.-

Verbal discussions with truck hauling contractors indicate that 22 ton payloads of ore can be hauled or trucked from the mine to the process plant site, approximately 30 miles, for 6¢ a ton mile. This rate assumes that the access road to the mine property (about 2 miles) is adequately and properly maintained. This price does not include the loading of the truck. Loading a truck from the "surge pile" would add approximately 45¢ per ton, making a total of \$2.25 per ton to load and truck the raw material from the mine to the process plant area. The total cost for transportation of 25,000 tons would be \$56,250.-.

The cost per ton for mining and trucking to the process plant site is therefor \$3.15 per ton.

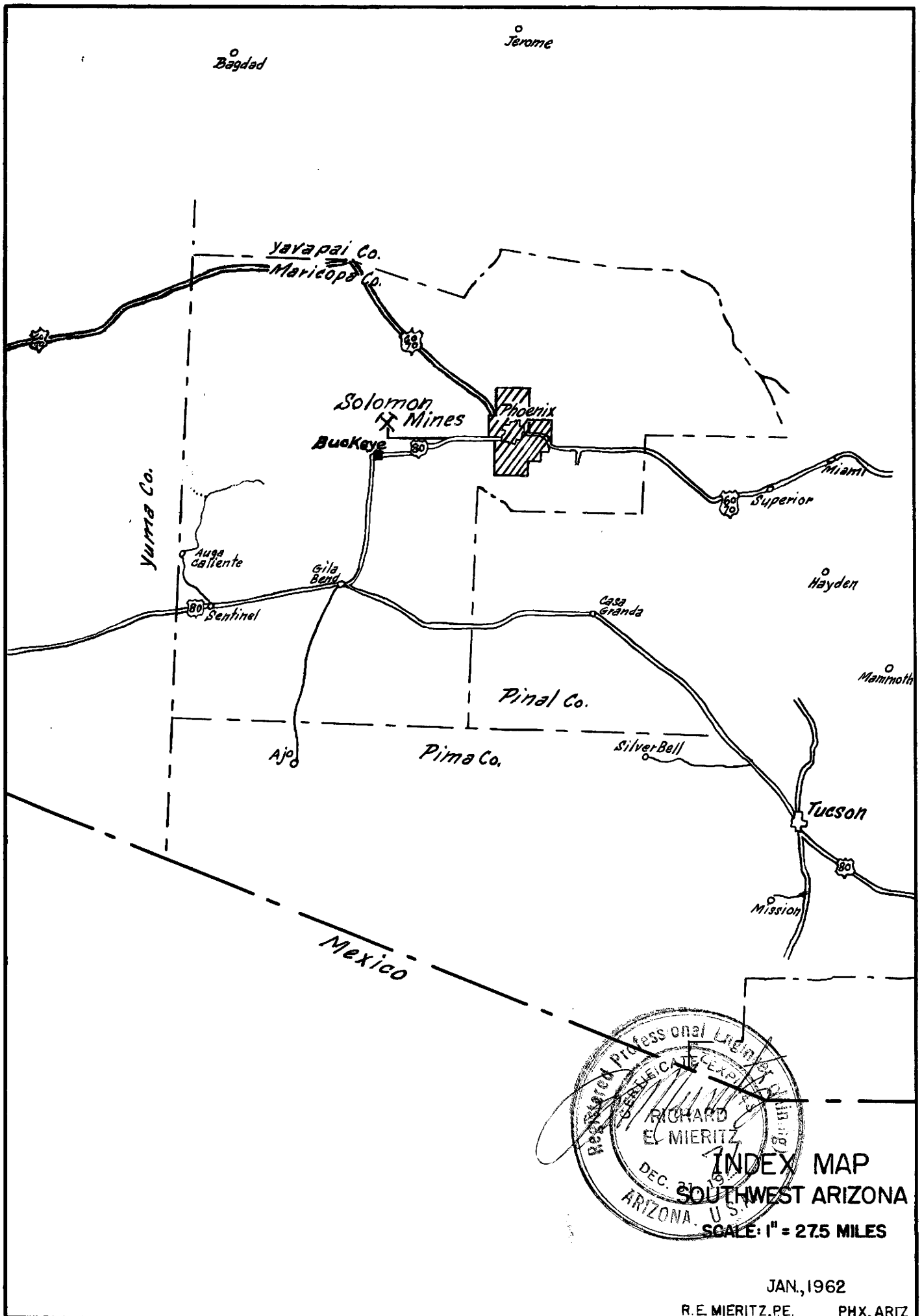
A crude ore storage area of 1500 ton capacity has been planned for the process plant area to buffer any unforeseen "breakdown" of haulage equipment or unpredictable acts of nature between the plant and the mine. This "reserve" is approximately a three week supply and could assure continuous plant operation, feed-wise.

It is planned to utilize one 22 ton truck making 4 round trips per day, five days per week, or 88 tons plus being transported each day. Truck haulage would be continuous year in, year out.

EXHIBITS for this Section include:

- Map No. 1 - INDEX MAP
- Map No. 2 - SOLOMON MINES PROPERTY
- Map No. 3 - SURFACE MAP
- Map No. 4 - MINE DEVELOPMENT
- Dozer and Grader Rental quotation.



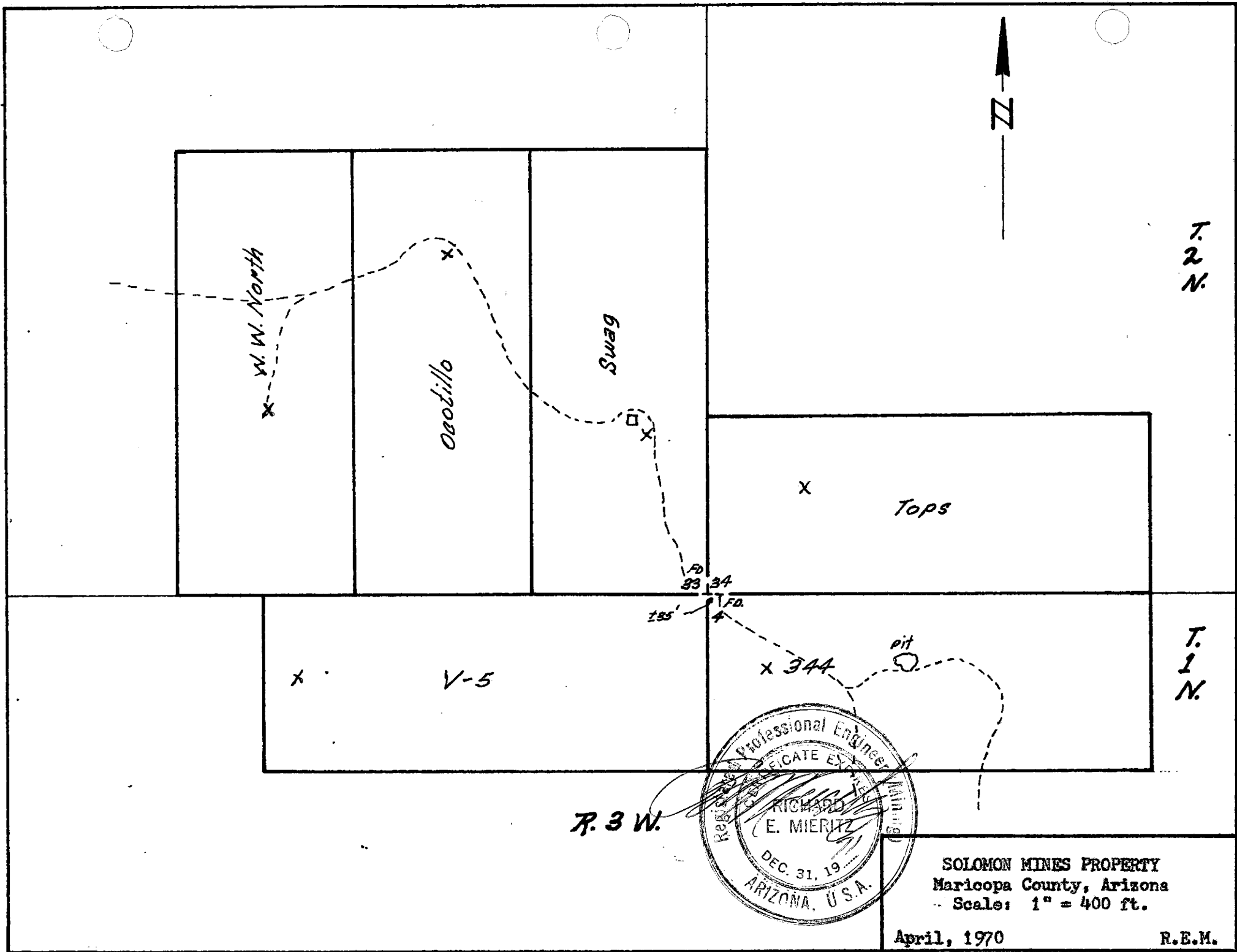


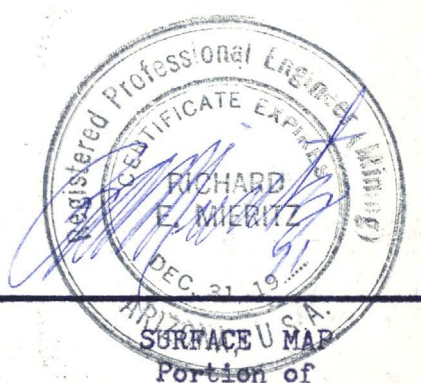
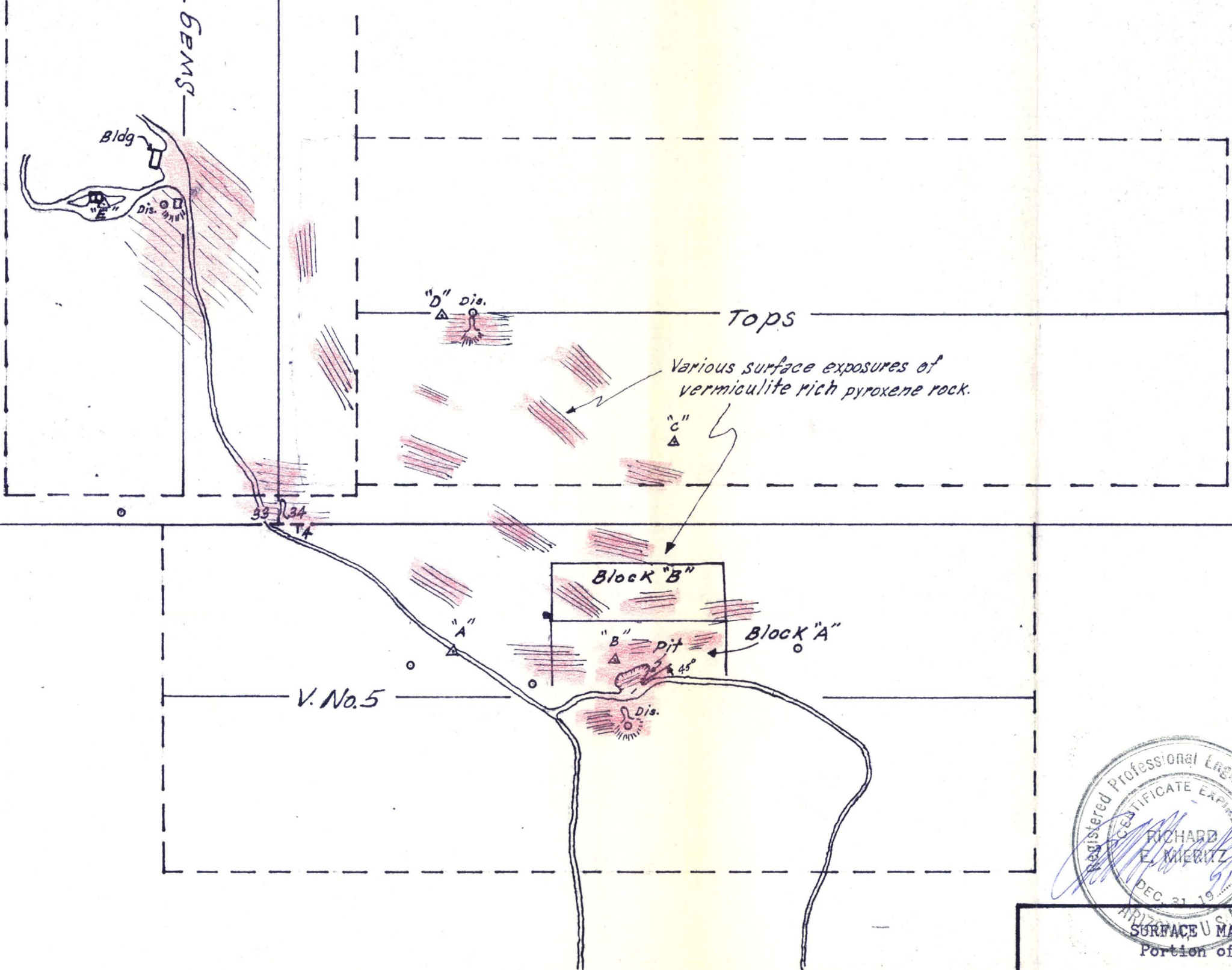
**INDEX MAP**  
**SOUTHWEST ARIZONA**  
 SCALE: 1" = 27.5 MILES

JAN., 1962  
 R. E. MIERITZ, P.E. PHX., ARIZ

MAP No 1










SURFACE U MAP  
 Portion of  
 SOLOMON MINES PROPERTY  
 Maricopa County, Arizona  
 Scale: 1" = 200 Ft..  
 Feb., 1970  
 R.E.M.  
 MAP No 3



W.W. NORTH

OCOTILLO

SWAG

-  Present Roads
-  Drill Roads
-  Mine Development Roads

Bldg.  
Bin.

33 34  
34

TOPS  
#344

Proposed Drill Holes

Pit Roads

V-5

Surge Pile  
±20,000 Tons

Boy Scout Camp

Yuma Road 1.9mi.

Claims to be Staked



**MINE DEVELOPMENT**  
**SOLOMON MINES**  
 Maricopa County, Arizona

Scale: 1" = 200 Ft.  
 C. Int'l = 20 Ft.

AUG., 1970

R. E. MIERITZ

MAP No 4

R.3W.

T. 2 N.

T. 1 N.



STATEMENT

DATE Aug. 31, 1962 70

TO R. E. Pieritz

5822 N. 22nd Place Phoenix, Ariz.

INACCOHNKWSDE

# *Barkley's Tillage Company*

R. F. BARKLEY  
937-4619

5310 NORTH 50TH AVE.

GLENDALE, ARIZONA

Dear Sir,			
Here are the rates that you			
requested on the following			
equipment:			
D8 Caterpillar with bulldozer			
and hydraulic ripper, operated			
and maintained.			
	\$ 28 00	Per Hr.	
#12 Caterpillar motor grader			
operated and maintained			
	\$ 18 00	Per Hr.	
We have no move in and move out			
charge if the total bill is more			
than \$1000.00.			
This quote submitted by:			
<i>R. F. Barkley</i>			

PROCESS PLANT





THE PROCESS PLANT:  
Raw Material - Plant Feed

The raw material (ore) as received from the mine would contain approximately 25% of the mineral vermiculite, 70 -75% pyroxene grains and not more than 5% quartz and other minor minerals. This material would range in size up to about 14 to 16 inches, grainy or sugary in texture, friable and somewhat elastic. It is not tough, brittle or dense.

To provide some information for the selection of the proper process plant equipment, the writer personally completed a crushing test of the material to determine its characteristics. A local Phoenix laboratory also completed "heating" tests on samples of the material to determine critical exfoliation temperatures, time and expansion qualities. A copy of this report is herein included.

The Process:

The designed flow sheet to process this material is quite simple. The raw material as received is stage crushed by jaw crusher and rolls until all the material passes a  $\frac{1}{4}$ " screen, fed into a horizontal or vertical kiln and heated to 1350<sup>o</sup>F to exfoliate the vermiculite. The entire product is bagged into quantities of 1.35 cubic feet or approximately 50 pounds per bag. One ton of the original raw material will produce approximately 40 bags of marketable product which wholesale at \$2.00 plus per bag in ton lots or retail at \$3.00 per bag. Market value per ton thus ranges from a maximum of \$120.- to a minimum of \$80.- plus.

Process Plant Site Preparation:

Immediately following a favorable "move forward" decision, pre-equipment plant site preparation can begin. Much of this work is labor and involves construction of the concrete ore storage pad, concrete foundations for the process plant equipment, concrete pad for the bagging equipment and construction of warehousing and Office space. The following identifies the estimated expenditures for plant site preparation for the necessary equipment but not for the construction of the warehousing buildings and office building.

Labor, 189 man days @ \$50.00/day	\$ 9,450.-
Material & Supplies. (concrete, lumber, crane rental, etc.).	\$ 7,500.-

\$ 16,950.-

The chosen plant site is located at the northwest corner of 59th Avenue and West Monroe Street, in an industrial zoned area. Natural gas, electricity, water and a railroad siding are available at the property. These facilities do not exist at the mine, and it is for these reasons that the specific plant site was chosen and the decision to transport the crude ore to Phoenix rather than the packaged product.

This property would be leased from the owner and the owner would construct the necessary buildings and fence the property as required. (See item 6 in CASH FLOW RECAP SCHEDULE at end of section covering operational costs.). The owner requires a \$25,000.- initial payment in escrow and a \$1200.- per month lease payment commencing the fifth month. This charge is included in



General and Administrative costs.

Process Plant Equipment, Installation and Erection:

Ordering of the equipment can begin immediately following a favorable decision to move forward on the Project. Suppliers have indicated a 5 to 6 week delivery, however, it is more likely an 8 week period would be required. Suppliers have also indicated full payment within 30 days after delivery. The writer urges that 60 to 90 day periods of payment be requested to insure against faulty or inoperative equipment. In view of this thought, the writer has spread the capital cost of equipment purchase over a three month period. The complete distribution of payment is shown in CASH FLOW RECAP SCHEDULE.

The required equipment and all necessary components as electric motors, switch gear, etc., are listed and costed as follows. Prices are substantiated by the suppliers included quotes. Prices also include freight and Taxes, but could change in the near future.

Process Plant Equipment:

1 - Austin Western Pan Feeder, or equivalent	\$ 8,340.-
1 - 1024 Jaw Crusher, complete, or equivalent	\$ 13,350.-
1 - 2416 Roll Crusher, complete, or equivalent	\$ 14,891.-
1 - 3X10 Vibrating Screen, comp. " " "	\$ 2,703.-
5 - 10 ft. Conveyors, comp. \$2,075.- ea.	\$ 10,375.-
2 - 14 ft. Conveyors, comp. \$2,330.- ea.	\$ 4,660.-
1 - 30 ft. Conveyor, comp.	\$ 3,220.-
1 - 20 ft. Bucket Elev., comp.	\$ 2,410.-
1 - 40 ft. Bucket Elev., comp.	\$ 2,965.-
1 - 65 ft. Bucket Elev., comp.	\$ 4,480.-
1 - Distributing Unit for Tanks	\$ 510.-
4 - C-12-8 Storage Tanks, \$2,163 ea.	\$ 8,652.-
1 - 1/2" steel storage tank (Allison)	\$ 2,000.-
1 - Rotary kiln, build or buy used	\$ 25,000.-
	<hr/>
	\$103,556.-

Bagging Equipment:

1 - Bagging Unit, Spee-Dee, or equivalent	\$ 4,710.-
1 - Bag Closing conveyor, St. Regis, or equiv.	\$ 1,750.-
1 - Bag Closer Unit, St. Regis or equivalent	\$ 3,600.-
1 - Conveyor	\$ 2,400.-
1 - Palletizer Unit, St. Regis or equivalent	\$ 19,600.-
1 - Conveyor	\$ 1,995.-
Freight and Sales Tax on above	\$ 3,785.-
	<hr/>
	\$ 37,840.-

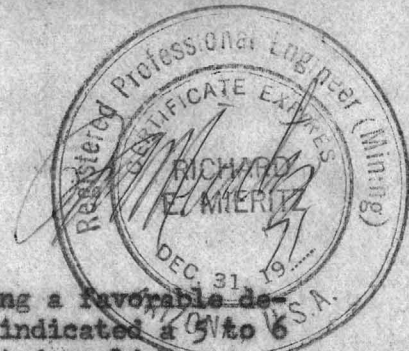
Total for plant equipment

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\$141,396.-

Process Plant equipment installation and erection consists of labor, small amount of materials and supplies, (wiring, small size structural shapes, etc.) and equipment rental such as large crane, etc. The estimated expenditure for this phase is as follows:

Labor, 150 man days @ \$50.00/day	\$ 7,500.-
Material, supplies and equipment rental	\$ 5,720.-
	<hr/>
	\$ 13,220.-





Plant Operation - Trial Period:

The trial period of Plant operation is expected to start at the beginning of the 3rd month. Four weeks have been allocated to this phase to make the necessary equipment adjustments to obtain the highest possible degree of efficiency.

Operation costs per ton during this period will, of course, be higher than the anticipated production costs - perhaps 2 to 3 times -, mostly because of the "stop and go" status. This period, however, will provide data to more accurately forecast the future continuous operation costs - particularly from the standpoint of the variables as natural gas and electricity consumption. Labor is relatively constant.

For this period, the following expenses are estimated:

Labor, 66 man days @ \$40.00/day	\$ 2,640.-
Gas and power	\$ 1,635.-
	<hr/>
	\$ 4,275.-

During this period also, personnel will be trained for the respective labor categories or classifications in the plant flow sheet. Hard core labor may well be suited for a major portion of this required labor.

Plant Operation - Full Scale capacity:

The process plant is so designed that only the kiln or heating section for exfoliation need be operated on a continuous 24 hour cycle in order to achieve the projected full scale production to meet sales demand. The crushing sections and bagging section are geared to handle three times this amount in a 24 hour period.

The labor force for full scale plant operation on a 24 hour basis should include the following:

- 1 - Plant operator-supervisor, doubles as 1st shift operator.
- 1 - Raw Material loader operator (front end loader)
- 1 - Bagging equipment operator
- 1 - Bagging equipment helper
- 1 - Bag sealer equipment operator
- 1 - Pallitizer equipment operator
- 2 - Fork lift operators
- 2 - Plant operators, 2nd and 3rd shifts.
- 1 - Laborer

Any desired increase in production over and above the present projected anticipations would merely require, labor-wise, double or triple shifting the crushing section and the bagging section. Equipment-wise, a second kiln - or replacement of the original with a larger unit - and the necessary finished product storage tanks and conveyors would be required.

EXHIBITS for this Section include:

A.R.C. Report on exfoliation.  
Graph, Monthly Production-Sales  
Copies of letters and quotations from  
suppliers of necessary equipment.

Map No. 5 - Process Plant Flow Sheet



# ARC LABORATORIES

Division of Arizona Research Consultants, Inc.

9236 NORTH 10TH AVE.

PHOENIX, ARIZONA 85021

943-3573

FOR: Frechette Industries  
c/o Richard Mieritz  
5822 N. 22nd Place  
Phoenix, Arizona

DATE 8/26/70

LAB No. 10985

Vermiculite-mica

## RESULTS

The sample was crushed in a jaw crusher set at  $\frac{1}{2}$  inch opening.  
Screen analysis after crushing:

- $\frac{1}{2}$ + 4 mesh	55.7 %
-4 + 10	15.0
-10 + 16	6.9
-16 + 30	9.4
-30 + 50	6.5
- 50	6.5

The - 10 + 16 appeared to be the most uniform fraction and was used for the tests below.

Apparent density = 1.113 or 69.4 lbs/cu.ft.

After exfoliation 0.516 or 32.2 lbs/cu.ft. (1400 °F)

Total moisture in ore as recd. = 4.84 %

Exfoliated @ Increase in volume

1050 °F 1.8 x original

1100 1.8

1150 2.0

1200 2.1

1300 2.0

1400 2.0

1400 (10 minutes) 2.0

A test on ore expanded at 1400 ° showed that 55 % was now - 16 mesh.

All heating times were 5 minutes which was judged to be the minimum time required to heat the crucible and contents to a uniform temperature, except for 1 test marked 10 minutes. By throwing a piece of ore directly into the furnace at any temperature above 1100 °F expansion began immediately and appeared

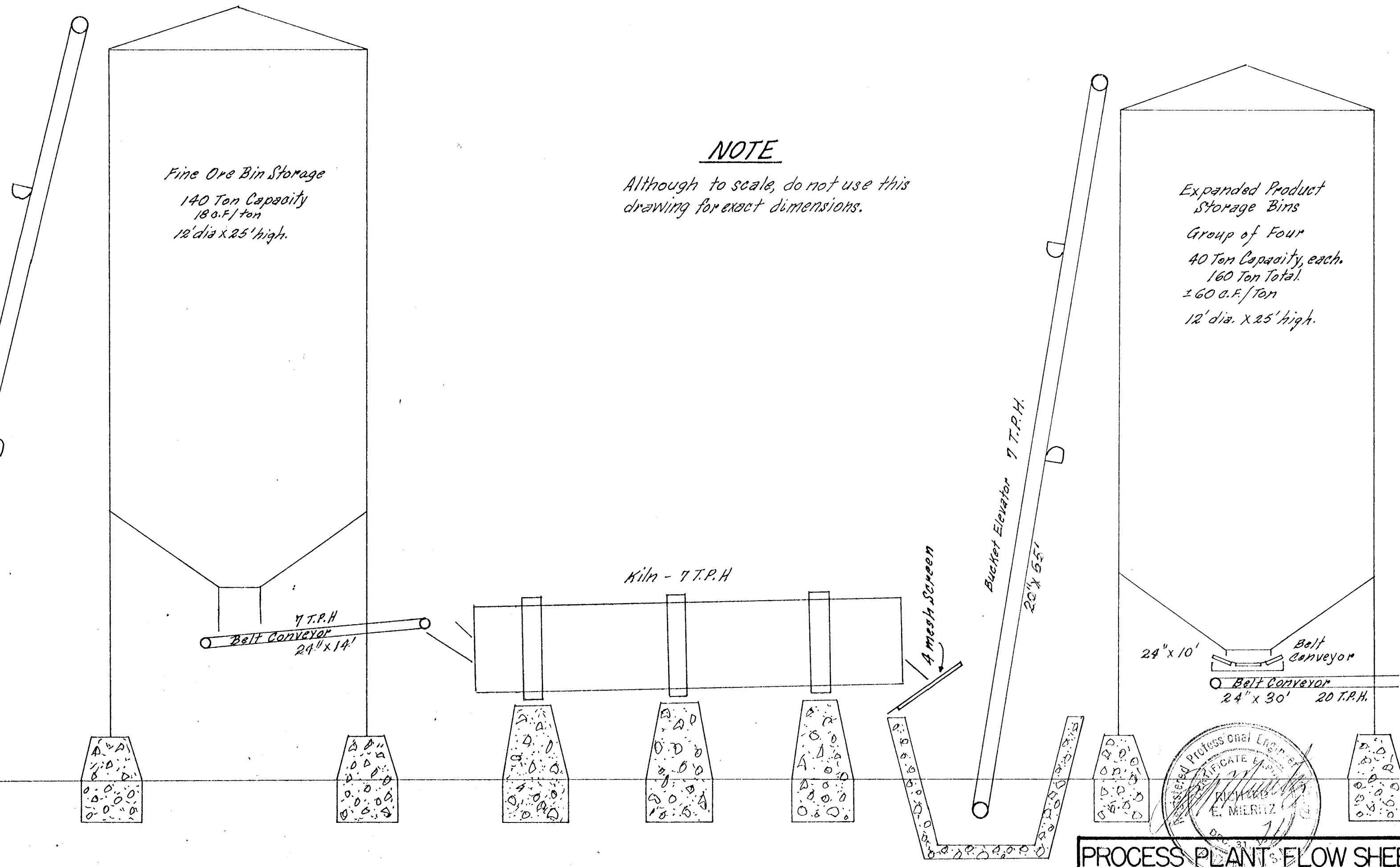
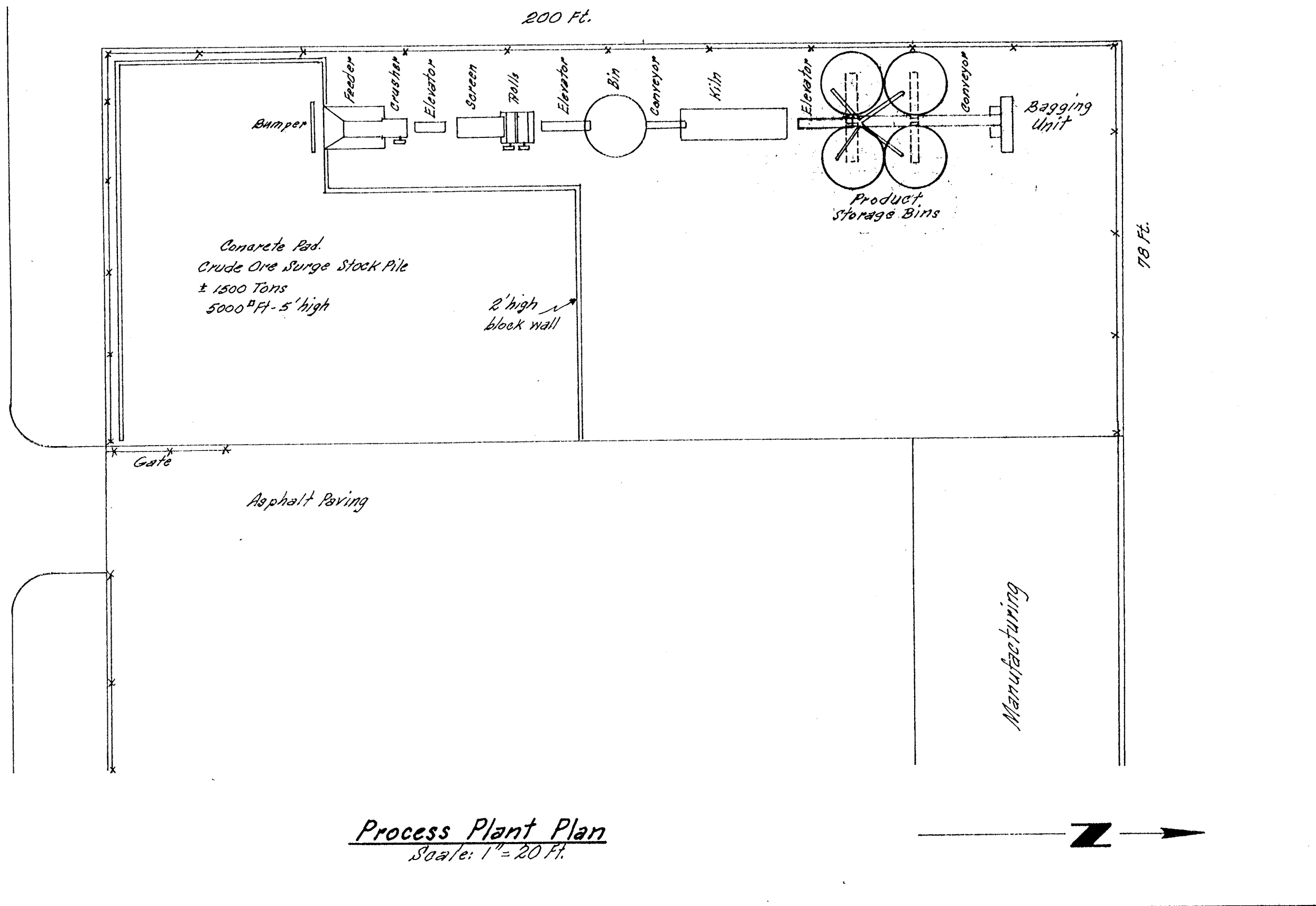
Respectfully submitted, complete within 1 minute.

ARC LABORATORIES

John T. Long, Jr.



Monroe Street



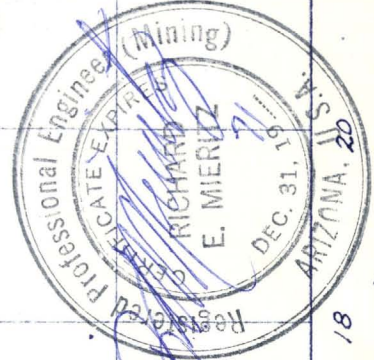
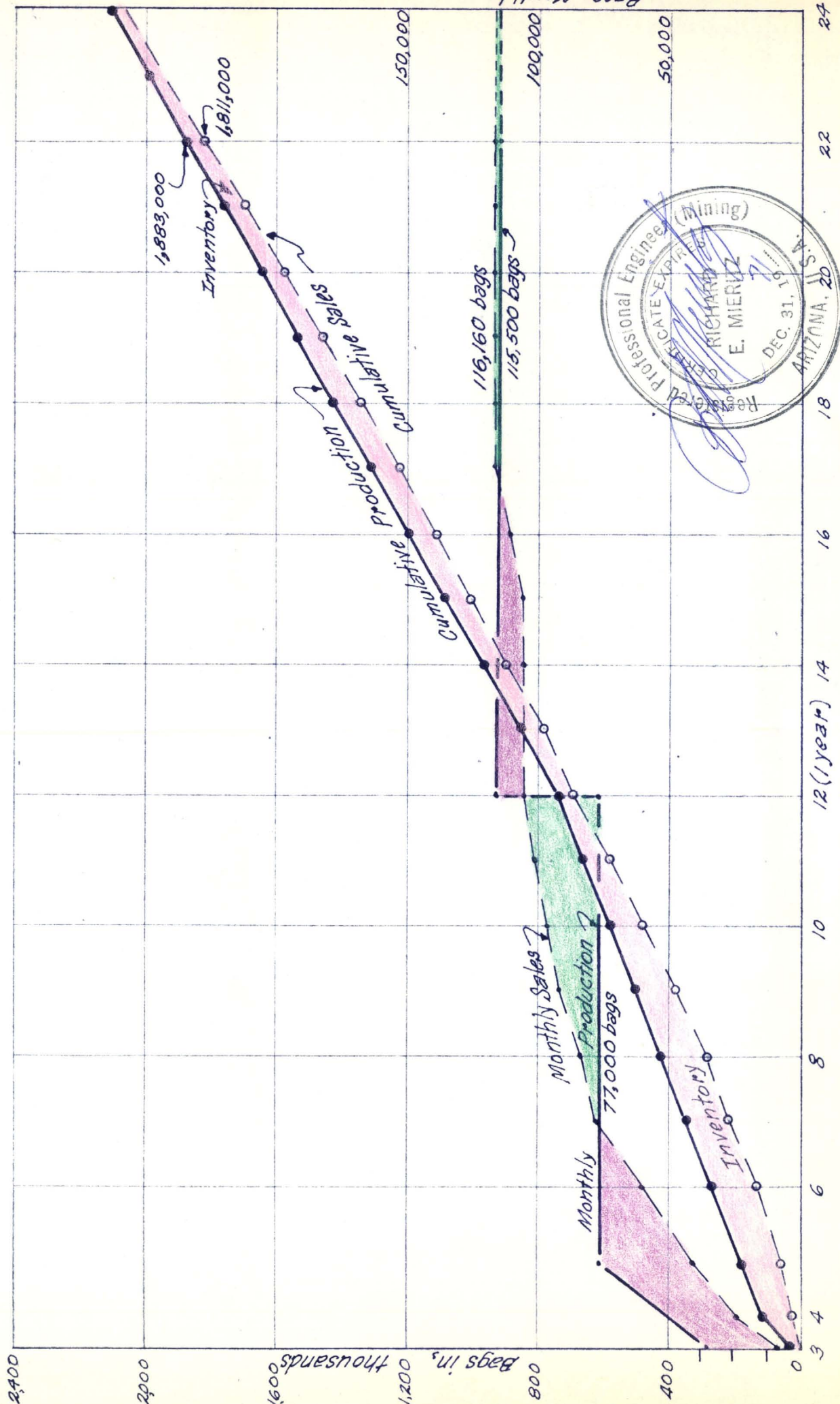
Process Plant Elevation  
Scale: 1/4" = 1 Ft.  
1" = 4 Ft.

PROCESS PLANT FLOW SHEET  
FRECHETTE INDUSTRIES INC.  
Phoenix, Arizona  
Scale: As Indicated

AUG. 1970

R.E. MIERITZ

PROFESSIONAL ENGINEER  
REGISTERED IN THE STATE OF ARIZONA  
E. MIERITZ



*Months after Financing Received*

20 Month Cumulative - Monthly Production - Sales

After L. Frechette  
 Dec, 1970 - R.E. Mieritz



Walter R. Lunt  
4316 E. Hubbell  
Phoenix, Arizona  
85008

September 1, 1970

Frechette Industries, Inc.  
c/o Mr. P. E. Mieritz  
5322 N. 22nd Place  
Phoenix, Arizona 85016

Dear Mr. Mieritz;

We are pleased to quote the following for the various items that were discussed verbally on Aug. 31 and Sept. 1.

Please note that various brochures, mechanical specifications and capacity tables are enclosed for the further description of the machinery quoted.

One - Universal Industries Idler belt conveyor Model UI-24-365T.C. 30'-0" shaft centers 24" belt width as shown in Drawing No. I-20. The conveyor is complete with 3 ply rubber covered conveyor belt, 3 HP, 3 phase 220-440 volt motor, shaft mounted speed reducer, v-belt drives, drive guard, 28'-0" of hinged hood covers, loading hopper with belt seals, discharge housing, size 0 disconnect & starter combination. F.O.B. Phoenix - - \$3,124.96

One - Universal Industries Idler belt conveyor as above with 14'-0" shaft centers, model #UI-24-365TC with completing equipment as above with 12'-0" hinged hood cover in lieu of 28'-0" in above item.  
F.O.B. Phoenix - - - - \$2,261.10

One - Universal Industries Idler belt conveyor identical to above unit, with above completing components. F. O. B. Phoenix - - - - \$2,261.10

Five - Universal Industries Idler belt conveyors, Model #UI-24-365-TC with 10'-0" shaft centers, 24" belt width. Completing equipment includes: 2 H.P. 3 phase, 220/440 volt motors, 3 ply rubber covered conveyor belting, shaft mounted gear reducer, v-belt drives, drive guard, 8'-0" of hinged hood covers, loading hopper with belt seals, discharge housing, size 0 disconnect & starter combination. Price for the five identical units as described, F. O. B. Phoenix - - - - @2,015.66 - - - - \$10,078.30

One - SCC-7524 bucket elevator by Screw Conveyor Corporation, see catalog # 569 enclosed, with 20'-0" discharge height; working platform, 20'-0" ladder, 3 H.P. 3 phase, 220/440 volt motor, shaft mounted speed reducer, v-belt drives, drive guard, size 0 disconnect & starter unit. F.O.B. Phoenix - - - - - \$2,337.37

One - 7524 bucket elevator by Screw Conveyor Corporation with 40'-0" discharge height, working platform, 40'-0" ladder, 30'-0" safety cage, 5 H.P. 3 phase, 220/440 volt motor, shaft mounted gear reducer, v-belt drives, drive guard, size 0 starter & disconnect unit.

F. O. B. Phoenix - - - - - \$2,380.10

One - 3520 Centrifugal Chain type elevator by Screw Conveyor Corp. (see catalog 1009), 65'-0" discharge height, working platform, 65'-0" ladder, 53'-0" safety cage, 5 H.P. 3 phase, 220/440 volt motor, shaft mounted gear reducer, drive guard, v-belt drives, buckets quoted are AARB malleable iron buckets on 16" centers. F.O.B. Phoenix - - - - - \$4,349.20

Four - Columbian Steel Tanks Model #C-12-8, (see bulletin #BF-669), with rack and pinion control gates, 2'-0" extensions on leg heights of each tank, anchor bolt sets for each tank, one ladder only with necessary instructions, bolts, gaskets, bracing, etc as shown on bulletin #BF-669.

F.O.B. Phoenix - - - - - \$8,632.00

One - Simlo 8" by 4 way distributor with necessary brackets, controls and cable. 50 feet 8" 12 ga. wall pipe. F.O.B. Phoenix - - - - - \$495.75

Arizona State Sales Tax of 3% is to be added to all prices above.

Prices quoted are firm for thirty days and are subject to change without notice.

Thank you for the opportunity of quoting on the above machinery.

Estimated shipping schedules for above items presently do not exceed one month.

Yours sincerely,

*Walter R. Lunt*

Walter R. Lunt

s/



REPLY TO  
820 NORTH 17th AVENUE  
P. O. BOX 6636  
PHOENIX, ARIZONA 85005  
TELEPHONE 258-8031



BRANCH  
4620 SOUTH COUNTRY CLUB ROAD  
P. O. BOX 5571  
TUCSON, ARIZONA 85703  
TELEPHONE 294-7677

September 1, 1970

Prechette Industries, Inc.  
1625 West Osborn  
Phoenix, Arizona 85015

Attention: Mr. R. E. Mieritz

Gentlemen:

As requested in our conversation of Monday, August 31st, we are pleased to quote on the various pieces of equipment described below and illustrated in the enclosed literature.

- 1 - AUSTIN-WESTERN 10 X 24 Roller Bearing Jaw Crusher, V-Belt Drive, powered by a 50 HP wound rotor, open dripproof motor, 220/440 volt, 3 phase, 60 hertz; complete with controls including drum resistor and primary starters.  
Weight: 8,680 lbs.  
Price- - - - - \$13,350.00
  
- 1 - AUSTIN-WESTERN 24 X 16 Roller Bearing Crusher with two smooth shells; V-Belt Drive; powered by a 60 HP wound rotor, open dripproof motor, 220/440 volt, 3 phase, 60 hertz; complete with controls including drum resistor and primary starters.  
Weight: 8,470 lbs.  
Price- - - - - \$12,260.00
  
- 1 - AUSTIN-WESTERN 3 X 10 Ft. Apron Feeder, 3.2 Cu. Yd. Hopper, powered by 5 HP squirrel cage motor, drip-proof, 220/440 volt, 3 phase, 60 cycle.  
Weight: 11,715 lbs.  
Price- - - - - \$ 8,340.00

All the above prices are f.o.b. Lima, Ohio.  
Estimated freight on the above - - - - - \$ 1,224.00  
Sales Tax on the above - - - - - \$ 1,407.00

- 1 - EL-JAY Model L-481 2-bearing Rock Screen, single deck, 4 X 8 ft., including parts for base mounting, drive belt tensioner device, motor base; powered by 3 HP, 220/440 volt, open dripproof motor, 1750 RPM.  
Weight: 1,350 lbs.  
Price- - - - - \$ 2,495.00

NOTE: The above price does not include wire cloth.

Above price is f.o.b. Eugene, Oregon.  
Estimated freight- - - - - \$ 104.00  
Sales Tax on above - - - - - \$ 104.00

- 1 - MARCO Model 151 - 24" X 20' Conveyor including BS-150 dacron belt, 12" drive, 1½ HP electric motor, 1160 RPM; and supports.  
Weight: 2,194 lbs. each.  
Price- - - - - \$ 2,057.00 Each

NOTE: For estimating purposes, please use this figure for all conveyor lengths less than 20 ft.

- 1 - MARCO Model 151 - 24" X 30' Conveyor including BS-150 dacron belt, 12" drive, 1½ HP electric motor, 1160 RPM; and supports.  
Weight: 1,694 lbs. each.  
Price- - - - - \$ 2,258.00 Each

The above prices are f.o.b. Monett, Missouri.

Freight - based on seven (7) conveyors - - - - - \$ 778.50  
 Sales Tax- - - - - \$ 698.00

All prices are subject to those in effect at the time order is placed.

As pointed out in our discussion, the prices shown above are for the bare equipment only and does not include assembly, erection or installation, and may deviate once engineering drawings are received.

We thank you for the opportunity to quote on the above equipment, and we trust we will be favored with your valued order.

Yours very truly,

WESTERN MACHINERY COMPANY



Louis P. Benedict  
Vice President - Sales

LPB:hj  
Encls.  
(In triplicate)



May 20, 1970

Frechette Industries, Inc.  
1625 West Osborn Road  
Phoenix, Arizona 85015

Attention: Mr. Lou Frechette, Jr., President

Reference: Packaging Equipment & Conveying System  
To Palletizer

Dear Mr. Frechette:

Following our recent telephone conversation, I reviewed our quotation to you May 6, 1970. This quotation is complete with the exception of the conveying system from the point where the closed bag leaves the conveyor under the closing unit. We did not include the conveyor from this point to the palletizer since we did not know whether you would want this in a straight line or exactly how your building would be constructed.

Based on our conversation, it would be our suggestion that you continue this entire assembly in a straight line and therefore, the following equipment would be all that would be required to complete your packaging system.

One 24" wide x 30' long Rubber Belt Conveyor with three pulley take-up in the center of the conveyor, motor mount, power sprocket, head and tail terminals, idlers, frame and cross braces. Also to include, 1½ HP Gear Head motor, electrical starter, and push button. Conveyor height to be such as to receive bags from closing unit conveyor and inclined up to correct height for depositing on feeder conveyor into the palletizing system.

Selling Price . . . . . \$2,400.00

FOB: Denver, Colorado

Shipping Weight: Approximately 1800 lbs.

6.78 CWT

*Just  
at expense  
ARS July 11, 1968*

Mr. Lou Frechette

- 2 -

5/20/70

If you will review our quotation, you will note that we quoted on the St. Regis Pinch Bottom Bag Closing Unit complete with Pedestal and the Bag Closing Conveyor. From that point, the bags would then be transported by the conveyor, as quoted above, onto the 10' accumulator conveyor and then the feeder conveyor which was quoted with the palletizer. From the feeder conveyor they would be transported to the palletizer. If you will refer to the palletizer drawing, you will note a similar arrangement.

In regards to the filling equipment needed for your operation, we have checked various engineering firms in this area and none specialize in this particular type of packaging equipment. This is the reason why we recommended your going to the Karstrom Company since they manufacture a unit which could be altered, at a nominal charge to meet your requirements. Any engineering firm that would take on a project of this nature would do so either on a flat rate or at approximately \$100.00 per hour. A company such as Karstrom can do this at a fraction of the cost.

If you have any questions regarding the above, please advise.

Very truly yours,



Ed Foster

cc: Mr. F. H. Rendler  
St. Regis Paper Company  
Bag Packaging Division  
P. O. Box 670  
Sun City, Arizona 85351

ETF/lm



EQUIPMENT DESCRIPTION & PRICING

ST. REGIS AIR FLOTATION Semi-Automatic Palletizer Model 4 for bags, bales or overwrap containers. Unit consists of positive displacement blower assembly with 5 HP 230/460-3-60 HZ motor, hydraulic pump with 7½ HP 230/460-3-60 HZ motor, photo-cell sensing system equipped with transformer for 115V circuit and 4,000 lb. capacity hydraulic lift. (Reference data sheet 310-E)

Selling Price . . . . . \$18,450.00

FOB: Downey, California

NOTE: Customer required to supply 230/460-3-60 HZ power supply only to main switch box.

INCLUDED WITH ABOVE:

- Empty Pallet Powered Conveyor
- Filled Pallet Gravity Roller Conveyor
- Empty Pallet Dispenser for 36" x 36" minimum to 48" x 48" maximum (wood only)

*5200<sup>00</sup>  
3,73 cwt*

*Included  
in wt.*

AUXILIARY EQUIPMENT

Accumulator Conveyor - 10'-0" long x 24" wide, belt driven idler rolls complete with ½ HP 230/460-3-60 HZ motor.

combined with

Feeder Conveyor - 36" long x 24" wide, with rubber belting complete with ½ HP 230/460-3-60 HZ motor. Having an approximate overall length of 13'-0"

Selling Price . . . . . \$ 1,995.00

FOB: York, Pennsylvania

*500<sup>00</sup> 11,48 cwt*

OPTIONAL EQUIPMENT

- 120°F Ambient Temperature Cooler ✓  
(for use in desert areas) . . . . . \$ 825.00
- 100°F Ambient Temperature Heater ✓  
(for use cold areas) . . . . . \$ 675.00
- Blower Silencer ✓ . . . . . \$ 325.00

*Lead 4 weeks  
get equipment  
11/1/68  
approx B.P. cost*

May 6, 1970

Frechette Industries, Inc.  
1625 West Osborn Road  
Phoenix, Arizona 85015

Attention: Mr. Lou Frechette, Jr., President

Reference: Packaging Equipment

Gentlemen:

Enclosed please find descriptive brochure on our St. Regis Hot Air Pinch Bottom Bag Closer Unit. Also included, is the Equipment Description and Pricing of this Closing Unit, and also, of the Pedestal and Bag Closing Conveyor which would be required when using this type of equipment. We have included our Data Sheet No. 308-H of the new and improved Portable Pedestal Unit on which this Closing Unit can be applied. This is a much better operating Pedestal than that depicted on the brochure, and, as stated, is also moveable. Enclosed also, you will find Data Sheet No. 308-G of the Closing Conveyor required with this unit.

You will find also enclosed, the brochure on the St. Regis Air Flotation Semi-Automatic Palletizer, Model 4. This unit is a high-speed palletizer that requires only one operator to handle bags, at a rate of fourteen or more. We have recorded one operator palletizing as many as twenty to twenty-two bags per minute without any undue difficulty when the Conveying System to the equipment is correctly engineered. We have taken the liberty, also, of including in our Equipment Description and Pricing of the Palletizer, the necessary conveying equipment to allow for high-speed palletizing. These conveyors are the Feed and Accumulator Conveyors, as depicted on the back of the brochure under Data Sheet 310-E. We have not priced any other conveying system up to this point, in that, this will depend on your future plant layout as to how far you will wish the bags to be conveyed from the Closing Unit to the palletizer. A good rule of thumb for determining your conveying cost would be to figure approximately fifteen dollars per foot.



Mr. Lou Frechette

- 2 -

5/5/70

In reference to the filling equipment needed for your operation, we had discussed the possibility of your making your own and our supplying an electrical diagram as to how this could be properly sequenced. Since our initial call, however, Mr. O'Neal, Packaging Engineering Manager, that called with us, has had an opportunity to study your requirements in more depth. Enclosed is a copy of a brochure he has furnished us from the Karstrom Company, which manufactures packaging machinery for operations similar to your requirements. You will note, in the lower right hand corner, a unit that would be applicable for your type of bagging, but would have to be slightly larger. This unit bags by volume and it can be made to meet any specific requirements. We suggest that you contact these people outlining to them your exact volume requirements, and they can supply you with a price and dimensions of equipment needed for your operation.

If after receipt of the enclosed, you have any questions, please advise and we will give your request our immediate attention.

Very truly yours,

*Ed Foster*  
Ed Foster

ETF/lm  
Enclosure

EQUIPMENT DESCRIPTION & PRICING

St. Regis Model 90-C Pinch Bottom Bag Field Closer, (less pedestal) with hot air manifold for reactivating pre-applied adhesive. Unit includes 1/2 HP 230/460 Volt - 3 Phase - 60 HZ Class 11, Group G Motor, variable speed drive, air filter, and 3/8" NPT connection for air supply (Data Sheet 308-F)

Selling Price . . . . . \$3,075.00

FOB: East Providence, Rhode Island

Approximate Shipping Weight: 375 lbs.

A-11994 Spare Part Kit (2 Extra Compression Belts and 1 Extra Heater Element . . . . . \$ 50.00

650# 12.21 cwt

AUXILIARY EQUIPMENT

Model 93-A Portable Machine Pedestal for mounting the Pinch Bottom Bag Field Closer. (Data Sheet 308-H)

Selling Price . . . . . \$ 475.00

FOB: East Providence, Rhode Island

Approximate Shipping Weight: 275 lbs.

Model 520 Bag Closing Conveyor, 12' between centerlines of head and tail pulleys, with 1/2 HP 230/460 Volt - 3 Phase - 60 HZ Class 11, Group G Motor, and Reeves Drive (Adjustment from 23.5 to 65 feet per minute) (Data Sheet 308-G)

Selling Price . . . . . \$1,750.00

FOB: York, Pennsylvania

Approximate Shipping Weight: 1000 lbs. - 11.48 cwt

Jay E. [unclear] Lead 4 weeks  
Direct info  
ARS July 11, 1968 [signature]



HEAD OFFICE

# S PEE-DEE<sup>®</sup> PACKAGING MACHINERY

13400 W. Silver Spring Drive / Menomonee Falls, Wis. 53052 / Phone 414-781-3400

June 1, 1970

VIA AIR MAIL

Frechette Industries, Inc.  
Chemical & Mining Division  
1625 W. Osborn Road  
Phoenix, Arizona 85015

Attention: Mr. Louis Frechette, Jr.  
President

Dear Mr. Frechette:

Thank you for your letter of May 18th regarding the use of a Model DR-6 or DHR-6 Double Head Spee-Dee Filler for filling 1.35 cubic feet of free flowing vermiculite into bags at 13 to 15 fillings per minute.

Referring to our volume chart A-1127 enclosed, you will note that a 6" OD volume cup by 20½" long has a mid-point volume of 581 cu. in.. On the double head machines 2 such cups would discharge simultaneously, resulting in a total volume of 1162 cubic inches being delivered in one (1) single discharge. By using 2 such discharges, the volume of 2332.8 cubic inches can be accomplished.

I see no reason why we should not be able to fill a 6" OD x 20½" long cup at speeds of 26 to 28 fillings per minute. The operator need only hold the bag under the filler for 2 discharges to get the desired filling speeds of 13 to 15 per minute.

There would only be a little over 2 seconds time between discharges so we would recommend a conveyor be used to support the bag at the Filler and to carry it away immediately after filling to allow the operator time to grab the next empty bag and get it on the filler

KARSTROM CO.

*Spee-Dee packaging machinery*

before the machine discharges for the second interval of fillings. The trick would be to have the empty bags conveniently located or if possible, being handed to the operator or conveyed to the operator in an open position to save time. We could provide the Filler with a foot switch for starting and stopping the motor, this could be used as a dead man control to stop the filler should the operator not reach one of the bags in time.

The unit we would propose in this case would be our Model DHR-6 Double Head Heavy Duty 8 Cup Indexing Filler with:

- 1) 12 cu. ft. Twin Legged Stainless Steel Hopper,
- 2) Dust Covers over Top Plates,
- 3) 1 set (8) 6" OD x 20 $\frac{1}{4}$ " Long Volume Cups  
(1110 to 1214 cu. in. range),
- 4) Nylon Rings under Cup Holder Plates,
- 5) Hard Chrome Plated Bottom Plate Wearing disc,
- 6) Stainless Steel Discharge Spout 10" dia.  
at top and cut to fit bag,
- 7) Variable Speed Drive,
- 8) Totally enclosed 3/4 HP 115 V AC Capacitor  
Start Motor -

Price F.O.B. Menomonee Falls, Wisconsin . . . \$4,560.00

Terms: 30% down with the order balance Net 30 Days  
on credit rated accounts.

Shipment in approximately 4 weeks from receipt of  
order with our present shop load.

The Filler proposed is set up for table mounting, should the angle iron floor stand such as shown on the bulletin be desired, add \$110.00 to the price.

I have included Nylon Wearing Rings under the Cup Holder Plate operating against the hard chrome plated wearing disc on the stationary bottom plate, this is our recommended abrasion style construction, which would be well suited for your vermiculite. I have also included Dust Covers over the Top Plates of each filler head, this prevents the dust from blowing back as the product drops out of the volume cup. These could be eliminated if not desired at a deduction of \$380.00. The shipping weight would be around 850 to 900 lbs. the truck rate from here to Phoenix is around \$9.41 per hundred lbs..



June 1, 1970

Page -3-

Should you want the foot switch, we can offer the medium duty type for \$25.00 additional or the heavy duty water tight type for \$40.00 additional.

I am sending a copy of this letter to Mr. R. W. Loy, Jr. of Southwestern Scale Co., 1447 S. 26th Street, Phoenix, Arizona our representative in your area and have asked him to contact you at the earliest moment to go over this quotation. Should you have any questions, please take them up with Mr. Loy at that time. We look forward to receiving your valued order for this equipment.

Yours very truly,

KARSTROM COMPANY, SUBSIDIARY  
OF THE EXACT WEIGHT SCALE CO.



Herbert F. Techtmann  
Sales Manager

HFT:ped

Enclosures

CC: The Exact Weight Scale Co.  
The Southwestern Scale Co.

*Direct Mfg. Processing Equipment  
Jarl E. [unclear]  
ARS July 1, 1968*





## PRODUCT MARKETING:

### General:

The product MICA-LITE, because of the vermiculite content and characteristic of absorbing a limited but moderate amount of fluid or liquid, the most common being oil and/or water, is excellent as a floor sweep in such businesses as machine shops, garages, mechanical areas for vehicle and airline maintenance work, etc. It is in this area of the market that the qualities of Mica-Lite exceed those of other competitive products as Speedee Dry, Floor Dry, Quick Zorb and Oil Zorb. A few of many testimonial letters from some of the users of Mica-Lite are included as part of this section to formally substantiate the claim herein stated.

Mica-Lite has other uses also, as soil conditioner, aggregate for plaster and concrete work, etc. Research and test work in these areas are being done on a limited scale by Frechette Industries.

Although minor at the moment, an inquiry has been received from Auckland, New Zealand to Frechette Industries, via Solomons Mines regarding crushed and graded vermiculite ore prices and availability in 50 ton lots with an interest to using the material as an aggregate for plaster and concrete. The inquirer utilized the Auckland Office of the American Consul and the U. S. Department of Commerce, Washington, D. C.

### Local and National Markets:

As indicated earlier, Mica-Lite has been sold locally (Phoenix area) to a variety of businesses. Among these are the following:

- Machine Shops: Allied Tool & Die., Blake Machinery Co., J. Mill Tool & Die, Paraflex Machine & Tool, Saguaro Tool & Die, etc.
- Airlines: Cutter Aviation, Airwest, City of Phoenix Airport, Delta Airlines, American Airlines, the latter indicating strong interest in purchasing to supply all their facilities nation wide.
- Brake Companies: Clay Brake Co., Shur-Way Brake Co., Cutter Auto Supply, Comco Transmission, Arizona Auto Clinic.
- Miscellaneous: Western Electric, Apache Optical, U. S. Post Office Garage, Allis Chalmers, Holmquist Engineers, Broadway Stores, Allison Steel, Kaiser Aerospace, Motorola.
- Nurseries: Vaughn of Arizona, Sorrell Nurseries, etc.

The above are examples of the various businesses who have used Mica-Lite and are repeat customers. The Phoenix business market has only been scratched. The Phoenix home owner market has not been contacted.

Nationally, it is not difficult to realize the market potential of this product, particularly in the heavier industrial areas or cities of the nation. Phoenix is considered a "light industry" city and the fact that the product has been so well received would very strongly indicate greater potentials in these other areas particularly with Mica-Lite have a superior absorbing quality or ability over other competitive products. Initially, National plans include only 14 States, the southwestern and western states, namely, Arizona, California, New Mexico, Texas, Oklahoma, Kansas, Colorado, Nevada, Utah, Oregon, Washington, Idaho, Montana and





Wyoming.

Sales Organization and Distributor Outlets:

Much research has been completed by Mr. L. Frechette to determine the best approach to the marketing and sales phase of this business. Initially, 10 salesmen will be employed and trained for a three month period, with their employment coinciding about midway during the Process Plant Trial period. One month later, another 10 salesmen will be employed and trained. This program would follow through until a force of 40 salesmen have been employed and trained.

Simultaneously, 20 distributorships with warehousing facilities will be established in the 14 States and these distributors will serve approximately 410 cities with populations of 25,000 or more. The 40 salesmen would be drawing on the inventory of these distributors but not necessarily at the ratio of two salesmen to one distributor since some areas are more populated than others.

Sale quota goals, as determined and set by Mr. Frechette, for the area of concern at this stage are five (5) bags per thousand population per month. Ultimately this means in excess of 6,000 bags of production per day for the process plant and the mine.

Competitive Products:

Competitive products in the Phoenix area are either of the perlite or clay type material which basically have no physical absorbing criteria or ability except that the fluid or liquid merely adheres to the surface of the particles. These competitive products tend to create slippery conditions under foot and fail to absorb the liquid which has penetrated into the floor. Mica-Lite users commend the product.

The following table compares prices of Mica-Lite in various quantities with those of four competitive absorbents available in the Phoenix area.

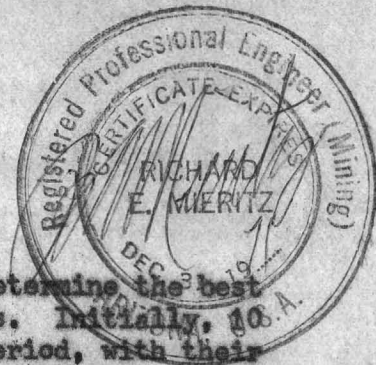
Product	Bag weight or volume	1 - 3 Bags	4 - 19 Bags	19 - 40 Bags	Ton lots or over 40 Bags.	Remarks
MICA-LITE	1.35 c.ft. (50 lbs)	\$3.00	\$2.75	\$2.50	\$94.00/ton	
Floor Dry	1.35 c.Ft. (35 lbs)	\$10.00 min.	\$3.00	\$2.35	\$120.00/ton	Includes Fgt from Oklahoma
Quick Zorb	1.15 c.ft. (50 lbs)	\$10.00 min.	\$2.85	\$2.40	\$ 96.00/ton	Plus Fgt out of Phoenix.
Oil Zorb	(50 lbs)	\$10.00	\$2.65	\$2.40	\$ 96.00/ton	Plus Fgt out of Phoenix.

Speede Dry

NOT AVAILABLE - SHIPPED FROM OUT OF STATE.

Product Testimonials:

Mr. Frechette has contacted many of the more larger users of Mica-Lite to request testimonial letters regarding the product. Many of those contacted have policies restricting the issuance of such letters. Examples of the latter are Allis Chalmers, Western Electric, U. S. Post Office, City of Phoenix Airport, Airwest, Motorola and Kaiser Aerospace. Smaller businesses



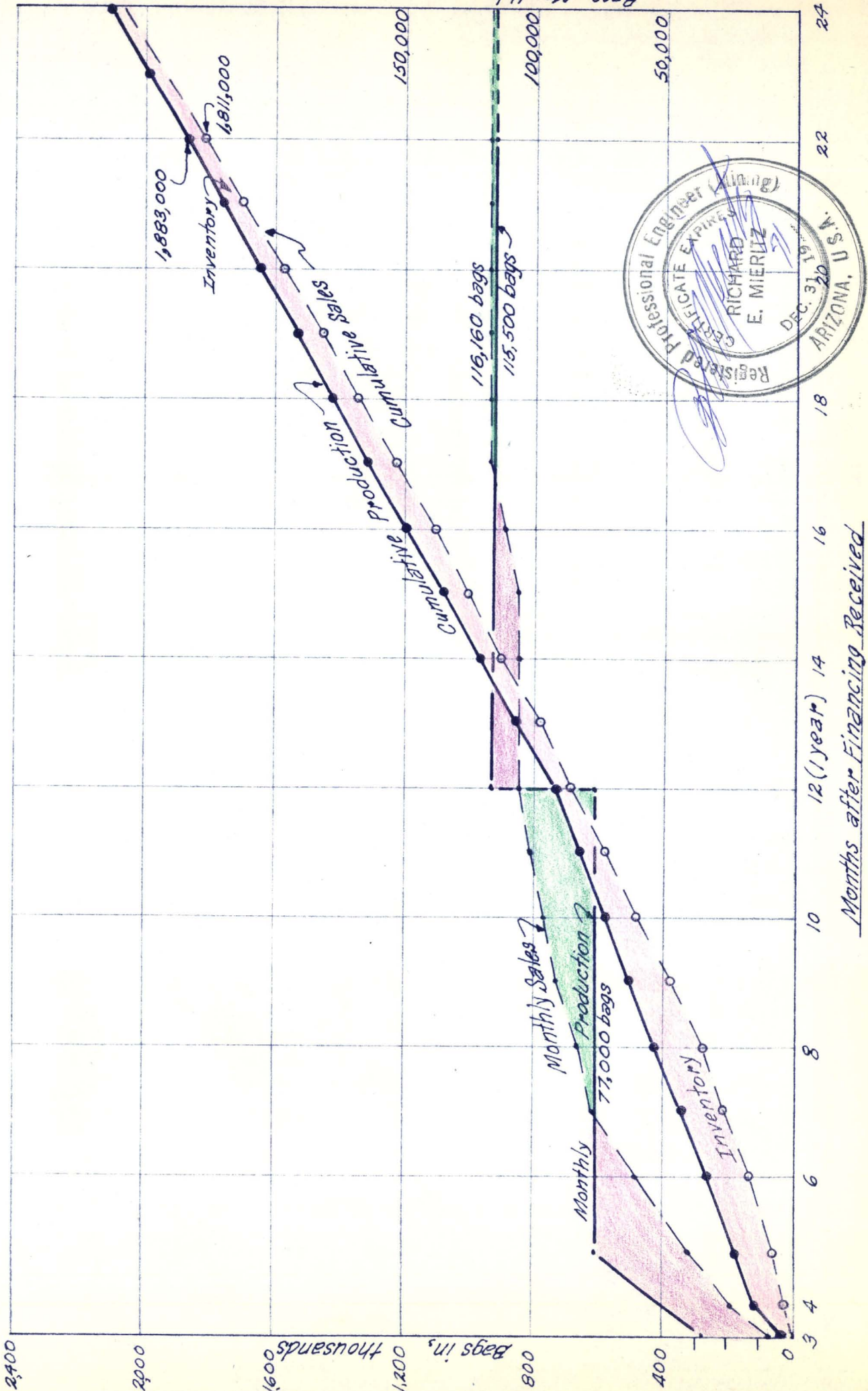


however did provide the requested letters, copies of a few are herewith included.

EXHIBITS for this section include:

Graph - 20 Month Cumulative - Monthly Production-Sales  
Copies of Testimonial letters





20 Month Cumulative - Monthly Production - Sales

Months after Financing Received

After L. Frechette

Dec. 1970 - R.E. Mieritz





# CUTTER AVIATION INC.

November 12, 1970

Frechette Industries, Inc.  
1625 W. Osborn  
Phoenix, Arizona 85015

Attention: Mr. Louis Frechette

Dear Lou,

We have successfully used your Mica Lite absorbant for over five years.

Our primary use for this product is for oil spills and fuel spills on our rough ramp area outside the hangar. We find it does an excellent job and is superior to any product we have used.

The other products were grainy and did not have the features to bring up the oil out of the small holes in the asphalt. Also, they were slippery when stepped on and had a tendency to roll. One other feature I did not like was the abrasive action of the other material. It would scrape and mar our painted floors when used on them.

We haven't used the Mica Lite on our hangar floors in our hangar because our janitor prefers to clean up the oil spills while they are still fresh and also, the mechanics prefer this to having any dust in the area of an engine.

Thanks for giving us an opportunity to tell of our use for your product. I have yet to see anything comparable. Even though our usage is small (about one bag a month) we would not be without it.

Sincerely,

Glen Foulk  
Service Manager

# Allied Tool & Die Co.

---

3807 South 7th Street « » Phoenix 40, Arizona  
Phone 276-2439

November 13, 1970

Frechette Industries, Inc.  
1625 West Osborn Rd.  
Phoenix, Arizona 85015

Attention: Mr. Lou Frechette

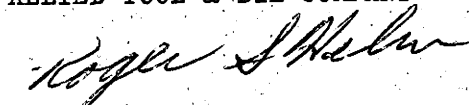
Gentlemen:

During the years 1967 & 1968, you supplied us with Micro Lite Floor Dry, an oil absorbant product. We used approximately 40 bags per year. We found this product to be a good one & did a nice job for us.

The product we are now using, does a comparatively nice job, also, but we feel that we use more of it to get the same job done with the product we were getting from you.

Very truly yours,

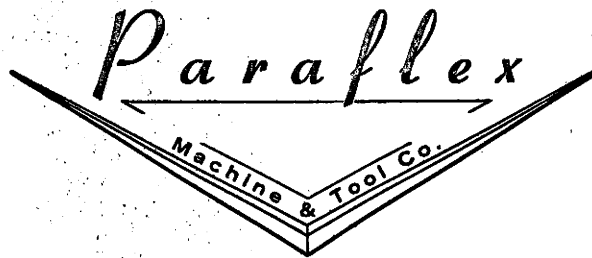
ALLIED TOOL & DIE COMPANY



Roger S. Helm  
Foreman

RSH/skd





3825 NORTH 39TH AVENUE • PHOENIX, ARIZONA 85019 • PHONE 272-5673

November 12, 1970

Mr. Lou Freschette  
1625 Osborn Road  
Phoenix, Arizona

Dear Sir:

Having used many tons of your Mica-Lite material in our plant over an extended period we have found that we prefer it over all similar substances tested.

It does a superb job of oil absorption without leaving an abrasive residue which can be extremely harmful to machinery mechanisms.

Sincerely,

PARAFLEX-MACHINE & TOOL CO.

A handwritten signature in dark ink, appearing to read "Robert Edgar", is written over the typed name.

Robert Edgar  
Purchasing Agent

RE:sl



**apache  
optical inc.**

*Wholesale Laboratories & Supplies*

967-8831  
Area Code 602

Post Office Box 2920  
Phoenix, Arizona 85036

November 12, 1970

Mr. Louis Frechette, Jr., President  
Frechette Industries, Inc.  
Chemical and Mining Divisions  
1625 West Osborn Road  
Phoenix, Arizona 85015

Dear Lou:

This letter is written to tell you in writing about your fine product "MICA-LITE." We have been using it as an oil absorbent for the past two years and find it to be the best absorbent for our purposes.

I recommend it to all your customers with no reservations.

Sincerely,

Frank D. Keller  
Apache Optical Inc.

FDK:tb



CASH FLOW:

General:

The cash flow of this Project considers the following:

- (a) Initial loan of \$350,000.--
- (b) Capital Investment Expenditures for:
  - (1) Process Plant equipment
  - (2) Process Plant structures and office building
  - (3) Office furnishings and equipment
- (c) Working Capital expenditures as labor, materials and supplies for
  - (1) Mine operation
  - (2) Process Plant operation
  - (3) Marketing (Sales Expenses)
  - (4) G. and A. expenses
- (d) Revenue from projected sales goals.



The CASH FLOW RECAP SCHEDULE included at the end of this Section projects the status of expenditures and revenues for a twenty month period commencing at a date when the financing becomes available to the corporation.

Capital Investment Expenditure:

Capital investment expenditures for the process plant and office buildings were discussed in the Section titled "PROCESS PLANT". Capital investment expenditures not heretofore itemized are office furnishings and equipment. Specific quotations have been received from Goodmans Office Furniture, Phoenix, for the many items required, however, for simplicity at this time, a lump sum figure is indicated since most items are actually less than \$500.00 each. The following is required:

General and Administrative

Office furniture, desks, chairs, file cabinets, book cases, etc., for

Outer office, Receptionist  
General Managers office,  
Sales Managers office,  
Clerks Office  
Bookkeepers office  
Warehouse Order-Dispatch Clerk

\$ 3,900.--

Office Business Machines  
Electric Typewriters (2)  
Calculator  
Adding Machine (2)  
Check Protector  
Copying Machine

\$ 2,636.--

The initial office supply expense (expendable) is included in the first month G. & A. expenditure and is estimated at \$850.--. Future office supply expenses are allocated on a monthly rate.

Working Capital:

Expenditures of working capital for all phases of the Project except full scale production operation were discussed and detailed in Sections titled "THE MINE" and "PROCESS PLANT".





Working capital expenditures detailed in this category include labor, material and supplies and services.

The labor and personnel required to operate the Project and their estimated salaries are as follows:

<u>Mining</u>	
1 - Front End Loader Operator (1½ - 2 yd)	\$ 900.-/mo.
<u>Process Plant</u>	
1 - Plant Operation Supervisor	\$ 900.-/mo.
2 - Plant Operators, 2nd and 3rd shifts	\$ 700.-/mo. ea.
1 - Front End Loader Operator (1½ - 1½ yd)	\$ 750.-/mo.
1 - Bagging Operator	\$ 600.-/mo.
1 - Bagging Operator Helper	\$ 480.-/mo.
1 - Bag Sealer Operator	\$ 600.-/mo.
1 - Palletizer Operator	\$ 480.-/mo.
2 - For Lift Operators	\$ 600.-/mo. ea.
1 - Laborer	\$ 440.-/mo.
<u>Sales Organization</u>	
1 - Sales Manager	\$1,250.-/mo.
40 - Salesmen (10 initially, 40 start of 4th month)	\$ 500.-/mo. ea.
<u>G. &amp; A.</u>	
1 - General Manager	\$1,500.-/mo.
1 - Receptionist/Secretary	\$ 400.-/mo.
1 - Clerk/typist	\$ 400.-/mo.
1 - Bookkeeper-Invoicer	\$ 600.-/mo.
1 - Order Clerk-Dispatcher (Warehouse)	\$ 600.-/mo.
<u>Miscellaneous</u>	
1 - Consultant (includes expenses) (seven month duration)	\$2,500.-/mo.

To the above listed salaries, the writer has added 15% of the gross to cover F.I.C.A., unemployment insurance, etc. Ten % of gross has been added to the monthly salaries to cover health, accident ins., etc. These additions have been made to arrive at the monthly expenses for each phase of the operation.

Monthly expenditures other than salaries and wages are estimated to approximate the following:

<u>Mining Operation</u>	
Dozer Contractor, includes operator, fuel, oil.	Dozer \$ 28.-/hr.
	Grader \$ 18.-/hr.
Front end loader rental, 2 yd, includes oil, fuel, etc.	\$1,190.-/mo.
Contract truck hauling	\$ 2.25/ton
Royalty (Mrs. D. L. Solomon)	\$ 4.-/ton
<u>Process Plant Operation</u>	
Fork Lift Rental (2)	\$ 250.-/mo. ea.
Front End Loader rental	\$ 700.-/mo.
Fuel-oil for above units	\$ 150.-/mo.
Natural gas	\$ 960.-/mo.
Electricity	\$1,760.-/mo.
Delivery truck lease, includes fuel, oil, maintenance.	\$ 270.-/mo.
Bags	\$ .047/ea.
Pallets, disposable for shipments	\$ .06/bag.



General and Administrative

Loan Payments	\$ 7,500.-/mo.
Building lease (commences 5th mo.)	\$ 1,200.-/mo.
Office Supplies	\$ 70.-/mo.
Telephone	\$ 500.-/mo.
Utilities	\$ 200.-/mo.
Postage	\$ 400.-/mo.
Dues, Subscriptions, Contributions, etc	\$ 550.-/mo.
Janitorial Service	\$ 60.-/mo.

Sales Organization

40 Auto Rentals (lease)	\$ 165.-/mo. ea.
Gas and oil expense for above-maximum	\$ 150.-/mo. ea.
Shipping costs, average	\$ .40/bag
Advertising, average	\$ .01/bag
Samples and customer entertainment	\$ .02/bag
Travel Expenses, Gen'l Mgr. and Sales Mgr.	\$ 1,100.-/mo. ea.

The monthly figures used in the accompanying CASH FLOW RECAP SCHEDULE reflect the use of the figures previously listed for labor and personnel as well as those figures listed for expenditures other than salaries and wages.

Revenue from Projected Sales:

An average revenue figure of \$2.25/bag has been used to arrive at the monthly gross revenue based on the Projected monthly sales. Salesmen receive a 15% commission on gross sales value, but same is disbursed in the month after it had been earned.

The monthly net cash income results from subtracting the commission of previous month plus the current month operating expenses from the current month gross sales revenue.

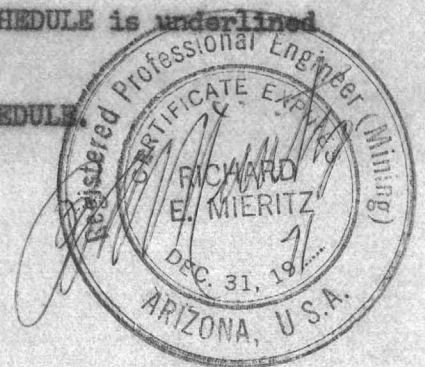
A small cash monthly income (sales revenue exceeding operating expenses) should be realized at the end of the 6th month, and increase thereafter.

Cash Flow:

The CASH RESERVE, commencing with the initial \$350,000.- loan, decreases quite rapidly the first four months of the Project because of Capital Investment and working capital expenditures. The lowest "cash reserve" position (\$29,317.-) is reached at the end of the fifth month. A net revenue is realized in the sixth month and from that point the CASH RESERVE Position steadily increases to \$373,000.- at the end of the 12th month period. After the sixth month the operating costs stabilize and the projected sales increase because the full 40 man sales force should be quite effective with most of the force fully trained.

The CASH RESERVE POSITION in the CASH FLOW RECAP SCHEDULE is underlined in orange color.

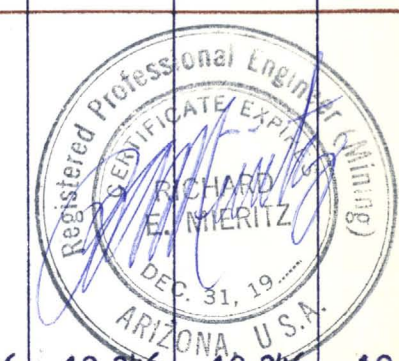
EXHIBIT for this Section is the CASH FLOW RECAP SCHEDULE





**CASH FLOW RECAP SCHEDULE - Mining - Process Plant Construction - Process Plant Operation - Product Sales - Product Revenue and Employees**

OPERATIONAL LIABILITIES and REVENUES	M O N T H S										M O N T H S									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th
Mine Road Construction, (Pre-Mine)	5,424																			
Mine Raw Material and Stockpile, 25-30,000 tons	2,490	9,965	9,965										2,490	9,965	9,965					
Transport Raw Material, (Con'tor, \$2.25/ton) (Mine to Process Plant)			1,980	4,220	4,220	4,220	4,220	4,220	4,220	4,220	4,220	4,220	6,330	6,330	6,330	6,330	6,330	6,330	6,330	6,330
Plant Equipment Purchase - *Capital Investment		55,000*	55,000*	31,396*																
Plant Site Preparation (Pre-equipment)	11,300	2,825	2,825																	
Plant Site Preparation (Bldgs, etc.) (Property Owner, Mr. A. P. Tell) +Escrow.	25,000*																			
Plant Equipment installation-erection		10,576	2,644																	
Plant Operation, Trial Period			4,275																	
Plant Operation, Production to meet sales.				23,122	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246	19,246
Sales Expenditures - Salaries, expenses, adv. etc, but no commission - see below.			12,245	45,755	45,455	70,255	71,905	73,555	75,205	75,205	75,205	75,205	91,760	91,760	91,760	91,760	91,760	91,760	91,760	91,760
G. and A. Expenditures. #Includes \$6,540 Capital Investment of Office Furniture			9,185#	8,335#	9,535#	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355	7,355
Raw Material Royalty (Mrs. D. L. Solomon) (\$100.00/wk plus 10¢/bag produced)	400	400	400	11,600	8,100	8,100	8,100	8,100	8,100	8,100	8,100	8,100	11,920	11,920	11,920	11,920	11,920	11,920	11,920	11,920
Consultants Fees and Expenses	2,500	2,500	2,500	2,500	2,500	2,500	2,500													
Loan Payments (10 years @ 2% above prime interest rate)	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
<b>TOTAL MONTHLY CASH OUTLAY</b>	<b>54,614</b>	<b>88,766</b>	<b>107,519</b>	<b>134,428</b>	<b>96,556</b>	<b>119,176</b>	<b>120,826</b>	<b>119,976</b>	<b>121,626</b>	<b>121,626</b>	<b>121,626</b>	<b>121,626</b>	<b>146,601</b>	<b>154,076</b>	<b>154,076</b>	<b>144,111</b>	<b>144,111</b>	<b>144,111</b>	<b>144,111</b>	<b>144,111</b>
NET REVENUE (Gross Sales revenue less commission)			18,000	51,300	81,900	121,500	150,750	163,850	178,650	184,950	192,800	197,710	197,710	197,710	197,710	212,058	222,156	222,156	222,156	222,156
RESULTING CASH MONTHLY OUTLAY	54,614	88,766	89,519	83,128	4,656															
CUMULATIVE CASH OUTLAY		143,380	232,899	316,027	320,683															
MONTHLY NET CASH INCOME (Net Revenue - Oper. Exp)						2,324	29,824	43,874	57,024	63,324	71,174	76,084	51,109	43,634	43,634	67,947	78,045	78,045	78,045	78,045
<b>CASH RESERVE POSITION (\$350,000.00 Loan)</b>	<b>295,386</b>	<b>206,620</b>	<b>117,101</b>	<b>33,973</b>	<b>29,317</b>	<b>31,641</b>	<b>61,465</b>	<b>105,339</b>	<b>162,363</b>	<b>225,687</b>	<b>296,861</b>	<b>372,945</b>	<b>424,054</b>	<b>467,688</b>	<b>511,322</b>	<b>579,269</b>	<b>657,314</b>	<b>735,359</b>	<b>813,404</b>	<b>891,449</b>
Bags MICA-LITE produced			35,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	115,500	115,500	115,500	115,500	115,500	115,500	115,500	115,500
Bags MICA-LITE sold			8,000	24,000	40,000	60,000	76,000	84,000	92,000	96,000	100,800	105,600	105,600	105,600	110,880	116,160	116,160	116,160	116,160	116,160
SALES REVENUE (Gross, @ \$2.25/bag average price)			18,000	54,000	90,000	135,000	171,000	189,000	207,000	216,000	225,200	232,600	232,600	232,600	249,480	261,360	261,360	261,360	261,360	261,360
SALESMEN COMMISSION (15% of gross sales)			2,700	8,100	13,500	20,250	25,150	28,350	31,050	32,400	34,890	34,890	34,890	34,890	37,422	39,204	39,204	39,204	39,204	39,204
<b>RESULTING NET REVENUE</b>			<b>18,000</b>	<b>51,300</b>	<b>81,900</b>	<b>121,500</b>	<b>150,750</b>	<b>163,850</b>	<b>178,650</b>	<b>184,950</b>	<b>192,800</b>	<b>197,710</b>	<b>197,710</b>	<b>197,710</b>	<b>197,710</b>	<b>212,058</b>	<b>222,156</b>	<b>222,156</b>	<b>222,156</b>	<b>222,156</b>
Inventory. Warehoused at Plant site. Bags			27,000	80,000	117,000	134,000	135,000	128,000	113,000	94,000	71,200	43,600	53,500	63,400	73,300	77,920	77,260	76,600	75,940	75,280
<b>PERSONNEL Required</b>																				
Mining	1	1	1	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—
Plant Construction	4	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plant Operation, Trial Period	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plant Operation, Required capacity	—	—	—	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Salesmen and Sales Manager	—	1	11	21	31	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
G. and A.	1	1	2	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Consultant	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>TOTAL PERSONNEL</b>	<b>7</b>	<b>9</b>	<b>22</b>	<b>36</b>	<b>48</b>	<b>58</b>	<b>58</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>



**NOTE:** Detail figures to arrive at the totals used in this schedule are mentioned and listed in the body of the report and can be substantiated by quotations from the suppliers of equipment and other reliable sources, Sales, of course, are projections.

L. Frachette  
R.E. Mieritz, Dec. 1970



PERSONNEL:

Several persons have contributed, in varying degrees, much time, expense and professional knowledge and guidance with regard the information contained herein and to the formation of this Project. They all deserve much credit.

For the readers perusal, resumes of the following persons are included in this Section.

Mr. Franklin L. Naylor Jr., Scottsdale, Arizona.  
Mr. John Herbert Bagg, Phoenix, Arizona.  
Mr. Richard E. Mieritz, Consulting Engineer, Author of  
the Report, Phoenix, Arizona.

Frechette Industries

Mr. L. Frechette, President & Board Chairman, Phoenix, Ariz.  
Mr. Robert W. Owen, Vice President, Phoenix, Arizona.  
Mr. Vincent J. Kelleher, Director, Phoenix, Arizona.  
Mr. Michael F. McCluskey, Director, Phoenix, Arizona.



# World Who's Who In Finance and Industry

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**NAYLOR, Franklin Llewellyn, Jr.**, cons. engr., b. Arlington, N.J., July 17, 1910; s. Franklin L., Sr. and Mary H. (Fiedner) N.; M.E., U. Cal., 1942; m. Edna Anabel Woglom, Sept. 7, 1932; children - Marjorie Evelyn (Mrs. Victor E. Glidden, Jr.), Franklin L. III, Virginia Irene Naylor (Mrs. Ronald C. Wasem). Engaged in various engring, capacitors, 1928-; cons. indsl. engr., 1946-; has been with Indsl. Div., S. S. White Dental Mfg. Co., Breeze Corp., inc., Walker-Turner Corp., Aluminum Co. Am., all on East coast, U.S. Spring and Bumper Co., Lockheed Aircraft Corp., Pacific Div., Bendix Aviation Corp., Grand Central Aircraft Co.; v.p. Baker and Weikel, engr., 1948-; pres. Naylor Engring & Research Corp., Los Angeles; gen. agt. Bankers United Life Assurance Co. of Chgo.; spl. agt. Constn. Life Ins. Co.; pres. Am. Pacific Life Ins. Co.; owner Ariz. Chem. & Engring Co., offices Tucson and Phoenix, Naylor & Assos., estate and business consultant Tucson and Phoenix; instr. Tng. Inst., Mchts. and Mrs. Assn.; instr. engring subjects Tucson Secondary schools; instr. spl. engring classes, State of Cal. Burbank and Glendale Unified Sch. Dist., 1939-; instr. occupational engring and bus. Ariz. Jr. Colls.; instr. for Ariz. State Colls.; licensed prof. engr., gen. bldg. contractor, real estate broker, engr., Cal. licensed ins. agt. Ariz. Pres. Glendale-Burbank Joint Carpentry Apprentice Com., 1943; mem. WPB. Office Prodn. Mgmt. and War Prodn. Bd. trainer, Tng. Within-Industry div., World War II; chmn. Trade Adv. Com. for Sheet Metal Workers, Nat. Defense Com., 1943-45; employer rep. Trade Com. for Drafting, Lathing and Pattern Makers, 1943-45; Mem. SCORE, vice chmn. Small Bus. Exccs. Clearing House; mem. Internat. Exec. Service Corps; Pres. Greater Phoenix Republican Club, 1962; pres. pro tem, 1963; Mem. Am. Soc. M.E. (life, dir. prof. mgmt. div.), Am. Ordnance Assn., Bldg. Contractors Assn. Cal. Soc. Advancement Mgmt. Glendale C. of C., Am. Arbitration Assn. (nat. panel arbitrators), Hammond Organ Soc. (pres. Tucson 1955), A.I.M., Hawaii C. of C. (aero affairs com.). Author, Aluminum and its Alloys; co-author several books on supervisory devel. such as Job Instruction, Planning and Presentation, Orientation of New Employees, principles of orgn. and mgmt. others; contrb. maj. trade jour. articles Clubs: Presidents, Nat. Travel, Phoenix Executive Home 1631 Palmcrott Way SE, Phoenix, Ariz. 85007. Office: 6125 E. Indian School Rd., Scottsdale, Ariz. 85251. Address: 1230 Carmen Dr., Glendale, Cal.

**NAZARETH, Vasco Philip**, elec. co. exec., b. Lisbon, Portugal, Feb. 19, 1937; s. John de-Pava and Marie C. (Serra) N., B.A., U. Louvain (Belgium), 1959; MBA, 1961, diploma in Internal Law, U. Lisbon, 1960; postgrad. in Washington U., St. Louis, 1961-63; m. Jeannine Y. Mousset, Feb. 26, 1962; 2 d. v. Ann Marie Came to U.S., 1961, naturalized; 1966 Dir. Econ. Service Employee Govt. (W. Africa), 1959; cons. Petrolium Oil Co. (Africa), 1960; mem. marketing program Gen. Electric Co., N.Y.C., 1963; analyst marketing research Internat. div., 1964; overseas bus. planner Hotpoint Div. Chgo., 1965; overseas research and planning mgr. combined major appliance and Hotpoint divs., N.Y.C., 1966-67; contract mgr. overseas major appliance dept., Louisville, 1967; merchandising mgr. minimal appliance and television operations, 1968 -; locality Washington U., St. Louis, 1962; Decorated Order Arthus, Herman Found. fellow, 1961;

firm, to 1967; with Bear & Am. Corp., 1962-63; with McCrory Corp., 1963-; non-pres. in later capacity chief exec. officer S. Klein Dept. Stores, inc. (merged with McCrory Corp., 1968). Address: McCrory Corp., 711 Fifth Ave., N.Y.C. 10022.

**NEARBORG, Eugene Everett**, oil co. exec., b. Ponca City, Okla., Sept. 14, 1923; Eugene Lawrence and Grace (Rueb) N.; ment Tex. A. and M. U., 1941; B.S. in Petroleum Engrg., 1948; m. Anna, indsl. engr., 1949; 3 children - Charles Eugene, Mark, Peter, Genl. Landman, Pan Am. Petroleum Corp., 1941-52; ind. law man, 1952-80; v.p. Plateau, Inc., Farmington, Minn., 1941-52; v.p. Petroleum Engrg., 1952-55; pres. Sulphur River Corp., 1963-66; Capital Petroleum, Inc. (formerly Presidio Operating Co.), 1963-67; pres., chmn. Necco, inc., 1967-; Bd. dirs. Roswell YMCA. Served as pilot, 1st Lt. USAAF, 1942-45. Mem. Beta Gamma Sigma, Methodist (ofcl. bd.). Home: 9017 Briarwood Lane, Dallas, Texas 75209. Office: 3303 Lee Pkwy., Dallas, Texas 75219.

**NEARING, Dudley Woodruff, Jr.**, chem. co. exec.; b. New Britain, Conn., Feb. 25, 1925; s. Dudley Woodruff and Ethel (Barnes) N.; B.A., Dartmouth, 1946; M.S., Johns Hopkins Univ., 1948; instr. 1948-59; with Reichold Chem., Inc., Marwick, Chem. & Engr. C.P.A., N.Y.C., 1949-59; with Reichold Chem., Inc., 1959-; v.p., com. mgt., 1962-; dir. mem. engr. firm Inpage com. 1963-; v.p. final 1964-67; mem. Henry J. Lloyd Co., 1967-; v.p. 1967-; served with AUS, 1943-45; C.P.A., N.Y. Mem. Am. Inst. C.P.A.'s; Kings County Grand Jurors Assn. Home: 64 Poplar St., New York, N.Y. Office: 525 E. 17th St., New York, N.Y. 10012.

**NEARY, William F.**, brewery exec.; b. 1920; Phi B., U. Wis.; married. Successively accountant, asst. to treas., asst. to v.p. financial Fabst Brewing Co., Milwaukee, 1946-66; (Pres., asst. to pres., 1966; exec. v.p., 1967-; merged with AUS, 1943-45; Office: 917 W. Columbia, Milwaukee, Wis. 53233.

**NEATHERY, Willie John**, columnist, writer; b. Albertville, Tenn., June 6, 1905; s. Thomas William and Dora Ann (Sadler) N.; student LaSalle Extension U., 1929-33; U. Washington, 1951-52; m. Mathe Lou Lowrey, Mar. 3, 1945; 1 dau., Carlyn Ann. With accounting and budgeting dept. Celanese Corp. Am., Hopewell, Va., also Rome, Ga., 1922-58; treas. Ledbetter-Johnson Co., Rome, 1958-60; bus. mgr. Shorter Coll., Rome, 1960-; office systems cons., Rome, 1960-; Bd. dirs. local A.R.C., Cerebral Palsy Assn. Served with USAAF, 1942-46; 51-53; Mem. Rome C. of C., Methodist (supt. Sunday sch.). Kawanian Home: 107 Turner Chapel Rd., Rome, Ga. 30161.

**NEBBIA, John Charles, Jr.**, airlines co. exec.; b. Rochester, N.Y., Apr. 7, 1925; s. John and Margaret (Holoman) N.; m. Sally L. Pierrelli, Nov. 30, 1946. Admitted to N.Y. bar, U.S. Tax Ct., sr. auditor Jackson & Ziegler, C.P.A.'s, Rochester, 1952-56, sr. accountant Price, Waterhouse & Co., 1956-59, internat. tax cons. 1964-65, law asso. A.S. Munster, Syracuse, N.Y., 1962-63, domestic tax cons. Haskins & Sells, N.Y.C., 1963-64, asst. to v.p. finance, and dir. taxes Monaco Industries, Amsterdam, N.Y., 1965-68, corp. controller Northeast Airlines, Inc., Boston, 1968-; Served with AUS, 1943-46; 51-52;

Comm., chmn. Ga. Nuclear Adv. Comm., 1956-63; Ga. Sci. and Tech. Com. 1964-65; Atlanta Area Council, Inc., Boy Scouts Am.; Atlanta Community Chest, 3 yrs.; chmn. Spl. Unemployment Relief Com., 1932; mem. Pres.'s Youth Employment Assn.; chmn. Atlanta Area Comm. on Pollution; v. l. are Bd. Mem. Spl. Com. on Orgn. Hoover Comm., 1954-55; mem. com. on bus. orgn. Dept. Def., also mem. Procurement Task Force; Roy V. Wright Lectr. Am. Soc. M.E., 1954; mem. Board of Trustees, Key West ASB Fellow Am. Mgmt. Assn., Am. Soc. M.E., A.A.A.S., Am. Inst. Inosl. Engrs., mem. Newcomen Soc., Soc. Advancement Mgmt., Ga. Atlanta Jr. (life), Atlanta chambers commerce, Men's Garden Clubs of Am. and Atlanta North Ga. Camellia Soc., Union Soc. of Savannah, Am. Heart Assn., Inc., Ga. Heart Assn., Inc., Ga. Engring. Soc. (life mem.), S.C.V., Nat. Atlanta (past pres.) retail mchts. assns., Alpha Kappa Psi, Phi Kappa Phi, Kappa Phi Kappa (Distinguished Service award), Clubs: Piedmont Driving (Capital City) Standard Town and Country (Atlanta), Piedmont Driving, Capital City Commerce and Standard, Author: The Manager: A Human Engineer. Home: Baltimore Apts., Atlanta, Ga. Office: 45 Broad SW, Atlanta, Ga.

**NEELY, William Lee**, mfg. exec.; b. Pitts., Pa., Aug. 8, 1918; s. William Lee and Helen (Henderson) Neely; B.S., Edinboro Sch. Bus., 1936-40; U. Pitts., 1952-53; m. Barbara Cleveland, Mar. 13, 1947; children - William, Douglas, with Ernst & Ernst, 1946-48, with Rockwell Mfg. Co., Pitts., 1949-; asst. com. mgt., 1952-58, asst. treas., 1958-61; treas., 1961-67; v.p. of Williamsburg Fed. Savs. & Loan Assn., Pitts., Western Pacific Service Bus. Assn., Bd. dirs. Columbia Hosp., E. Boroughs council Boy Scouts Am. Service, 1961-63; USAAF, 1943-45; Mem. Pa. P.A. chambers commerce Machinery and Allied Products Inst. Financial Exec. Inst. Home: 173 Park Dr., Pitts., Pa. 15223. Office: 400 N. Lexington Av., Pitts., Pa. 15203.

**NEES, H.H.**, ment co. exec.; b. nr. Charleston, Ill., Oct. 30, 1915; s. H.H. and Pearl (N. G.) Nees; B.S., Washburn Univ., 1937; m. Helen (Wagner) Nees, June 12, 1937; children - Kathryn Irene, 1941; 1 d. Soc. asst. treas. local Basic Industries, inc. (formerly Ideal Cement Co., Denver) Mem. U. of Minn. Assn., Colo. Hist. Soc., Denver Botanic Gardens, Phi Alpha Delta Eta, K.P. Home: Boulder, Colo. 80302. Office: Ideal Cement Co., 821 17th St., Denver, Colo. 80202.

**NEEF, Carroll Forsyth**, food, drug, cosmetic cons.; b. Payson, Mich., Jan. 10, 1908; s. Corvan Ferry and Adeline (Forsyth) N.; A.B., Washington U., St. Louis, 1929; M.A., U. Cal. at Berkeley, 1930; postgrad. (Food Law Inst. - Food) Emory U., 1954; m. Helen Osterhom, 1930 (div. 1956); children - Robert E., 1940; Anne (Mrs. Walter R. Newman), Carroll Forsyth, m. 2d. Wounded Campaigner, 1918;



J. H. BAGG  
2100 EAST MISSOURI AVENUE  
PHOENIX, ARIZONA 85016

## JOHN HERBERT BAGG

Born: April 3, 1905  
Graduated: 1922  
Attended: 1922  
Graduated: B. S. 1928

Brooklyn, N. Y.  
Gilman School, Baltimore, Md.  
Bus. College " "  
Yale - Industrial Engineering

## EMPLOYMENT

1928 - 1929	Allied Chemical Corp.	Baltimore Works: batch operator shipping, lab., quality control Sec'y to President, N.Y.C.
1929 - 1930	" " "	Marcus Hook Works - main plant
1930 - 1931	" " "	various, to learn major prods.
1931 - 1932	" " "	Chicago Office, salesman
1932 - 1933	" " "	Buffalo Office, ass't mgr.
1934 - 1942 (1942 - 1946)	" " "	Baltimore Office, mgr. (On leave of absence with Navy) (Details follow)*
1947 - 1949	Allied Chemical Corp.	St. Louis Office, Dist. sales mgr.
1949	" " "	Resigned so as to move to Phnx.
1950 - 1953	Thunderbird Sales Corp.	Vice-Pres. in charge of sales
1953 - 1957	J. H. V. Farms Corp.	Managed 4 farms, Pinal County sold farms Real estate sales Ranch sales Real Estate Broker Associate
1957 - 1960	O'Malley Inv. & Realty	
1960 - 1962	Hebbard & Webb	
1962 - 1969	(self-employed)	
1970 - date	F. Naylor & Associates	

\*Details on service record 1942 - 1946,  
1942 - 1943 U. S. Navy  
1943 - 1944 " " "  
1944 - 1946 " " "  
1946 (Inactive)  
(1946 - 1950)  
1950 - 1962 U. S. Naval Reserve  
1962 " " " "

1950 - 1962  
Various service schools  
Subchaser duty, Atlantic  
Destroyers, Pacific Fleet  
Released to ready reserve: LC  
Request of Allied Chem.  
Resumed reserve status, Phoen.  
C.O. Composite & BuShips units  
Retired from service

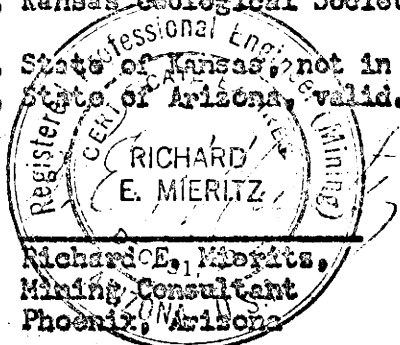
## FAMILY DATA

1935	m. Dorothy Santee Davis	b. December 3, 1907 Plymouth, B.A. Univ. of Wisc - 1929
1937	d. Mary Christine	m. R.R. Parker 11/26/66 Somerville, N. J.
1940	s. John H. Jr.	B. S. Cornell Univ. 1962 A-1 Allis Chalmers, La Mirada, C.
1945	s. Carter D.	B. S. Cal-Berkeley 1969 K. N. Craik N.I.A. Phoenix

PROFESSIONAL RESUME

Richard E. Mieritz

- Jan., 1965 to present Independent Mining Consultant completing many examinations and evaluations of mining properties in Arizona, western States and Mexico. Retained as Consultant and Exploration and Field Project Manager, Mt. Goldsworthy Mining Pty., Port Hedland, Western Australia; as Field Development Eng. and Administrative Eng., Anvil Mining Co., White Horse, Yukon Territory, Canada; as Exploration Manager in Turkey, Cyprus Mines Inc., as Geological Consultant, Home-Stake Production Co. for their mining properties.
- Dec., 1962 Chief Mining Engineer, Mt. Goldsworthy Mining Pty. for their Iron deposit, Northwest Western Australia. Mt. Goldsworthy is a consortium of Utah Const. CO., Consolidated Goldfields of London and Cyprus Mines Inc., Los Angeles.
- Jan., 1956 Independent Mining Consultant in mining, geology and metallurgy of base metals and industrial minerals. Completed property examinations, appraisals, evaluations, guided and supervised exploration projects, mine design, mill design and leach plant design. Had supervisory and management responsibilities. Work completed in Arizona, Nevada, California, New Mexico, Colorado, Utah, Idaho, Mexico, Panama, Brasil and Peru.
- July 1953 Staff Engineer, Amstutz & Yates, Consulting Petroleum Geologists and Engineers, Wichita, Kansas. Completed engineering work in the oil and gas fields of Kansas and Oklahoma. Completed geological work, reservoir reserve and potential engineering, secondary recovery by gas and water repressuring, design of such plants and methods.
- Oct., 1945 Superintendent of exploration Projects of base metals in Utah, Idaho, Colorado, Nevada and Arizona for American Smelting & Ref. Co., Salt Lake City, Utah and Tucson, Arizona. Superintendent of Toquepala and Quellaveco copper exploration and development Project, Southern Peru for Northern Peru Mining & Smelting Co., a subsidiary of A.S. & R. Co., from 1950-53.
- Oct., 1942 Project Engineer for the U. S. Bureau of Mines in Utah. Supervised iron and aluminum exploration Projects. In 1944 was promoted to Ass't to Chief of the Iron and Steel Div. in the Washington D. C. Office controlling all exploration, mining and process Projects of raw materials for steel making in the U. S. and Alaska. After Bureau re-organization, became Chief of the Nevada-California and Alaska Divisions controlling exploration, mining and process Projects of all minerals in the industry and had budgetary responsibilities.
- June, 1939 Various "hard knock" employment with Utah Copper Co., Bingham, Utah., U. S. Smelting & Ref. Co., Lark, Utah., and Shell Oil Co., New Mexico and Texas. Summer job in 1938 with Pickands Mather Iron Mining Co., Wakefield, Michigan.
- June, 1939 Received B. S. Mining Engineers degree, Univ. of Wisconsin.  
April, 1934 Received Petroleum Geology Certificate, Kansas Geological Society, Univ. of Kansas.  
July, 1955 Received Mining Engineers License 3191, State of Kansas, not in force.  
Mar., 1956 Received Mining Engineers License 2745, State of Arizona, valid.





## RESUME

Louis Frechette, Jr.

1625 West Osborn Road, Apartment 3  
Phoenix, Arizona 85015  
Phone 274-7075

### PERSONAL DATA

Birth date	December 4, 1921	Age	49
Place	Woodland, Illinois	Marital Status	Married

### EDUCATION

Grammar School - Martinton, Illinois  
High School - Martinton, Illinois (1939), Graduated, Donovan, Illinois (GED 1951)  
Special Courses - Restaurant Management Course  
Business Administration and Executive Training Course  
Alexander Hamilton Institute (1961)  
Motel Management Training Institute, Milwaukee, Wisconsin (1963)

### WORK HISTORY

1969 to Present Frechette Industries, Inc. - 1625 West Osborn Road - Phoenix, Arizona  
Position: President and Chairman of the Board  
New corporation formed by me March 3, 1969, for Chemical Specialties and Mining Operation, to produce an oil absorbent and soil conditioner called Mica-Lite. I incorporated and registered securities which were approved, November 20, 1969, by the Arizona Securities Division.

March 1967 to March 1969 Operated a sole proprietorship company called Frechette & Sons Industrial Supply Co., Phoenix, Arizona. Sold machine cutting tools, chemicals, cutting oils, building maintenance items and products for the first year. On May 18, 1968, with the help of Mr. R. W. Owen, chemist and, now, Vice President of Frechette Industries, Inc., developed a line of products called Multi-Met (Multiple Metals) Chemical Compounds and Machine Coolants. An expanding market, with limited production facilities, and a shortage of working capital force me to incorporate the company in order to raise the necessary working capital and build the necessary production facilities and expand the sales force.

April 1966 to March 1967 Worked for the United States Post Office in Phoenix, Arizona, as a Mail Carrier and Clerk until I injured my back in November 1966 and was terminated in March 1967.

October 1965 to April 1966 Moved to Phoenix from Illinois - worked at part-time, various jobs. Made application for the postal job.

January 1964  
to  
October 1965  
A. M. Castle Co. - Franklin Park, Illinois  
Production scheduler and Turn Foreman, production shearing department.  
Left to make arrangements to move to Phoenix.

March 1950  
59  
January 1964  
Worked for Inland Steel Company, Chicago, Illinois and at the Indiana Harbor Steel Mills of Inland. Started out as laborer (one week) - Production Expediter and Shipping Expediter for one and one-half years. Transferred to general offices, October 1951, as Sales Service Man and Sales until 1957. Production schedule Coordinator and allocation and schedule control analyst, responsible for steel allotment allocations and production control liason to the ten producing mills and internal statistical records and reports to executive management.

December 1945  
to  
March 1950  
Owned and operated two restaurants in Hammond, Indiana.

December 1939  
to  
September 1945  
Served with United States Army - Domestic and overseas.  
Honorable Discharge (Certificate of Disability)

HOBBIES

Golf, oil painting and art.



RESUME  
Robert W. Owen

1 January 1971

I-A PERSONAL DATA

Address: 8336 East Weldon Avenue  
Scottsdale, Arizona 85251

Phone: (602) 946-7922

Born: 3 April 1914

Marital Status: Married, 3 adult children

Education: B. S. in Chemistry from University  
Dayton, Dayton, Ohio 1948  
Also attended Ohio University and  
Antioch College.

I-B GENERAL

Am capable of originating, planning, and carrying out complete research projects.

Good at design and construction supervision of laboratories, or at planning additional departments in existing facilities.

Versed in gas chromatography; infrared, ultraviolet, visible, atomic absorption, and flame emission spectrophotometry; emission spectroscopy; and thin layer and other forms of chromatography.

Expert analyst, inorganic or organic.

Broad experience in surfactants, water treatment (including swimming pools), pesticides, fertilizers, soil and plant chemistry, petroleum, fats and oils, phosphate chemistry, coatings, chemical specialties (household, industrial, sanitation, cosmetics), ore flotation reagents, metals, etc. Various aspects in research and development, quality control, production, advertising, label preparation, technical service to customers, technical sales assistance, and some direct sales have been included.

One patent on water treatment.

Several (non-technical) publications on water treatment.

Lectures, several times each year.

Work well with others, or can work independently.

Excellent writer of laboratory manuals.

II-A EMPLOYMENT RECORD, BRIEF

June 1969 to present

Independent consultant, Chemist for Engineers Testing Laboratories, Phoenix, Arizona, and Vice President, Research Director for Frechette Industries, Inc., Phoenix, Arizona.

October 1957 to June 1969

Arizona Agrochemical Corp., Cortez Chemical Company, and Westag, Phoenix, Arizona (3 divisions, same company).  
CHIEF CHEMIST

December 1954 to October 1957

E. W. Smith Chemical Company, City of Industry, California.  
CHIEF CHEMIST

March 1953 to December 1954

Pilot Chemical Company, Santa Fe Springs, California  
CHIEF CHEMIST

December 1952 to March 1953

Stoody Corp., Whittier, California.  
PLANT METALLURGIST

December 1950 to December 1952

Purex Corp., Southgate, California  
RESEARCH CHEMIST

July 1950 to December 1950

California Testing Laboratories, Los Angeles, California  
CHEMIST

December 1944 to July 1950

Bowser-Morner Testing Laboratories, Dayton, Ohio  
CHEMIST

Also taught school and completed degree work during this period.

Previous to December 1944 (Chemical experience only)

California Institute of Technology; ASSISTANT RESEARCH  
CHEMICAL ENGINEER

Military Service (CHEMICAL WARFARE)

W. A. Hammond Drierite Co., PRODUCTION SUPERVISOR

Moraine Products: POWDER METALLURGY RESEARCH

Jamestown Malleable Iron Corp.: ASSISTANT TO CHIEF CHEMIST

Kettering Foundation for Photosynthesis Research:

(Antioch College) CHEMIST

Ohio University, Biochemistry Department: LABORATORY  
ASSISTANT



RESUME

Name: Vincent J. Kelleher  
Age: 55 (born Nov. 13, 1915--St. Louis, Mo.)  
Address: 114 E. El Caminito Phoenix, Az. 85020  
Marital Status: Married (wife's name--Anne J.) no children  
Education:

<u>School</u>	<u>Graduate</u>	<u>Last year attended</u>
John Reagan High School Houston, Tex.	yes	1933
St. Louis University St. Louis, Mo.	Certificate in business admin- istration with accounting major	1947

Employment dates:

1/1/69 to 7/31/69 National Computing Industries  
3003 No. Central Phoenix, Az.  
Position--accountant

7/1/66 to 8/31/68 Eder, Kelleher & Baron, Certified Public Accountants  
7912 Bonhomme Ave. Clayton, Mo.  
Position--partner

1/1/64 to 6/30/66 Eder, Weltman & Co., Certified Public Accountants  
7912 Bonhomme Ave. Clayton, Mo.  
Position--partner

12/1/61 to 12/31/63 Harvey Eder & Co., Certified Public Accountants  
7912 Bonhomme Ave. Clayton, Mo.  
Position--senior accountant

5/1/54 to 11/30/61 Self employed--certified public accountant

12/1/47 to 4/30/54 Harvey Eder & Co., Certified Public Accountant  
814 Olive St. St. Louis, Mo.  
Position--senior accountant

2/46 to 10/47 St. Louis University

1/42 to 1/46 Military service

1937 to 1942 Singer Sewing Machine Co.  
801 Olive St. St. Louis, Mo.  
Position--auditor

1933 to 1937 St. Louis Post-Dispatch  
1912 Olive St. St. Louis, Mo.  
Position--copyholder

## History:

Following graduation from high school in 1933, my father moved his family back to St. Louis (we were originally from there). Shortly thereafter, I went to work for the St. Louis Post-Dispatch as a copyholder--assistant to proof-readers. The job with Singer Sewing Machine Co. became available in 1937 and I went to work for this company as an internal auditor for the central division. Later, this developed into a traveling auditor's position. Neither of these jobs required a formal accounting knowledge, as the reporting forms were unique to the company's need for information. Auditors were company trained to work with the various forms used. The forms contained a mixture of real and nominal accounts and neither balance sheets nor income statements were prepared at the division levels. Sometime during my stay with Singer, I became interested in the more conventional kind of accounting and took a few courses at night at Washington University in St. Louis.

My employment at Singer Sewing Machine Co. ended abruptly with the outbreak of World War II. I applied for training with the Army Aviation Cadet program and was accepted 1/15/42. After graduating as a qualified multi engine aircraft pilot, I served eighteen months in the CBI Theatre with the air transport command. The balance of my active duty consisted mainly of ferrying planes around the U. S. A. and Europe. I was placed on inactive duty 1/29/46 and became a member of the Air Reserve as of that date. On 1/11/62, I received an Honorable Discharge from all duty with the permanent rank of captain.

When I was relieved from active duty with the Air Force, I decided to renew my interest in accounting and enrolled in the School of Commerce and Finance, St. Louis University. At this time, an abbreviated course was being offered GIs so that they could complete in three years what would normally require four years. The academic award for completing this program was a Certificate, as distinguished from a BA.

On 12/1/47, I went to work for Harvey Eder & Co., Certified Public Accountant, moving upward from junior to semi-senior to senior accountant. With the exception of the period 5/1/54 to 11/30/61, during which I conducted my own practice as a CPA, I had an association with this firm until 3/31/68. From 1/1/54 to 8/31/68, I was a partner of the firm. The firm's clientele was of a diversified nature. The various client's annual gross ranged from thirty thousand to thirty million. The different firm names listed on the resume reflect only the changes made to accommodate the admittance of new partners.

Early in 1968, I decided that I had had about all that I could take of the tax season rat race and notified my partners that I was resigning from the firm as soon as it was practical for all concerned. My resignation became final 8/31/68. Since my wife and I had already decided that we would eventually move to Phoenix, we made the move at that time. We have been residents of Phoenix since 11/30/68.

I became an employee of National Computing Industries on 1/1/69. The terms of employment contained a ninety<sup>day</sup> test period available to all parties. Before the expiration of the test period, it became obvious to me that the situation left something to be desired. The company may well have felt the same. I remained with the firm until the independent CPAs had completed the



annual audit and a replacement had been hired and briefed. I left this position on 7/31/69.

Although my resume does not reflect this information, I became associated with Frechette Industries Inc. about September 1969 and look forward to a mutually happy future with the firm.

Miscellaneous:

In November 1953, I passed the examination given by the American Institute of Certified Public Accountants. And in 1954, I was licensed by the State of Missouri to practice in the capacity of certified public accountant. I am now a member of the American Institute of Certified Public Accountants and I was, until August 31, 1968, a member of the Missouri Society of CPAs.

I am a member of the American Legion, Scottsdale Country Club and a life member of the Optimist Club (past president).

I enjoy good health and exercise regularly, especially on the golf course.

PERSONAL HISTORY  
OF  
MICHAEL F. McCLUSKEY

7126 North 19th Avenue  
Phoenix, Arizona 85021

PERSONAL DATA

Birthdate: January 3, 1937      Height: 5' 8"  
Marital Status: Married  
Health: Excellent

OBJECTIVE

To obtain a position in an industry providing opportunities and training in the fields of MARKET RESEARCH, PUBLIC RELATIONS, & SALES MANAGEMENT.

EDUCATION

Business Administration - Washington University, St. Louis, Missouri - 1964

BUSINESS EXPERIENCE

A few of my business accomplishments in which you might be interested are as follows:

July                      Sales Manager - Frechette Industries, Inc.  
1969 to Present

1968 to                      Divisional Manager with an area sales volume of  
July 1969                      \$860,000 per year for a national Manufacturer's  
                                    Representative firm selling to Prime Original  
                                    Equipment Manufacturing accounts.

Duties: Sales Management and administration, personnel selection and training, budgeting, public and customer relations.

1. First two months of 1969 sales volume increased 200%.
2. Increased the volume of sales within my division to the point it has become necessary to double the sales force.
3. Developed my sales volume to the number one position within the company.

1967                      Sales Engineer, Manufacturer's Representative firm,  
to                              Phoenix, Arizona  
1968

Duties: General sales, administration, customer relations.

1. Increased company's sales Volume by 25%



2. Initiated and secured new accounts leading to an increase of \$200,000 in sales volume for the company.
3. Developed a new concept in packaging for a product to prevent damage in shipment resulting in a \$198,000 order.

1964  
to  
1967

Sales Engineer, Manufacturer's Representative firms,  
St. Louis, Missouri

Duties: General sales, administration, customer relations.

1. Employed as a Junior Sales Engineer and within six months became the number one salesman within the company.
2. My sales volume at the end of three years was \$1,000,000 annually.

1959  
to  
1964

Sales Supervisor, Olivetti-Underwood

Duties: Product training, employee relations, customer relations, supervision of sales personnel

1. Devised a new sales method wherein a salesman's special talents could be utilized within a team to handle large new accounts, resulting in a substantial increase in sales.

1955  
to  
1959

United States Navy

#### VALIDATED PROFESSIONAL EVALUATION

The following summary is a result of an in-depth evaluation of academic and experience factors through clinical situational procedures by J. Frederick Marcy & Associates, Consultants to Management:

"Mr. McCluskey is an intelligent, serious and conscientious person with a need for a position which absorbs his interests. He has a strong competitive spirit and a will to succeed. He approaches problems in a straight forward manner and relates to people in the same way. In addition he wants to be involved and committed in a job he likes and involves dealing with people."

#### SALARY OBJECTIVE

Open with position opportunities and potential of prime importance.

-Additional information will be forwarded upon request-

A  
PRELIMINARY ESTIMATE

of the

GEOLOGIC ORE RESERVES  
(Vermiculite)

at the

SOLOMON MINES PROPERTY

Maricopa County, Arizona

by

R. E. Mieritz  
Mining Consultant  
Phoenix, Arizona

February 16, 1970



## INTRODUCTION:

The writer was requested by Mr. L. Frechette, President Frechette Industries, Phoenix, Arizona, to examine and evaluate to some degree, the Solomon Mines "vermiculite" property located about 7 miles north, northwest from Buckeye, Arizona. Frechette Industries has a lease on this property to mine and process the vermiculite to a saleable product.

The evaluation objective was to determine a tonnage reserve and potential for the vermiculite bearing rock, a reserve for a small area where mining of the material is currently in progress and a potential for the rest of the claimed area. These reserve figures are strictly preliminary in nature simply because there is no data on which to base a firm reserve calculation except the frequency and amount of rock outcrops in the area. However, the writer does present some figures based on his observations of the outcrops, etc as they were examined on February 14, 1970.

## CONCLUSIONS:

As a result of the field examination completed by the writer as mentioned above, his work thereof and the geologic information gained, as well as the writers interpretive geologic reasoning have all been combined, translated and equated toward the following two conclusions:

- (1) - Approximately 115,000 tons of vermiculite rock can be inferred as a reserve in the area of the present operation, (V. No. 5 Claim) and,
- (2) - Approximately 600,000 plus tons of vermiculite rock should be available as a future potential from the other two claims shown on the included map.

## THE PROPERTY, LOCATION and ACCESSIBILITY:

The Solomon Mines vermiculite property consists of six unpatented lode mining claims in the White Tank Mountains approximately 24 miles west of Phoenix, Arizona. The claims are known as the Swag, Tops, V. No. 5, Cootillo, #344 and W. W. North. Specifically these claims lie in parts of Sections 33 and 34, T. 2 N. and Section 4, T. 1 N., both of R. 3 W. of the G. & S. R. B. & M. in Maricopa County.

Access to the property from Frechette Industries Plant and Office site at 59th Ave. and W. Van Buren Rd., is to travel west on Van Buren Rd. as far as possible on pavement, then south for a mile to W. Yuma Rd and west again around a fenced auxillary airfield and past same for approximately 1.5 miles at which point a transmission line crosses the road and an access road bears to the right or north. The property is 2.5 miles north on the access road.

## GEOLOGY and MINERALIZATION:

The claimed area hosts such rocks as PreCambrian gneiss, granite, pegmatite dikes, quartz dikes and the vermiculite rich rock.

The latter (vermiculite rich rock) appears to be outcropping most every place but this is due mostly to its irregular outline and contacts with the gneiss or other rocks. This rock appears to occur as lenses, layers, large and small dikes and large irregular outlined masses.

It is this latter type which constitutes the bulk of the "tonnage reserve" referred to in the two conclusions on page one and in the tonnage calculations referred to in the succeeding paragraphs.

ORE RESERVE and POTENTIAL:

To obtain some degree of accuracy and reliability of tonnage figures, the writer surface walked much of the V. No. 5, Tops and Swag claims. This area includes the "productive" area and enhances some of the larger mass type volumes of vermiculite rich rock. The writer finds through this reconnaissance, that much detailed surface geological mapping will be required in the future to satisfactory carry out a successful mining operation.

The included map indicates in a general way the surface expression of the vermiculite rich rock. The area is also well covered with talus and alluvium and this hinders rock outcrop observation.

In the area of the present "Pit", the writer has credited a total of 115,000 tons of vermiculite rich rock as two blocks, "A" with 37,500 tons and "B" with 75,000 tons. Each block was taken as 150 feet each side of the Pit (east and west) with 100 feet into the hill - north. A fifteen foot thickness was applied for the single zone in Block "A" and fifteen feet each for the two zones in Block "B". A twelve cubic foot in place factor was used.

$$\begin{array}{r} \text{Block "A"} \quad 300 \times 100 \times \frac{15}{12} = 37,500 \text{ tons} \\ \text{Block "B"} \quad 300 \times 100 \times \frac{30}{12} = 75,000 \text{ tons (two zones)} \\ \hline 112,500 \text{ tons} \end{array}$$

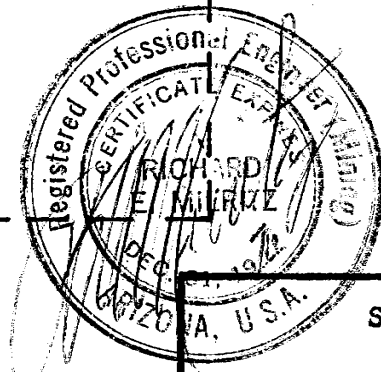
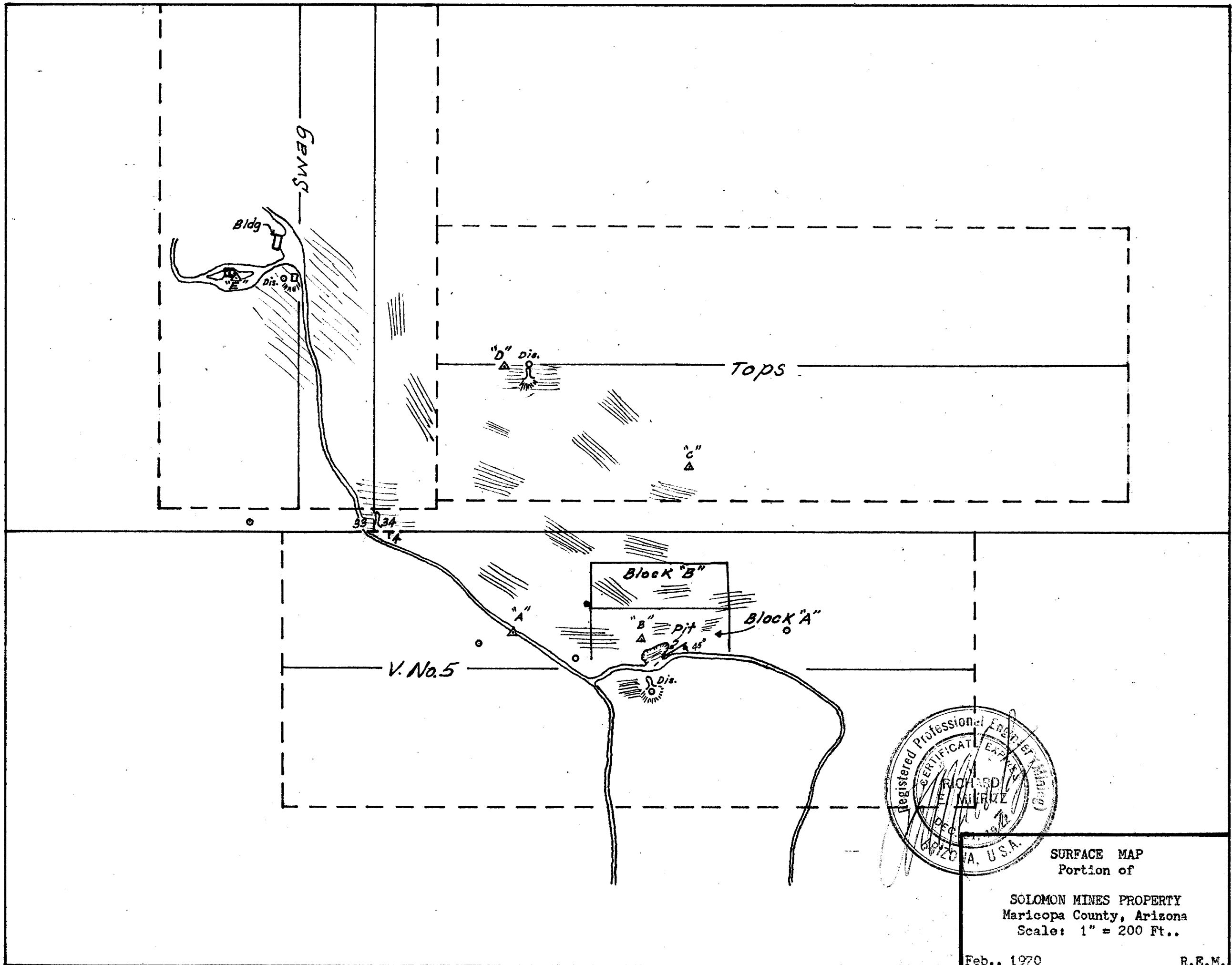
The writers estimate of 600,000 tons of vermiculite rich rock as a future potential is based on the strength and abundant area of exposed vermiculite as shown on the included map. With adequate exploration in this area, the writer feels sure this tonnage and more could be developed.

Respectfully submitted,

R. E. Mieritz,  
Mining Consultant.

Phoenix, Arizona  
February 16, 1970





SURFACE MAP  
 Portion of

SOLOMON MINES PROPERTY  
 Maricopa County, Arizona  
 Scale: 1" = 200 Ft..

Feb., 1970

R.E.M.

AN  
INFORMATION and EVALUATION

REPORT

on the

SOLOMON MINES VERMICULITE CLAIMS

in the

White Tank Mountains  
Maricopa County, Arizona

by

Richard E. Mieritz  
Mining Consultant  
Phoenix, Arizona

July 22, 1981



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Included Exhibits:

- ARC Laboratories letter dated August 26, 1970
- ZONOLITE letter dated November 5, 1970, 3 pages
- Map No. 1 - INDEX MAP, Southwest Arizona
- Map No. 2 - SOLOMON MINES PROPERTY
- Map No. 3 - SURFACE MAP
- Map No. 4 - MINE DEVELOPMENT
- Map No. 5 - PROCESS PLANT FLOW SHEET

## INTRODUCTION:

At the request of and authorization by Carolyn Youngblood, Newellton, Louisiana, daughter of Dwight Solomon, deceased, the writer has prepared the following report on the Solomon Mines vermiculite property, Maricopa County, Arizona.

This report is based on facts and excerpts from the writer's earlier report dated January 1971, on his personal knowledge of the property since 1961 and on his general geologic knowledge of the area.

## PROPERTY and LOCATION:

The property consists of six unpatented mining claims (120 total acres) in parts of Sections 33 and 34 T. 2 N., R. 3 W. and part of Section 4 T. 1 N., R. 3 W., Maricopa County, Arizona.

The claims are named:

W. W. North	Tops
Ocotillo	V - Number Five
Swag	344

(See Map No. 2 - CLAIM MAP)

The claims are approximately six miles north of Buckeye, Arizona, which town is on U.S. Highway 80, about 36 miles west of downtown Phoenix. The most direct route from Phoenix center is to travel west on McDowell Road to Perryville Road - about 22.5 miles west of Central Avenue in Phoenix. Turn left (south) to Perryville and Yuma Road. From the crossroad at Perryville, travel west (right) 5.5 miles to Watson Road. A northwest - southeast high tension power line crosses the main road close to this junction. Travel north (right) on Watson Road, Interstate I-10 at 0.6 miles. Continue for one mile more on Watson Road to a N. 25° W. "Y" on the left which leads to the Boy Scout camp - 0.3 miles distant. The property is to the west - or left. (See Maps No. 2 and 3)

## FACILITIES:

Electricity is available within a mile to the east. A small water source could probably be developed on the Ocotillo or Swag claims in the small valley, or close by off the claims to the east. Bottled gas or diesel would have to be used for the heating fuel.

## HISTORY:

Having located the claims in 1960 and 1961, Mr. Dwight Solomon discovered that some of the rock formation contained a variety of vermiculite which expanded to some degree when heated. This characteristic, plus the fact that the exfoliated material had "absorbing" qualities, caused Mr. Solomon to commence a small operation which produced an "oil absorbant" under the copyrighted - registered name of MICALITE.

For production, Mr. Solomon utilized a flame thrower pointed toward a small pit bank containing the vermiculite rich rock, hand screened the exfoliated material and bagged same.

Solomon Mines was created and the MICALITE sold locally in Phoenix. Sales increased to a point that Mr. Solomon employed a "salesman" until Mr. Solomon passed on in December 1968.

In March 1970, Frechette Industries, Incorporated, Louis Frechette, President, Phoenix, Arizona, leased the Solomon Mines from Mrs. D. L. Solomon, widow, to establish a productive operation utilizing the finished product, MICALITE, as an "Oil Absorbant", mineral "Soil Conditioner" and as pet "litterbox" material.

In February 1970, the writer prepared an "ore reserve" report of the property and between August and December 1970, a complete Report on the Property, Mining, Milling, Capital Investment, Marketing, Cash Flow, etc., as a basis for Frechette Industries to obtain adequate financing for the Project and to establish the business. Unfortunately, realization of same did not materialize.

In December 1971, Mrs. Solomon leased the property to Harold Crevasse, Paradise Valley, Arizona, who was going to forward the production of MICALITE. Some work was done but the project never got off the ground.

The writer visited the property on July 21, 1981 to determine what progress or changes had been made. The original small pit operated by Mr. Solomon has been lengthened in an east - west direction and a second "bench" pit - about ten feet higher in elevation - was constructed above the original pit level. (See Map No. 4)

The present roads are somewhat in disrepair, however, a small amount of work would easily repair same.

#### GEOLOGY:

The claimed area hosts such rocks as Pre-Cambrian gneiss, granite, pegmatite dikes, quartz dikes and the vermiculite rich rock - a pyroxene. The latter (vermiculite rich pyroxene) appears to outcrop in many places within the property and this is due to its irregular outline and contacts with the gneiss and other rocks. The vermiculitic rock appears to occur as lenses, layers, large and small dikes and large irregular outlined masses. It is these large irregular masses which will provide the required ore reserves. (See Map No. 3 - SURFACE MAP)

Quoting in part from Dana's Textbook of Mineralogy, Fourth Edition, Page 674 - "The VERMICULITE GROUP includes a number of micaceous minerals, all hydrated silicates, in part closely related to the chlorites, but varying somewhat widely in composition. They are alteration products of the micas biotite, phlogopite, etc. and retain more or less perfectly the micaceous cleavage. Many of them are of a more or less indefinite chemical nature and the composition varies with that of the original mineral and with the degree of alteration."



"The laminae in general are soft, pliable and inelastic. Heated to 100° to 110°, most of the vermiculites lose considerable water which is probably hygroscopic; at 300° another portion is often given off; and at red heat a somewhat larger amount is expelled. Connected with the loss of water upon ignition is the common physical character of EXFOLIATION; some of the kinds show this to a marked degree, others to a lesser degree."

The Solomon Mines raw material contains approximately 25% vermiculite in a host rock of pyroxene and minor other minerals.

#### ORE RESERVE and POTENTIAL:

The writer prepared a February 16, 1970 Preliminary Estimate of Geologic Ore Reserves (Vermiculite) on the Solomon property for Frechette Industries.

To obtain some degree of accuracy and reliability of tonnage figures, the writer surface walked much of the V - Number Five, Tops and Swag claims. This area includes the "productive" area and enhances some of the larger mass type volumes of vermiculite rich rock. The writer finds through this reconnaissance that much detailed surface geological mapping will be required in the future to satisfactorily carry out a successful mining operation.

The included map (Map No. 3) indicates in a general way the surface expression of vermiculite rich rock. The area is also well covered with talus and alluvium and this hinders rock outcrop observation.

In the area of the present "Pit", the writer has credited a total of 110,000 tons of vermiculite rich rock as two blocks, "A" with 37,500 tons and "B" with 75,000 tons. Each block was taken as 150 feet each side of the "Pit" (east and west) with 100 feet into the hill - north. A fifteen foot thickness was applied for the single zone in Block "A" and fifteen feet each for the two zones in Block "B". A twelve cubic foot in place factor was used.

$$\text{Block "A"} \quad 300 \times 100 \times \frac{15}{12} = 37,500 \text{ tons}$$

$$\text{Block "B"} \quad 300 \times 100 \times \frac{30}{12} = 75,000 \text{ tons (two zones)}$$

$$\underline{112,500 \text{ tons}}$$

The writer's estimate of 600,000 tons of vermiculite rich rock as a future potential is based on the strength and abundant area of exposed vermiculite as shown on the included map - SURFACE MAP NO. 3. With adequate exploration in this area, the writer feels sure this tonnage and more could be developed.

Now, as then, any ore reserve figure can only fall into the category of "inference", however, the writer has designed a drill program to explore the deposit and develop a proven ore reserve of at least 250,000 tons of vermiculite rich rock.

The drilling program as suggested is for approximately 1000 feet of hole up to twelve holes varying in depth from 80 to 100 feet. Drill holes should be so located as a pattern to assure that the continuity of the material can be shown to exist as it is thought to be - in mass - and as such, then amenable to low cost open pit mining. (See Map No. 4 - MINE DEVELOPMENT.)

#### PRE-MINE PREPARATION:

Pre-mine preparation consists of constructing main line haulage road (2 miles), pit roads, bench level approach roads, a small amount of overburden removal and a 25,000 ton surge pile area. This work is identified by the brown and tan coloring on Map No. 4 - MINE DEVELOPMENT. A portion of this work would have been "roughed in" during the drilling program.

Pre-mine work involves dozer and operator rental and grader and operator rental. A time period of three weeks is anticipated.

#### MINING RAW MATERIAL (ORE):

Mining of the raw material could be by an open pit, low cost method using a dozer equipped with rippers for breakage of the material and a 1½ cu. yd. front end loader for transportation to a surge pile for truck loading or loading into the mill head if a mill is located on the property.

Drilling and blasting for rock breakage should not be required.

Mining of 25,000 tons - a year's supply - could be completed in approximately three months. The production not required immediately to feed the process plant could be stockpiled on the "surge pile" area.

#### THE PROCESS PLANT:

##### Raw Material - Plant Feed

The raw material (ore) as received from the mine would contain approximately 25% of the mineral vermiculite, 70 - 75% pyroxene grains and not more than 5% quartz and other minor minerals. This material would range in size up to about 14 to 16 inches, grainy or sugary in texture, friable and somewhat elastic. It is not tough, brittle or dense.

To provide some information for the selection of the proper process plant equipment, a local Phoenix laboratory completed "heating" tests on samples of the material to determine critical exfoliation temperatures, time and expansion qualities. Zonolite, a Division of W. R. Grace & Co., also tested the material as explained in their November 5, 1970 letter herewith included.

### The Process:

The designed flow sheet to process this material is quite simple. The raw material as received is stage crushed by jaw crusher and rolls, attrition ground, fed into a horizontal or vertical kiln and heated to 1350° to exfoliate the vermiculite. The entire product is bagged into quantities of 1.35 cubic feet or approximately 50 pounds per bag. One ton of the original raw material will produce approximately 40 bags of marketable product.

### Process Plant Equipment:

As part of the writer's exercise included in the 1970 "Frechette" report, a generalized process plant flow sheet was designed for a 25,000 ton annual capacity, 1,000,000 bags per year. (See Map No. 5) At that time, the writer obtained current prices and substantiated same. A round figure estimate at this time is estimated at approximately \$400,000.-.

The required major equipment is listed below:

#### Process Plant Equipment:

- 1 - Austin Western Pan Feeder, or equivalent
- 1 - 1024 Jaw Crusher, complete, or equivalent
- 1 - 2416 Roll Crusher, complete, or equivalent
- 1 - 3X10 Vibrating Screen, complete, or equivalent
- 5 - 10 ft. Conveyors, complete
- 2 - 14 ft. Conveyors, complete
- 1 - 30 ft. Conveyor, complete
- 1 - 20 ft. Bucket Elevator, complete
- 1 - 40 ft. Bucket Elevator, complete
- 1 - 65 ft. Bucket Elevator, complete
- 1 - Distributing Unit for Tanks
- 4 - C-12-8 Storage Tanks
- 1 - ½" steel Storage Tank
- 1 - Rotary kiln, build or buy used

#### Bagging Equipment:

- 1 - Bagging Unit, Spee-Dee, or equivalent
- 1 - Bag Closing Conveyor, St. Regis, or equivalent
- 1 - Bag Closer Unit, St. Regis or equivalent
- 1 - Conveyor
- 1 - Palletizer Unit, St. Regis or equivalent
- 1 - Conveyor

### CONCLUSIONS:

The early activities of Messrs. Solomon and Frechette indicate that a viable, saleable and profitable product can be produced utilizing the vermiculite rich pyroxene rock within the confines of the claimed area known as Solomon's Mines. Their work also indicated that the product would be publicly accepted because of many testimonial letters which were received by both.



The writer opines that an adequate supply of the raw material can be developed within the confines of the claims to support a profitable business for many years in the future.

The Process Plant can be ideally located on or near the property and with Interstate I-10 now completed to Dysart Road - west Phoenix - and within one mile of the property - transportation of the finished product is now much easier to markets in all directions, east - west - north and south through Interstate Highways I-10, I-8 and I-17.

Respectfully submitted,

---

Richard E. Mieritz  
Mining Consultant

July 22, 1981

# ARC LABORATORIES

Division of Arizona Research Consultants, Inc.

9236 NORTH 10TH AVE.

PHOENIX, ARIZONA 85021

943-3573

FOR: Frechette Industries  
c/o Richard Mieritz  
5822 N. 22nd Place  
Phoenix, Arizona

DATE 8/26/70

LAB No. 10985

Vermiculite-mica

## RESULTS

The sample was crushed in a jaw crusher set at  $\frac{1}{2}$  inch opening.  
Screen analysis after crushing:

- $\frac{1}{2}$ + 4 mesh.	55.7 %
-4 + 10	15.0
-10 + 16	6.9
-16 + 30	9.4
-30 + 50	6.5
- 50	6.5

The - 10 + 16 appeared to be the most uniform fraction and was used for the tests below.

Apparent density = 1.113 or 69.4 lbs/cu.ft.

After exfoliation: 0.516 or 32.2 lbs/cu.ft. (1400 °F)

Total moisture in ore as recd. = 4.84 %

Exfoliated @ Increase in volume

1050 °F 1.8 x original

1100 1.8

1150 2.0

1200 2.1

1300 2.0

1400 2.0

1400 (10 minutes) 2.0

A test on ore expanded at 1400 ° showed that 55 % was now - 16 mesh.

All heating times were 5 minutes which was judged to be the minimum time required to heat the crucible and contents to a uniform temperature, except for 1 test marked 10 minutes.

By throwing a piece of ore directly into the furnace at any temperature above 1100 °F expansion began immediately and appeared

Respectfully submitted, complete within 1 minute.

ARC LABORATORIES

John T. Long, Jr.

**GRACE**

# ZONOLITE

DIVISION W. R. GRACE & CO.

LIBBY, MONTANA

**MINERS AND MANUFACTURERS OF VERMICULITE PRODUCTS**

November 5, 1970

Mr. L. Frechette  
1625 West Osborn Road  
Phoenix, Arizona 85015

Dear Mr. Frechette:

The sample of vermiculite ore from your property has been tested. I am including a copy of the laboratory results and vials of material for your information.

As you know, the sample consisted of a single piece, for which, incidentally, I wish to thank you. It is usually difficult to obtain a sample that shows the actual relationship of the minerals. In order to liberate the vermiculite, with minimum degradation of the vermiculite, the sample was broken, crushed in a hammer mill, passed through a roll crusher and then ground in an attrition mill. The crude screen analysis shown on the laboratory assay is the result of this grinding. Experimentally, it has been found that stage grinding, with specific crusher settings, liberates the vermiculite with minimum breakdown. From the fractions obtained by the screen analysis a 250 gram sample was prepared to the standard screen analysis for the No. 4 concentrate. This sample, containing 25% vermiculite, was passed through a special electric furnace that duplicates the results obtained in a commercial expanding furnace. The No. 4 size expanded very well. A concentrate made from this size ore would have produced 50 bags of four-cubic-foot size from each ton of concentrate. Your small sample of No. 4 appears fine, due to the washing, drying and general abuse of the laboratory procedures. A portion of plus 20 mesh is included to show the fully expanded vermiculite appearance. The expanded vermiculite has a good, uniform gold color, acceptable strength without excessive delamination or breakdown, due to heat. The vermiculite would be entirely satisfactory for any of the commercial No. 4 purposes.

The gangue minerals were primarily pyroxenes with small amounts of olivene, ilmenite and magnetite. No biotite or phlogophite was noted in any of the sizes and micaceous delamination due to heating was only noted below 100 mesh.



Mr. L. Frechette

-2-

November 5, 1970

This is not at all unusual. The indicated vermiculite content of the original sample, 25% vermiculite, is lower than general ore grades, but not a major concern. It is surprising that only a very small amount of alkalic feldspar and virtually no quartz could be found in the rock fraction.

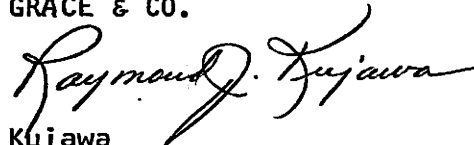
As a final note, regarding the analysis, there was not sufficient material to prepare an accurate sample of the coarser concentrate sizes. However, expansion of the material available, as indicated by the plus 20 mesh material returned to you, firmly indicates that acceptable No. 2 and No. 3 concentrates could be produced.

You have indicated that you intend to operate the property yourself to supply a local market initially. Should you wish to consider any different operating arrangement such as lease, option of the property or sale, I would like the opportunity to discuss this with you. The first step in this direction would be an examination of the property, with more detailed sampling. In the meantime, I would appreciate the opportunity to visit you, should I be passing through Phoenix.

Very truly yours

CONSTRUCTION PRODUCTS DIVISION  
W. R. GRACE & CO.

By:

R. J. Kujawa  
Chief Geologist

RJK/jbg

enc.

Expanded grades

#1 -3 +14, 5 to 6 pounds/ea. ft.  
 #2 } -5 +20, 6 to 7 pounds/ea. ft.  
 #3 }  
 #4 -8 +65  
       -10 +65  
       -20 +100

Sample: Frechette Ind., Inc.  
from 1625 W. Osborn Rd  
Phoenix, Arizona 85015

Post No. \_\_\_\_\_

As by Mt. \_\_\_\_\_

Correction factor used: \_\_\_\_\_

Screen	Crush	Exp.	Rock E			%	Wght.
	Wt.	Wt.	Bio. Wt.	Bio. Wt.	Fract. Wt.	Vert.	Cont.
0.575"							
0.375"							
3							
4							
6							
8							
10							
14							
20		6.0					
28		17.1					
35		23.3					
48		16.0					
55		11.5					
100		9.9					
150							
200							
Pan		16.2					
Slime							
Total		100.0					

Time: \_\_\_\_\_ Sec. \_\_\_\_\_

Temp. \_\_\_\_\_

Gross Wt. \_\_\_\_\_

Pan \_\_\_\_\_

Net Wt. \_\_\_\_\_

Sample: No. 4 std. sizing - 25.0% Vm  
50 bag yield.

Single pc. mica pyroxenite rec'd.  
Grd thru hammer mill, rolls, attrition mill.

Gangue minerals primarily pyroxenes (some  
aegirine-augite) with olivene?, ilmenite; ~~hematite~~  
No biotite - a few pcs. alk. plag. + 1 pc. gtz. onlco.

% Solids \_\_\_\_\_

# PUT IT IN WRITING

## MEMORANDUM

19

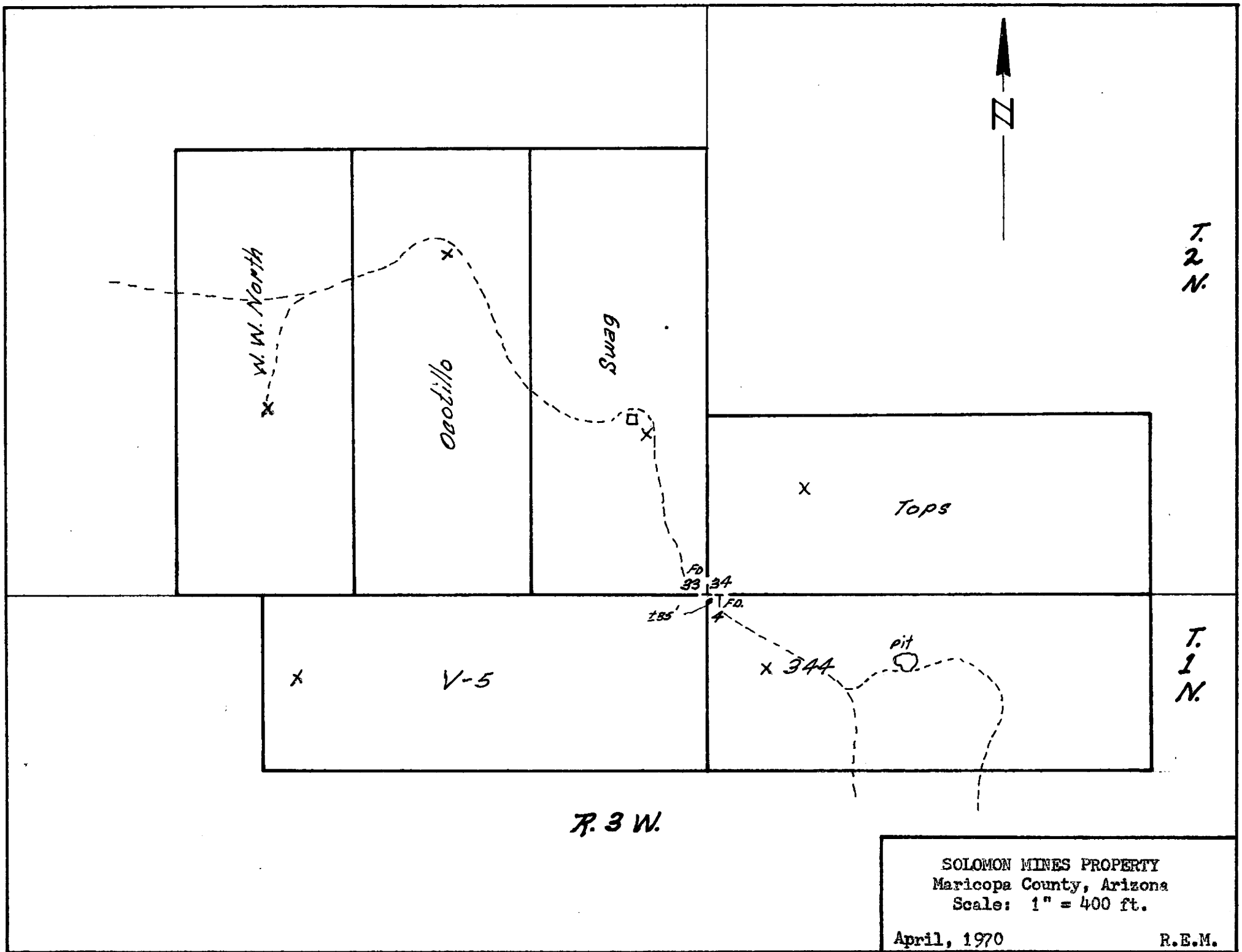
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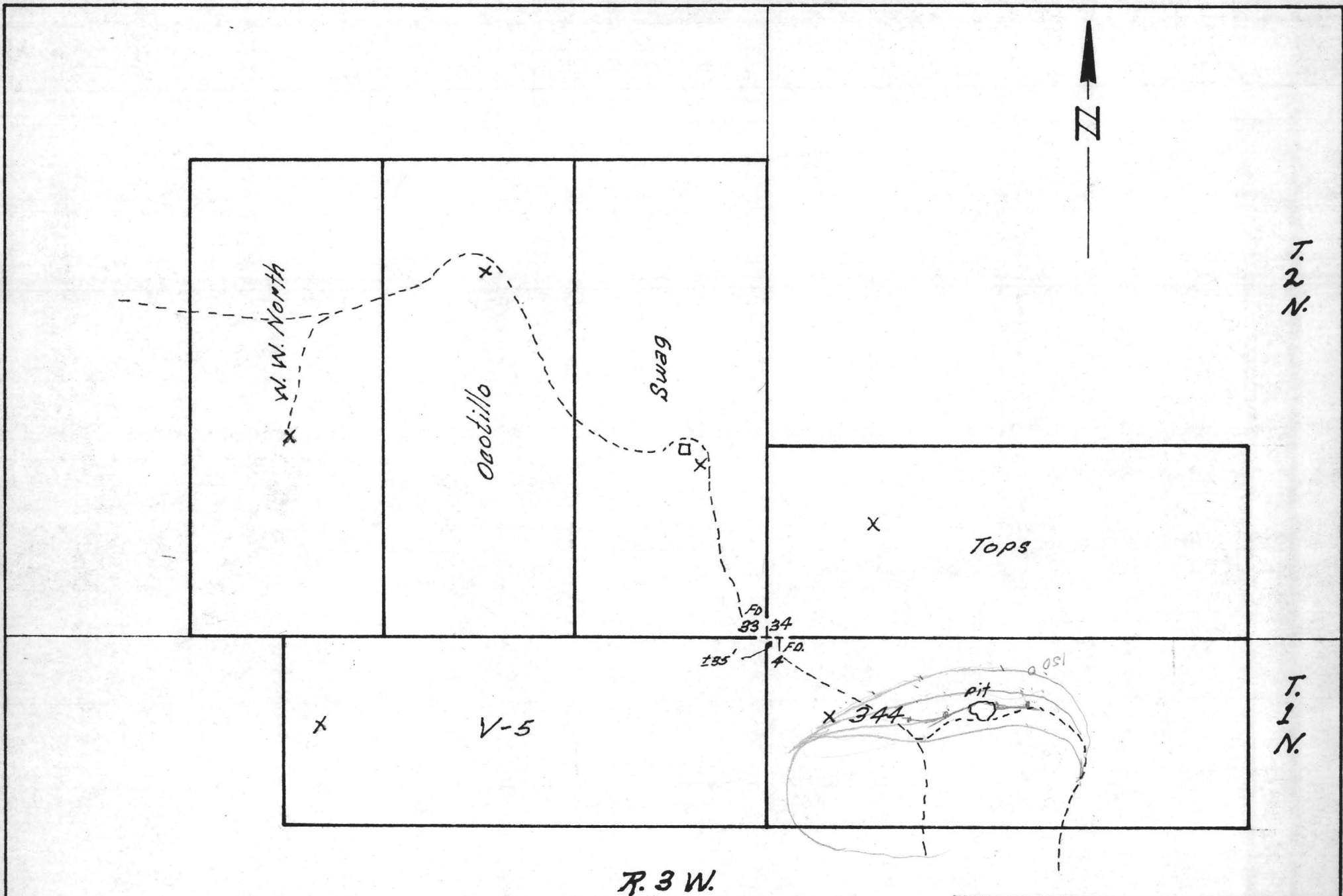
To

Freche's Crushing Test - Bar of Mine - 6 x 10 set of  
 $1'' + = AD \#2 \quad + \frac{5}{8}'' = 20.75 = 51.9 \text{ about } 1\frac{1}{2}''$   
 $- \frac{5}{8} + \frac{3}{8} = 4.00 = 10.0$   
 $- \frac{3}{8} = \underline{15.75} = \underline{38.1}$   
 $AD.00 \quad 100.0$

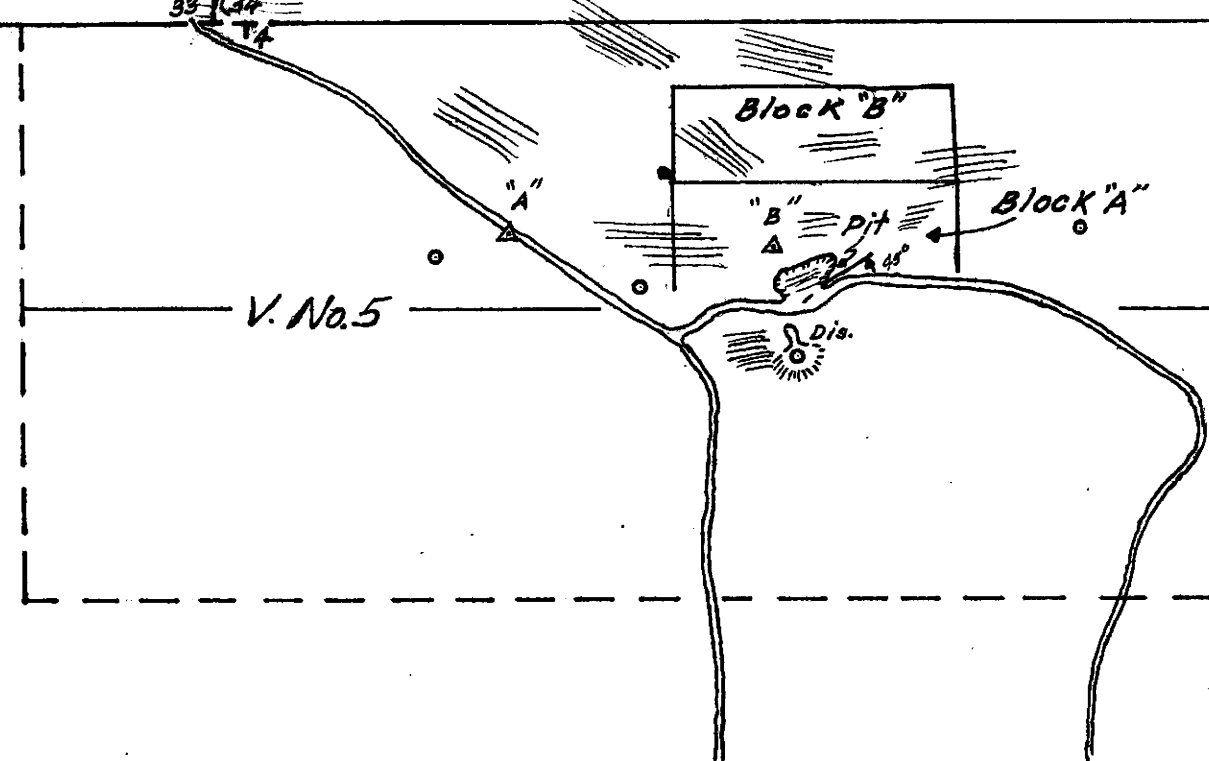
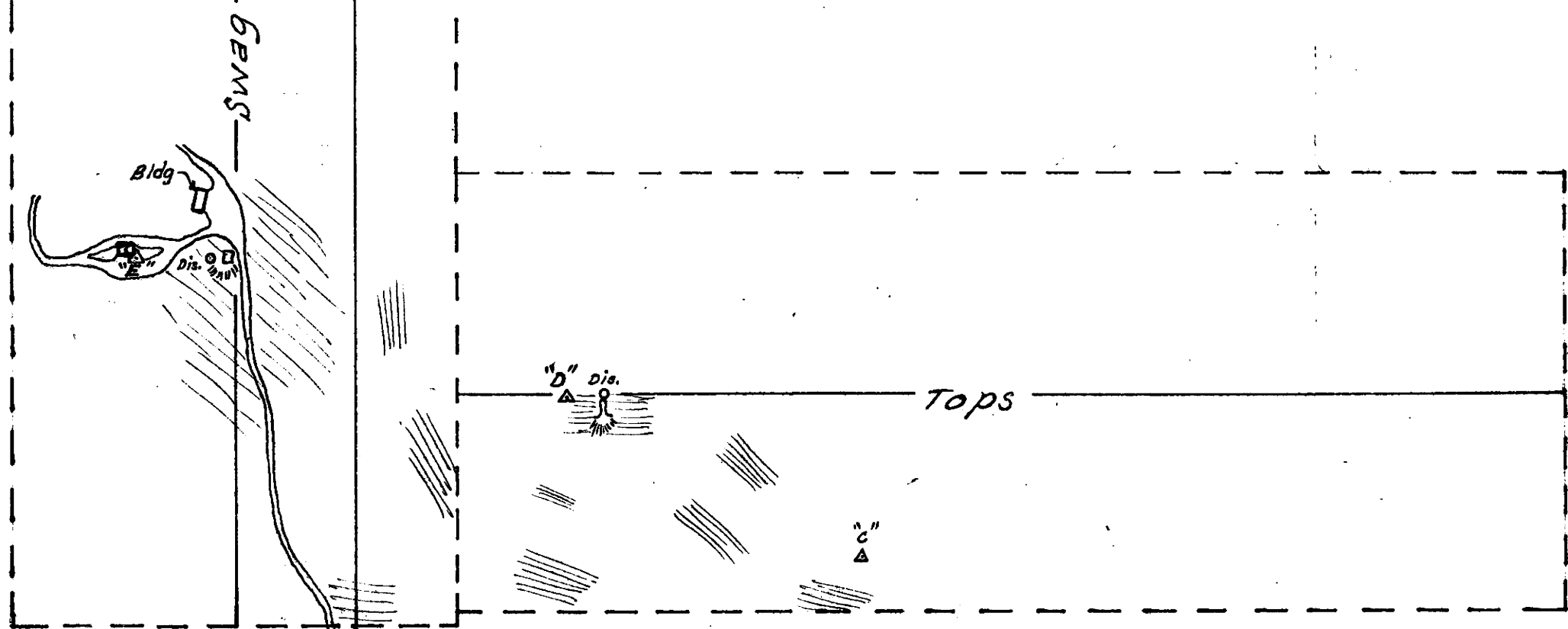
5" x 12" x 8"







SOLOMON MINES PROPERTY  
 Maricopa County, Arizona  
 Scale: 1" = 400 ft.  
 April, 1970  
 R.E.M.



SURFACE MAP  
Portion of

SOLOMON MINES PROPERTY  
Maricopa County, Arizona  
Scale: 1" = 200 Ft..

Feb., 1970

R.E.M.





# ZONOLITE

DIVISION W. R. GRACE & CO.

LIBBY, MONTANA

MINERS AND MANUFACTURERS OF VERMICULITE PRODUCTS

November 5, 1970

Mr. L. Frechette  
1625 West Osborn Road  
Phoenix, Arizona 85015

Dear Mr. Frechette:

The sample of vermiculite ore from your property has been tested. I am including a copy of the laboratory results and vials of material for your information.

As you know, the sample consisted of a single piece, for which, incidentally, I wish to thank you. It is usually difficult to obtain a sample that shows the actual relationship of the minerals. In order to liberate the vermiculite, with minimum degradation of the vermiculite, the sample was broken, crushed in a hammer mill, passed through a roll crusher and then ground in an attrition mill. The crude screen analysis shown on the laboratory assay is the result of this grinding. Experimentally, it has been found that stage grinding, with specific crusher settings, liberates the vermiculite with minimum breakdown. From the fractions obtained by the screen analysis a 250 gram sample was prepared to the standard screen analysis for the No. 4 concentrate. This sample, containing 25% vermiculite, was passed through a special electric furnace that duplicates the results obtained in a commercial expanding furnace. The No. 4 size expanded very well. A concentrate made from this size ore would have produced 50 bags of four-cubic-foot size from each ton of concentrate. Your small sample of No. 4 appears fine, due to the washing, drying and general abuse of the laboratory procedures. A portion of plus 20 mesh is included to show the fully expanded vermiculite appearance. The expanded vermiculite has a good, uniform gold color, acceptable strength without excessive delamination or breakdown, due to heat. The vermiculite would be entirely satisfactory for any of the commercial No. 4 purposes.

The gangue minerals were primarily pyroxenes with small amounts of olivene, ilmenite and magnetite. No biotite or phlogophite was noted in any of the sizes and micaceous delamination due to heating was only noted below 100 mesh.

Mr. L. Frechette

-2-

November 5, 1970

This is not at all unusual. The indicated vermiculite content of the original sample, 25% vermiculite, is lower than general ore grades, but not a major concern. It is surprising that only a very small amount of alkalic feldspar and virtually no quartz could be found in the rock fraction.

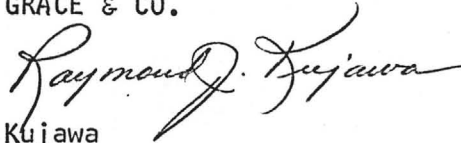
As a final note, regarding the analysis, there was not sufficient material to prepare an accurate sample of the coarser concentrate sizes. However, expansion of the material available, as indicated by the plus 20 mesh material returned to you, firmly indicates that acceptable No. 2 and No. 3 concentrates could be produced.

You have indicated that you intend to operate the property yourself to supply a local market initially. Should you wish to consider any different operating arrangement such as lease, option of the property or sale, I would like the opportunity to discuss this with you. The first step in this direction would be an examination of the property, with more detailed sampling. In the meantime, I would appreciate the opportunity to visit you, should I be passing through Phoenix.

Very truly yours

CONSTRUCTION PRODUCTS DIVISION  
W. R. GRACE & CO.

By:



R. J. Kujawa  
Chief Geologist

RJK/jbg

enc.

Exploited grades

#1 - 3 + 14, 5 to 6 pounds/cu. ft.

#2 } - 5 + 20, 6 to 7 pounds/cu. ft.  
#3 }

#4 - 8 + 65

- 10 + 65

- 20 + 100

11-2-70

"Prospect" Sample

RESEARCH LABORATORY ASSAY

12-29-69

Sample from Frechette Ind., Inc.  
1625 W. Osborn Rd  
Phoenix, Arizona 85015

Post No.

Assay No.

Concentration factor used:

Grain Size	Grain Wt.	Exp. Wt.	Ratio E. Bl. Wt.	St. Wt.	Grain Wt.	% Yield	Grain Wt.
0.525"							
0.375"							
3							
4							
6							
8							
10							
15							
20		6.0					
25		17.1					
30		23.3					
40		16.0					
65		11.5					
100		9.9					
150							
200							
pan		16.2					
Slime							
Total		100.0					

Time

Temp

No. 4 std. sizing - 25.0% Vm  
50 bag yield.

Single pc. mica pyroxenite rec'd.  
Grd thru hammer mill, rolls, attrition mill.

Ganque minerals primarily pyroxenes (some aegirine-augite) with olivene?, ilmenite; ~~hematite~~ magnetite  
No biotite - a few pcs alk. plag. + 1 pc. gtz. oncos.

Gross Wt.

Pure

Net Wt.

Grain Wt.



Caryn Youngblood - Dwight Selmons daughter  
P.O. Box 68  
Newilton, Louisiana 71357, AC 318-467-5791

50# bag \$ 5.00

- 20 mesh = #4 commercial - 6%  
+ 20 mesh = #2 } acceptable  
#3 }

gangue minerals.

pyroxenes -

olivine.

Ilmenite - magnetite

No hematite, no phlogopite

25% -



July 16, 1981

R.E. Mieritz  
2940 N. Casa Thomas  
Phoenix, AZ 85016

Dear Mr. Mieritz,

Enclosed is a check for \$500.00 as the initial consideration for your preparation of a report on Solomon's mine properties. An additional \$500.00 will be sent upon completion of the certified report. You stated in your phone call of July 16, 1981 that you felt 2-3 days would be required to update the existing report. We will look forward to hearing from you soon.

Sincerely,

Caryn Youngblood

Rt. 2 Box 68

Newellton, LA 71357

AK# 2831  
84-394  
1111  
Texas State Bank  
Newellton, La.

paid July 20, 1981

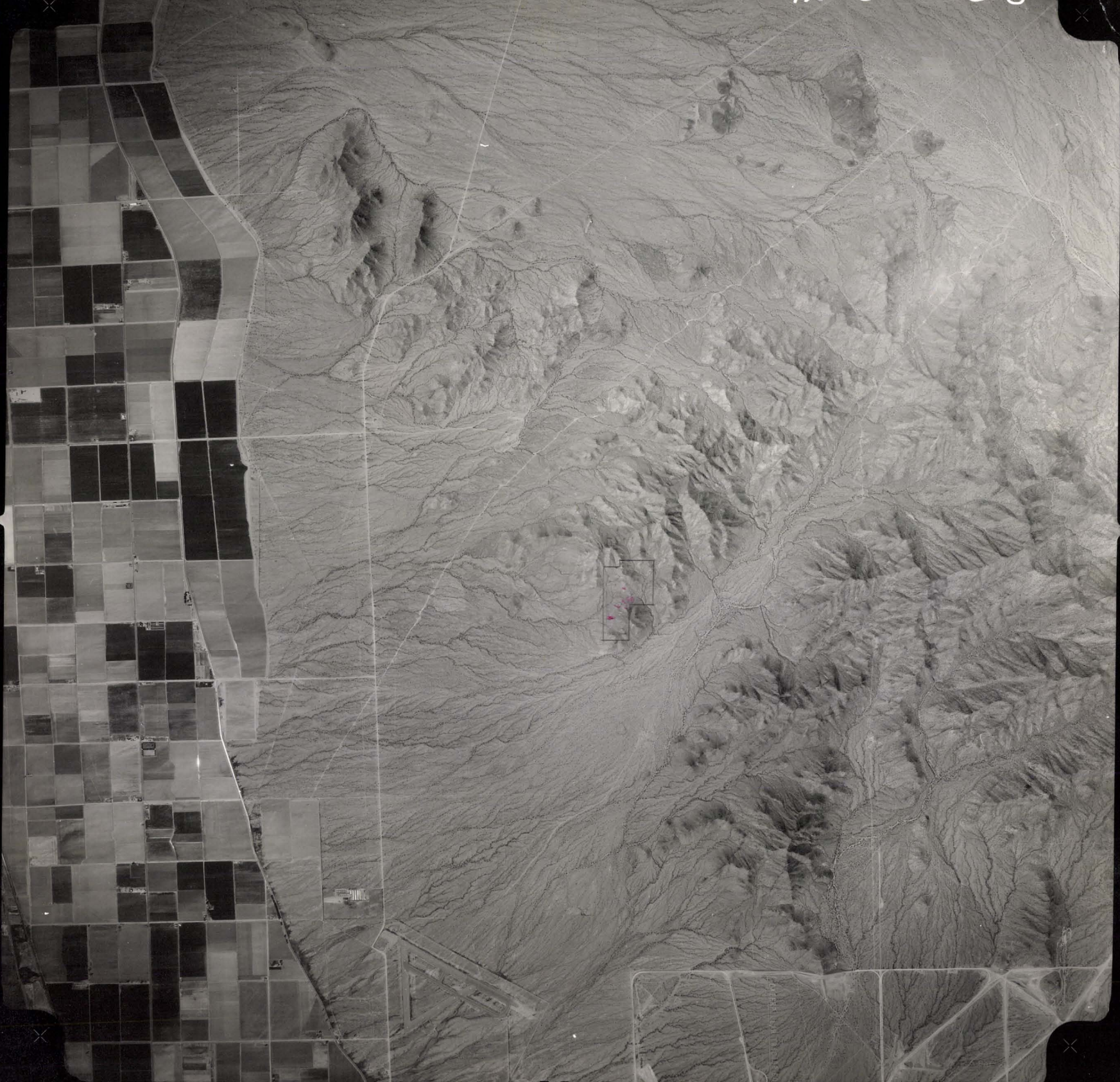


3-2-67

1:5000'

7RV6

3-8



Ca 530  
SAG 57  
f-88,52





-----  
-----  
March 9, 1969

Mrs. D. L. Solomon  
1338 West Thomas Rd.  
Phoenix, Arizona,  
85013

Dear Mrs. Solomon:

Herewith my appraisal for the mining claims Dwight had near Buckeye, Arizona.

After reviewing the copies of the claim notices Dwight had in his file and which you gave me for reference, I decided to spend a little time at the County Recorders Office checking on these notices as well as to check on whether Dwight had recorded his Proofs of Labor each year. I actually found six claims he recorded, the sixth being the Ocotillo and instead of V Number One, it is recorded as V Number Five. The others are alright--Swag, # 344, Taps (the Taps) and W. W. North.

There are no recordings of Proof of Labor for these claims and this should have been done yearly beginning with year 1960. Basically, it is not necessary to record this proof of Labor, but it is a safeguard against "claim jumping" and I strongly recommend that this be done immediately for the six claims for the year 1967-68. Such work must be done each year before September 30 of that year. By recording a Proof of Labor now, it may save some difficulty later.

Next, you should also get a copy of each of the Recorded claims for your file.

From the descriptions on the claim notices, which isn't much, and from your description as well as my own knowledge of the claims and geology, I have prepared a claim map of the way I think the claims lie--at least, if they aren't exactly this way on the ground, then they should be so laid out. Work done on any one claim for the year will then apply to all claims as regard the assessment work which must be done each year--\$100.00 per claim.

My invoice is herewith attached.

Sincerely yours,

R. E. Mieritz

March 10, 1969

Mrs. D. L. Solomon  
1338 W. Thomas Road.  
Phoenix, Arizona,  
85013

MINING CLAIM APPRAISAL

Dear Mrs. Solomon:

You have requested I complete an appraisal of the lode mining claims in your husbands possession at the time of his death in December, 1968.

To complete such an appraisal it has been necessary to physically examine these claims on the ground, determine their position if possible and review the geology within their boundaries. This action was physically and personally completed on March 3, 1969.

As a result of such action and study of the geologic conditions, the writer appraises the six claim property at \$800.00 per claim or a full total appraisal of \$4800.00.

Property and Location

The property consists of six lode mining claims of standard size and are known as the following as recorded at Maricopa County Recorders Office.

<u>Claim Name</u>	<u>Recording Date</u>	<u>Docket</u>	<u>Page</u>
Ocotillo	Mar. 7, 1960	3186	501
Swag	Feb. 16, 1961	3591	48
V Number Five	Mar. 28, 1961	3638	450
# 344	Apr. 24, 1961	3671	414
Taps	Apr. 24, 1961	3671	415
W.W. North	June 13, 1967	6608	64

These Location notices were personally checked at the Recorders Office on March 7, 1969.

These claims lie in Sections 33 and 34 of T. 2 N. and Sec. 4 of T. 1 N., both in R. 3 W. of the G. & S. R. B & M. about 7 miles north northwest of Buckeye, Maricopa County, Arizona.

Geology



## Geology

The property is in a setting of semi-mountainous, rugged terrain and in an area of precambrian rocks known as gneiss and schist. Within the host rock gneiss are small patchy zones of diorite containing some of the altered minerals in the vermiculite group of minerals which exhibit exfoliation when heat is applied.

Only one such small area is partly developed by a very small pit about 10 feet by 20 feet in area and about 7 feet deep.

There is very little market for the particular product at this time because of its impurities.

The claimed land is not suitable for agricultural purposes nor grazing purposes.

Very little monetary value can be placed on the claims from the mineral standpoint because of the small patchy type occurrence and the very limited marketability of the product at this time.

Respectfully submitted,

---

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

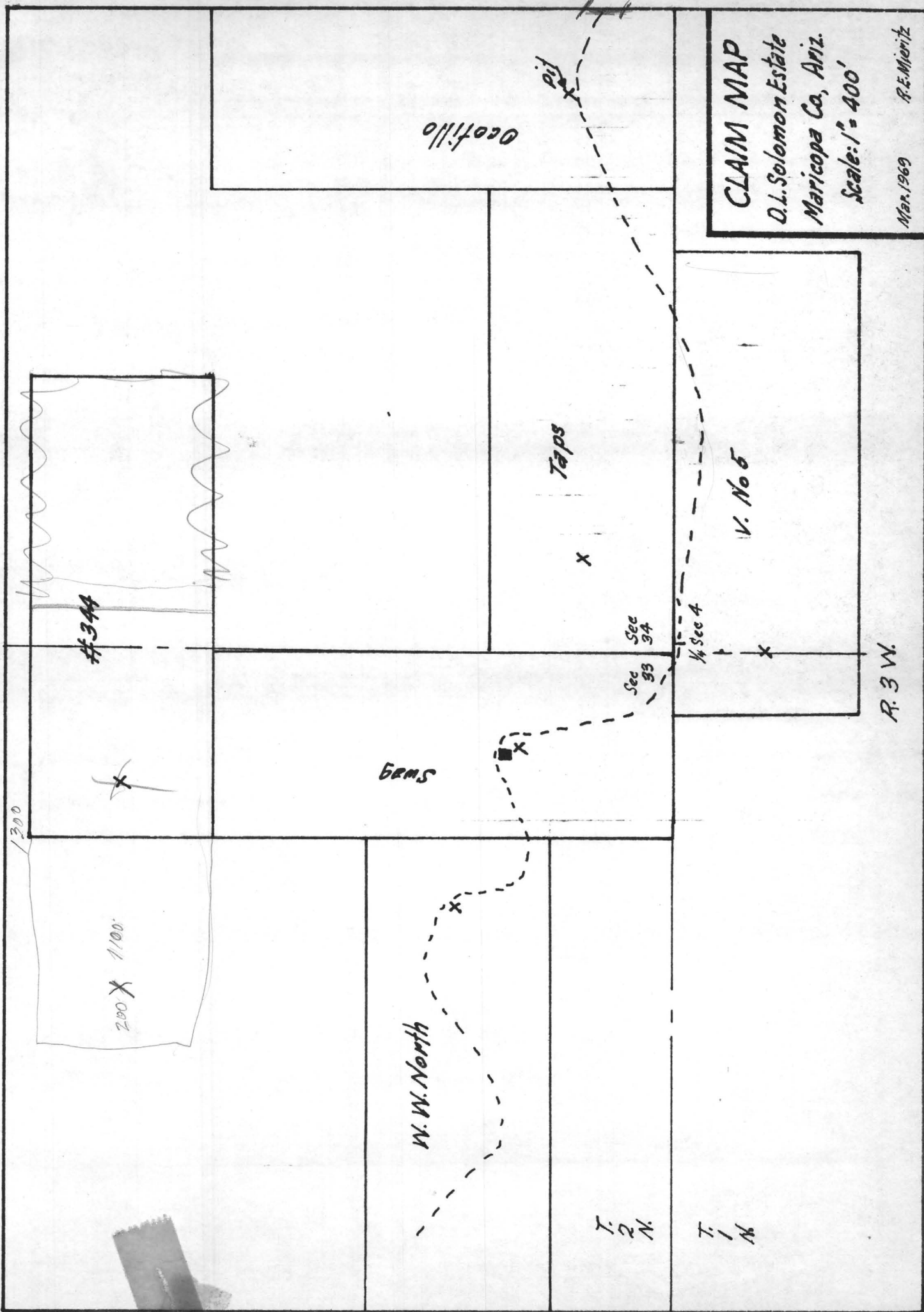
**CLAIM MAP**

D.L. Solomon Estate  
Maricopa Co, Ariz.

Scale: 1" = 400'

Mar. 1969

R.E. Meritz



Ocotillo

Pit

Taps

V. No 5

#344

Sec 93  
Sec 34

1/4 Sec 4

GEMS

W.W. North

T. 2 N.

T. 1 N.

R. 3 W.

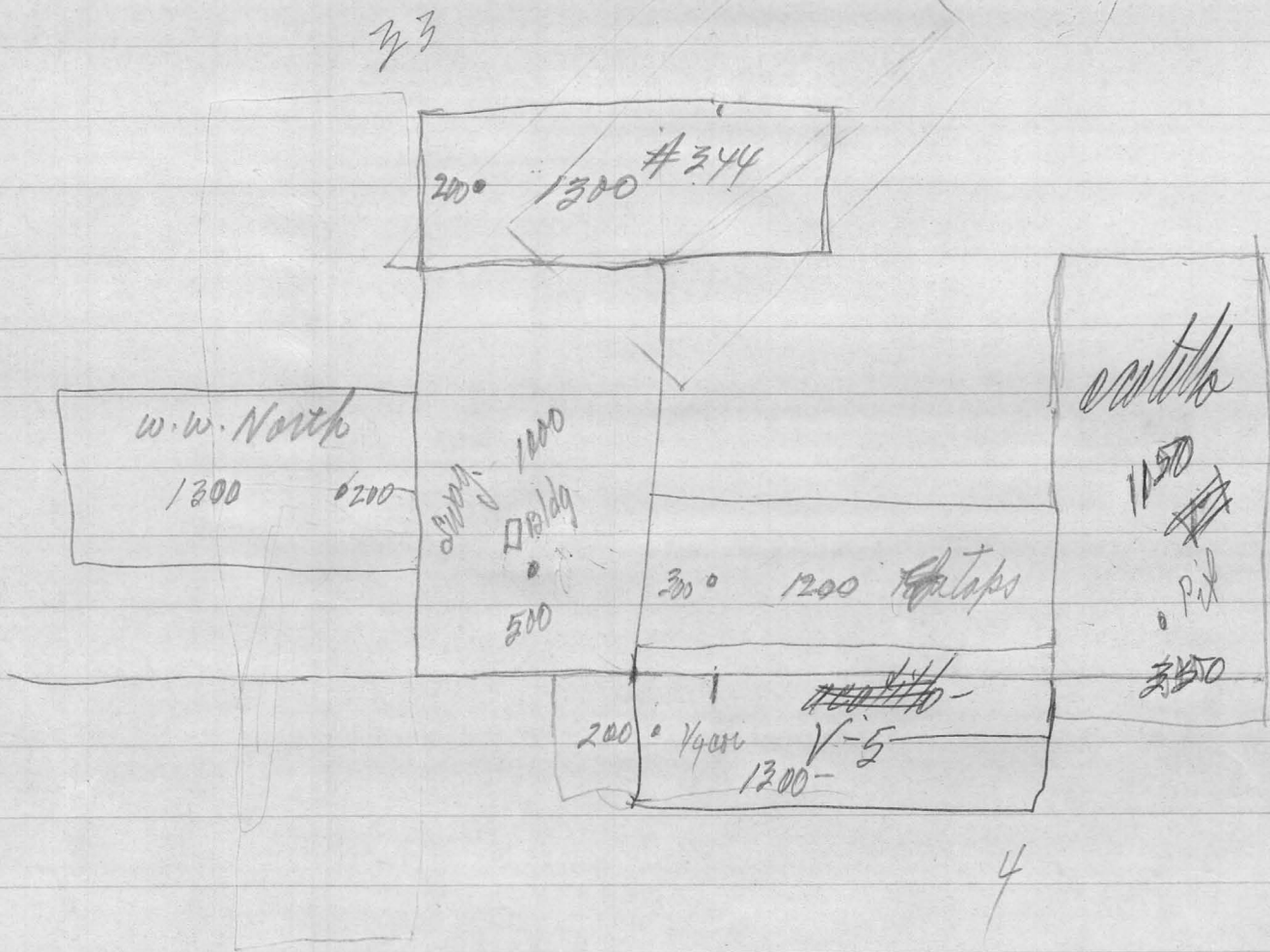
1300

200 X 1100

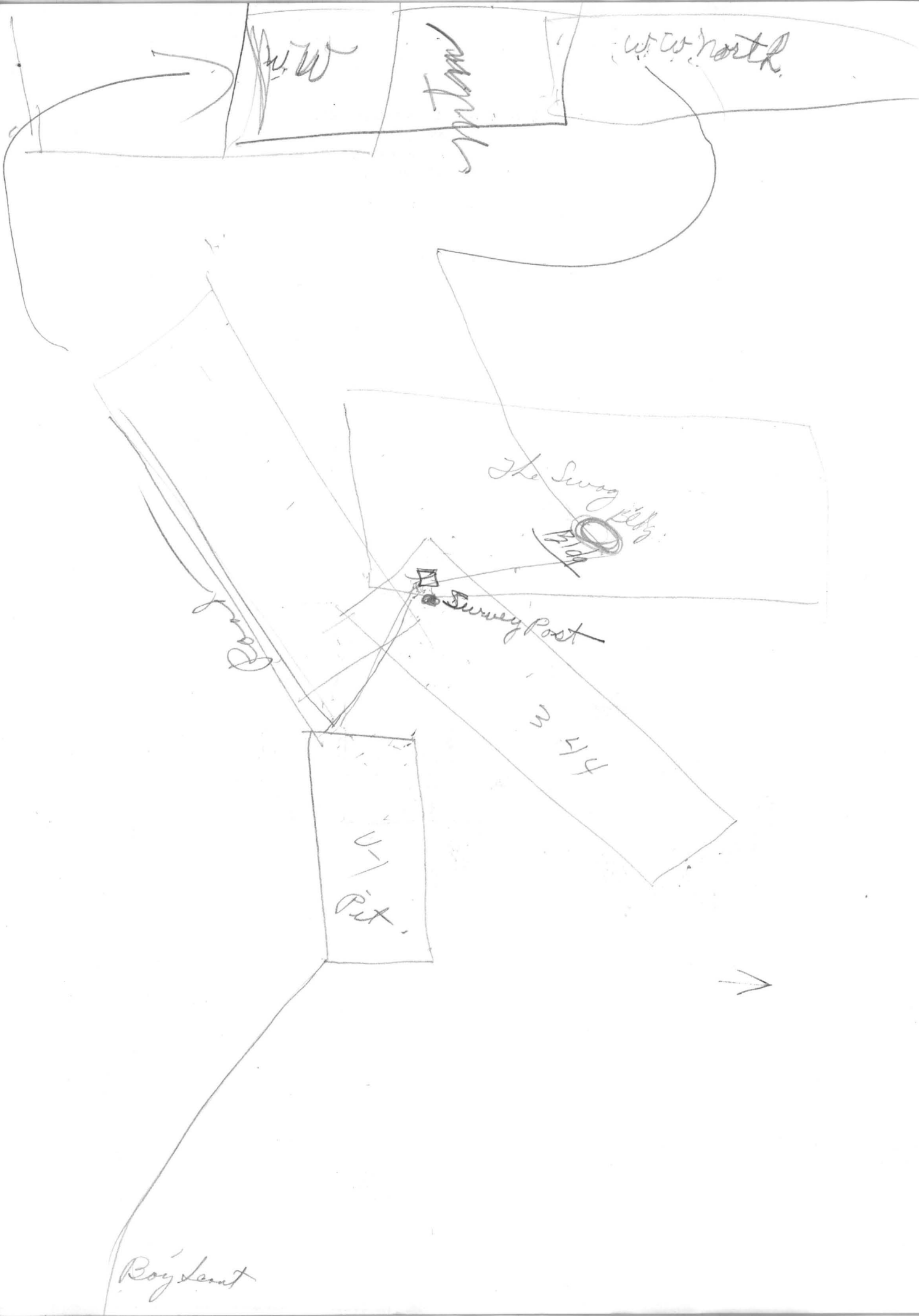
24 - IN R 200

Francis Crable 258-7053 - #16 Airport Bldg.

Van Run - part Frick's end of payment - back to west end  
Perryville road. - around aux airport. New highway  
on highway road - 100 feet 2nd part west to mine.







NW

system

W. North

The Survey Plot  
1

Survey Post

Road

W 44

U-1  
Pit

Boys' tent



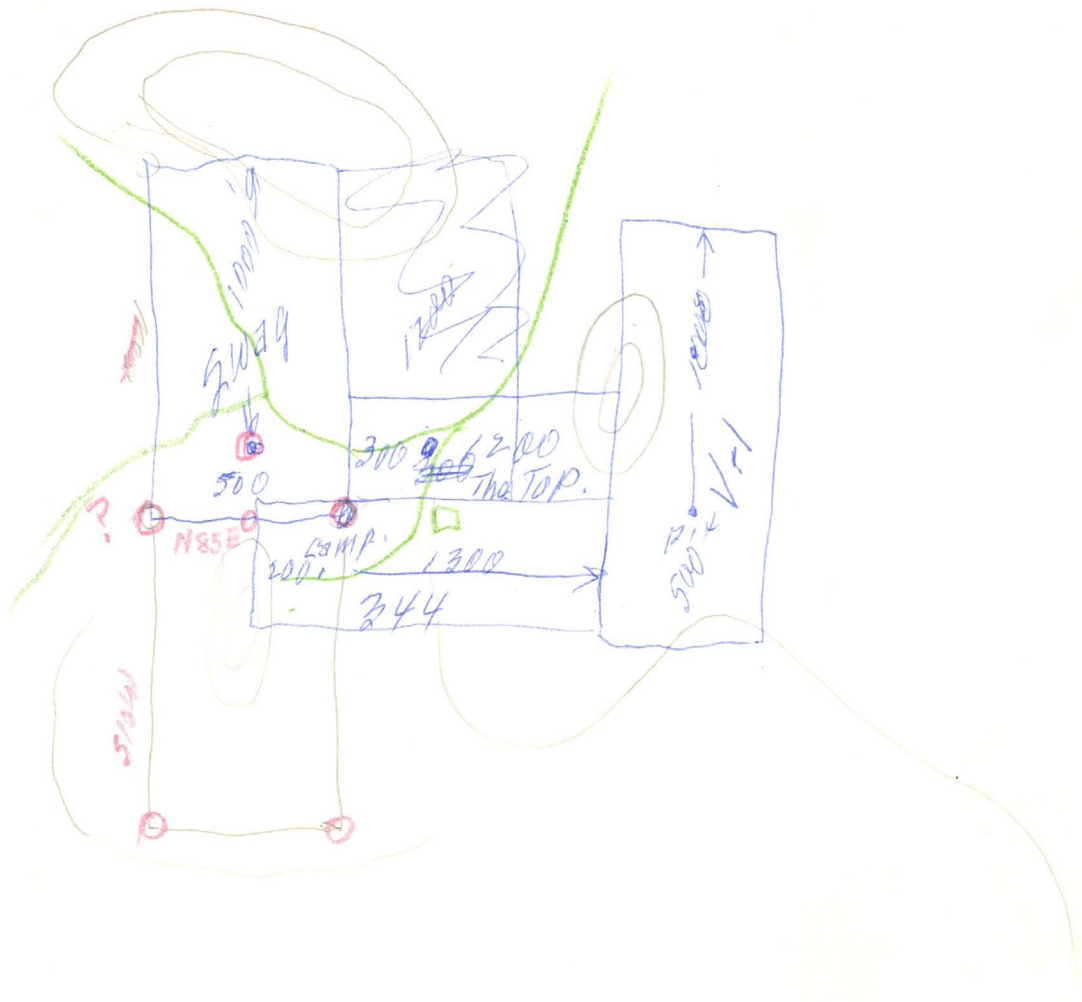
DWIGHT L. SOLOMON

LAWYER

1338 WEST THOMAS ROAD

PHOENIX, ARIZONA 85013

TELEPHONE 279-7354



Scuttles

350' North - 1150 South - 2028 W. W. in 1919.

V-5 - Sect. 4 - 200' West 1300 ft. East

1/7/41 - North line of Sec 4 is side line of side of claim.



X #344

GRMS

W. W. North

Taps

Ocotillo

Pit

T. 2 N.

T. 1 N.

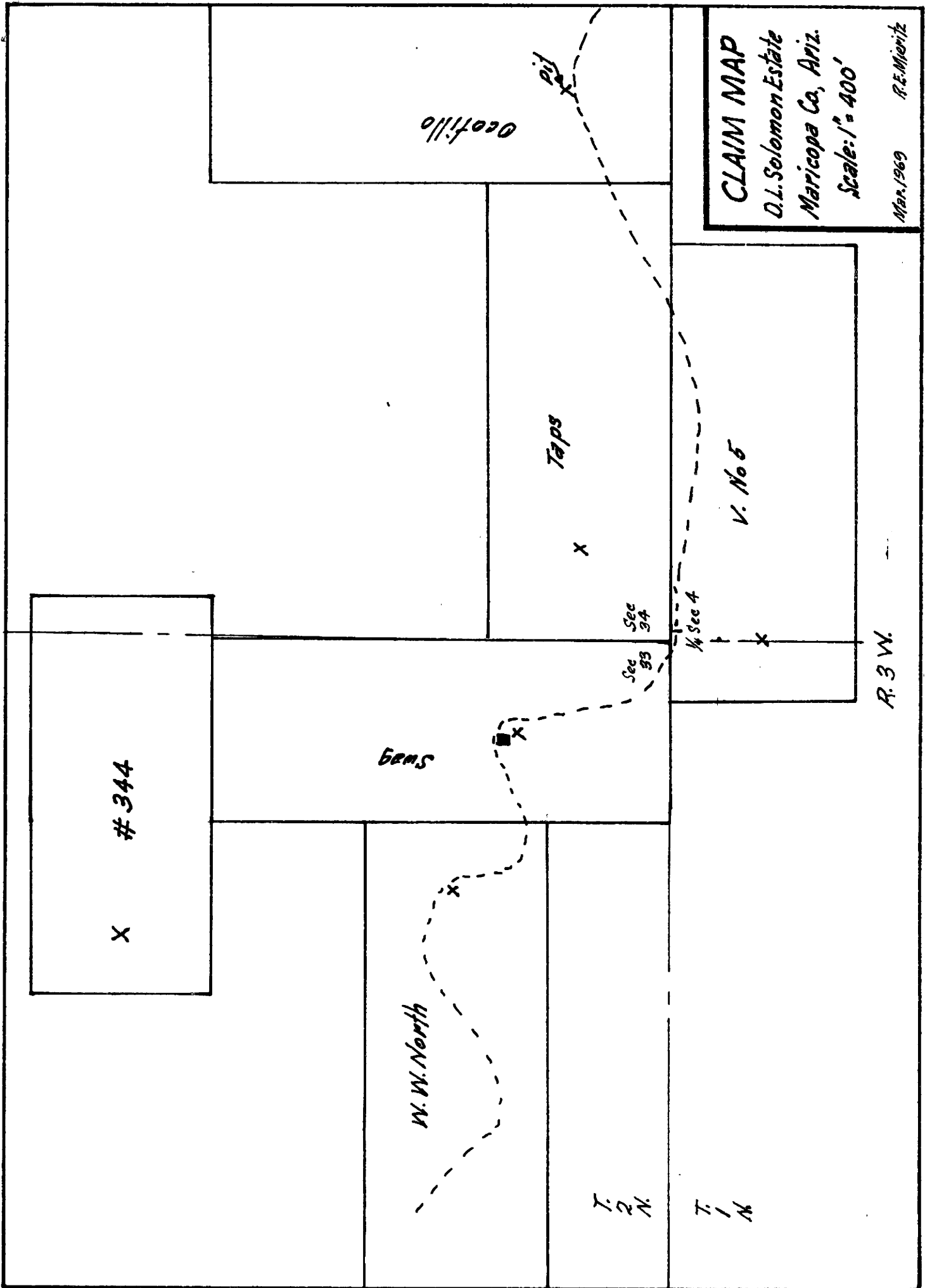
Sec 33  
Sec 34

1/4 Sec 4

V. No 5

R. 3 W.

**CLAIM MAP**  
D.L. Solomon Estate  
Maricopa Co, Ariz.  
Scale: 1" = 400'  
Mar. 1969 R.E. Mieritz



**CLAIM MAP**  
D.L. Solomon Estate  
Maricopa Co, Ariz.  
Scale: 1" = 400'  
Mar. 1969 R.E. Mieritz

X  
# 344

GEMS

W.W. North

Taps

Ocotillo

V. No 5

T. 2 N.

T. 1 N.

R. 3 W.

Sec 34

1/4 Sec 4

	3 <sup>10</sup>	4 <sup>20</sup>	5 <sup>30</sup>	6 <sup>40</sup>	7	8	9	10
Cost	730	730	730	730	730	730	730	730
Inv.	1500, -	3000	4500	4500	3000	1500		
Cost			1450	3300	4950	6600		
Inv.			1500	3500	4500	4000		

Sales  
 Sales  
 Sales

Salv	5000	10,000	15,000	20,000	20,000	20,000	20,000
Inv	1250	3,500	3,750	5,000	5,000	5,000	5,000
Exp	2200	2,200	2,200	2,200	2,200	2,200	2,200
Inv	565	565	1565	1565	1,565	1565	1565
Adv.		1120	770	770	770	770	770
Imp. Ent.		2240	1540	1540	1540	1540	1540
Ship.		22400	15400	30,800	30,800	30,800	30,800
		44,800	30,800	30,800	30,800	30,800	30,800
		131	242	5	2	1	44
	2245	68155	60855	70255	71905	73555	75205
		22400	15400				
		45755	45455				

2,095  
 change for  
 Imp. Inv.

Sales



## Guthrie

1. Organize New Company.
2. All information
3. Live Copies
4. Testimonial letters

---

Marketing - Management  
New aspect to common  
Dirt experience  
New many employees.  
50,000 tons indicate  
200-erfer -  
Money - for what - why  
- → get back -

Program. Attached.

Answer - cont. p. → answer to  
Full time - Manager -

Responsible - Operations  
Quality Control

1 - Full lodge full pay's -  
1 - mid operation  
4 - subsidiary operation.  
Cons.  
his experience.

Parent - interest in plant  
can't take - equiv. - full.  
Maybe take. - C. Island.

Cost additions for additional film

G E A

3 ~~1536~~ 536  
2180

Trans.				
Sup.				
ut. Dms	<u>3</u>	<u>7</u>	<u>5</u> lease	
Contrib.	1780	1780	2980	2980
Labor →	4375	4375	4375	4375
Equip →	2180	2180	2180	
Supp.	<u>2850</u>	<u>1250</u>	<u>1250</u>	<u>11</u>
	9185	8335	9535	7355

225  
245  
1800

132  
10  
122



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

Dear Mr. Mieritz:

Frechette Industries, Phoenix, Arizona, is desirous of retaining you and your professional services of geology and mining engineering as a consultant in the field of vermiculite mine development and operation of the Solomon Mines property, Maricopa County, Arizona and in the field of vermiculite processing and operation of our Phoenix, Arizona plant which would produce Mica-Lite Absorbent.

In view of this, it is mutually agreed by the undersigned (1) Board Members of Frechette Industries as party of the first part and (2) yourself as party of the second part, to wit:

(a) Party of the second part shall act as Consultant to Frechette Industries in the aforementioned fields for a period of ten (10) years commencing at a date exactly four (4) months after the formal date of financing to be completed by Frechette Industries.

(b) Compensation to party of the second part for his services by Frechette Industries shall be as a royalty payable at the rate of one (1) cent per fifty (50) pound or  $1\frac{1}{2}$  cu. foot bag of Mica-Lite Absorbent produced by Frechette Industries.

(c) The maximum annual (anniversary) payment by Frechette Industries to party of the second Part shall not exceed \$20,000.00 nor shall the yearly payment be less than \$12,000.00. Monthly payments shall be paid directly to party of the second part or to a third party (trust, etc) as so directed or assigned in writing by the party of the second part.

(d) Party of the second part agrees to make himself available to Frechette Industries for the purposes aforementioned and when necessary, but party of the second part reserves the right to persue his profession and services to and for other clients. Party of the second part does agree that Frechette Industries has first claim for time from the party of the second part during the tenure of this Agreement.

(e) In the event it becomes necessary for the party of the second part to vacation or serve another client outside the borders of continental United States for a limited and known time, party of the second part shall appoint an acceptable colleague to substitute during the absence for party of the second part. Financial compensation to the substitute is the responsibility of the party of the second part.

(f) If death of party of the second part occurs before the aforementioned natural expiration date of this Agreement, then said Agreement shall terminate at the end of the month in which such death occurs and Frechette Industries shall no longer be liable for any further payments except those payments which may be delinquent ~~to~~ and due to the months end.

(g) In the event Frechette Industries should "fail" financially or otherwise, during the tenure of this Agreement, party of the first part agrees to notify party of the second part in writing thirty (30) days in advance and that all monies due are paid up to ~~the~~ and including the 30 day notice period.

(h) Frechette Industries may terminate this Agreement for professional incom-

petence or the like but only after a registered sixty (60) day "show cause" letter has been received by party of the second part and that both parties mutually agree to the termination.

(i) Affixment of signatures by all concerned attest to the understanding and accord of all articles contained herein.

Consultant

Frechette Industries  
Board Members

Richard E. Mieritz,  
Mining Consultant  
Phoenix, Arizona.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Mica-lite Sales Record (limited, manual production) 1965-1970

Solomon Mines  
~~Fredette (Salesman)~~  
 Fredette Industries  
 Hand Production  
 From stored production  
 Customer (Bags per year)

Solomon Mines  
 Fredette (Salesman)  
~~Hand Production~~

1965 1966 1967 1968 1969 1970 TOTAL

Solomon Mines  
 Salesman - unknown  
 Fredette  
 Fredette Indust.  
 Manual Production  
 Stored Production  
 Total Sales - Bags.



100-15 = 86

# Mica-lite Sales Record (limited manual Production) 1965-1970

55 to  
11"

20  
Solomon Mines 13  
Salesman ?  
Frechette  
Frechette Inds. 15  
Hand Production 15  
From Stored Prod. 17  
TOTAL SALES

CUSTOMER	1965	1966	1967	1968	1969	1970	Total
15 1	6	6	6	6 44	6	6	8
27							

Frechette call, 4/11/71 - 9:00 PM

Mr. Naylor for mtg. among them at the.

- ① - He/Herner will accept Bookkeeper/Invoice job @ \$100.00/mo.
- ② - Bob Owens " " Plant Operator/Supervisor @ \$90.00/mo.

③ Lease - Sublease from Frechette Ind. - - -

- (a) \$150. - /wk rental -
- (b) \$4.00/ton royalty processed material.
- (c) 25 year lease.
- (d) Any indebtedness against F.I. to be secured by personal note (Alexander Grant, etc.) (Clean up Frechette Ind.)
- (e) Mrs Solomon wouldn't cancel lease for 6-7 months anyway. -

must not change original type of material

④ Frechette agrees to: Both

- (1) New Corporation - act as Gen'l Manager (employee)
- (2) Frechette Ind. act as Sales Unit - with McChesley as Sales Manager.
- (3) New Corporation Executives Naylor's choice.



1. Contract lease written - by approval
2. Faith in Naylor - self
3. Commitments as to (sales) → start immediately.
  - (a) - assistance to Frech. Ind. → keep quiet
  - Dental orders
  - Production orders.

Why Frechette - instead of Force Allied Chem. →

Grade sizes below 100 mesh uses areas  
5 follows:

Grease Lubricants  
Filler in Plastics  
Wire and rubber goods  
Wallpaper printing  
Outdoor advertising paints  
Anti caking agent in fertilizers  
Increasing viscosity of oil  
Fireproof Containers for photographic films  
Extender for Gold and bronze printing inks and  
for paint  
Carriers for agricultural chemicals, insecticides  
herbicides and fungicides

Usage percentages of total production  
Pure Effoliated Vermiculite  
Aggregate (Concrete, Plaster + Cement) 40%  
Insulation (Loose fill block, pipe covering  
backing) 40%  
Agriculture (Horticulture, soil conditioning,  
fertilizer carrier, Litter) 16%  
Miscellaneous 4%

Unrefined Effoliated Vermiculite - 1/8" screen  
as produced by Fuchette Industries Inc.,  
Mining Div (Solomon Mines) used as Oil liquid  
absorbent, Pet Litter, Charcoal (dehydrant) & Soil Conditioner



# Verm. aggregate Concrete - Composition & Characteristics

WT. 16 to 50 lbs per cubic ft  
Comparison strength 50 to 500 lbs per sq. inch.  
for Verm. Concrete to 150 lbs per cubic ft

WT 150 lbs per cubic ft.  
Comparison strength 1300 to 3000 lbs per sq. inch  
for concrete - Reg.

Thermal Conductivity (k factor) is 0.60 to 1.9 BTU per sq. ft. per inch thickness, per hr., per degree F, depending principally on the mix ratio, which governs the unit weight of the concrete. The proportions of mix usually are 1 cu ft. portland cement (1 bag) 3 cu ft of stabilized vermiculite concrete aggregate (3/4 bag) and 2 cubic ft of sand. The lighter the concrete the more sealed air spaces are present, with a corresponding lowering of the k factor and greater efficiency as insulation. Air entraining agents are used with vermiculite concrete and are introduced as a dry additive in the proportion of about 5 ozs per 1/4 cu ft bag of effoliated vermiculite.

Verm. Down to mesh are used in plaster

Base coat composition 6 bags of Verm. (4 cu ft per bag) to 9 bags of gypsum plaster.  
Finish coat composition 1 bag Verm. (4 cu ft) 2 bags unfibered gypsum plaster and 16 gallons of water

a 4 hr fire rating was issued in 1939 on a  $\frac{1}{8}$  inch thickness of vermiculite plaster on metal lath to fireproof a steel floor assembly. Since then many fire ratings for various types of construction and fireproofing have been developed.

Vermiculite has contributed materially to the improvement of modern lightweight building construction.

### Mining Practice

#### Open Cut Method

Strip overburden with hydraulic scrapers and dig the vermiculite ore from the face with power shovels or dozers with rippers and load into trucks. Benches are established if ore has a vertical thickness of over 25 ft.

Ores contain 25 to 95% Vermiculite



Packing refrigerator, cold storage rooms, insulators, fireless cookers, thermal jugs, ovens, safes and water heaters.

As a refractory, Vermiculite with a suitable binder and applied as a plastic mass which can withstand furnace temperatures to  $1800^{\circ}\text{F}$

Horticulture, carriers for herbicides, insecticides, fungicides and fumigants, hatchery litter, refractory fire brick and beds for transporting hot steel ingots.

As a filler it has applications in plastics, rubber, paints, printing inks, and oil well cements.

For other uses it is loaded with many binders, including dextrin, casein glue, wood pulp, clays, plaster of paris, portland cement, synthetic resins and water glass.

In combination with asphalt it is used in roofing and floor compositions.

It is used as a soil additive for rooting cuttings and tubers in hot beds, for sprouting seedlings, and as a general soil conditioner mainly to lighten clay soil or to improve the moisture-retention qualities of sandy soils.

The coarser vermiculite ( $\frac{1}{2}$  inch particle size) is used as hatchery litter.



Report on Vermiculite - Bulletin 630 - Mineral Facts & Problems  
U. S. Bureau of Mines 1965 Edition

Mined - usually by Open cut method  
Ores contain between 25 to 95% Vermiculite  
Beneficiation -

Wet method using Hammer Mills  
Roll Mills, Classifiers Screens, tables  
and other standard beneficiation equipment  
and practices, Vertical furnaces, Ore  
falling by gravity against a series of baffles  
through a temperature zone ranging from  
1600° F - to 2000° F

Exfoliated Grades & uses

Grade 1 Size Screened to minus 3 - plus 14 mesh  
Wt. 5 to 6 lbs per cubic ft.  
used for Loose fill insulation

Grade 2+3 Size Screened to minus 5 - plus 20 mesh  
Wt. 6 to 7 lbs per cubic ft.  
used for Concrete aggregate replacing sand,  
gravel or crushed stone.

The above uses constitute 50% of all Vermiculite used.

Other Grade 4 Size Screened to minus 8 plus 65 mesh  
minus 10 plus 65 mesh  
minus 20 plus 100 mesh  
Tyler Standard Screen Sizes

uses vary - Plaster for walls and  
ceilings to insulate against heat and  
sound and as fireproofing around beams,  
girders and Columns.

## Vermiculite Reference sources

Vermiculite Institute  
Trade Publications on Various Uses  
Chicago, Ill.

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Housing & Home Finance Agency  
Lightweight Aggregate Concrete  
1949 28 pp

---

Bowles, Oliver. Home insulation w/mineral products  
Bureau of Mines Inf  
Circular 7388 1946 11 pp

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McMillan, W D and F W. Gerhardt  
Investigation and Laboratory Testing  
of Vermiculite

Deposits Leno County, Tex Bureau of Mines  
Rept. of Inv. 4486 1949 42 pp

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Young, W. A. Inv. of Encampment Verm. Deposit  
Carbon County, Wyo. Bureau of Mines  
Rept of Inv. 4857 1952 15 pp



A.P. Tell - 59th Ave. & Manassas.

\$25,000. - in Equity Co.

will start const - build office - and warehouse  
including land scape - fencing.

Lease purchase, building

Land \$20,000 -

Office - 32,000 -

Warehouse - 32,210 -

40 x 100

Pay Monthly - \$1,200. -

---



(3)

Monthly Costs - Other than Salaries & Wages.

Mining Operation

Dozer Contractor (Dozer, operator, Fuel, Oil)	\$/25.00/hr
Grader, " " "	\$/18.00/hr.
Frontend Loader Rental (Incls Oil, Fuel) <sup>2yd</sup>	\$/1190.-/mo
Contract Truck Haul - \$2.00/ton - 3500 tons/mo.	\$/7000.-/mo
Royalty - \$4.00/ton - 3500 tons/mo	\$/14,000.-/mo

Process Plant Operation

Fork Lift rental (2)	\$/250.-/mo ea.
Frontend Loader Rental	\$/900.-/mo.
Fuel - Oil for above	150.-/mo.
Natural gas	960.-/mo.
Electricity	1760.-/mo.
Delivery Truck lease (Incls Fuel - Oil - Main)	\$/270.-/mo. <sup>4090</sup>
Bags (130,000 @ 0.047 ea.)	\$/6,110.-/mo
Pallets (disposable - 0.06/bag)	\$/7,800.-/mo.

Sales Organization

40 - Auto Rentals (lease @ \$165.00/mo ea.)	6,600.-/mo
(Gas & Oil expense - \$150.-/mo/Auto)	6,000.-/mo
Shipping costs (0.40/bag @ 130,000 bags)	52,000.-/mo
Advertising (14/bag @ 130,000)	1,300.-/mo
Samples & Entertainment (2¢/bag, 130,000)	2,600.-/mo.
Travel exp. (Sml Mpr, Sales Mpr)	2,200.-/mo.

G & A. - Jan. payments

<del>Building lease</del> <del>Redrow</del> \$25,000.-	7,500.-/mo.
Building lease (commencing 5th Mo.)	\$/1200.-/mo.
Office Supplies	\$/70.-/mo
Telephone	\$/500.-/mo
Utilities	\$/200.-/mo
Dues, Subscriptions, Contributions, etc.	\$/550.-/mo
Janitorial Service	\$/60.-/mo
Postage	\$/400.-/mo

(2)

Labor and Personnel

Mining - 1 - Front end loader Operator (2nd) \$900.-/mo

Process Plant Production

- 1 - Plant Operation Supervisor \$900.-/mo
- 2 - Plant operators - 2nd & 3rd shifts 700.-/mo ea
- 1 - Front End loader Operator (1st) 750.-/mo
- 1 - Bagging Operator 600.-/mo
- 1 - Bagging Operator Helper 480.-/mo
- 1 - Bag Sizer Operator 600.-/mo
- 1 - Palletizer Operator 480.-/mo
- 2 - Fork Lift operator 600.-/mo ea
- 1 - laborer 440.-/mo

5530.  
1388  
6938

Sales Organization

- 1 - Sales Manager \$1250.-/mo
- 40 - Salesmen (10 initially, 40 start of 4th month) \$500.-/mo ea
- Travel Expenses (Genl Mgr, Sales Mgr.) ~~15700000~~

G. & A.

- 1 - General Manager \$1500.-/mo
- 1 - Receptionist/Secretary \$400.-/mo
- 1 - Clerk/typist \$400.-/mo
- 1 - Bookkeeper - Biller \$600.-/mo
- 1 - Order Clerk - Dispatcher (warehouse) \$600.-/mo

3500.  
875  
4375

Miscellaneous

- 1 - Consultant (Includes Exp.) \$2500.-/mo.  
(7 month duration fulltime)

Salesmen	10 - 5000	450	30 - 15000	2,250
	20 - 12000	1500	40 - 20000	3,000
				11,200
FICA, Unemployment etc (15% gross)				1,680.-/mo
Health, Accident Ins, etc (10% gross)				1,120.-/mo
Salesman	10 - 500	50	1000	
	20 - 1000	40	2000	

(1)

Capital Investment Costs (Equipment other than Plants)

G. & A.

Office Furniture, desks, chairs etc  
for General Manager  
Sales Manager  
Receptionist  
Clerk  
Bookkeeper  
Warehouse - Order Clerk.

\$2900. —  
(90 days)  
1300

Office Business machines  
2 - Electric typewriters  
calculator  
Adding Machine  
check Protector  
copy Machine

\$2636. — 879  
(90 days)  
2179

Office Supplies (Expendable)

\$850. —

3029



The Project

## INTRODUCTION

(2)

MICA-LITE, an oil absorbent, is a product that utilizes a vermiculite rich <sup>pyroxene</sup> serpentine rock as the raw material from a nearby mining property, and has been processed by a time consuming, crude and expensive method and marketed on a limited scale by the Phoenix based Solomon Mines, Inc. from 1966 until the death of Mr. D. L. Solomon in 1968. Marketing of the product continued on a limited scale only to "repeat customers" by Frechette Industries, an Arizona Corporation until the available inventory was exhausted.

At the beginning of the business, Mr. D. L. Solomon engaged Mr. L. Frechette as salesman for the Mica-Lite product and it was the latter who initiated, persued, promoted and pyramided sales of the product <sup>in</sup> the Phoenix and nearby localities to a level exceeding the capabilities of the existant mining and processing methods by D. L. Solomon.

Although originally obtained by Frechette Industries, the long term royalty type lease on the mining property from Mrs. Solomon, has been transferred to the corporation now seeking financial assistance to establish an efficient mining operation, <sup>construct</sup> a modern of adequate capacity plant to process the raw material to a marketable product and establish the necessary sales outlets for national domestic distribution of the product MICA-LITE, an oil absorbent.

## SCOPE OF REPORT

This report covers the planning, design, time factors, projected estimates, financlal requirements and cash flow for the following phases:

### MINE

- (1) Exploration and development of a mineral deposit by drilling to prove the existance of a source and supply of an acceptable and processable vermiculite <sup>pyroxene</sup> serpentine raw material for at least a five year period.
- (2) Prepare deposit for mining, construct haulage roads and a surge pile area,
- (3) Mine and transport <sup>25,000</sup> 50,000 tons of raw material to Plant area, this being <sup>the first</sup> one years supply.

### PROCESS ~~PLANT~~ PROCESS PLANT

- (1) Purchase necessary Plant Equipment
- (2) Prepare Plant Area, install/erect plant machinery and equipment, construct necessary buildings,
- (3) Operate process plant on trial basis to make minor operating adjustments <sup>Process Plant trial operation</sup>



3

for greatest efficient operational procedures, equipment-wise and labor-wise and continue plant operation at a capacity equal to or in excess of market sales buildup.

MARKETING

- (1) Local marketing, national marketing, Mica-Lite qualities,
- (2) Sales organization and distributor outlets
- (3) Competitive products, their qualities, availability and retail prices,
- (4) Product testimonials.



# THE MINE



4

THE MINE - (Raw material source and supply)

The Property

of good legal standing,

Mrs. D. L. Solomon, Phoenix, is the owner of six standard lode mining claims, located by her late husband, in Sections 33 and 34 of T. 2 N., R. 3 W. and Section 4 of T. 1 N.,

R. 3 W., of the G. and S. R. B. & M., White Tank Mtns, Maricopa County, Arizona, approximately 30 miles due west of the proposed plant site at 59th Avenue and Buckeye Road, an industrial zoned area of Phoenix. (See Map No. 1, INDEX MAPS & Map No 2 - Solomon Mines Property legal)

The writer is very knowledgeable of the property due to his close acquaintance with Mr. Solomon and the frequent visits to the property as a personal friend and professional friend as early as year 1961, shortly after Mr. Solomon located the claims.

After discovery that the vermiculite rich <sup>DVMXITE</sup> serpentine rock would exfoliate and had absorbent qualities, Mr. Solomon produced the marketable product MICA-LITE as an oil absorbent simply by using a flame thrower pointed toward the very small mine pit bank containing the vermiculite rich rock, <sup>hand</sup> screening the exfoliated material and bagging same. This method was time consuming, expensive and small quantity production. Mr. Solomons death halted the effort.

Geology and Ore Reserves

The claimed area hosts such rocks as PreCambrian gneiss, granite, pegmatite dikes, quartz dikes and the vermiculite rich rock -- probably a serpentine. The latter, (vermiculite rich rock) appears to be outcropping <sup>in many</sup> most every places but this is due to its irregular outline and contacts with the gneiss or other rocks. The vermiculite rock appears to occur as lenses, layers, large and small dikes and large irregular outlined masses. It is these large irregular masses which will provide the required ore reserves. (See Map No 3 - Surface Map)

The writer prepared a Preliminary Estimate of Geologic Ore Reserves (Vermiculite) Report on February 16, 1970 for ~~Frechette Industries~~ on this property for Frechette Ind. Any ore reserve figure at this time can only fall into the category of "inference", however, the corporation <sup>is</sup> planning a drill program to explore ~~and develop~~ the deposit and develop a proven ore reserve of at least 250,000 tons of vermiculite rich rock. This tonnage would be in excess of a five year reserve and operation and would have an "in place" value in excess of \$20,000,000.- or profit-wise, before taxes, but after all operating expenses, (in excess of \$6,000,000.- for a five year period.)

Quoting in part from Danas Testbook of Mineralogy, fourth Edition, page 674 - "The VERMICULITE GROUP includes---etc.

Because ore reserve tonnages of vermiculite rich rock are, at this moment, geologic inferences, the corporation intends to drill the property at strategic locations to <sup>initially</sup> prove, develop, prove and "block out" an ore reserve of at least 250,000 tons to assure the corporation of a five year supply of the raw material. Further geologic inference points to the fact that in excess of 600,000 tons of raw material can eventually be proven to exist ~~on-the~~ within the property. (See Map No. 3, Surface Map)

The drilling program planned by the Corporation is for approximately 1000 feet of hole in ten to twelve holes varying in depth from 80 to 100 feet. Drill holes will be so located <sup>as to</sup> in a pattern to assure <sup>that</sup> the existing continuity of the material exists as thought to be - in mass, <sup>as such,</sup> amenable to low cost open pit mining. (See Map No. 4, Mine Development) The work and expense of access drill roads and drilling of the development holes to prove the desired tonnage target is for the account of the Corporation and such work would be completed and the results submitted to your organization prior to the physical final approval of the funds requested. This exploration program is estimated to cost, <sup>the Corporation</sup> approximately \$25,000.-.

Pre-Mine Preparation

Use from page 5 of old report.



Mine - 5000 Tons - Initial  
Mining Raw Material

5

*using a dozer equipped with rippers*

*and*

Mining of the raw material will be by open pit, low cost method. Drilling and blasting should not be required, merely the use of rippers on a dozer for breakage and the use of a 1 1/2 cu. yd front end loader. These units can be rented and therefor would not become a continuous liability to the Corporation.

Mining of 25,000 tons - a one years supply - would be completed in two stages approximately 12 1/2 months apart time wise, each stage mining 12,500 tons. The production not required immediately to feed the processing plant would be stockpiled on the "surge pile" area. (See Map No. 4, Mine Development)

It is estimated that 25,000 tons of raw material can be mined and stockpiled at the mine area with the following equipment in the time allotted and at the following ~~are~~ total cost.

Dozer, 480 hours (2 1/2 months) @\$28.00/hr	\$13,440.-
Loader rental, 2 1/2 months, \$1200.-/mo.	\$ 3,000.-
Operator, 2 1/2 months, \$800.00/mo.	\$ 2,000.-
Fuel, oil, etc, for loader	\$ 1,490.-
Consulting Supervision and expenses	\$ 1,360.-
	<hr/>
	\$21,290.-

Verbal discussions with truck hauling contractors indicated that 22 ton payloads of the ore could be hauled or trucked from the mine to the process plant site, approximately 30 miles, for 6¢ a ton mile, <sup>*this rate assumes that the*</sup> ~~providing~~ access road to the mine property (about 2 miles) ~~was~~ <sup>*is*</sup> adequately and properly maintained. This price does not include the loading of the truck. Loading a truck from the "surge pile" would add approximately 45¢ per ton, making a total of \$2.25 per ton to load and truck the raw material from the mine to the process plant area. The total cost for transportation of 25,000 tons would be \$56,250.-.

The cost per ton for mining and trucking to the process plant site is therefor \$3.10/ton.

A crude ore storage area of 1500 ton capacity has been planned for the process plant area to buffer any unforeseen "breakdown" of haulage equipment or unpredictable acts of nature between the plant and the mine. This "reserve" is a ~~nine (9) day~~ <sup>*approximately a week*</sup> supply and could assure continuous plant operation ~~from the~~ feed-wise.

It is planned to utilize <sup>*one*</sup> ~~two~~ 22 ton trucks making <sup>*5*</sup> ~~4~~ round trips per day, five days per week, or <sup>*110*</sup> ~~100~~ tons being transported each day and ~~that~~ <sup>*the*</sup> tonnage would provide continuous feed for the plant on a seven (7) day per week basis. Truck haulage would be continuous year in, year out, ~~at full scale production.~~

- Maps - 1 - Index
- 2 - Claim
- 3 - Surface
- 4 - Mine Development
- 5 - ~~Process Plant Flow Sheet~~

*88  
23  
448  
4 1/3  
1740  
14*



THE  
PROCESS PLANT

## THE PROCESS PLANT

### Raw Material - Plant Feed

6

The raw material as received at the plant site would contain approximately 20-25% of the mineral vermiculite, ~~and~~ 70-75% ~~serpentine~~ <sup>serpentine</sup> grains and not more than about 5% quartz. This material would range in size up to about 14 to 18 inches ~~in~~ for at least one and possibly two of three dimensions. It is crystalline or sugary in texture, friable, and it is not tough, brittle or dense. The designed flow sheet to process this material is quite simple.

To provide information for the selection of the proper ~~plant~~ process plant equipment, the writer personally completed a crushing test of the material to determine its crushing characteristics. A local Phoenix laboratory also completed "heating" tests on samples of the raw material to determine critical exfoliation temperatures, time and expansion qualities. A copy of this report is herein included.

### The Process

Simply stated, the raw material as received at the plant is staged crushed by jaw crusher and rolls until the material passes a  $\frac{1}{2}$  inch screen, fed into a horizontal or vertical kiln and heated to 1250°F. <sup>to exfoliate the</sup> where the vermiculite, ~~exfoliates~~, and this entire product is bagged into quantities of 1.35 cubic feet or approximately 50 pounds per bag. One ton of the original raw material will produce approximately 40 bags of marketable product, <sup>which</sup> at \$2.00 plus <sup>wholesale</sup> in ton lots or \$3.00/bag/retail. Market value per ton thus ranges from a maximum of \$120.00 to a minimum of \$80.00 <sup>plus</sup>.

### Process Plant Site Preparation

Immediately following a favorable "forward moving" decision, pre-equipment plant site preparation can begin, - ~~start of two week period.~~ (Schedule A, Time and Expenditure <sup>Cash Flow</sup> ~~Table~~). Much of this work is labor and involves construction of the concrete ore storage <sup>Prep. Schedule</sup> pad, concrete foundations for the process plant equipment, concrete pad for the bagging equipment, and construction of warehousing and office space.

<sup>the</sup> northwest corner of The chosen plant site is located at 59th Avenue and Monroe Street, in an industrial zoned area. Natural gas, electricity, water and a railroad siding are available at the property. These facilities do not exist at the mine, and it is for this reason that the Process Plant site was thusly chosen and the decision made to transport the crude ore to Phoenix rather than the packaged product.

*List from report.*

### Process Plant Equipment, Installation and Erection

Ordering of the equipment can commence ~~at the start of the two week period, viz.,~~ - immediately following a favorable decision to move forward on the Project. Suppliers have indicated a 5 to 6 week delivery, however, it is more likely an 8 week period would be required. Suppliers have also indicated full payment within 30 days after delivery. The writer urges that 60 to 90 day periods of payment be requested to insure against faulty or inoperative equipment.

In view of this suggestion, the writer has spread the capital cost of equipment purchase over a <sup>three</sup> ~~two~~ month period, (~~Schedule A~~), the payment in the ~~two week period being~~ that for the complete bagging, sealing and palletizing unit. This complete distribution of payment is shown in Schedule <sup>A. Cash Flow</sup>.

The required equipment and all necessary components as electric motors, switch gear, etc., are listed and costed as follows. Prices are substantiated by the suppliers included quotes. Prices also include freight and taxes.

#### Process Plant Equipment

List from report

#### Bagging Equipment

List from report

Process Plant equipment installation and erection consists of labor, small amount of materials and supplies, (wiring, small size structural shapes, etc.) and equipment rental, mostly crane being required.

List from report.



Plant Operation - Trial Period

The trial period of plant operation is expected to start at the beginning of the ~~two week~~ <sup>3rd</sup> ~~period~~ <sup>month</sup>. ~~Three~~ <sup>four</sup> weeks have been allocated to this phase to make the necessary equipment adjustments to obtain the highest possible degree of efficiency.

Operation costs per ton during this period will, of course, be higher than the anticipated production costs - perhaps 2 to 3 times -, however mostly because of the "stop and go" status. During this period however, data can be obtained to more accurately forecast the future continuous operation costs - particularly from the standpoint of the variables, as natural gas and electricity consumption. Labor is relatively constant.

For this period, the following expenses are estimated and allocated:

list from report.

During this period also, personnel will be trained for the respective labor categories or classifications in the plant flow sheet. Hard core labor may well be suited for a major portion of this required labor.

Plant Operation - Full Scale Capacity

The process plant is so designed that only the kiln or heating ~~section~~ (exfoliation) section need be operated on a continuous 24 hour cycle. in order to acheive the projected full scale ~~capa~~ production of 6,400 bags of product daily. The crushing sections and bagging sections are geared to handle three times this amount in a 24 hour period.

The writer vizualizes a full scale capacity plant operation utilizing a labor force of ~~nine~~, <sup>eleven</sup> possibly ~~ten~~, for a 24 hour period. This includes the following:

- 1' Plant operating supervisor - *double as 1st shift operator.*
- 1' Raw material loader operator *(Frontend loader.)*
- 1' Bagging equipment operator
- 1' Bagging equipment helper
- 1' Bag sealer equipment operator
- 1' Pallitizer equipment operator
- 2' Fork lift operator
- 2' Plant operators, 2nd and 3rd shifts.

Any desired increase in production over and above 6,400 bags per day would require double or tripple shifting the crushing section and the bagging section. Additional equipment required for an increased production would be a second kiln - or replacement of the original with a larger unit - and - the necessary finished product storage tanks and conveyors.

*ARC Report*  
*Map & Process Plant Flow sheet.*  
*Graph. Projected Sales & production*  
*Bimonthly sales & Prod.*



## MARKETING PRODUCT

### General

The product MICA-LITE, because of the vermiculite content, is capable of absorbing a limited but moderate amount of a fluid or liquid - the most common being oil and/or water. The principal market use established and generated in the Phoenix area has been that of an oil absorbent for as a floor sweep in such businesses as machine shops, garages, mechanical areas for vehicle and airline maintenance work, etc. It is in this area of the market that the qualities of Mica-Lite exceed that of other competitive products as Speedee Dry, Floor Dry, Quick Zorb, and Oil Zorb. A few of many testimonial letters from some of the users of Mica-Lite are included as part of this report, to formally substantiate the claim herein stated.

The same product has other uses also, such as soil conditioner, aggregate for plaster and concrete work, etc. Research and test work in these areas is being done on a limited scale, by Frechette Industries.

Although minor at the moment, an inquiry has been made received from Auckland, New Zealand to Frechette Ind. via Solomon Mines regarding crushed and graded vermiculite ore prices and availability in 50 ton lots, with an interest to using the material as an aggregate for plaster and concrete. The inquirer utilized the office Auckland office of the American Consul and the U. S. Department of Commerce, Washington D. C.

### Local and National Markets

As indicated above, Mica-Lite has been sold locally (Phoenix area) to a variety of businesses. Among these are the following:

Machine Shops: Allied Tool & Die., Blake Machinery Co., J. Mill Tool & Die., Paraflex Machine & Tool., Saquaro Tool & Die, etc.

Airlines: Cutter Aviation, Air West, City of Phoenix Airport, <sup>Delta Airlines</sup> American Airlines., the latter indicating strong interest in purchasing to supply all their facilities nation wide.

Brake Companies: Clay Brake Co., Shur-Way Brake Co., Cutter Auto Supply, Comco Transmission., ~~etc~~ Arizona Auto Clinic.

Miscellaneous: Western Electric, Apache Optical, U. S. Post Office Garage, <sup>Allis</sup> Kaiser Aerospace, Chalmers, Holmquist Engineers, Broadway Stores, Allison Steel, etc. Moorola

Nurseries! Vaugh of Arizona, Sorrell Nurseries, etc.

The above are merely examples of the various businesses who have used Mica-Lite and are repeat customers. The Phoenix business market has not been scratched. The Phoenix home owner market has not been touched.

Nationally, it is not difficult to realize the market potential of this product, particularly in the heavier industrial areas or cities of the nation. Phoenix is considered a "light industry" city and the fact that the product has been so well received would very strongly indicate greater potentials in these other areas particularly with Mica-Lite having a superior absorbing quality or ability <sup>than</sup> other competitive products. Initially, National plans only include 10 States, the Southwestern States and Western States. Sales Organization and Distributor Outlets as follows, Arizona, Calif, etc

Much research has been completed by Mr. Frechette to determine the best approach to the marketing and sales phase of this business. Initially, 10 salesmen will be employed and trained for a three month period, with their employment coinciding about midway during the Process Plant Trial period. One month ~~later~~ later, another 10 salesmen will be employed and trained. This program would follow through until a force of 40 salesmen have been employed and trained.

Simultaneously, 20 Distributorships with warehousing facilities will be established in the 14 States and these distributors will serve approximately 410 cities with populations of 25,000 or more. The 40 salesmen would be drawing on the inventory of these distributors but not necessarily at the ratio of two salesmen to one distributor since some areas are more populated than others.

Sale quota goals, as determined and set by Mr. Frechette, for the area of concern at this stage are five (5) bags per thousand population per ~~day~~ month. Ultimately this means in excess of 6,000 bags of production per day for the Process Plant and Mine. ~~It is hoped the goal can be reached within an 18 month period from start of production.~~

*out maybe we should go to the "Factory Rep" route -*

Salesmen will be paid a monthly salary of \$500.00 and 15% commission <sup>of sales</sup> for purchases of Mica-Lite made. After the training period, leased cars would be furnished the salesman or they would be paid 15¢ per mile for the use of their own car. During the training period, gas and oil allowance for 2,000 miles per month for three months would be permitted the trainee. (9)

### Competitive Products

Competitive products in the Phoenix area are ~~of the~~ <sup>of</sup> either the perlite or clay type material which basically have no physical absorbing criteria or ability except that the fluid or liquid merely adheres to the surface of the particles. These competitive products tend to create slippery conditions under foot and fail to absorb the liquid which has penetrated into the floor. Mica-Lite users commend the product.

The following table compares prices of Mica-Lite in various quantities with those of four competitive absorbents available in the Phoenix, area.

List .

### Product Testimonials

Mr. Frechette has contacted many of the more larger users of Mica-Lite to secure testimonial letters regarding the product. Many of those contacted, such as Allis Chalmers, Western Electric, U. S. Post Office garage, City of Phoenix Airport, Air West, Motorola and Kaiser Aerospace, have policies restricting the issuance of such letters. Smaller businesses however did provide letters of commendation of the product and a few of such letters are included herein.

*Graphs. Projected Sales & Prod.*

*: Gross Sales and Cost Comparison*

*Bimonthly sales and Prod.*

*List Competitive Products - prices, quantities*

*Copies of Testimonials.*



# OPERATING Costs

1. Mine
  2. Process
  3. Sales
  4. G. & A.
- } Full scale prod.

## Includes

Labor  
M & S  
Taxes  
Misc.



Cash Flow-TIME  
Charts  
(2 years or 18 months?)

PERSONNEL:

Several persons have contributed, in varying degrees, much time, expense and professional knowledge and guidance with regard the information contained herein and to the formation of this Project. They all deserve much credit.

For the readers perusal, resumes of the following persons are included in this Section.

Mr. Franklin L. Naylor Jr., Scottsdale, Arizona.  
Mr. John Herbert Eagg, Phoenix, Arizona.  
Mr. Richard E. Mieritz, Consulting Engineer, Author of  
the Report, Phoenix, Arizona.

Frechette Industries

Mr. L. Frechette, President & Board Chairman, Phoenix, Ariz.  
Mr. Robert W. Owen, Vice President, Phoenix, Arizona.  
Mr. Vincent J. Kelleher, Director, Phoenix, Arizona.  
Mr. Michael F. McCluskey, Director, Phoenix, Arizona.



Dear Mr. McCann:

Your letter of September 14, 1970, addressed to Solomons Mines Inc., Maricopa, Arizona, has just recently arrived through the cooperation of the U. S. Department of Commerce, Washington D.C. and their local office here in Phoenix.

We sincerely regret the delay in answering your letter, but this has been due to the fact that Solomon Mines is no longer active and Frechette Industries has taken over the mining property. Also, we are currently moving toward establishment of an expanded operation to produce <sup>a</sup> ~~the~~ product having great demand domestically. We can however, provide you some technical data regarding the material and to answer some of the questions in your letter.

Our ore contains approximately 20 to 25% vermiculite, 4 to 5% moisture, 65 to 70% pyroxene and approximately 1% milky quartz. We utilize and market a full ton of the ore, there being no waste material. Thus, at this time, we do not produce various grades of vermiculite as per say, nor do we have any plans <sup>at this time</sup> ~~in the immediate future~~ to produce other grades in the very near future.

Test work, with reference to the product we produce for market as an oil absorbent, <sup>shows</sup> ~~has~~ the following characteristics:

Exfoliation temperature 1250 to 1350°F.

Exfoliation time less than 10 minutes.

Apparent density of material tested (-10 +16 mesh) 1.113 or 69.4lbs/cu.ft.

Apparent density after exfoliation (-10 +16 mesh) 0.516 or 32.2 lbs/cu.ft.

Thermal conductivity and range, solubility and suitability as aggregate for plaster and concrete work characteristics are not known at this time, but test work along these lines will be conducted.

Preliminary test work thus far indicates that the vermiculite contained in the ore, when concentrated (waste removed) can produce very acceptable ~~grades~~ vermiculite grades #2, #3, and #4. Additional test work along these lines will be persued.

It is regretted we can not provide you a quote for the supply and delivery C.I.F. Auckland of vermiculite ore crushed and graded to  $\frac{1}{4}$ " to  $\frac{1}{8}$ " as requested. Should we reach the position of being able to supply you in the future, we will advise of same. Meanwhile, we will send you a 10-12 pound sample of the crude ore for your use. In return, we would

~~the~~ <sup>by</sup> regular mail appreciate receiving from you the results of your tests to learn whether <sup>your</sup> ~~the~~ desired products are feasible from our ore or raw material, <sup>or whether same could be produced economically</sup> ~~for shipment to Auckland.~~

Thank you very much for your letter and inquiry.

C.C. U.S. Dept of Commerce  
R. E. Mieritz,  
Consuming Eng.



## TRIANGLE INTER-OFFICE ACTION MEMO

**MESSAGE**

TO Mr. R.E. Mieritz

SUBJECT

Report Solomon Mines, Frechette Lease

This will acknowledge the receipt of your  
request of January 16, 1972.

We are pleased to forward the same to you  
by certified mail, this date.

Regards,

Harold Crevasse

FROM Harold V. Crevasse

DATE  
1-17-72**REPLY**

TO

## INSTRUCTIONS TO SENDER

1. RETAIN PINK COPY. 2. MAIL REST OF SET WITH CARBON INTACT.

## INSTRUCTIONS TO RECEIVER

1. WRITE REPLY. 2. DETACH STUB, MAIL WHITE, RETAIN YELLOW.

FRECHETTE INDUSTRIES, INC.  
1625 West Osborn Road  
Phoenix, Arizona  
85015

October 5, 1970

Mr. Rickard E. Mieritz  
5822 North 22nd Place  
Phoenix, Arizona 85016

Dear Mr. Mieritz:

Frechette Industries, Phoenix, Arizona, is desirous of retaining you and your professional services of geology and mining engineering as a consultant in the field of vermiculite mine development and operation of the Solomon Mines Property, Maricopa County, Arizona, and in the field of vermiculite processing and operation of our Phoenix, Arizona, plant which would produce Mica-Lite Absorbent.

In view of this, it is mutually agreed by the undersigned (1) Board Members of Frechette Industries as party of the first part, and (2) yourself as party of the second part, to wit:

- (a) Party of the second part shall act as Consultant to Frechette Industries in the aforementioned fields for a period of ten (10) years commencing at a date exactly four (4) months after the formal date of financing to be completed by Frechette Industries.
- (b) Compensation to party of the second part for his services by Frechette Industries shall be as a royalty payable at the rate of one (1) cent per fifty (50) pound or 1-1/2 cu. foot bag of Mica-Lite Absorbent produced by Frechette Industries.
- (c) The maximum annual (anniversary) payment by Frechette Industries to party of the second part shall not exceed \$20,000.00, nor shall the yearly payment be less than \$12,000.00. Monthly payments shall be paid directly to party of the second part or to a third party (trust, etc.) as so directed or assigned in writing by the party of the second part.
- (d) Party of the second part agrees to make himself available to Frechette Industries for the purposes aforementioned and when necessary, but party of the second part reserves the right to pursue his profession and services to and for other clients. Party of the second part does agree that Frechette Industries has first claim for time from the party of the second part during the tenure of this Agreement.
- (e) In the event it becomes necessary for the party of the second part to vacation or serve another client outside the borders of continental United States for a limited and known time, party of the second part shall appoint an acceptable colleague to substitute during the absence for party of the second part. Financial compensation to the substitute is the responsibility of the party of the second part.
- (f) If death of party of the second part occurs before the aforementioned natural expiration date of this Agreement, then said Agreement shall terminate at the end of the month in which such death occurs and Frechette Industries shall no longer be liable for any further payments except those payments which may be delinquent and due to the months end.

(g) In the event Frechette Industries should "fail" financially or otherwise during the tenure of this Agreement, party of the first part agrees to notify party of the second part in writing thirty (30) days in advance and that all monies due are paid up to and including the thirty (30) day notice period.

(h) Frechette Industries may terminate this Agreement for professional incompetence or the like, but only after a registered sixty (60) day "show cause" letter has been received by party of the second part and that both parties mutually agree to the termination.

(i) Affixment of signatures by all concerned attest to the understanding and accord of all articles contained herein.

Frechette Industries, Inc.  
Board Members

Consultant

---

Louis Frechette, Jr., Chairman

---

Richard E. Mieritz,  
Mining Consultant  
Phoenix, Arizona

---

Robert W. Owen

---

Vincent J. Kelleher

---

Michael F. McCluskey

*Part of  
sold*



January 16, 1972

Mr. Harold Crevasse  
5323 Mockingbird Lane  
Scottsdale, Arizona, 85253

Dear Harold:

In as much as you and your three 5 Mining Co. now have an effective lease with Mrs. Solomon on her vermiculite property and since physical work on the property has now commenced as evidenced by a visit on January 10, 1972, I would like to request of you the return of the copy of my Report and Maps of the Frechette Industries Proposal of operation, processing and marketing of the Micalite (oil absorbent and soil conditioner and other uses) as produced from the Solomon vermiculite property and necessary financial requirement.

I have recalled all outstanding reports and have delayed my request recalling the copy of the Report, Drawings and Maps which was hand delivered to your home on May 3, 1971 after your request for same as you wished to present to your financial contacts in Chicago and Dallas.

Some time prior to October 16, 1971, the Report, Drawings and Maps have served your personal interest in the project and ultimately lead to the signing of an effective lease of the property with Mrs. Solomon. The general information in the report has served its purpose now, but the technical data and design is another matter.

Since it likely you are proceeding on the project and not contemplating my professional help and advise, I would also like to request the return of the unsigned agreement between Frechette Industries and myself--the subject being schedule of professional fees and ~~work~~ requirements--which was handed to you as a guide at our conference on October 27, 1971.

Re-iterating, please return the complete copy of my signed and stamped Report on the Frechette Industries Proposal for the production, processing and marketing of Micalite from Solomons vermiculite deposit as well as the unsigned work agreement referred to in the previous paragraph.

For professional and personal reasons I do not wish to have any signed or unsigned copies of the referred to report, drawings and maps in circulation while an effective lease on the property is valid. The report is a result of my efforts and time and unpaid for, thus, my property.

Would appreciate early receipt Harold.

cc: Mrs. Solomon

*Sincerely,  
R. E. Mieritz*  
R. E. Mieritz

Rich 11/21/71  
2/25/71  
Carr to prop.

Proposed 4/29/71 (2)  
Carr 2/3/71 (1)  
7th call 10/5/71

discussed for after.  
dis. cons. 10/16/71  
Meet. Sal. Carr. 10/27/71 - gave Encl. list.  
Signed lease - 12/6/71 - worked out 12/8/71 - m.m.

H. Carr

Early last year, March, after my work for you on the Rich Hill property, I mentioned the Fuchette Industry Mosaic (oil absorbent) proposal, utilizing Mrs. Salomon's residual deposit in the White Tanks Mountains north of Buckeye, Arizona.

On April 29, 1971 you telephoned me, requesting a copy of my report on the Fuchette Industry proposal and required financial assistance. The report also included my opinions and designs of mine operations, processing plant. You indicated that you thought the user fee of ~~As part of this report~~

your interest in the report was you indicated you had contacts in the financial circles and might be able to secure the necessary financing. You requested two copies of the report - one for Chicago and one for Dallas. On May 5, 1971 I hand delivered to you one copy of the report, drawings and maps, and indicated it would not be a wise business move to have two reports in circulation.

On October 5, 1971 you telephoned me to advise that your sources of financial assistance were not interested in the project, but since you had been working in this direction you yourself had become extremely interested in the project and could personally finance some of the project could be operated and the product produced on a scale greatly reduced from what was indicated in my report. During our conversation I indicated to you that in my opinion, the project could be scaled down and could conceivably cost about \$50,000. Details would of course have to be included.

In the same conversation you requested to meet Mrs. Salomon to see if she would be agreeable to lease the



(3)

applying <sup>my</sup> "constants" in mind constants to the variables and "in mind knowers" to the unknowns & variables.

- (1) shrinkage of the wall and pith breaking from the pool level up. Long we drilling for up mound, well mineralized areas, to open solution passage ways.
- (2) upward circulation of acid solution to strip the pool for more acid and iron ~~and~~ sulphurous iron for greater copper dissolution.
- (3) skimming pregnant solution at the upper most elevation of the "natural vat".
- (4) Recirculation of solution, if necessary, for buildup of copper content to achieve good, fast precipitation.

Feasible? That of course remains to be seen, of first by study and then in practice. It is thought to be so because I am sure the necessary factors would be much greater than with downward, spray type precipitation.

If I can be of further service to you and DuPont, please advise.

V. J.

B.M.

cc: S. B. Duran.



the remedial property. In that day we discussed the possibility  
of my doing the consulting and supervising work on the project of  
Cot. materialized. I advised I would prepare a schedule of fees,  
etc. if and when you obtained a lease from Mrs. Salomon and  
some was presented to you on October 27 at which time I asked  
how did you ~~my~~ an unsigned agreement ~~with~~ between  
Fruchette Industries providing compensation for  
consulting fees and what work arrangements would be  
~~made~~ finalized.

On or about December 6, 1971, a lease between yourself  
and Mrs. Salomon was signed and effective. On December  
6 you telephoned me advising you signed the lease  
and wanted to meet with me on December 8 and  
you would call me on that date. Since December 6, I have  
had no word from you by any media.

On January 10, visited Salomon's property - road  
was blocked and circle turn around below pit.

~~As~~  
~~As~~ ~~as~~ ~~much~~ ~~as~~ ~~you~~ ~~now~~ ~~have~~ ~~an~~ ~~structure~~  
lease with Mrs. Salomon on her remedial  
property and since ~~work~~ has now commenced on  
the property as evidenced by a visit on January 10, 1972  
I would like to request a copy of the return of the  
copy of my report and ~~copy~~ of the Fruchette Industries  
Proposal of operations ~~and~~ ~~management~~ of the Salomon  
Property ~~with~~ ~~proposed~~ necessary financial services.  
I have ~~made~~ all outstanding reports and have  
delayed my request ~~of~~ ~~you~~ ~~returning~~ ~~the~~ ~~copy~~ ~~of~~ ~~the~~  
report and ~~impact~~ ~~to~~ ~~you~~ ~~was~~ ~~hand~~ ~~delivered~~ ~~to~~  
you on May 3, 1971 after your request for same as  
you wished to present to your financial contacts

The annual information with regard to the proposed to provide all the technical data and design is another matter.

Some time prior to October 16, 1971 the report <sup>and maps</sup> discussed your personal interest in the project and ultimately lead to the signing of an effective lease ~~with~~ of the property with Mrs. Robinson.

Since ~~it is~~ likely you are proceeding on the project and not contemplating any personal help and advice, I would also like to request the return of the unsigned agreement between Fuchite Industries and myself ~~the~~ the supporting schedule of professional fees and ~~work~~ <sup>work</sup> ~~reporting~~ <sup>reporting</sup> ~~minutes~~ <sup>minutes</sup> which was handed to you <sup>at our</sup> at our conference on October 27, 1971.

<sup>the complete</sup> ~~Requesting~~ please return <sup>the complete</sup> my ~~stamped~~ <sup>stamped</sup> copy of the Fuchite Industries Proposal for the production and ~~marketing~~ <sup>marketing</sup> processing and marketing of ~~specialite~~ <sup>specialite</sup> ~~from~~ <sup>from</sup> ~~solomons~~ <sup>solomons</sup> ~~promiculet~~ <sup>promiculet</sup> ~~deposit~~ <sup>deposit</sup> as well as the unsigned work agreement referred to in the previous paragraph.



So. Car & Mont. Feb Mins.

No. 1, \$ 35.00	-3 +14	Insulation
No. 2, \$ 32.00	-6 +20	<del>Insulation</del>
No. 3, \$ 29.00	-10 +35	soil conditions
No. 4, \$ 26.00	-20 -45	Plaster
Crude - \$ 21.00	-28 -100	Fire doors

Mesh

Booby - L.A. 834/100 - }  
 S.F. 1.14/100 - }

Vermiculite Institute Chicago Ill.  
 N.S. Prof. M. Everett (261-3357)

- 3 +14 - Insulation Under
- 5 +20 } Concrete Aggregate
- 8 +45 }
- 10 +65 Plaster
- 10 +100

80 - 4 cuft bags for #2  
 20 " " " #3  
 50 " " " #4 / portion 90% Vermiculite





**U.S. DEPARTMENT OF COMMERCE**  
**Business and Defense Services Administration**  
Washington, D.C. 20230  
Bureau of Domestic Commerce

November 24, 1970

Mr. Louis Frechette, Jr.  
President  
Frechette Industries, Inc.  
1625 W. Osborn Road  
Phoenix, Arizona 85015

Dear Mr. Frechette:

This will confirm my telephone conversation with you of November 19, 1970, concerning vermiculite.

There is enclosed a copy of a letter addressed to Solomon's Mines Inc., which was forwarded to this office by the American Consul in Auckland, New Zealand, with a request that we verify the name and address inasmuch as the writer of the letter did not receive a reply.

The Department of Commerce Field Office in Phoenix advises that you have recently acquired this mine. Therefore we are forwarding the letter to you for direct reply to J. H. M. Carpenter, Ltd.

If you are interested in supplying the vermiculite for which the company requests quotations and specifications, the Phoenix Field office will be pleased to assist you in developing this export trade.

Sincerely,

M. M. Dotye  
Bureau of Domestic Commerce

Enclosure

TO	Action	Note	Done	Date

FILE REF. SM35

14th September, 1970.

Solonka's Mines, Inc.,  
 Maricopa,  
 Arizona, 85139,  
 U.S.A.

Dear Sirs:

We shall be pleased if you will submit a quotation to us for the supply and delivery C.I.F. Auckland of Vermiculite Ore, crushed and graded if possible # 1 to 175. If you are able to produce other grades, we would welcome information on these.

We should also like to receive with your quotation, copies of any technical literature covering your product, e.g.

- Exfoliation Temperature
- Exfoliation Rate
- Specific Heat
- Specific Gravity
- Thermal Conductivity and Range, Solubility
- Suitability as aggregate for Plaster and concrete works.

Should your quotation meet our requirements, we would be prepared to order in 50 ton lots. Our estimated consumption initially would be 200 to 250 tons per annum.

If you could forward a sample this would enable us to carry out tests to ascertain suitability for the New Zealand market.

*Answer  
 to Tolz # Sample*

Yours faithfully,  
 J.H.M. CARPENTER LIMITED.  
 Auckland, New Zealand

W.G. McCann,  
 SALES MANAGER

WGMCC:CAR



FRECHETTE INDUSTRIES INC.

1625 West Osborn Road  
Phoenix, Arizona 85015

January 5, 1971

Mr. W. G. McCann  
Sales Manager  
J. H. M. Carpenter Limited  
Auckland New Zealand

Dear Mr. McCann:

Your letter of September 14, 1970, addressed to Solomons Mines Inc., Maricopa, Arizona, has just recently arrived through the cooperation of the U. S. Department of Commerce, Washington D. C. and their local office here in Phoenix.

We sincerely regret the delay in answering your letter, but this has been due to the fact that Solomon Mines is no longer active and Frechette Industries has taken over the mining property. Also, we are currently moving toward establishment of an expanded operation to produce a product having great demand domestically. We can however, provide you some technical data regarding the material and to answer some of the questions in your letter.

Our ore contains approximately 20 to 25% vermiculite, 4 to 5% moisture, 65 to 70% pyroxene and approximately 1% milky quartz. We utilize and market a full ton of the ore, there being no waste material. Thus, at this time, we do not produce various grades of vermiculite as per say, nor do we have any plans, at this time, to produce other grades in the very near future.

Test work, with reference to the product we produce for market as an oil absorbent, shows the following characteristics:

Exfoliation temperature 1250 to 1350° F.

Exfoliation time less than 10 minutes.

Apparent density of material tested (-10 +16 mesh) 1.113 or 69.4 lbs./cu. ft.

Apparent density after exfoliation (-10 +16 mesh) 0.516 or 32.2 lbs./cu. ft.

Thermal conductivity and range, solubility and suitability as aggregate for plaster and concrete work characteristics are not known at this time, but test work along these lines will be conducted.

Preliminary test work thus far indicates that the vermiculite contained in the ore, when concentrated (waste removed) can produce very acceptable vermiculite grades #2, #3, and #4. Additional test work along these lines will be pursued.



Mr. W. G. McCann

- 2 -

January 5, 1971

It is regretted we can not provide you a quote for the supply and delivery C. I. F. Auckland of vermiculite ore crushed and graded to 1/4" to 1/8" as requested. Should we reach the position of being able to supply you in the future, we will advise of same. Meanwhile, we will send you, by regular mail, a 10-12 pound sample of the crude ore for your use. In return, we would appreciate receiving from you the results of your tests to learn whether your desired products are feasible from our ore or raw material, or whether same could be produced economically for shipment to Auckland.

Thank you very much for your letter of inquiry.

Sincerely yours,



Louis Frechette, Jr.  
President

LF/ld

cc. U. S. Department of Commerce  
R. E. Mieritz ✓  
Consulting Engineer

P O BOX 19156 HOUSTON TEXAS 77024 (713 + <sup>62</sup> NA 2-1520) PLANTS IN HOUSTON AND NEW ORLEANS

January 20, 1969

RESERVE -  
 1-504-536-3500

*Freehills Industries, Inc.*  
 Solomons' Mines, Inc.  
 1338 West Thomas Road  
 Phoenix, Arizona 85013

Gentlemen:

We are very interested in the Vermiculite ore mine which you are now operating.

We would appreciate receiving your quotations on Vermiculite ore, f.o.b. Houston, Texas, and f.o.b. New Orleans, Louisiana. Please send quote to the above letterhead address.

*10-20,000 TONS yearly*  
*# 3-4 grades (zone scale)*  
*± \$18.00/ton doc. + freight.*  
*Zone - floats*  
*So. Car - Air Sep. - not clean.*  
*4/24/71*

Very truly yours,

FILTER-MEDIA COMPANY

Ned V. Scott, Jr.

NVS/pr

P.S.

- Also please advise us
- ① your railroad for shipping
  - ② Grades of ore available
  - ③ Other customers
  - ④ Price FOB your mine.

*Planned above*  
*telling him*  
*not in production*  
*for one sales*  
*at this time*  
*1/25/69*

*Zonolite - #1 #2 #3 #4 #5*  
*So. Africa #5 #4 #3 #2 #1*



Cable: "INTERMAC"

# MACON International

24 CALIFORNIA STREET  
SAN FRANCISCO, CALIFORNIA 94111

Phone: Area 415  
391-2833/4

PLEASE RETURN DUPLICATE OF THIS  
FORM WITH REQUESTED INFORMATION  
PRIOR TO ASAP

## QUOTATION REQUEST

DATE: 2/19/71  
REFERENCE NO.: ABC

QUOTE PRICES:  
( ) FOB FACTORY  
(  ) FOB DOCK SAN FRANCISCO OR NEAREST PORT  
( ) FAS

PACKING REQUIRED:  
( ) DOMESTIC CARTONS  
( ) EXPORT CARTONS  
( ) WOOD BOXES OR CRATES

ORIGINATED BY: A. D. MACRAE  
ENCLOSURES:

*If wood box/crate packing is indicated above, please quote cost separately if you have packing facilities.*

ITEM NO.	QTY	PART NO. if applicable	DESCRIPTION	Unit wt. (X)*	Unit cube (X)*	UNIT PRICE	TOTAL
1.	55		SHORT TONS VERMICULITE UNEXFOLIATED ORE NUMBER THREE				
2.	110		SHORT TONS VERMICULITE UNEXFOLIATED ORE NUMBER TWO				
<p>WITH QUOTATION PLEASE ADVISE HOW THIS MATERIAL IS PACKED.</p> <p>Please submit:            _____ copies of literature applicable to this quotation.            _____ copies of your general catalog.            * Weight &amp; cubic measurement required only if checked.</p>							

NOTE: IF YOUR QUOTATION DOES NOT CONFORM EXACTLY TO ABOVE OR ATTACHED SPECIFICATIONS, STATE QUALIFICATIONS HERE:

DATE: \_\_\_\_\_

SHIPMENT: \_\_\_\_\_

SIGNED: \_\_\_\_\_

(If variable, indicate by Item Numbers)

FOR: SOLOMAN MINES, INC.  
1338 W-THOMAS ROAD  
PHOENIX, ARIZONA

TERMS: \_\_\_\_\_

PRICES FIRM FOR \_\_\_\_\_ DAYS.



# MACON INTERNATIONAL

TEL. 391-2833

24 CALIFORNIA ST. • SAN FRANCISCO, CALIF. 94111

CABLE ADDRESS  
INTERMAC

March 16, 1971

*% Franchetta Ind. Inc.*  
Bureau of Mines  
Phoenix Field Office  
2721 N. Central Avenue  
Phoenix, Arizona 85004

Attention: Mr. Phil Stanton

Subject: Vermiculite Unexfoliated Ore  
Grades 2 and 3

Dear Mr. Stanton,

On March 1, 1971, we discussed the possibility of locating a mine that could furnish the requirements of our customer in Japan. At that time I believe you were going to ask someone in Solomon Mines, Inc. to contact me to see whether something could be worked out to our mutual benefit.

Since talking to you, I have received some figures from our customer on his usage rates. To start with we are advised that both price and quality meeting their requirements, that the possibility of making a contract for two years would be good. They will possibly be buying more than 1,000 metric tons yearly. Their estimates are that the demands would increase by about 30% every year from now on.

The grade number 2 and 3 referred to are:

No. 2- Unexfoliated Vermiculite guaranteed size as per U.S. Tyler mesh standard 9-20 mesh with tolerance of  $\pm 10\%$  equal or over.

No. 3- Ditto, but as per U.S. Tyler mesh standard 6-12 mesh with tolerance of  $\pm 10\%$  equal or over.

It is essential that the material should swell to about 1000% after exfoliation at 900°C for 2 minutes. Inspections are made by an inspecting agency before shipment on moisture, color and size.

Just happened to think, would the gentleman you were going to have contact us *to* a Mr. Franchetta?

Very truly yours,

MACON INTERNATIONAL

A. D. Macrae

ADM/lm

# MACON INTERNATIONAL

TEL. 391-2833

24 CALIFORNIA ST. • SAN FRANCISCO, CALIF. 94111

CABLE ADDRESS  
INTERMAC

March 29, 1971

Frechette Industries, Inc.  
1625 Osborn Road  
Phoenix, Arizona 85015

Attention: Mr. Louis Frechette, Jr.

Dear Mr. Frechette,

As you probably are aware, for sometime we have been looking for a source of supply of Vermiculite Unexfoliated Ore. This would be for a very fine customer of ours in Japan whom at the present time is importing his ore from South Africa.

I had talked first to Mr. Phil Station, <sup>U.S. Dept. Commerce</sup> ~~Bureau of Mines~~, Phoenix Field Office and then followed this conversation up with a letter telling him about what our customer required. In again talking to Phil last week, he mentioned the fact that he turned the letter over to you in hopes that we might be able to work something out in supplying our customer's requirements.

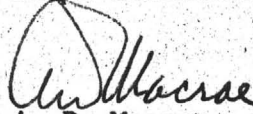
If you recall, the letter mentioned the fact that our customer would possibly be using more than 1,000 metric tons yearly and that the demands would increase about 30% every year from now on. The grades used would be number 2 and 3.

Phil Staton did not know if the mine was in production at this time and I wondered if there were any financial aspects to the opening of the mine for production such as our customer would require, and if so perhaps something could be worked out.

Would you be good enough to give this some thought and let us hear from you with your comments as to the possibility of furnishing Vermiculite Ore on a contract basis.

Very truly yours,

MACON INTERNATIONAL

  
A. D. Macrae

ADM/hm



L E A S E

THIS LEASE made this 9<sup>th</sup> day of March, 1970  
between ISABEL F. SOLOMON, hereinafter referred to as Lessor,  
and FRECHETTE INDUSTRIES, INCORPORATED, an Arizona corporation,  
hereinafter called Lessee,

W I T N E S S E T H:

1. That the Lessor, in consideration of the rents,  
royalties, covenants and agreements herein contained and to be  
paid and performed by the Lessee, hereby lets and demises unto  
the Lessee the following unpatented mining claims, the location  
notices of which are recorded in the office of the County  
Recorder of Maricopa County, Arizona in the docket and pages  
referred to below:

<u>NAME OF CLAIM</u>	<u>DOCKET</u>	<u>PAGE</u>
Ocotillo	3186	501
Swag	3591	48
V No. 5	3638	450
No. 344	3671	414
Taps	3671	415
W.W. North	6608	64

said claims being in an Unnamed Mining District, Maricopa  
County, Arizona.

TO HAVE AND TO HOLD the same unto the Lessee for a  
period of ten (10) years commencing on the 1st day of April,  
1970 and from month to month thereafter on the same terms unless  
Lessor sells or transfers the property in accordance with the  
provisions of Paragraph numbered 4 below.

2. The Lessee covenants with the Lessor as follows:

(1) To enter upon said mining claims and to work  
the same in a good and minerlike fashion with due regard to  
the safety, development and preservation of the said premises  
as a workable mine.



(2) To work and mine the said premises as above-said steadily and continuously from April 1, 1970 until termination of this lease.

(3) To keep accurate accounts of production records which shall be available to Lessor for inspection; and to render to the Lessor monthly statements showing the amount of all materials taken from the premises; and to pay to the Lessor as rent One Hundred Dollars (\$100.00) each week during the term of this lease; said \$100.00 to be payable on April 1, 1970 and a like sum each and every week thereafter. In addition to said weekly rental instalments, Lessee shall pay to Lessor a royalty of 10¢ on each one and one-third cubic feet of material removed from the premises. In the event that Lessee packages the materials removed from the premises in containers which have a capacity that is larger or smaller than one and one-third cubic feet, said royalty shall be increased or decreased according to the ratio that one and one-third cubic feet bears to 10¢. Said royalty payments shall be computed on the first day of each week during the term of this lease and shall be paid to Lessor on or before the 1st day of each week following such computation.

9¢ 10¢  
got

✓(4) To perform and complete annual assessment work sixty (60) days prior to the expiration of each assessment year and to forthwith record affidavits of labor performed upon completion of said assessment work.

✓(5) To post upon the property "non-liability notices", in accordance with the provisions of §33-990, Arizona Revised Statutes and to record such notices of non-liability prior to the expiration of ten (10) days after the commencement of work.

✓(6) To sufficiently timber all underground excavations; to save Lessor harmless from any liability on account

the property free and clear of liens and encumbrances.

✓ (7) To allow the Lessor and her agents to enter upon said premises at all reasonable times to inspect the operations of the Lessee.

✓ (8) Not to assign this lease or any interest thereunder and not to sublet the premises or any part thereof without the written consent of the Lessor; to comply with all laws, regulations and rules of the State of Arizona, Maricopa County, other governmental agencies, and the United States of America; to pay all taxes and assessments levied against said premises and to pay all excise taxes on products sold from the premises, including severance taxes, if any.

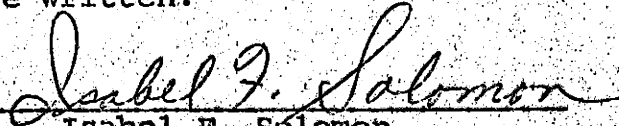
✓ (9) To re-deliver to the Lessor the said premises on the termination of this lease in good condition.

✓ 3. In the event of violation of any of the covenants by the Lessee the Lessor shall have the election to terminate this lease and Lessor shall have the right to enter upon said premises and dispossess all persons occupying it without affecting any other remedies provided by law.

✓ 4. In the event that Lessor desires to sell said property and secures a bona fide offer in writing specifying the terms of a proposed sale and giving the name of the person or corporation to whom the property may be sold or transferred Lessor shall notify Lessee and Lessee shall have a thirty-day option to purchase the property on the same terms and conditions as the prospective purchaser has offered.

5. This lease shall be binding on the heirs, personal representatives, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties have hereunto set their hands the day and year first above written.

  
Isabel F. Solomon

FRECHETTE INDUSTRIES, INCORPORATED

By Gene Frechette, Jr.  
its President

LESSEE

STATE OF ARIZONA     )  
                                  ) ss.  
COUNTY OF MARICOPA )

The foregoing Lease was acknowledged before me this 9<sup>th</sup>  
day of March, 1970 by ISABEL F. SOLOMON.

My commission expires:

Gene R. Dawson  
Notary Public

My Commission Expires Mar. 23, 1973

STATE OF ARIZONA     )  
                                  ) ss.  
COUNTY OF MARICOPA )

On this, the 9<sup>th</sup> day of March, 1970, before me, the  
undersigned notary public, personally appeared LOUIS FRECHETTE,  
who acknowledged himself to be the president of Frechette  
Industries Incorporated, an Arizona corporation and that he  
as such officer being authorized so to do, executed the fore-  
going lease for the purposes therein contained by signing the  
name of the corporation by himself as president.

In witness whereof I hereunto set my hand and official  
seal.

My commission expires:

Gene R. Dawson  
Notary Public

My Commission Expires Mar. 23, 1973



crude Kern-unrefined  
95% + = \$21.00/ton or \$5.25/ton in place

AGREEMENT ADDING TO LEASE

THIS IS an agreement dated April 28, 1970 between Isabel F. Solomon (Lessor) and Frechette Industries, Incorporated (Lessee).

ADDING TO the Lease dated March 9, 1970 between the above named parties, the provision that the payment of Rent and Royalties named in that Lease shall give the Lessee the right to use the name "Mica Lite".

When the Lease expires, or the Lessee ceases to pay Rent and Royalties, the right to use the name "Mica Lite" shall revert to the Lessor.

Isabel F. Solomon  
Isabel F. Solomon

Frechette Industries, Inc.

by Louis Frechette Jr.  
President

STATE of Oregon  
COUNTY of Wheeler }

This instrument was acknowledged before me this 28<sup>th</sup> day of April, 1970 by ISABEL F. SOLOMON and LOUIS FRECHETTE JR.

Witness my hand and official seal.

U. R. Dawson  
Notary Public

My Commission expires:

My Commission Expires Mar. 23, 1973

*Mica-Lite*<sup>®</sup>

**OIL & LIQUID ABSORBENT  
and SOIL CONDITIONER**

**TYPICAL USERS:** ● Homes ● Hotels ● Motels ● Hospitals ● Airports  
● Airlines ● Offices ● Businesses ● Parking Lot Operators ● Garages  
● Transmission Shops ● Heavy Equipment Overhaul Shops ● Truck Service  
Centers ● Automotive Service Stations ● Industrial Maintenance Shops ●  
Machine Shops ● Metal Working Shops ● Engine Overhaul Shops ● Crank-  
case Grinding Shops ● Mine Maintenance & Machine Shops ● Foundries  
● Nurseries ● Golf Courses ● Department Stores ● Municipal & State  
Facilities ● Landscape Services ● Park & Gardening Departments

DISTRIBUTED BY

*Specialized Products for Industry from...*

**FRECHETTE INDUSTRIES, INC.**

CHEMICAL & MINING DIVISION  
PHOENIX, ARIZONA 85031  
PHONE (602) 274-7075



**2 PRODUCTS IN 1**

**NEW**

*Mica-Lite*<sup>®</sup>

A MINERAL PRODUCT  
OF ARIZONA U.S.A.

**OIL & LIQUID  
ABSORBENT  
AND MINERAL  
SOIL CONDITIONER**

- *Safe* ● *Fireproof* ● *Economical*
- *Many Uses* ● *Keeps Soil Workable-Retains Moisture*
- *Completely Inert & Sterile*







# Mica-Lite®

## ABSORBS OILS • Acids-Any Thin Liquid CONDITIONS SOIL • Permanent-Doesn't Decompose

Furnished in 1.35 cubic ft. paper bags

### DIRECTIONS FOR USE AS AN ABSORBENT



**Fast Oil & Liquid  
Pick-up • Fireproof  
• Economical**

1. Pour **Mica-Lite** on oil or liquid to be cleaned. Be sure and use enough.
2. Using the back edge of a push broom (or other instrument) spread the **Mica-Lite** evenly over the entire area.
3. Let the **Mica-Lite** set for 3 to 5 minutes. During this time, it will absorb the substance.
4. Sweep up the **Mica-Lite** and save to use again. **Mica-Lite** can be re-used until it turns dark in color, as long as it remains a light brown, it is usable.
5. For oil stains or dried oil spots, first apply a stoddard solvent to dissolve the oil, brush slightly and allow the solvent to penetrate for 2 to 3 minutes. Then use **Mica-Lite** steps 1 through 4 to pick up solvent and oil.

### FOR PET LITTER AND PET ACCIDENTS

1. **Mica-Lite** makes an ideal substance for cat boxes, hamster, rabbit and bird cages since it absorbs all messy liquids.
2. **Mica-Lite** can be used to clean up pet accidents, and sickness. Just pour on and let stand while it absorbs the moisture, then sweep up the **Mica-Lite**.

### FOR BARBECUE AND GARBAGE CANS

1. Pour **Mica-Lite** in the bottom of your barbeque, it will absorb meat drippings, excess sauces, and fats that usually cook on the barbeque making it difficult to clean. **Mica-Lite** absorbs your charcoal lighter and acts as a wick to hasten the burning of the charcoal.
2. Pour **Mica-Lite** 1" deep in your kitchen or backyard garbage cans. It will absorb water, grease and food juices, and keep your garbage cans neater and makes them easier to empty.

### DIRECTIONS FOR USE AS A SOIL CONDITIONER

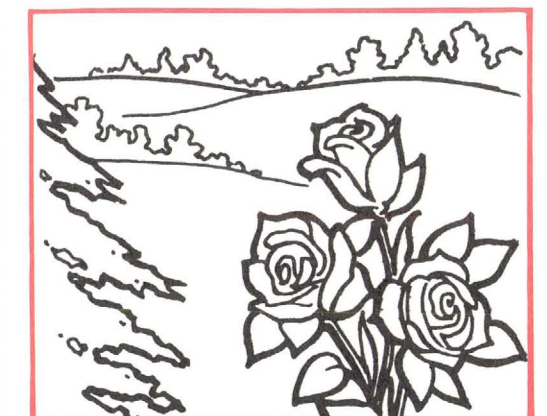
**For Home Planters,  
Flowerpots,  
Landscape Areas,  
Golf Courses, Etc.**

1. Loosen and break up soil, then rake level.
2. Add **Mica-Lite** to recommended depth over the entire area, then work into the soil, level and plant.
3. For small flower pots, mix 1/4 cup **Mica-Lite** to 1 cup soil.

Your grass, flowers, trees and shrubs will grow better when the soil is mixed with a natural moisture absorbent. **Mica-Lite** holds water, so you have less run-off when watering, and you know there is needed moisture in the ground at all times.

Your gardening, weeding, etc., will be easier when you work with soil that does not pack down and become rock-hard. Because **Mica-Lite** absorbs moisture, the soil stays workable and yet firm. It does not have to be re-added like other mulch type conditioners because **Mica-Lite** is a mined earth product and will not rot or deteriorate when moisture is added as organic compost products do.

Recommended Ratio		
Soil Depth	Amount of Mica-Lite	Bag Coverage
1"	1/4"	64 sq. ft.
2"	1/2"	32 sq. ft.
3"	3/4"	22 sq. ft.
4"	1"	16 sq. ft.
5"	1 1/4"	13 sq. ft.





July 28, 1971

Mrs. D. L. Solomon  
2879 B North 43rd Ave.  
Phoenix, Arizona,  
85009

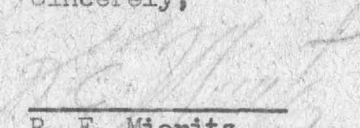
Dear Mrs. Solomon:

This letter will serve as an affidavit and proof of assessment work completed on your group of six vermiculite claims located in an unnamed mining district in sections 33 and 34 of T. 2 N., R. 3 W. and section 4 of T. 1 N., R. 3 W. of the G. & S. R. B. & M. in Maricopa County, Arizona..

Such work included geological appraisal, evaluation and a feasibility study as to mine planning, development and processing the ore material, all of which fact and study was compiled into report form. A period of time for this work commenced in December, 1970 and completed in January of 1971. The value of this work is in excess of \$600.00 and more than ample for the minimum assessment requirement for the six claims.

A copy of this report is herewith handed to you.

Sincerely,

  
R. E. Mieritz,  
Mining Consultant

July 22, 1971

Mr. Franklin Naylor  
Naylor and Associates  
6125 East Indian School Rd.  
Phoenix, Arizona, 85251

Dear Mr. Naylor:

Thank you for gathering all the copies and the original of the Mica-lite report.

Herb Bagg indicated you may have use for one copy of this report, consequently I am sending one to you which you may retain in your files for the present and the future. There would be no need to return same at any time in the future. I do have the original and two copies, and this will suffice for my use.

Sincerely,

---

R. E. Mieritz



June 16, 1971

Mr. Franklin Naylor  
Naylor and Associates  
6125 East Indian School Road  
Scottsdale, Arizona.

Dear Franklin:

With my letter of May 25th, I had requested of you the original and three copies of the report I had prepared on the Frechette Oil Absorbent Project.

Unfortunately, to date I have not received the requested copies of the report nor have I had any information from your office as to the progress it has made towards possible financing of the project.

Franklin, I would very much appreciate your sending the original and three copies of that report by return mail to the above Sunn City address.

Sincerely,

---

R. E. Mieritz,  
Mining Consultant.

May 25, 1971

Mr. Franklin Naylor,  
Naylor and Associates  
6125 East Indian School Road  
Scottsdale, Arizona

Dear Franklin:

It is now over a month since I was advised that Mr. Max Guthrie would contact me regarding a deal for the Frechette Mica-Lite project. Apparently Guarantee Life and Franklin Insurance companies are not interested in the project.

In view of this, I would like to request that the original and the ~~three~~ copies of my report on this project be returned to me. Please send them to me at the above Sun City address as that shall be my mailing and telephone address after May 28th.

I greatly appreciate the illness factor and the company affiliation changes of yourself and your associate, however, these reports have been in your possession for approximately five months and has been nil, at least I have not been advised of any progress toward a deal for the project.

I regret this action but feel it is necessary under the present conditions.

Sincerely,

---

R. E. Mieritz  
Mining Consultant

Thomas Mitcham, Dist Explor. Geologist.  
Cerro do Pasco, 26 N. Tucson Blvd.  
602-325-1531

A. D. Wandke, Pres. of Cerro Mineral Exp.  
let. 11/9/70. New York.

Auckland N.Z. 255 tons crude.

Macon Int. } 25 tons No 3  
24 California St. } 110 tons No 2  
S. Fran. } unexfoliated.

Filter Media  
Houston Texas 250 TONS

W. P. Grace.



April 22, 1971

Mr. Ned V. Scott, Jr.  
Filter-Media Company  
P. O. Box 19156  
Houston, Texas, 77024

Dear Mr. Scott:

This is just a short note to thank you personally for permitting me to talk to you over the phone yesterday and to thank you also for the most valued information you provided me regarding the specifications of your vermiculite requirements, etc.

I am making a complete feasibility study of the Solomon Mines vermiculite deposit located just west of Phoenix and the information you provided has been very helpful to say the least.

If perchance the study indicates that the project may be economically feasible and competitive, I will, as promised over the phone, advise you.

Again, thank you for your cooperation.

Very truly yours,

---

R. E. Mieritz,  
Mining Consultant.

March 30, 1971

Mr. Rea C. Tenney  
Santa Barbara of America  
930 Beltline Rd. # 132  
Irving, Texas, 75060

Dear Rea:

This is new stationary but the address and telephone number will really not be effective until the middle of June when we make the move from the present address and telephone number which you have.

Over the many years you had always expressed the thought that you desired a mining project which you might be able to get financed much like you did with the oil-gas ventures. Something which would not take too much money to develop the property by drilling and not too much money to get into production with a "fast return" on the money.

Over the years also, I have looked at many properties and none really seemed to fit the requirements. The enclosed report on a non-metallic mineral might well be of interest and a possible project of merit if financing can be obtained.

My knowlege of this dates back to the days of FMC when my lawyer and friend staked or claimed this property--more as a hobby than anything else. He was looking for a little additional "retirement" money and had no ambitions of large scale production. However, his death two years ago stopped all that and at the moment, Mr. L. Frechette, my lawyers salesman up until his death, has obtained a long term lease on the property and has attempted to get a large scale operation financed by organization of Frechette Industries and contacting many of these "goons" who always say they can do it but never produce. The latest attempt on his part was through the insurance company route and SBA guarantee. The hangup there is that the prime rate is now low and the Gov. won't permit an adequate interest rate for the Insurance Co. to go ahead with the "loan", although they have approved of the project and would be willing to make the "loan" for the commencement of the business. This is now stymied in Washington, D. C. Apparently, the Insurance Co. work similar to what you were doing in Houston before Santa Barbara. Anyway, you know more about that than I.

The enclosed report was prepared for the sole purpose of presentation to the insurance company and like I say, there is verbal approval and it has been given high priority if and when this question of interest for the Insurance company can be resolved. Meanwhile, time passes.

Basically, I don't promote, but I did contact Cyprus Mines because I do a lot of work for them. The gross or net profit is too small for them and their non-metallic division is in Trenton, N. J. They turned it down.



\$350,000.- is needed for mine development, plant equipment purchase and construction and operating capital. Approximately \$20,000.- would be needed over and above the previous figure for exploration of the ore and to develop or block out at least a five year supply. I have visited this property and examined it many times. There is no risk as to the development of the necessary reserves but it must be done before any operation can commence, or be financed. Thus, we are looking at something around \$375,000.-.

The value of the saleable product is in the oil absorbent and soil conditioner uses, not basically in the production of the vermiculite but the vermiculite in its expanded form is necessary for both the products. W. R. Grace mine at Libby Montana only has, at present, 27% vermiculite and it started out with 30%, so the 25% content at the Solomon property is not necessarily low grade, in fact, the 25% is just a little too much for the oil absorbent, 15 to 20% being a better situation. W. R. Grace was looking at it from the standpoint of a pure vermiculite product. We would use waste and the vermiculite for the absorbent and soil conditioner--all that is mined is used--no material wasted.

According to the U. S. Bureau of Mines and E. and M. J., there are only three sources in the world, Montana, North Carolina and Africa. Frechette has had inquiries from Japan, New Zealand and Texas, for the vermiculite, but like I said, the money or profit is not in that product.. The Department of Commerce has offered to develop the foreign market or help in any way. It would take more money to set up a plant to actually produce the vermiculite concentrate or if the graded ore were sold, we could only get \$9.- to \$10.- per ton and would still require the equipment up to but not including the bagging unit, or the kiln.

Deal-wise, Frechettes best position is a long term loan at 10% interest, similar to the INS. CO.-SBA route, but basically there are no assets to speak of except the equipment that would be purchased and their corporations position is such that it has no assets. Frechette also has in mind a combination joint venture-loan situation with 51% to the financiers and their share of the money and a 49% money loan to Frechette Ind. at 10% interest rate. What can be done along this line from the financiers side I do not know. You would have a better idea than I. First, I guess you would have to determine if the project looks of interest and whether you might be able to generate money interest. From my own view point, I can say that I think the potential is great, even much more so than has been indicated in the report. The project cash flow is good even at a low rate of projection. The product is good, even excellent, and better than any on the market because it prevents slippery footing on the floors.

If you have any questions or require more information, phone or write me and let me know your reaction. Would appreciate your returning the report when it has served its purpose, negatively or positively.

Had a letter from Steve which I answered shortly after receiving same. Seems he saw Georges letter when talking to Ray.

Don't you ever come to Phoenix???? or Sun City????.

Best regards,



*mentioned  
35-65 a  
week ago.*



Zonolite bag - 3 cu ft \$1.90

Safe-T-Sorb - (50 lbs)	\$1.60	each	} Dist.
Quick Sorb - (50 lbs)	1.60	"	
Floor Dry (25 lbs)	1.65	"	

---

Floor Dry - \$1.75 - 60 or more

Safe-T-Sorb - \$2.25 - 60 or more

Quick Sorb " "

---

Pro tail - \$3.00/bag

4/19/71

June 16, 1971

Mr. R. J. Kujawa, Chief Geologist  
Construction Products Division  
W. R. Grace Company  
Libby, Montana.

Dear Mr. Kujawa:

I am sorry I was not able to accompany you and Mr. L. Frechette on your visit to the Solomon Mines vermiculite deposit just west of Phoenix, Arizona.

Mr. Frechette called me after your visit to the property and advised that it was necessary for you to continue your travels. He also advised that you had taken some samples at various points and that you would report to him as to the results. In this light, I have enclosed a print of a map I had completed in August of 1970 which shows the topography, etc. I forward this to you first to aid you from the standpoint of your examination of the property and secondly to request of you to indicate the relative positions of the the samples taken and their identifying marks. When same has been completed, I would appreciate if you would forward the enclosed print with your necessary remarks on same.

You may use the print as a base for your maps which might be included in your report to your superiors.

Sincerely yours,

---

R. E. Mieritz,  
Mining Consultant

cc: L. Frechette



*Mica-Lite*<sup>®</sup>

## OIL & LIQUID ABSORBENT and SOIL CONDITIONER

**TYPICAL USERS:** ● Homes ● Hotels ● Motels ● Hospitals ● Airports  
● Airlines ● Offices ● Businesses ● Parking Lot Operators ● Garages  
● Transmission Shops ● Heavy Equipment Overhaul Shops ● Truck Service  
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- Safe • Fireproof • Economical
- Many Uses • Keeps Soil Workable-Retains Moisture
- Completely Inert & Sterile







# Mica-Lite®

## ABSORBS OILS • Acids-Any Thin Liquid CONDITIONS SOIL • Permanent-Doesn't Decompose

Furnished in 1.35 cubic ft. paper bags

### DIRECTIONS FOR USE AS AN ABSORBENT

### DIRECTIONS FOR USE AS A SOIL CONDITIONER



**Fast Oil & Liquid  
Pick-up • Fireproof  
• Economical**

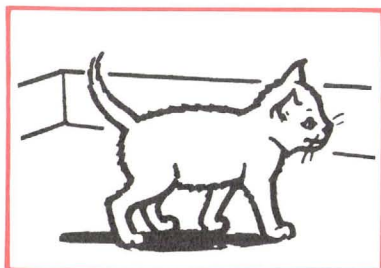
1. Pour **Mica-Lite** on oil or liquid to be cleaned. Be sure and use enough.
2. Using the back edge of a push broom (or other instrument) spread the **Mica-Lite** evenly over the entire area.
3. Let the **Mica-Lite** set for 3 to 5 minutes. During this time, it will absorb the substance.
4. Sweep up the **Mica-Lite** and save to use again. **Mica-Lite** can be re-used until it turns dark in color, as long as it remains a light brown, it is usable.
5. For oil stains or dried oil spots, first apply a stoddard solvent to dissolve the oil, brush slightly and allow the solvent to penetrate for 2 to 3 minutes. Then use **Mica-Lite** steps 1 through 4 to pick up solvent and oil.

**For Home Planters,  
Flowerpots,  
Landscape Areas,  
Golf Courses, Etc.**

1. Loosen and break up soil, then rake level.
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3. For small flower pots, mix ¼ cup **Mica-Lite** to 1 cup soil.

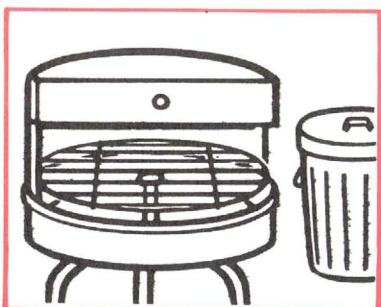
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Your gardening, weeding, etc., will be easier when you work with soil that does not pack down and become rock-hard. Because **Mica-Lite** absorbs moisture, the soil stays workable and yet firm. It does not have to be re-added like other mulch type conditioners because **Mica-Lite** is a mined earth product and will not rot or deteriorate when moisture is added as organic compost products do.



### FOR PET LITTER AND PET ACCIDENTS

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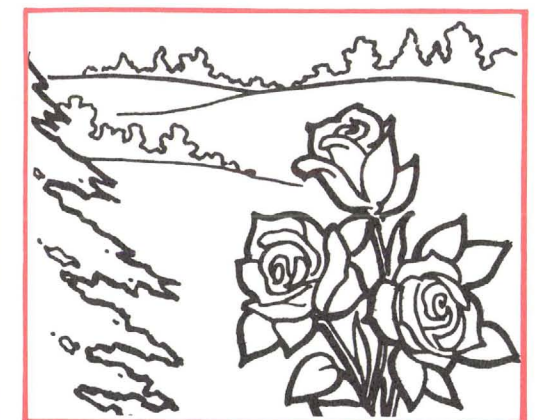


### FOR BARBECUE AND GARBAGE CANS

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2. Pour **Mica-Lite** 1" deep in your kitchen or backyard garbage cans. It will absorb water, grease and food juices, and keep your garbage cans neater and makes them easier to empty.

### Recommended Ratio

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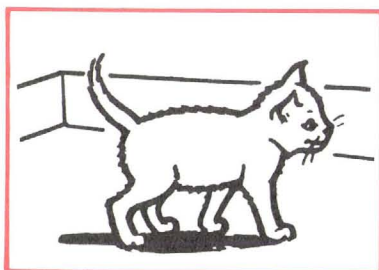
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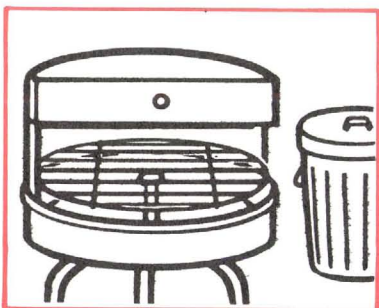
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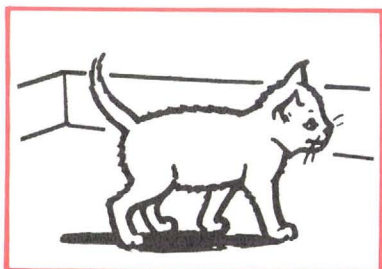
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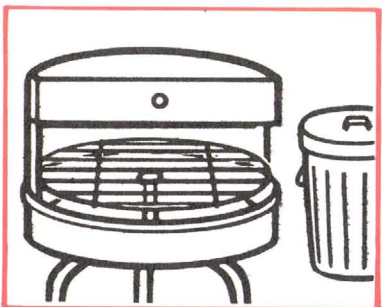
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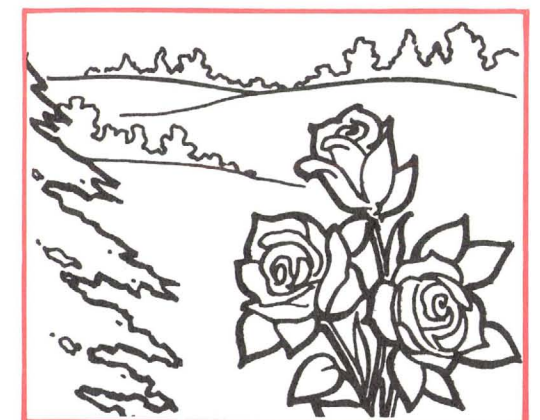
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*UNITED  
SIERRA*

BOX 1201      TRENTON, NEW JERSEY 08606  
DIVISION CYPRUS MINES CORPORATION  
TELEPHONE 609 • 883-5111      TWX 510 • 685-9585

March 24, 1971

Mr. R. E. Mieritz  
5822 North 22nd Place  
Phoenix, Arizona 85016

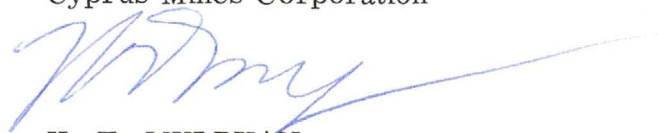
Dear Mr. Mieritz:

We have studied the data which you submitted with regard to the Mica-Lite proposal, and feel this would not fit in with our general division plans. Nevertheless, we do appreciate your calling this matter to our attention.

As you requested, your brochure is enclosed herewith.

Very truly yours,

UNITED SIERRA DIVISION  
Cyprus Mines Corporation



H. T. MULRYAN  
President

HTM:EE



March 11, 1971

Mr. H. T. Mulryan  
United Sierra Division  
P. O. Box 1201  
Trenton, New Jersey, 08006

Dear Mr. Mulryan:

Thank you for your phone call of even date. Herewith the report on the project discussed during our conversation.

Before proceeding, permit me to say that I have no assigned nor hidden interest in this project, my position being strictly the consulting phase. The report was prepared on behalf of Frechette Industries for presentation to an Insurance Company through their local agent. The New York based Insurance Co. management expressed their desire for me to be Board Chairman and Executive Officer of the operating corporation (watchdog) for their money. In essence, they have approved the loan and the project has a high priority, but the negotiations of all the Insurance companys making commercial loans with S.B.A. have bogged down (hassel over rates of interest over and above prime rate). This source of revenue is therefor dead center.

After my Turkey assignment for Cyprus Mines, Jim Hansen mentioned to keep Cyprus in mind should something good come up. Thus my phone call to Jim to see if this project might suit the requirements of yearly profits. The ultimate cash flow may be too small.

The report was prepared specifically for presentation to the Insurance Company for their requirements. You will therefor have to perhaps overlook or revise in your mind some statements or figures.

The board members (4) of Frechette Industries are professional men but not in the mining or mineral processing industry, consequently are really not well versed in these phases. Mr. Frechette is the ram rod so to speak and has done much as to researching for all the voluminous information he has gathered particularly in the market end.

If you have any questions or if I can help you in any way, please call or write either myself or Mr. Frechette. He is knowledgeable to the fact that I have presented the project to Cyprus and in turn to United Sierra.

Thank you for your consideration.

Very truly yours,

---

R. E. Mieritz.

April 5, 1971

Mr. H. T. Mulryan, Pres.  
UNITED SIERRA DIVISION  
Cyprus Mines Corporation  
P. O. Box 1201  
Trenton, New Jersey, 08606

Dear Mr. Mulryan:

Thank you kindly for your letter of March 24, 1971 and the return of the brochure on the Mica-Lite proposal which I had submitted to you as a result of my conversation with Mr. Jim Hansen who in turn mentioned the project to Mr. Joe Klein in Los Angeles and your subsequent phone call.

I greatly appreciate your time and consideration reviewing the matter and sorry this would not fit the general division plans of United Sierra.

Thank you for returning the brochure.

Very truly yours,

---

R. E. Mieritz,  
Mining Consultant.



A PRELIMINARY REPORT

on the

CAPITAL COST ESTIMATES

for

MINE DEVELOPMENT

AND

PROCESS PLANT EQUIPMENT

PURCHASE AND ERECTION

for

PRODUCING Mica-Lite, ABSORBENT

by

FRECHETTE INDUSTRIES, INC.

PHOENIX, ARIZONA

Authored by

Richard E. Mierita  
Mining Consultant  
Phoenix, Arizona

September 10, '70

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**Attachments:**

- ARC Laboratories Report, August 26, 1970
- Barclays Tillage Company, August 31, 1970
- Boyles Bros Drilling Co., August 27, 1970
- Walter R. Lunt, September 1, 1970
- Western Machinery, September 1, 1970
- StRegis Paper Co., May 20, 1970
- StRegis Paper Co., May 6, 1970
- Karstrom Co. (Spee-Dee) June 1, 1970

- Map No. 1. Index Map.
- Map No. 2. Surface Map (Portion of Solomon Mines Property)
- Map No. 3. Mine Development
- Map No. 4. Process Plant Flow Sheet



INTRODUCTION: *Foreword*

The writer has been retained by Frechette Industries Inc., Phoenix, Arizona to prepare this financial requirement report covering the phases of raw material source and supply and the plan and design of a process plant to convert the raw material to a marketable and profitable product. A thorough study of all phases has been completed by the writer and this report reflects the writers study and analysis of the Project.

(a) PROPOSAL:

Frechette Industries proposes to (a) utilize a serpentine vermiculitic micaceous type raw material, (b) process by simple mechanical crushing to proper size and heating for exfoliation to about twice its normal volume, and (c) market the exfoliated material as an Oil Absorbent - trade name: Mica-Lite.

(b) SCOPE OF REPORT:

This report covers the planning, design, time factors and financial requirements for the following phases:

- Mine* (1) Exploration and development of a mineral deposit by core drilling to prove the existance of a source and supply of an acceptable and processable vermiculitic micaceous raw material,
- (2) Prepare deposit for mining, construct haulage roads and a surge pile area,
- (3) Mine and transport <sup>30,000</sup> ~~5,000~~ initial tons of raw material to Plant Area,
- Plant* (4) Prepare Plant Area for installation and erection of process equipment,
- (5) Install and erect process equipment,
- (6) Operate process plant on trial basis to make minor operating adjustments for greatest efficient operational procedures, equipment-wise and labor-wise, and
- (7) ~~Mine in excess of 25,000 tons of raw material.~~

(c) FINANCIAL REQUIREMENT SUMMARY:

The financial requirements for the above increments of the proposed Project are as follows:

(1) Access Drill Road Construction	\$ 1,860.-
(2) Core Drilling, 1200 feet	\$ 20,910.-
(3) Mine Road (Pre Mine) Construction	\$ 4,814.-
(4) Mine 5000 tons (Contract Hauling)	\$ 16,815.-
(5) Plant Site Preparation (Pre-equipment)	\$ 12,815.-
(6) Equipment Installation and erection	\$ 8,840.-
(7) Equipment Purchase	\$117,896.-
(8) Plant Operation, Trial Period	\$ 5,275.-
(9) Mine <del>5,000</del> 15,000 Tons, (Stockpile)	\$ 15,310.-
	<hr/>
	\$203,935.-

### PERTINENT FACTS:

Frechette Industries has a royalty type lease on six unpatented standard lode mining claims in Sections 33 and 34 of T. 2 N., R. 3 W. and Section 4 of T. 1 N. R. 3 W. G. & S. R. E. & M., Maricopa County, Arizona, approximately 30 miles due west of Frechette Industries' Plant site at 59th Ave. and Buckeye Road, an industrial zoned area of Maricopa County. (Map No. 1, INDEX MAP).

The writer has previously examined the property geologically and in an earlier report inferred the existence of a substantial reserve tonnage of the raw material.

A local Phoenix laboratory completed "heating" tests on samples of the raw material to determine critical exfoliation temperatures, time and expansion qualities. A copy of this report is herein included.

The writer also personally completed a simple crushing test of the material to determine its crushing characteristics for selection of the proper crushing equipment.

### HISTORY:

As early as 1966, Mr. D. L. Solomon, an attorney and owner of the mining property, experimented with the material and produced a saleable product which was marketed as Mica-Lite, an Oil Absorbent. Mr. L. Frechette joined Mr. Solomon in 1967 as salesman and who initiated, persued and had just started to create what could be a considerable potential market in the Phoenix area - thus proving a market did exist. The death of Mr. Solomon ~~stalled~~ the effort.

*halted*

Mr. Solomon produced the marketable product simply by using a flame thrower pointed toward the mine pit bank, screening the exfoliated material and bagging same.

Frechette Industries plans to produce Mica-Lite on a large scale. To accomplish this, financing is being sought.

### RAW MATERIAL SOURCE and SUPPLY:

The serpentine vermiculitic micaceous raw material source and supply is the Solomon Mines property as previously described. This material exfoliates upon heating.

Quoting in part from Dana's Textbook of Mineralogy, Fourth Edition, page 674 - "The VERMICULITE GROUP includes a number of micaceous minerals, all hydrated silicates, in part closely related to the chlorites, but varying somewhat widely in composition. They are alteration products of the micas biotite, phlogopite, etc and retain more or less perfectly the micaceous cleavage. Many of them are of a more or less indefinite chemical nature and the composition varies with that of the original mineral and with the degree of alteration".



"The laminae in general are soft, pliable and inelastic. Heated to 100 to 110°, most of the vermiculites lose considerable water which is probably hygroscopic; at 300° another portion is often given off; and at red heat a somewhat larger amount is expelled. Connected with the loss of water upon ignition is the common physical character of EXFOLIATION; some of the kinds show this to a marked degree, others to a lesser degree".

The serpentine variety has colors from leek-green, blackish green, oil and siskin green or brownish red and brownish yellow.

For all practical purposes the above completely describes the Solomon Mines raw material.

In an earlier geologic ore reserve report, the writer submitted the following conclusions:

- (1) Approximately 115,000 tons of vermiculite rock can be inferred as a reserve in the area of the present operation. (V#5 claim) and,
- (2) Approximately 600,000 plus tons of vermiculite rock should be available as a future potential from the other two claims shown on the included map (MAP No. 2 - GEOLOGIC MAP).

Because the stated reserve tonnages are geologic inferences, exploration and development of the deposit by core drilling is a pre-requisite to any forward movement of process plant construction and/or erection. An ore reserve in excess of 100,000 tons must be proven to justify and warrant feasible advancement through process plant construction, product production, marketing and profitable revenues.

A 100,000 ton proven reserve would have an "in place" value of \$8,800,000. - based on a finished product average wholesale and retail market value of \$88.00 per ton or \$2.20 per bag of product.

#### MINE PROPERTY FACILITIES:

The physical placement of this mining property is such that it is 2 miles to the nearest electric power, four to five miles to the nearest natural gas source and 3 miles to the nearest water source, unless a water well were drilled approximately 3/4 mile south of the property. The nearest railroad is at Buckeye, 8 miles distant by road.

The property's position as described above relative the available facilities dictates that a processing plant must be located elsewhere than at the property.

Ore haulage to the chosen plant site, 59th Ave. and Buckeye Road, is not particularly costly when related to the fact that all of the material in a ton would be used as the product - in other words, no payment for hauling waste material.

All required facilities are at hand, or very near, to the chosen plant site.

Climate-wise, short of a disaster, the writer foresees no deterrent against

a continuous, all year mine operation, if such is required. The planned stock pile of 25,000 plus tons would take care of any mining delay.

PLANNED PROGRAM of PROJECT:

The planned program of the Project requires several increments or phases both time-wise and finance-wise. This report, as prepared by the writer and as previously mentioned, considers only those phases of the Project from Mine Development through Process Plant construction and initial process plant operation to the final marketable product, - Mica-Lite, an Oil Absorbent, in 50 pound or 1.5 cubic foot content bags. Overall production costs, marketing costs and management costs, etc., are reported on by the management of Frechette Industries.

This report therefor considers the following phases:

- (a) Exploration and Development of the source and supply of the raw material,
- (b) Pre-mine haulage road construction (access to property) and pit road construction as well as surge pile area construction,
- (c) Mining an initial 5000 tons and transporting same to the Process Plant at 59th Ave. and Buckeye Road,
- (d) Plant site preparation; process plant portion only, pre-equipment arrival,
- (e) Process Plant equipment installation and erection,
- (f) Process Plant trial operation period,
- (g) Initial Process Plant production period, and
- (h) Mine and stockpile at mine, 25,000 tons raw material, ready for transportation to the plant when needed.

Financial requirements, staging periods and times for each of the above increments of progress are shown in Schedule A. Explanations of the increments, financial details to support the schedule figures and various estimates, justified by writers experience, and when applicable, follow:

(a) Exploration and Development:

Proving by core drilling the existance of 100,000 plus tons of usable quality vermiculitic micaceous raw material is the initial and most important increment of the Project.

To accomplish this goal, the writer proposes core drilling 9 to 12 or more holes, as indicated on MAP No. 3 - (Mine Development), totaling 1200 feet. These holes would not exceed 150 feet in depth.

Based on information provided by Boyles Bros. Drill Contractors, the writer estimates a financial requirement as follows:

Mobilization	\$ 250.-	
1200 feet @ \$10.60/ft.	\$12,720.-	
25% for extras (casing, cementing, etc.)	\$ 3,200.-	
Water truck rental and milage	\$ 900.-	
Core Boxes	\$ 180.-	
Total		\$17,250.-
Access drill road Const. Dozer, 48 hrs. @ \$28.-/hr		\$ 1,350.-
Consulting Supervision and Expenses		\$ 3,570.-
Total		\$22,170.-



SCHEDULE "A" - TIME AND EXPENDITURE TABLE - FRECHETTE INDUSTRIES INC., MINE DEVELOPMENT TO INITIAL PRODUCTION STAGE.

MONTH	FIRST		SECOND		THIRD		FOURTH		FIFTH		Totals	Supervs.	Totals	
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.				
(A) - Access Drill Road Const.	\$ 1,350													
(B) - Core Drilling (Contr.)	\$ 3,300	\$ 5,200	\$ 5,200	\$ 3,550										
(C) - Mine Road Const. (Pre-Mine)				\$ 2,960	\$ 1,344									
(D) - Mine 5000 Tons (Con't Haul)					\$ 7,350	\$ 8,700								
(E) - Plant Site Preparation (Pre-equipment)				\$ 5,840	\$ 2,680		\$ 1,500	\$ 1,500						
(F) - Equipment Installation and Erection						\$ 3,000	\$ 3,000	\$ 1,800						
(G) - Equipment Purchase. Order						\$ 32,000	\$ 32,000	\$ 16,056	\$ 37,840					
(H) - Plant Operation Trial Period								\$ 2,850	\$ 1,425					
(I) - Plant Full Production Period														
(J) - Mine (stock pile 25,000+ tons raw material)							\$ 3,600	\$ 3,600	\$ 3,600	\$ 3,600				
(K) - Consulting Supervision & Expenses.	\$ 1,020	\$ 1,020	\$ 1,020	\$ 1,020	\$ 1,020	\$ 1,020	\$ 990	\$ 990	\$ 990					
<b>Totals</b>	\$ 5,670	\$ 6,220	\$ 6,220	\$ 13,370	\$ 12,394	\$ 44,720	\$ 41,090	\$ 26,796	\$ 43,855	\$ 3,600	\$ 203,935.-	\$ 9,090.-	\$ 203,935	
LABOR FORCE - Mining . . . . .					1	1	1	1	1	1				
Plant Construction . . . . .				4	4	5	5	4	5					
Plant Operation (Trial) . . . . .													** (Included in Marketing Report)	
<b>Totals</b>				4	5	6	6	6	6	1				

\* These two increments are considered as one phase, total expenditure being \$22,170.-.

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Access drill roads and drill locations must be constructed to permit the truck mounted drill unit to enter the "target" area. Such roads are shown as green color on Map No. 3 - Mine Development. One weeks work - 48 hours - of dozer-operator rental will be required to construct the drill roads and drill locations.

The writer estimates no more than a six week period to drill 1200 feet of hole. Commencement of such work immediately upon dozer construction completion is possible. (Schedule A). Disbursement of payments are also indicated but it is likely that earlier completion may be possible, in which event faster disbursements would be required. Drill Contractors tend to request advance monies be bank escrowed to assure their payment.

The proposed drill footage and results will definitely provide positive or negative data on which to advance a justifiable decision for moving forward on the Project or to reject the balance of the proposal as submitted. Drilling results could easily provide a favorable decision mid-way through the six week period allocated to this program, however, such is not the case if drilling results to that point lack continuity. A final decision, either way, would be consummated no later than at the end of the 3rd two week period of Schedule A.

MINE ROAD (Pre-Mine Construction):

With the advent of a favorable decision to move forward on the Project, pre-mine construction as well as pre-equipment plant site preparation and process plant equipment ordering can all commence at the end of the 3rd two week period - or sooner. *immediately*

Pre-mine preparation consists of constructing main line haulage road (2 miles), pit roads, bench level approach roads and a 25,000 ton surge pile area. (brown coloring on MAP No. 4, - Mine Development) A portion of this work was "roughed in" *previously* to the drilling program. (increment *2 small amt of overburden removed*)

*The pre-mine* This work involves dozer and operator rental *and* as well as grader and operator rental. A time period of three weeks is required. (Schedule A, increment "A"). The financial requirement breakdown is:

Dozer rental, 168 hours @ \$28.-/hr.	\$ 3,584.-	<i>4704</i>
Grader rental, 40 hours @ \$18.-/hr.	\$ 720.-	<i>720</i>
Consulting Supervision and Expenses	\$ 510.-	<i>510</i>
Total	\$ 4,814.-	<i>5424</i>

*5,934*

MINE 5000 TONS (Initial): *RAW Material*

Mining the initial 5000 tons can commence at the start of the 5th two week period. This operation involves rental of dozer and operator, rental of 1 1/2 cubic yard front end loader (company's labor to operate) - and contract truck hauling from the mine property to the plant site, approximately 30 miles.

The 5th and 6th two week periods are devoted to this operation with the resulting financial requirement breakdown as follows:



Dozer rental, 145 hours @ \$28.-/hr.	\$ 4,060.-	
Front End Loader rental, (Comp. Oper. Inc'd)	\$ 2,090.-	
Consulting Supervision and Expenses	\$ 765.-	
Total		\$ 6,815.-
Contract Truck hauling, \$2,00/ton		\$10,000.-
Total		\$16,815.-

PROCESS PLANT SITE PREPARATION:

Immediately following a favorable "forward moving" decision based on the drilling results, pre-equipment plant site preparation can begin - start of the 4th two week period. Much of this work is labor and involves construction of the concrete ore storage pad, concrete foundations for the process plant equipment, etc. Lack, at this time, of engineered foundation drawings from the suppliers prohibits exacting financial requirement estimates, however, the writer believes the following estimate to be within the realm of reality.

Labor, <sup>189</sup> 126 man days @ <sup>50.00</sup> \$40.00/day	\$ 5,040.-	9,450.-
Material & Supplies. (concrete, lumber, etc) (equipment rental)	\$ 6,480.-	7,500.-
Consulting Supervision and Expenses	\$ 1,295.-	1,295.-
Total		\$12,815.-

\$18,245

EQUIPMENT INSTALLATION and ERECTION:

Process Plant equipment installation and erection consists of labor, small amount of materials and supplies (wiring, small size structural shapes, etc) and equipment rental, mostly crane being required.

Labor, <sup>150</sup> 102 man days @ <sup>50.00</sup> \$40.00/day	\$ 4,080.-	7,500.-
Material, Supplies and equipment rental	\$ 5,720.-	5,720.-
Consulting Supervision and Expenses	\$ 1,040.-	1,040.-
Total		\$8,840.-

\$14,260

EQUIPMENT PURCHASE:

Ordering of the equipment can commence at the start of the 4th two week period, - viz., - immediately following a favorable decision to move forward on the Project. Suppliers have indicated a 5 to 6 week delivery, however, it is more likely an 8 week period would be required. Suppliers have also indicated full payment within 30 days after delivery. The writer urges that 60 to 90 day periods of payment be requested to insure against faulty or inoperative equipment.

In view of this suggestion, the writer has spread the capital cost of equipment purchase over a two month period, (Schedule A), the payment in the 9th two week period being that for the complete bagging, sealing and palletizing unit. This complete distribution of payment is shown in Schedule A.

The required equipment and all necessary components as electric motors,

switch gear, etc., are listed and costed as follows. Prices are substantiated by the suppliers included quotes. Prices also include freight and taxes.

Process Plant Equipment

Pan Feeder, complete <i>or equivalent</i>	\$ 8,340.-	
1024 Jaw Crusher, complete <i>or equivalent</i>	\$13,350.-	
2416 Roll Crusher, complete	\$14,891.-	(Includes tax & Fght)
3x10 Vibrating Screen, Tax & Fght	\$ 2,703.-	
5 - 10 ft. Conveyors @ \$2,075 ea.	\$10,375.-	
2 - 14 ft. Conveyors @ \$2,330 ea.	\$ 4,660.-	
1 - 30 ft. Conveyor	\$ 3,220.-	
1 - 20 ft. Bucket Elev., complete	\$ 2,410.-	
1 - 40 ft. Bucket Elev., complete	\$ 2,965.-	
1 - 65 ft. Bucket Elev., complete	\$ 4,480.-	
1 Distributing Unit for Tanks	\$ 510.-	
4 - C-12-8 Storage Tanks, \$2,163 ea.	\$ 8,652.-	
1 - 1/2" steel storage Tank (Allison)	\$ 2,000.-	
1 - Rotary Kiln, USED, Keller Mach.	\$ 1,500.-	<i>25,000 Est</i>
<i>Furnace</i>		
<b>Total, Process Plant Equipment</b>		<b>\$ 80,056.-</b> <i>103,556</i>

Bagging Equipment

1 - Bagging Unit	\$ 4,710.-	
1 - Bag Closing Conveyor	\$ 1,750.-	
1 - Bag Closer Unit	\$ 3,600.-	
1 - Conveyor	\$ 2,400.-	
1 - Palletizer Unit	\$19,600.-	
1 - Conveyor	\$ 1,995.-	
Freight and Sales Tax on above	\$ 3,785.-	
<b>Total, Bagging Equipment</b>		<b>\$ 37,840.-</b>

**Grand Total**

**\$117,896.-**  
*141,396*

PLANT OPERATION, TRIAL PERIOD:

The trial period of plant operation is expected to start at the beginning of the 8th two week period. Three weeks have been allocated to this phase to make the necessary equipment adjustments to obtain the highest possible degree of efficiency.

Operation costs per ton during this period will, of course, be higher than the anticipated production costs - perhaps 2 to 3 times -, mostly because of the "stop and go" status. During this period however, data can be obtained to more accurately forecast the future continuous operation costs - particularly from the standpoint of the variables, natural gas and electricity consumption, labor being relatively constant.

For this period, the writer allocates the following:

Labor, 66 man days @ \$40.00/day	\$ 2,640.-	
Gas and power	\$ 1,635.-	
Consulting Supervision & Expenses	\$ 1,000.-	
<b>Total</b>		<b>\$ 5,275.-</b>



During this period also, personnel will be trained for the respective labor categories or classifications in the plant flow sheet.

PLANT PRODUCTION, FULL SCALE CAPACITY:

The writer visualizes a full scale capacity plant operation utilizing a labor force of six, possibly 7, for a 24 hour period. This includes a loader operator feeding the raw material, a bagging unit operator, perhaps a helper and a palletizer operator, all working on a single shift basis. Three plant operators, one on each of three shifts, will be required, the day shift operator doubling as the "supervisor" for the complete plant operation.

The presented plant design should process 160 tons of raw material or produce in excess of 6000 bags of finished product in 24 hours. All phases of the plant process, except the kiln, and final product storage bins, are designed to handle 160 tons of raw material on a single, 8 hour shift. The kiln is designed to operate continuously to avoid repeated heating and cooling which would cause early and excessive fatigue of the kiln lining and greater fuel consumption.

Any desired increase in production over and above 6,000 bags of product would require double shifting the crushing section and the bagging section - labor-wise - and three additional men would be required. Additional equipment required for an increased production would be a second kiln - or replacement of the original with a larger unit - and the necessary finished product storage tanks. The necessary conveyors must also be included.

MINE - (Stockpile 25,000+ Tons):

The initially mined 5000 tons of raw material, on the basis of full scale plant operation, is but one months supply. It is therefor suggested that, upon completion of mining the initial 5000 tons, the rented dozer and front end loader remain and continue to mine 25,000 to 30,000 tons and stock pile same at the mine "surge pile area".

This tonnage would represent a 5 or 6 month supply. Retaining this equipment should result in overall reduced mining costs per ton.

Mining this additional tonnage requires the following expenditure:

Dozer, <sup>400</sup> 56 hours @ \$28.00/hr	\$ 9,408.-	13,440
Loader, rental 2 1/2 months, \$1200.-/mo.	\$ 2,400.-	3,000
Operator, 2 1/2 months @ \$800.00/mo.	\$ 1,600.-	2,400
Fuel, oil, etc.	\$ 992.-	1,892
Consulting Supervision & Expenses 2 1/2	\$ 910.-	1,360
<b>Total</b>	<b>\$15,310.-</b>	<b>21,790</b>

19,930  
9,965

The mining costs for the 25,000 tons in this instance (not including truck loading and hauling) would be \$0.576/ton. That for mining and truck loading the initial 5000 tons is \$1.21/ton.

0.852/ton.

CONSULTING SUPERVISION:

It is planned and approved by Frechette Industries that the writer be retained to supervise the various increments up to the full production stage of the Project.

The fee for this service is \$1,800.- per month plus expenses which are estimated at up to \$220.- per month - and include use of car and small sundry expenses.

The supervision fee and expenses have been distributed as shown in Schedule "A" and such distribution is based on the writer opinion of time allocation to each increment as the Project proceeds to completion.

CONSIDERATIONS:

The preceding facts, plans and cost figures consider the Project increments from Exploration and Mine Development of the raw material to a complete process plant, constructed in place and ready to operate at full capacity and at maximum efficiency.

The management of Frechette Industries has prepared a separate report on the plant operation, sales buildup and marketing of the product, Mica-Lite, Oil Absorbent - as well as the cash flow schedule and return of capital investment.

Respectfully submitted,

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Richard E. Mieritz  
Mining Consultant,  
Phoenix, Arizona.

September 10, 1970