

PE-065-01

STATE OF ALASKA
DIVISION OF MINES AND MINERALS

REPORT ON
MESPELT MINE OPERATION

OF

STRANDBERG MINES, INC.

NIXON FORK DISTRICT
MEDFRA QUADRANGLE, ALASKA

MARTIN W. JASPER
State Mining Engineer
February 1961

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REFERENCES

Map attached

USGS Bul. 714. Pg 93
USGS Bul. 722. Pg 149-162
USGS Bul. 783. Pg 97-144
USGS Bul. 864. Pg 229-242

REPORT ON
MESPELT MINE OPERATION

OF

STRANDBERG MINES, INC.

NIXON FORK DISTRICT
MEDFRA OUADRANGLE, ALASKA

INTRODUCTION

The old Mespelt gold-copper property was visited July 31 and August 1, 1960, at invitation of T. R. Strandberg, of Strandberg Mines, Inc. During this period attention was given "Safety First" provisions and practices.

LOCATION AND ACCESSIBILITY

The property is located at approximate coordinates Long. 154° and Lat. 63° 13'N in the Medfra Quadrangle. It is presently most readily accessible via "bush" plane from McGrath, (a 25 to 30 minute flight) with landings on a fair airstrip at south end of a ridge about 1 mile from camp.

The mine shaft, hoist, power plant, and shop, situated on west slopes of low well rounded mountain, is $\frac{1}{2}$ to $\frac{3}{4}$ mile west of its ridge at end of the Medfra road, which was built in the early days of the camp to serve the various mining property owners. This road has not been maintained for many years, and a 2 or 3 mile section across the lowlands is reported to be impassable for trucks or tractors during the wet summer months.

HISTORY AND OWNERSHIP

The first activity in this Nixon Fork mining district followed discovery of placer gold on Hidden Creek by F. F. Mathews in June 1917. Before end of that season other prospectors examined all streams in the area and staked numerous claims. Character of the placer gold generally indicated a near-by source, and search for it resulted in discovery of high-grade outcrops and the staking of numerous gold-lode claims in the district the following year. (1)/

During 1918 and 1919 trenching was done and a number of shafts were put down with very encouraging values found in the small orebodies developed. During winter of 1919-1920 the original (Crystal Lode) discovery of Pearson and Strand at head of Ruby Creek, was optioned to Thomas Eakin, who took out several hundred tons of high-grade which was shipped to the Tacoma smelter the following summer. (1)/

The most promising claims were taken over by the Treadwell Yukon Co., Ltd., early in spring of 1920, who conducted an intensive prospecting and development program that summer. In 1921 this company installed a 10 stamp mill to handle the ore from the claim groups acquired. With the ore shoots found to be erratic in occurrence, small in tonnage and of limited extent, the company discontinued milling operations in 1923 except for the Whalen lode which it continued to work for another year. The properties then reverted to the various owners.

The Treadwell Yukon Co., Ltd., is unofficially reported to have produced \$114,024.00 in gold during the 4 months mill operating season of 1922, with an slightly higher production in 1923, for a total \$235,000.00. (2) This production is said to have come largely from the Whalen mine, with some from the Pearson-Strand claims. Their operations are considered to have been at a loss. In 1924 E. M. Whalen and 4 associates leased the Treadwell mill. The small tonnage of broken ore remaining in the Whalen mine was milled and \$80,000.00 was recovered.

Upon relinquishment of the several claim groups (including the Whalen & Griffen, Pearson & Strand, and McGowan & Mespelt) by the Treadwell Yukon Company, "seven claims at head of Ruby Creek, which included site of the Crystal Lode, together with the stamp mill, were taken over by Pearson & Strand but subsequently passed into hands of the Mespelt Brothers and their associates, who have operated these lodes continuously during period of 1926-1933." (3) These operators continued their operation up to their granting lease to H. G. Wilcox and Associates in 1950 and 1951. Since 1952, Strandberg and Sons, Inc., have held the property under lease agreement.

Information from those generally familiar with the Mespelt Brothers operation suggests their gold production to have been approximately \$1,000,000.00, which indicates a total production from the several lodes to have been in the neighborhood of \$1,315,000.00.

During total period of the 10 stamp mill operation, to date, the mill tailings were saved in a pond on the mountain slope, built up by use of brush. This pond has been calculated to contain 10,000 tons. Allowing for possible loss of 2,000 tons escaping down the slope through the brush dam, a total of 12,000 tons is probably the maximum milled. Assuming the production to have been \$1,315,000.00, and accepting the claim that average gold values in the tailing to be \$30.00 to \$35.00 per ton (taking \$30.00 as an average), the mill heads would have averaged \$139.00 per ton, - a much higher average value than the \$25.00 to \$35.00 per ton (Au @ \$20.+/ton) suggested by Mr. Mertie. (3) The copper values in the tailings were not determined; the ore ranged within limits of 2 to 12%. No effort has been made to recover the copper to date.

Scarcity of water above the mill elevation has limited milling operations to a maximum of 4 months a year. Moving of mill to base of slope in Ruby Creek Valley might solve the water problem if sufficient ore can be developed to justify the expense.

(2) USGS Bul. 783. Page 127-128.

(3) USGS Bul. 864. Page 230, 232.

Since acquiring lease on the Mespelt property by Strandberg Mines, Inc., their work has been confined to underground development, surface exploration, extensive geochemical and geophysical work, and mapping. Ore encountered in development work has been stock-piled in an ore bin readily available for drawing whenever it is decided to start up the mill.

During summer months of last year three men (one miner and helper, and Mr. Strandberg as hoistman) were carrying on a limited mining operation, "underhand" stoping on a small orebody below the 460 Level. A calculated 144 tons had been removed up to time of visit from this stope and hauled to the mill ore bin, 3/4 to 1 mile from the shaft. An additional 253 tons (as a minimum) was estimated for a 10 foot depth below floor of this stope. ⁽⁴⁾ By end of the 1960 season the lessee reported that a total of 300 tons had been mined and hauled to the mill, with an additional estimated 50 to 100 tons of "broken ore" in the stope. This operation is located on the original Garnet Mineral Claim Group.

GEOLOGY

The geology of the Nixon Fork mining district is somewhat complex and to date not thoroughly understood from the mineralization and structural viewpoint. The area as a whole has been reported upon by several U. S. Geological Survey parties during the past 40 years. The district lies within (or along southern limits of) the Iditarod Fault Zone, a regional structural feature having a general N60E strike for several hundred miles.

In USGS Bulletin 864, pages 230 to 231, J. B. Mertie, Jr., summarizes their studies of the area up to 1933 under heading of Geology and Mineralization, from which the following extract was taken:-

"In vicinity of the lodes the country rock consists of early Paleozoic limestone and Cretaceous sandstone and shale. Both the Paleozoic and Cretaceous rocks have been invaded by a mass of quartz monzonite and related rocks, along the borders of which mineralization has taken place. The intrusive mass occurs as a plug, which outcrops in a roughly elliptical area with major and minor axes about 5 and 2 miles in length; Trend of the major axis is about N35°E. The intrusive rocks consist dominantly of quartz monzonite but include porphyritic variants of similar composition, which occur as marginal facies and as dikes. These monzonitic rocks are considered to be of Tertiary age.

"The principal gold lodes lie at or near the contact of this intrusive mass with the Paleozoic limestone, and most of those so far discovered occur in the limestone, though few of them are more than 100 feet from the contact. As these lodes occur on low ridges where outcrops are lacking, and as the underground work has been done mainly in bodies of ore, the contact relations between intrusive and country rocks are not well known. Sufficient work has been done, however, to show that the western margin of the quartz-monzonite, along which the lodes occur, is very irregular in outline and has numerous apophyses. It is also apparent that this irregular contact line has been further modified by cross faulting, some of which occurred prior to the deposition of ores. In fact it seems probable that the ore-bearing solutions followed fault planes as well as contact planes in their upward migration.

(4) Refer to 460 Level Mine Plan attached.

"The lodes consist of irregular-shaped masses of ore, which have no definite boundaries but fade into less mineralized or unmineralized country rock. Some of these ore bodies are roughly lens-shaped or disk-shaped. Most of them, regardless of their shape, have vertical or horizontal dimensions of less than 100 feet. In addition to irregularity in shape there is a marked irregularity in the distribution of gold in them, for the ore commonly occurs in irregular shoots, of varying value, within a generally mineralized ore body. The methods employed for following and recognizing ore of workable grade differ at different properties, for at some places the prevalence of copper minerals is an index of high gold content, and at other places the reverse is true.

"The ores consisted originally of gold-bearing copper and iron sulfides but have been extensively altered by processes of surficial oxidation, so that much of the gold has been released from the sulfides and now occurs as free gold recoverable by amalgamation. Most of the operating shafts so far sunk (1933) have shown this mixture of free gold and oxidized sulfides, but the ratio of oxidized to unoxidized ores differs in different ore bodies. Thus, the ore at the Whalen Mine is described as being almost wholly oxidized, whereas in the Crystal lode, at head of Ruby creek, the ore consisted of unoxidized chalcopyrite, pyrite, and bornite. The oxidized ores consist largely of the basic carbonates of copper and oxides of copper, intimately mixed with iron hydroxides. These oxidized ores have also doubtless been materially enriched by surficial processes, and as a result of such conditions it is to be expected that the ores will not only become leaner with depth but will also contain less free gold and will therefore become progressively less adapted to free milling. Inasmuch, however, as present mining operations have not extended below the zone of oxidation, and much surficial prospecting and mining remains to be done, this matter of decreasing tenor and increasing refractoriness with depth at present merits only placing on record for future consideration."

The limited surface exposures plus the relatively limited exploration and development work in the past was not mapped in detail as work progressed. That has had an end result of having no published available detailed records upon which the "casual" examiner could make intelligent predictions or "guesstimates" as to where the next isolated highgrade ore body might be located. During early days of the camp first attention was directed toward trenching and/or sinking shafts on the few highgrade outcrops. From that work the owners gained considerable knowledge of the ore habits, and signals and/or markers that often served as clues leading to another ore shoot. These "signals" included -

(a) Areas within 100 feet of the limestone-quartz monzonite "plug" or "tongues" extending from it, with limestone at or near its contact with the intrusive being the most favored area. Ore shoots in the intrusive were reported found in few places; and

(b) In fractured zones associated with cross faulting.

On surface, or where found in underground exploration drifts and cross-cuts fractures (or jointing systems) filled with limonite served as "markers"; the stronger ones, especially, justified following by drift, raise, or winze for reasonable distances.

Mr. T. E. Strandberg's exploration has included "tieing-in" and mapping (map not available at the mine) location of the original discoveries and shafts sunk upon them, and the dozer stripping of a 5 acre (more or less) area in search of possible "clues or markers" to other oreshoots. This latter work - located $\frac{1}{2}$ to $\frac{3}{4}$ mile east of the present working shaft near ridge crest - did not expose the critical limestone-quartz manzanite contact area or reveal any particular "signals" of special interest. Of possible future interest, however, is the occurrence of occasional "blebs" and disseminations of malachite and/or chrysocolla in the exposed white limestone. It is reported that these disseminated minerals have been noted over a wide area, and may have been the incentive for the extensive geophysical-geochemical exploration program by the Phelps Dodge Corporation for a 4 or 5 weeks period last summer, in area several miles to the north, with a crew (reported) of 14 men, a helicopter, and one "bush" plane.

The ore shoot being mined below the 460 Level by "underhand" stoping is of the so-called "chimney" type - that is, in this case it presently occupies a cavern created by downward migrating acid surficial waters. The ore has the appearance of large slabs that have been loosened by the downward migrating water and falling into the enlarged cavern. Post-mineral faulting was probably also a major factor in dislodgement of the slabs. Wedged in tightly by secondary iron and copper minerals deposition and a crushed limonite-limestone gouge-like material on south side, and against a limestone and quartz-monzonite wall on the north side, it requires drilling and blasting occasionally to permit mucking into a bucket which is raised by tugger hoist and dumped into a hand trammed car on the 460 level.

Floor of the stope at time of visit was an average 5 feet below the level. At southeast limit of this floor area the cavern is open for 11 foot width and for distance of 2 feet to the limestone cavern wall, which latter has a minus slope of 40 to 50 degrees. Looking down, the opening was estimated to extend for at least 30 to 35 feet, with the southeast wall appearing to steepen at that distance. This ore-shoot has an estimated 50° rake to the southeast. The ore-shoot appears to terminate 10 foot above the 460 track level. Its north and south walls are quartz-monzonite, with "slips" having 80°N and 50°S dips respectively, indicating this intrusive to be a "tongue" of the large quartz-monzonite "plug". The diverging dips suggest possibility of the oreshoot widening downward; the converging dips above the track level show narrowing width of the ore shoot, altho where the latter terminates above the track level the quartz monzonite was not evident and the material appeared to be a sheared, "gouge" like limestone with considerable limonite. The walls at southeast and northwest limits of the ore shoot are a somewhat altered limestone. The 2 foot width of limonitic, limestone gouge at northwest limit of the ore-shoot indicates a fairly strong fault of near vertical dip and northwest strike.

The Brunton-tape survey of the 460 Level shows a winze at Sta. 11, which was sunk several years ago to depth of about 35 feet, with objective of cross-cutting to the ore-shoot at that horizon. The distance to the ore-shoot from this winze should be within limits of 25 to 30 feet. (5)

Mineralization

The ore minerals present in order of their abundance in the ore-shoot are chrysocolla, malachite, azurite, free gold, and minor amounts of disseminated pyrite and chalcopryrite. The gangue material is largely composed of highly oxidized limestone with abundant limonite, and there is little doubt that a good deal of the gangue is highly altered quartz-monzonite.

The free gold - as observed in numerous hand samples - appears most abundant in the limonite, with a few specimen showing it present in chrysocolla. The silver content is negligible, with samples assayed showing only traces - that is, less than 1 ounce per ton of ore.

Sampling

Picked samples of the ore, brought in by T. E. Strandberg last summer for gold-silver analysis only as an aid in sorting the ore for mill feed by the lessee, showed the following values:-

REPORT OF ASSAY

Sample Marked	Au Oz	Ag Oz	Taken by
1	2.02	Tr	T. E. Strandberg
2	0.82	Tr	"
3	0.14	Tr	"
4	14.90	6.57	"
5	93.00 *	Nil	"
6	0.20	Nil	"
7	0.22	Nil	"
8	25.82	6.18	"
9	0.70	Nil	"
10	4.25	2.00	"
11	2.59	Nil	"

* Checked in triplicate

On August 1, 1960, 4 samples were taken with Dorr Holloway assisting, and analysis of them were as follows:

REPORT OF ASSAY

Sample No.	Width in. s	Gold Oz	Silver Oz	Cu %	Description
301	Grab	2.61	Tr	1.64	T.E.Strandberg. Grab from 9 tons of ore as hoisted to surface.
302	34"	3.03	Tr	3.05	By MWJ & DH. Oxidized fault gouge- mostly oxidized Ls & limonite. Channel taken 6' below track level @ SW corner of stope.
303	40"	4.28	Tr	8.28	By MWJ & DH. Adjoins # 302 going NE. Estimated 50% chryscolia, malachite, & azurite. Limonite abundant. Balance is highly oxidized crystalline Ls.
304	63"	4.81	Tr	2.75	By MWJ & DH. Adjoins #303. Abundant Chryscolia, malachite, azurite in oxidized & crystalline Ls.
305	18"	0.59	Tr	2.56	By MWJ & DH. From slab lying against NE wall of stope. Chryscolia, malachite, azurite. Oxidized Ls (or highly altered qtz monzonite?)

Note:- Balance of NW side (approx. 10') of stope not sampled, being covered with broken ore. (Refer to attached map of the 460 Level).

The weighted average value of the above 4 samples taken in the underhand stope is 3.79 oz (\$122.65) per ton. With the reported gold values of the impounded mill tailings being in the range of \$30.00 to \$35.00 it is guesstimated that gold recovery will be less than 75% of mill-heads.

CONCLUSIONS

The small tonnage mined and milled during past 40 years in the Nixon Forks district is of special interest. Generally of high-grade, the individual gold-lode occurrences have been small, isolated ore-shoots having no presently known well defined or direct association leading from one to another; their practical exploitation was largely limited to sinking shafts following the ore-shoot of each occurrence.

With natural high-grade outcrops limited in number, it was soon learned that ore-shoots were limited to proximity of the irregular limestone-quartz monzonite contacts (mostly obscured by vegetation and overburden) and fractured fault zones, and that limonite-filled fractures (on surface or underground) was a possible "clue" or "marker" that might lead to an orebody.

On basis of the estimated \$1,315,000 past gold production record, the calculated average value of the maximum estimated 12,000 tons mined and milled indicates \$139.00 per ton mill-heads, and a recovery record of around 75%. With a ball mill grinding the stamp mill discharge to minus 100 mesh, the gold values in the final tails are either enclosed in finely ground ore particles and/or coated with iron or other oxides. With amalgamation the only gold extraction method used by the operators, their recovery would be a very good record in any area.

With only small tonnage ore-shoots found to date, it has not been considered practical to add additional milling equipment for recovery of the copper values. Chrysocolla, a predominant copper mineral in most of the orebodies, has been an unsolved metallurgical problem until recently.

While the small gold-copper ore-shoots developed and mined in the area to date have not had the tonnage potential to attract interest of large mining companies, it continues to be an attractive one for small group of experienced miners. However, the encouraging results obtained by T. E. Strandberg from extensive geophysical and geochemical exploration over a several year period, and the disseminated copper occurrences in the Paleozoic limestone revealed by extensive stripping near the ridge crest, suggests that a "possible" large tonnage copper deposit may be proven by an extended diamond drilling program. Structural conditions are considered favorable for finding a deposit of real magnitude in that area.

MINE SAFETY CONDITION

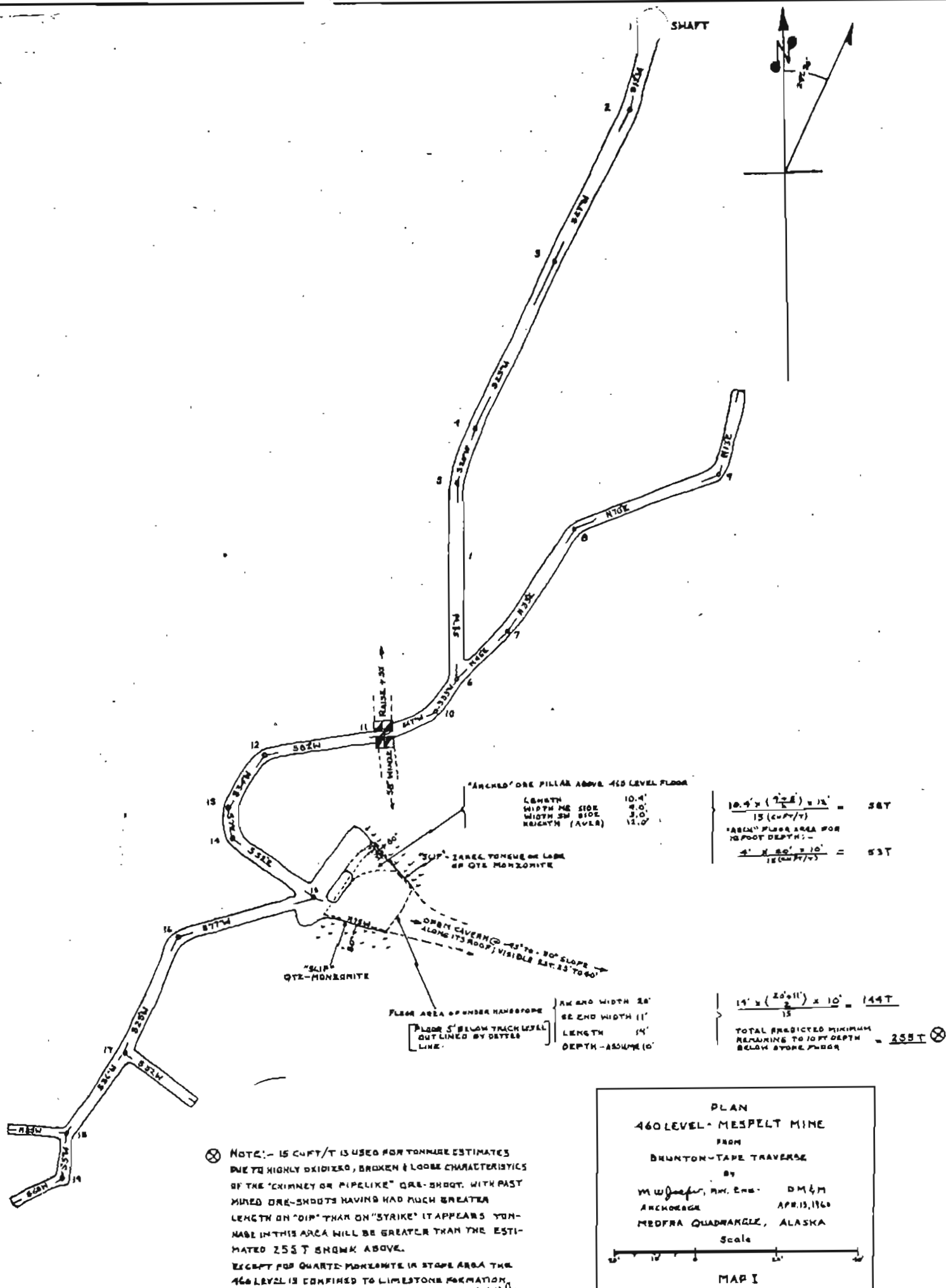
Mine inspection was limited to the more accessible workings, which included the 460 shaft, the 460 level and the underhand stope being mined below that level, the winze at Station 11, and one raise above the level. (6)

Ground conditions are generally good, requiring no timber except in fault zones where drift sets have been placed. Walls of the underhand stope showed no tendency to "spall- or slab-off" and did not require timber support at time of visit.

The untimbered winze below Station 11 had not been used since its completion several years ago, and was free from any "sluffing" or rock falls. The raise above the 460 Level has not been maintained for safe usage as an escapeway. At about 30-35 feet above the level this raise encountered "heavy ground" in mining a small ore-shoot. Timbered by the preceeding lessee, this section is considered neither safe or stable, and it will have to be cleaned out and re-timbered before it can be used safely.

The 460 foot vertical shaft, plus the 8 or 10 foot sump, is well timbered and in good condition. The shaft, 5 by 6 inside the lagging has ladders in the north side corners; there is insufficient room in the shaft for staging to be placed every

(6) Refer to attached map.



20 to 30 feet for "rest platforms" and protection of anyone using the ladders. The ladders were covered with ice and could not be readily used in case of emergency. Hoisting facilities are adequate and the conventional signals for handling men, materials, and ore are used. The round, flat bottom steel skip has a half ton ore capacity. The 5/8ths inch hoisting cable has a high safety factor for loads handled. The cable was inspected and was found to be in A-1 condition, and the hoist, powered by a gasoline engine, was in very good condition. An excellent building has been completed to house the hoisting equipment and shop facilities. It provides a clear view of shaft collar and headframe.

A weakness of the hoisting system is inherent in lack of "safety" device on the skip that would "grab" the guide rails in case of an emergency.

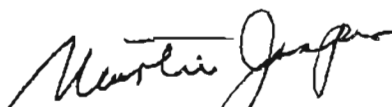
The headframe, about 40 feet in height is very well constructed of sound, native spruce. (Refer to pictures attached):

With the shaft currently being the only means of access to the mine workings, it is imperative that an additional escapeway to the surface be provided. Mr. Strandberg advised that can be done by repairing the raises between the several levels, which was estimated could be completed within a period of 2 or 3 weeks. It is urged that this be done before mining or further exploration is undertaken next season.

Water has been no problem to date. Bailing with the skip bucket equipped with an automatic foot valve, the sump is emptied with 3 to 5 trips twice a day. Source of the water appears to be largely from melting of the ice in the upper levels. Only an occasional drop of water was noted along the 460 level.

Anchorage, Alaska
February 1961

By-



Martin Jasper
Mining Engineer

State Division of Mines & Minerals

MEMORANDUM

State of Alaska

DIVISION OF MINES AND MINERALS

APR 24 1968
Div. Mines & Minerals

TO: ☐ Mary Hartley
Secretary
College

DATE : April 22, 1968

FROM: Mildred Zenger
Juneau

SUBJECT: Report No. PE-65-1

I noticed in the copy of the letter dated April 9 which you wrote to Mr. John P. Brooks that you said this report is not available for distribution.

Unless they've been lost in the shuffle somewhere, perhaps stored out of sight, there was a fairly large supply of this report and PE 85-22 when the supplies were shipped from our basement here to your office. Originally they were packed with extra supplies of circulars, but the movers repacked a lot of the stuff before they took it, so I'm not sure where these reports would have ended up.

I have a small supply on hand here (five copies) so am enclosing a couple for you until (and if) you can locate the larger supply.

Enclosures

February 5, 1962

Mr. Robert P. Wilson
Industrial Engineer
Taylorsville, California

Dear Mr. Taylor:

REF: Your Dec. 29th Letter
RE: Mespelt Gold-Copper Property

Reply to your Dec. 19th letter has been delayed until completion of various articles for our Annual Report, which I wound up a few days ago.

We do not have any additional maps or reports by others in our files, and it is suggested that you look up the references given in my report, a copy of which I believe Mr. Williams sent you.

I have not spent sufficient time on the Mespelt property to date to feel it would permit me to make specific recommendations of a program to follow. Before an exploration program could be intelligently undertaken a close study and geological mapping of the area should be completed. It is suggested that the next step to follow would be a geophysical survey, with diamond drilling of the most significant anomalies found. Results of these first procedures would more or less dictate the program to be carried on from there.

However, the foregoing is putting the "cart before the horse", so to speak, until such time that you have negotiated a deal acceptable to yourself and to the present leaseholders - the Strandberg Mines, Inc. It was suggested in my reply to your Nov. 13th letter that you contact -

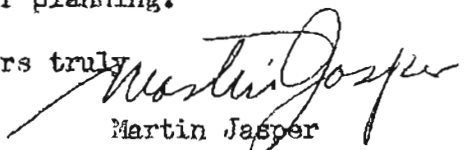
Harold Strandberg
926½ Fourth Avenue, Anchorage

regarding negotiating a deal on the property. If you have not done so it is suggested you do that. Harold is presently attending the current legislature session; he is one of 10 elected from this district, and it is likely he will not have the available time for that purpose until the session is over in late March or early April.

T. R. (Ted) Strandberg is the only one of the three brothers thoroughly familiar with the property, and he would be the most logical one ~~for you~~ to first familiarize you with the mine, and would be a good man ^{to} have look after initial exploration programming and execution. Ted has the area pretty ^{well} mapped, and did all the geochemical, geophysical, stripping, etc ~~since~~ work since they took over the property.

It is hoped the above will be of some help in your planning.

Yours truly


Martin Jasper

August 11, 1960

File 2 - Med from Quad
Mespelt Mine

Mr. T. H. Strandberg
Strandberg Mines Inc.
Mespelt Mine
Mediffa, Alaska

Dear Ted:

RE: Au Results - Aug. 1st, '60, Samples

Irwin Mitchell just completed the Au-Ag analysis of the 5 samples (1 muck of yours & 4 out of mine) I sent in from McGrath on the 2nd. He will now run the above for Cu and send them on to you when finished (corrections: he also finished the today for Cu as well). His Report of Assay is enclosed.

My description of the samples are as follows:-

- No. 301. Grab from 9 tons of "Muck" taken by you. Au 2.61 oz Cu 1.64%
- No. 302. Underhand stops, h60 level, taken by Dorr & MJ. Location 6' below track floor. Sample width 34". Cut normal from ~~east~~ south wall toward north wall. Oxidized fault gouge material mostly with little Ls fragments. Taken to determine what Au values mite be present (if any). Surprised to find it contained Au 3.03 oz Cu 3.05%.
- No. 303. Adjoining No. 302 on north side. Largely directly under vertical section of "arched pillar" 3 to 4 feet below floor of drift, h60 Level. Well oxidized material with an estimated 30 to 50% being chrysocolla, malachite, azurite. Gangue largely well oxidized CaCO3 with some crystalline Ls. Au 4.28 oz Cu 8.28%. Sample width 40".
- No. 304. Sample width 63" taken across arched section of pillar 4 or 5 feet above h60 Level floor. Gangue material similar to No. 303. 2ndary Cu minerals estimated at 1/3 of of No. 303. Au 4.81 oz Cu 2.75%.
- No. 305. Sample width 18". Taken from "slab" lying against north side wall. Gangue material similar to previous samples. Cu minerals estimated at about same amount as contained in No. 304. Au 0.59 oz Cu 2.56%.

The 4 mine (stops) samples were cut by Dorr Holloway under my direction. All samples were run in duplicate by Mr. Mitchell and checked closely.

From the above descriptions Dorr will readily recall where each sample was taken. For present this will be all. Regards to all.

Sincerely -

Martin Jasper

not mailed
9/1/60

August 10, 1960

Mr. T. R. Strandberg
Strandberg Mines, Inc.
Medfra, Alaska

Re: Mespelt Mine
Medfra Quad

C
Dear Ted:

O
Enclosed you will find print of the 460 level which was made by Brunton-Tape survey with Dorr Holloway on August 1st. On returning to McGrath that evening I worked up the notes on two sheets which I thought I would be able to complete somewhere along the line and mail to you before returning to Anchorage. However, between fighting the weather and waiting for planes I did not get around to do so until I returned to the office Monday of this week.

P
I had in mind making some vertical sections but did not have sufficient information or understanding of the occurrence to do it intelligently, so I am leaving that until I can dream up something on the subject after discussing what you have found by the end of the season.

Y
It is hoped that the 460 level plan will be of some guidance to you. Should some of the bearings between points appear to you to be somewhat questionable it is urged that you and Dorr check them.

Mitchell was on the sick-list last week so that he did not get the samples that I mailed August 2nd to him from McGrath in the furnace until today. He had, I believe, run the coppers on the samples that you brought in and had either sent them or will send them, possibly in this mail.

With best wishes for continued favorable progress and mine production.

Sincerely,

MWJ:bb

MARTIN W. JASPER
Mining Engineer

cc: Strandberg Office
J. A. Williams

Jones
PWJ-7

PWA V PWJ

JUNEAU ALASKA MARCH 17 1961 MINES AND MINERALS

MARTIN JASPER

DIVISION OF MINES AND MINERALS

329 SECOND AVE

ANCHORAGE ALASKA BR 2-3271

PLEASE SEND US YOUR MESPELT REPORT SP SO THAT I CAN ASK STRANDBERG
FOR PERMISSION TO PUBLISH THEM

JAMES A WILLIAMS DIRECTOR

171943Z

3/21/61 - Copy of message
rel 3/17 mg

Jas. A. Williams

Oct. 13, 1961

Martin Jasper

MESPELT MINE PLAN
"Mylar" Copy

C
O
P
Y

I ran across 2 "MYLAR" Mespelt Mine Plan maps this AM, which suggests that I did not send you the copy for your files. This is being mailed to you under separate cover.

M J

August 11, 1960

Mr. T. R. Strandberg
Strandberg Mines Inc.
Mespelt Mine
Medfra, Alaska

Dear Ted:

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My description of the samples are as follows:-

- No. 301. Grab from 9 tons of "Muck" taken by you. Au 2.61 oz Cu 1.64%
- No. 302. Underhand stope, 460 level, taken by Dorr & MJ. Location 6' below track floor. Sample width 34". Cut normal from ~~east~~ south wall toward north wall. Oxidized fault gouge material mostly with little Ls fragments. Taken to determine what Au values mite be present (if any). Surprised to find it contained Au 3.03 oz Cu 3.05%.
- No. 303. Adjoining No. 302 on north side. Largely directly under vertical section of "arched pillar" 3 to 4 feet below floor of drift, 460 Level. Well oxidized material with an estimated 30 to 50% being chrysocolla, malachite, azurite. Gangue largely well oxidized CaCO₃ with some crystalline Ls. Au 4.28 oz Cu 8.28%. Sample width 40".
- No. 304. Sample width 63" taken across arched section of pillar 4 or 5 feet above 460 Level floor. Gangue material similar to No. 303. 2ndary Cu minerals estimated at 1/3 of of No. 303. Au 4.81 oz Cu 2.75%.
- No. 305. Sample width 18". Taken from "slab" lying against north side wall. Gangue material similar to previous samples. Cu minerals estimated at about same amount as contained in No. 304. Au 0.59 oz Cu 2.56%.

The 4 mine (stope) samples were cut by Dorr Holloway under my direction. All samples were run in duplicate by Mr. Mitchell and checked closely.

From the above descriptions Dorr will readily recall where each sample was taken. For present this will be all. Regards to all.

Sincerely -

Martin Jasper

Jas. A. Williams

April 14, 1961

Jas. A. Williams

MESPELT MINE REPORT MAP.
MAP TRACING (Cloth)

C
Finished the 460 Level Map (transferred to tracing cloth) yesterday) and made
~~trip~~ print from it. The latter is free from "smudges" that showed on the
MYLAR tracing made from the original tracing paper Plan.

Enclosed you will find the cloth tracing and one tracing from it, which latter suggests
it will satisfy requirements. I will keep the MYLAR tracing here, prints from
which are satisfactory for my reports.

O
Also enclosed you will find the Micro Film of this Map for your permanent
records.

M J

P

Y

James A. Williams

March 17, 1961

Martin W. Jasper

Mespelt Report

With regard to your teletype message received this forenoon concerning the above report, I have withheld sending it on to you until Odin Strandberg could go over it and determine whether I had made any errors of a factual nature. HE DID SO EARLY THIS MORNING & THOT IT O.K.

Will try to get this report in the mail for you this afternoon so that you can discuss it with Harold Strandberg and see whether there are any objectionable features and/or whether he approves publishing it.

Regards:

P. S. The Colonel Dr. at the 5040th Hospital went over Mitch and decided that it was not necessart to hospitalize him and is treating him as an out-patient. He loaded up Mitch with an abundance of expensive drugs (for free) and figures that he would be better off working instead of lying in bed and worrying. The trouble does not seem to be anything that can not be corrected by taking the medications prescribed for the period the Dr. has advised.

MWJ:bb

C
O
P
Y

Division of Mines
and Minerals

Form M-1-5-59-3M

Assay Office Anchorage, Alaska

Date August 6, 1960

REPORT OF ASSAY

On samples received from Mr. Ted Strandberg

Address Medfra, Alaska

Assay No.	Sample Marked	OUNCES PER TON		Value per Ton	Percentage of Copper
		GOLD	SILVER		
12175	1				3.61% *
12176	2				0.83%
12177	3				0.39%
12178	4				16.01%
12179	5				14.50%
12180	8				11.63%
12181	9				3.24%
12182	10				7.15%
12183	11				1.44%

* Sample # 6 and #7 used in Au-Ag Assay.

5517500
3.18
165
100
55
450

I. W. MITCHELL

Assayer.

Aug. 10, 1960

T. K. STANFORD
ALASKA
NEVERA - ALASKA

NEVERA QUAD

Dear Ted -

In running the Brunton Tape Survey I used No. 5 starting from
sheet. The following stations of mine are same as yours -

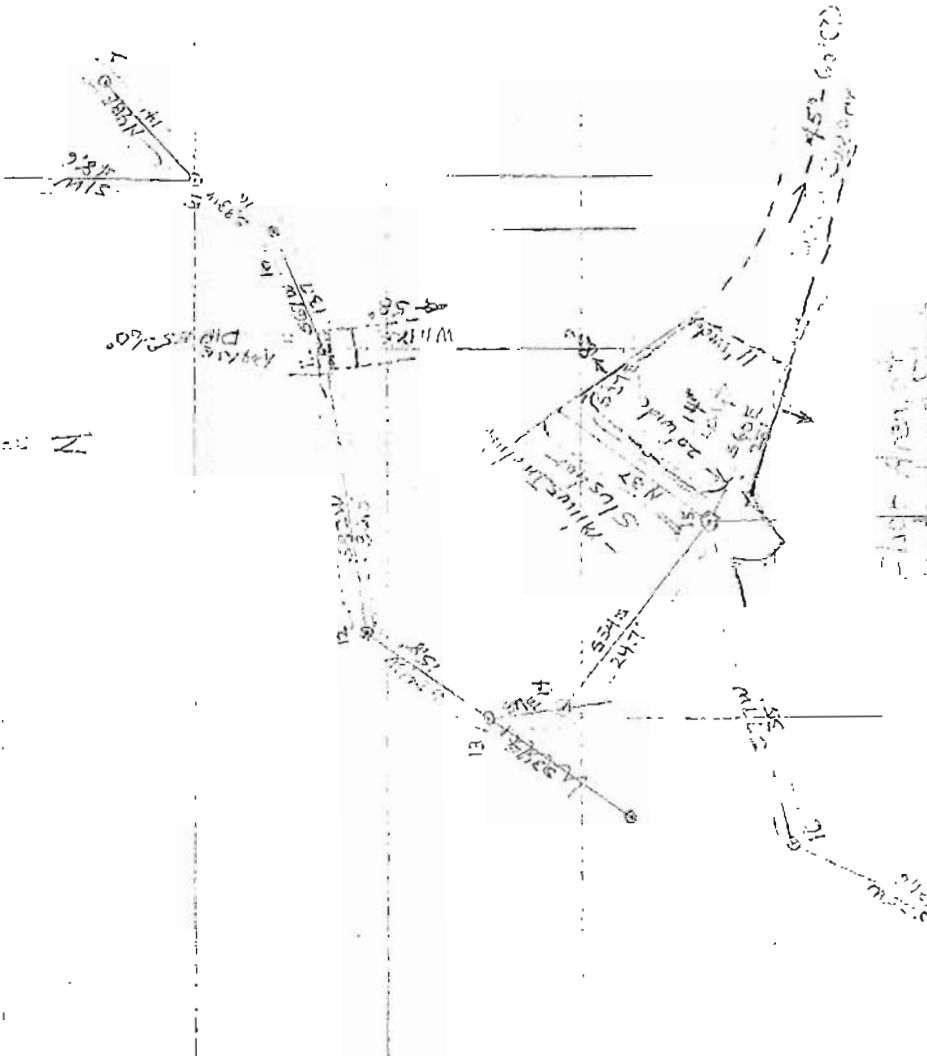
<u>M.J.</u> <u>STNS</u>	<u>TRIS</u> <u>STNS</u>
2	515
3	516
4	517
6	518
7	519
8	520
10	521
11	522
12	523
13	524

The above will help you correlate your stationing with mine.
I didn't take the time to think about bearing Dorr ^{my} way to the
wells - and I think, however, it will be confusing to do so.

I made all my objections on Trip in general. I got back to
town last Sat ~~note~~ mile - and left for Anchorage in 1 1/2 hr. MCA.
They got me out of there then. Tues - & up to now today; it is now clear -
I have a trip to make that is tough - & I'd delay it till get a rough -
also provisions for few days - if possible.

raj

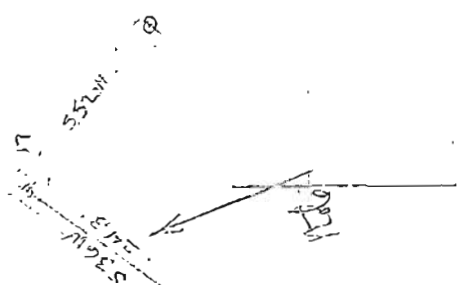
Plan of Section of Bridge at [unclear]
 [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]



Arched Pillar of One (H.G.)

[unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]

Arched block:-
 Length = 10'
 Width @ side = 9'
 (a) W. side = 5'
 Height 12' above Drift Floor





View of headframe, Mespelt Au-Cu Property,
Medfra Quad. Shop, Power Plant, and Hoist
Located in new building at right. Aug.1, 1960.



Aug. 1, 1960
View showing Mespelt Mill in center background
with impounded mill tailings showing immediately
to right of mill. Taken from shaft headframe area.