

OSSIAN MINES LTD.

1923/4

Location

The property Ossian Mines Ltd. consists of 7 mining claims - 347.1 acres - situated near the centre of the township of Ossian. 11185, 7, 8; 11181-2; 11413, 12577.

Showings

The principal discovery so far, consists of a large hogs-back of white quartz which is traced for some 600 ft. striking N 74° 32' E and dipping apparently in both directions from the centre. That on the north in places lies fairly flat. The deposit is a peculiar one in that it doesn't look like a true fissure vein or does it at all resemble a fracture filling. It has more the appearance of a large irregular mass of quartz coming up through the Andesite schist from two directions.

Following the strike to the east the vein is lost in the overburden but evidences of a little quartz are seen beyond No. 11 trench occurring 600 ft. east of the zero of the base line - see assay map accompanying this report. Westward from the zero point there is fairly high ground but no quartz was observed.

The quartz body is very wide. In places as in trench 4 it measures some 32 ft. across. Other trenches show almost as much quartz but not continuously. It is more usual to find quartz and andesite schist alternately in a trench.

The quartz on the whole is fairly well mineralized with Iron Pyrite in large cubes forming clusters as large as a Bantam's egg or larger. Minor amounts of sphalerite were also observed while a little Galena was seen in one place.

This peculiar occurrence of the pyrite makes satisfactory surface sampling difficult, as the clusters of pyrite have a tendency to crumble when a piece of quartz containing them is broken. This fine pyrite is only recovered with a crust as it settles into the cracks in the rock.

#### Development

To date the work on this block of ground has been confined mostly to the one outcrop of quartz. Several hundred feet of cross trenching and stripping have been done. A vertical shaft has been sunk with the small steam plant on the ground, to a depth of 90 feet. From this level a cross cut north has been driven 89 ft. and one south a distance of 26 ft.

At the time of my examination the shaft was full of water and so the underground wasn't seen. A Blue print J.V.A. James' cross-section of the underground working with assays of same also accompanies this report.

If the lenses of values occur as I have indicated in tracing showing my sampling results, the shaft has been sunk in an unfortunate spot and accordingly the results indicated should not be judged too harshly. However if any further underground work is to be done a air compressor plant will have to be installed.

#### Results

Since it was my job to check up those samples taken by the Dome Mine indicating values, only those sections were channelled. The results obtained are indicated on the accompanying plans.

On comparing my channels with those of Mr. James who represented the Dome Mines, it will be seen that in some cases good checks were made, e.g. a 4 foot section in Trench No. 1 gave \$21.60 as against \$22.32 for Mr. James. In other cases e.g. in Trench #2 I obtained \$1.60 over 3 feet as against his \$7.03 over the same width. No satisfactory explanation can be made in connection with this discrepancy unless it be that the section giving the higher assay is now obliterated by the dump near the shaft and mine wasn't an exact duplicate.

#### Conclusions

The three trenches east of the shaft all show sections of very encouraging values. These may link up to form a shoot of ore running across or at a small angle to the general strike of the quartz. This possibility is indicated by parallel pencil lines on the tracing. A similar condition with somewhat lower values may exist on the west side of the shaft making another parallel line as indicated by two more pencil lines. This condition would be unusual structurally but entirely probable and whether it is true or not can only be tested by stripping the overburden along the strike of these possible lenses.

#### Recommendation

In my opinion the results obtained justify the expenditure of a small amount of money, say about \$2000.00 in surface stripping and further cross trenching to the west, to prove the above-mentioned probabilities and to test the further extension westward of the quartz mass.

This would also prove the possibility of more parallel lenses.

This work could be accomplished with a small gang of about 6 men in a month's time. Any further policy would be determined by the results of the original work.

Respectfully submitted,

(Signed) K. B. Heisey.

KBH:EAD.

LETTERS + REPORTS

BY

J.W. MORRISON

FOR

W.E. HURD of OSSIAN MINES LTD.

1925-1926

(in pocket - 3 DDH MAPS - no dates  
1 1925 MAP  
1 1926 MAP)

1927 - Assay Results



320055E0376 63.3915 OSSIAN

020

*J. W. Morrison, B.Sc., M.E.*

CONSULTING MINING ENGINEER

EXAMINATION & REPORTS

111 MAIN STREET

*Haileybury, Ontario*

Sep. 11th., 1925.

Walter E. Hurd,  
503 Liberty Bdg.,  
Philadelphia,  
Pa.

Dear Mr. Hurd; -

Your letter of the 5th. instant to hand.

Your estimates of the average of holes Nos. 7, 9, 10 and II were correct. These holes average \$12.50 over a width of 8' 3". If we take all the holes west of No. 3 that cut the vein it gives an average value of \$14.88 over a width of 6' 10". The length covered by these holes along the strike of the vein is 405 feet, and the deepest hole is approximately 325 feet. This will yield about 64,000 tons, or roughly about \$900,000.00.

If the hole we are drilling now finds ore at 600 feet it will about double the above estimate. If it does not happen to find ore you will have to drill another, for I am quite confident about the depth being O.K.

With these results you should do more drilling on both ends of the present ore shoot. If you can locate another one like this, or the continuation of this one, you are assured of a splendid little mine. I am not trying to flatter you when I say that these are the best and most regular results I have ever had from diamond drilling. I do not think you have ever seen better yourself. I will, or Ralph will send you a plan of the whole work very shortly, but from east to west they show like this; -

No. 3 hole	.....	\$34.00	over	5	feet	wide.
" I "	.....	2.40	"	5	"	"
" 5 "	.....	22.80	"	5½	"	"
" - 7 ✓ "	.....	16.80	"	II	"	"
" - 9 ✓ "	.....	13.60	"	II½	"	"
" - 10 ✓ "	.....	3.20	"	5	"	"
" - II ✓ "	.....	10.40	"	5½	"	"

Dr. Cooke will be out from Quebec shortly, and I will make every effort to have him go in. I am quite sure he will go.

*J. W. Morrison, B.Sc., M.E.*

CONSULTING MINING ENGINEER

EXAMINATION & REPORTS

111 MAIN STREET

*Haileybury, Ontario*

The Northern Miner has asked me for some information on the work. I told them the results were good, but I was not at liberty to give them any. If you wish them to have any thing for publication, you can either write them yourself, or tell me just how much you want to give them.

Yours very truly,

*J. W. Morrison*

## REPORT ON PROPERTY

of

### OSSIAN MINES LIMITED

LOCATION, ACREAGE, ETC.: The property consists of 23 claims, or approximately 1,114 acres, situated in the Township of Ossian, Larder Lake Mining Division.

A wagon road is now in course of construction by the Ontario Government between a point on the Quebec extension of the T. & N. O. Ry. and the Walsh-Katrine Mine, a distance of  $4\frac{1}{2}$  miles. The extension of this road to the Ossian Mines Limited, has already been located, and no doubt will be completed in time. The total distance from the railway is 8 $\frac{1}{2}$  miles. A winter road to the Ossian Mines, Limited, has already been constructed.

POWER: The property is well timbered, and will furnish wood for a steam power plant for a number of years. For larger operations, however, steam power is not satisfactory.

Electric power can be secured by erecting a power line to the Argonaut Mine, a distance of nine miles, at a cost of \$2,500.00 per mile. It is possible that an electric line may be much closer in a short time.

I am informed by the Management of the Crown Reserve Mine that power produced by their crude oil engine is costing them \$107.00 per H.P. per year.

For preliminary work, I believe that steam is the most economic and satisfactory, while for larger operations, nothing can take the place of electric power for convenience and economy.

GEOLOGY: The rocks exposed consist of Rhyolite and Andesite much folded and sheared. These rocks, like most others of the District, have been subjected to intense folding and are now standing at a high angle, with a dip to the North. With the exception of one small body of Porphyry to the East, no intrusive rocks were found, but a heavy mineralization over a large area indicates the possibility of a large body in depth. About 80 percent of the total area is covered by overburden, so that it is possible intrusive bodies exist that have not yet been discovered.

VEIN SYSTEM: A quartz vein occurs in a sheared zone in the Rhyolite on the North leg of the fold. Where exposed on the surface it shows about 5 feet in width of quartz with schist along the walls, and all well impregnated with pyrite. The western end has a strike of N.80 W., changing to N.85 E. as it passes to the East. The dip varies from 45 degrees North at the Eastern end to 65 degrees North at the Western end of the explored zone. It has been proven that the mineral content of the vein carries the bulk of the gold.

DIAMOND DRILL RESULTS: This vein was cut by 14 diamond drill holes over a distance of 940 feet. Holes Nos. 3, 1, 5, 7, 9, 10 and 11 indicate a continuous shoot of ore, about 340 feet long on the surface, and extending to a depth of 400 feet. No. 3 hole cuts the vein at 400 feet. These holes indicate, in round numbers, about 62,000 tons of ore, averaging \$14.00 per ton, a total of \$870,000.00. *at 20¢/g.t.*



This is not "Blocked-out" ore, but is "Indicated" ore. I believe the ground will produce it. In performing the work the holes were placed close together in an effort to get as closely as possible to the actual average of the ore, and the length of the ore shoot. Every precaution was taken to get reliable information from every hole. The samples were taken by splitting the ore, one half of which was assayed by F. H. Huff, M.E. of Kirkland Lake, Ontario, a man whose ability and integrity in that line is well known. In case of unusual high or low assays, the results were checked by Ledoux & Co., New York, and in every case the results confirmed the accuracy of the former Assayer.

It has been found from practice that the Diamond Drill gives a slightly lower average than the actual value of the ore, particularly in schisted ground. This is probably due to the softer sections grinding and washing out of the core. It is likely that the same will hold in the above drilling.

RECOMMENDATIONS: It would be wise, before undertaking the sinking of a large shaft, to confirm the diamond drill results by driving a drift along the vein for about 400 feet, from the bottom of the present old shaft. The vein could be then sampled every four feet and its grade of ore determined. This work could be done with a small steam plant, and would cost about \$14,000.00. The cost of drifting at two of the developing properties for the past year has been \$24.00 per foot, and \$27.00 per foot. This includes overhead.

A little more diamond drilling might be advisable before locating the position of the working shaft. I am convinced that this zone will produce other ore shoots of the same character, and the shaft could then be placed between the two. However, this is looking a long way ahead, and is unnecessary. Underground transportation is rapidly improving and will take care of itself.

The shaft, in my opinion should be a three-compartment, on an incline, with a dip corresponding to the dip of the vein, in the footwall about 30 feet from the vein. From a study of the ore shoot on the attached blueprint, I believe the shoot is pitching to the East, and the shaft should, therefore, be placed well to the East.

With the exception that the vein is a little flat, in places, but not too flat, the working conditions are ideal. The vein is soft. The walls are schisted sufficiently to allow the vein to come free and make easy breaking, and the dilution for this reason will be low. The deepest hole gave the best result in value, which looks promising from the deep standpoint. If the preliminary work shows the values constant and the vein regular, you will have the best start of any prospect in the District. In fact, you are in better shape than any of the early prospects in Kirkland Lake or Timmins.

I might say that structurally your property resembles Porcupine much more than Kirkland Lake.

Yours very respectfully,

J. W. MORRISON

B.Sc. M.E.

November 7, 1925.

Haileybury, Ont.,

May 21st., 1926.

The President and Directors,  
Ossian Mines Limited,  
503 Liberty Bldg.,  
Philadelphia,  
Pa.

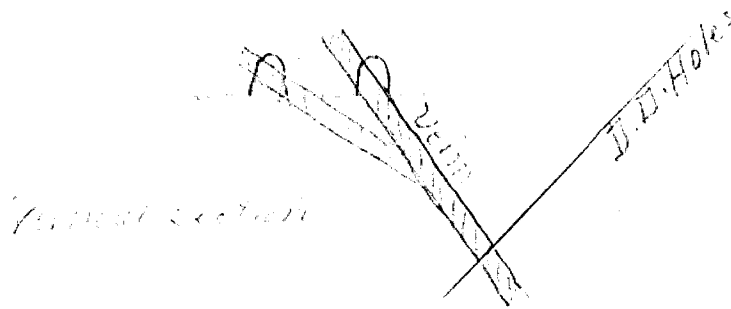
Gentlemen;-

I beg to submit the following report of the underground work at the Ossian Mines Limited from the the beginning until the above date.

Underground operations covered about two and one half months consisting of crosscutting and drifting on the 90 foot level. 566 feet of work was done, of which 480 feet was done on the vein system, the remaining 86 feet was done in country rock before the extension of the vein west was encountered.

The vein was first followed to the east for a distance of 40 feet and showed from one to two feet of quartz in a well mineralized schistoid zone. Our anxiety to see the western extension of the vein caused us to discontinue this work for the time.

The western extension of the vein from the point where it was first encountered and west showed a width much greater than the width of the drift, consisting of quartz impregnated with pyrite. We found later that there were two veins instead of one, both dipping to the north, one at an angle of 32 degrees, the other at 55 degrees. They would intersect about 15 feet below the level. We found from the drill records that the main vein had a dip of 55 degrees, consequently the other must be a branch.



It will be seen from the above sketch that the diamond drill holes crossed the vein about 25 feet below the level, or about 10 feet below the point of intersection of the veins. This may explain the difference ~~between~~ between the values from the drill cores and the drifts. It was unfortunate that the drifting was not done 25 feet deeper as it would have proven the correctness of the diamond drill results.

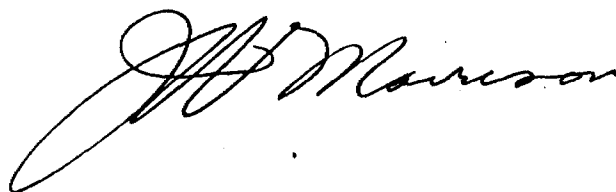
Tho the results obtained from drifting have not proven up to expectations, I still feel that the property, on the whole, looks too promising to drop with out a further effort. The fissure is a strong one, and is accompanied by considerable schisting. The diamond drill has shown a good grade of ore over fair widths at greater depths than the drifts, and these cannot all be wrong. The rhyolite is, in my opinion, the same flow as that found at the Noranda property in Rouyn, Quebec, and cannot be considered a barren rock.

The only objection to the formation that may arise is the absence of an intrusion. I contend that where values occur as they have here, there must be an origin for them, and that origin will eventually be found. There was no intimation of large bodies of Porphyry in Kirkland Lake in the beginning, but mining later revealed them. The same holds true of Porcupine. Over 4000 feet of work was done at the Argonaut before the origin of the ore was discovered. The overburden may easily hide large bodies of igneous rock on the Ossian Property. I do not therefore consider the visable absence of this a vital objection.

I would recommend diamond drilling along the the east and west extension of the vein in an effort to pick up other ore shoots. The holes should be about 300 feet apart, and about 250 feet deep. I believe that other ore shoots will be located without much difficulty. To prove the values indicated by the diamond drill below the 90 foot, I would suggest sinking a winze for a distance of 100 feet, which would prove beyond a doubt whether or not the material would make ore.

Reviewing the numerous properties I have visited during the past two years, I cannot help but think that the Ossian has possibilities beyond any of them. I think it would be a pity not to give it another good try.

Yours very respectfully,

A handwritten signature in cursive script, appearing to read "J. H. Morrison". The signature is written in dark ink and is positioned to the right of the typed name.

ADVANCE INFORMATION

OSSIAN GOLD MINES, LIMITED  
(No Personal Liability)

Incorporated under the Laws of the Province of Ontario.

CAPITALIZATION

Authorized - \$4,000,000

Issued - \$2,000,000 (Pooled)

Par value - \$1.00

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DIRECTORS

Robert D. Preston  
President  
Mayor of Oshawa

F. R. Bennetto, M.B.  
Vice-President  
Hamilton, Ont.

Walter E. Hurd  
Mine Operator  
Philadelphia, Pa.

Albert J. Bolton  
Director  
Lebel Oro Mines Ltd.  
Blue Quartz Gold Mines, Ltd.  
Toronto, Ont.

A. E. Eichler,  
Philadelphia, Pa.

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GENERAL INFORMATION:-

The Ossian Gold Mines, Limited, owns 23 mining claims containing 1,114 acres in one block, located on the famous Kirkland-Rouyn Gold Belt, about half-way between Kirkland Lake, Ontario and Rouyn, Quebec.

The geology of this property is similar to that of the Noranda property in Rouyn, Quebec. Portions of a large body of Rhyolite and Andesite have been explored in which profound heavily mineralized schisted zones occur traversing the veins and lenses of quartz heavily mineralized, and intermixed with mineralized schist carrying promising values in gold.

The development work so far accomplished consists of stripping and trenching on the surface. Several veins have been discovered during the course of this work, and one vein has been exposed for a distance of about 800 feet. Diamond drilling at depth indicates, within the limits drilled, ore with a value of upwards of \$870,000. A shaft has been sunk to a depth of 200 feet where the vein has been opened up, showing in places, a width of more than 20 feet, and containing promising gold values.

The property, although only in the initial stage of development, has big possibilities, and there is every reason to expect, as development and exploration proceeds, that other veins and lenses of quartz will be located in the large schisted zones traversing the property. It is planned to continue the present shaft to greater depth for the pur-

bodies, and exploring for other deposits. The company is equipped with mining plant and buildings capable of carrying on this contemplated work.

The veins opened up on the surface indicate that the property has big potential possibilities. Prominent Mining Engineers and Geologists believe that additional work will, in a short time, open up very valuable ore bodies, and a close study of Mr. Morrison's report will confirm this.

Confidential

ENGINEER'S REPORT OF PROPERTY

Of

OSSIAN GOLD MINES, LIMITED  
(No Personal Liability)

LOCATION, ACREAGE, ETC.

The property consists of 23 mining claims, or approximately 1,114 acres, situated in the Township of Ossian, Larder Lake Mining Division, about half-way between Kirkland Lake and Rouyn, Quebec.

A wagon road has been located and the right of way out out by the Ontario Government from Dalby Station on the Quebec Extension of the Temiskaming & Northern Ontario Railway, a distance of 8½ miles.

The winter road from Larder Lake to the Ossian, a distance of 12 miles, has been in use during the winter months, but is not in condition to render service during the summer.

The most feasible mode of transportation would be the grading of the road from Dalby Station, and this matter has already been taken up with the Government, and in all probabilities will be completed this summer.

POWER

The property is well timbered and will furnish wood for a steam plant for a number of years, or until all preliminary work has been done. Electric power for larger operations can be obtained from the Northern Ontario Light & Power Company, by the erection of a line to the Argonaut Mine, about 9 miles distant. The cost of the erection of this line would be refunded by the Power Company from the proceeds of the power consumed.

GEOLOGY

The exposed formation consists of Rhyolites and Andesites much folded and sheared. These rocks, like many others of the district, have been subjected to intense folding and are now standing at a high angle with a dip to the north. With the exception of a small body of porphyry to the east, no intrusive rocks have been found, but heavy mineralization over a large area indicates the possibilities of a large intrusive body at depth. About 80% of the area is covered by overburden, so that it is possible intrusive bodies exist even on the surface that have not yet been found.

The rhyolites and andesites are, in my opinion, the same series of flows as those associated with the copper-gold deposits of Rouyn Township, Quebec. They are, therefore, capable of holding very valuable deposits of gold, or copper and gold.

VEIN SYSTEM

A quartz vein occurs in a sheared zone in the rhyolite on the north leg of the fold. Where exposed on the surface it shows about 5 ft. in width of quartz, with schisted walls, well mineralized.

The western extension has a strike of about N.80 degrees west, changing to N.85 degrees east as it passes to the east. The average dip of the explored portion of the vein is about 55 degrees.

It has been proven that the mineral content of the vein carries the bulk of the gold. The fissure is a strong one and is

accompanied by considerable schisting.

#### DIAMOND DRILL RESULTS.

This vein has been out by 14 diamond drill holes. Holes Nos. 1, 3, 5, 7, 9, 10 and 11 indicate a continuous shoot of ore about 340 feet long, and extending to a depth of 400 feet, where the deepest hole, No. 3, out the vein, showing a vein 5 feet in width which gave an assay of \$34.00 over this width. The holes mentioned above gave an average of \$14.00 per ton over a width of 7 feet.

In performing this work the holes were placed close together in an effort to get as near the actual value of the ore as possible. Every precaution was taken to get reliable information from every hole. The samples were taken by splitting the core, one half of which was assayed by F. H. Huff, M. E., of Kirkland Lake, a man whose ability and integrity in this line is well known. In case of unusual high or low values, the results were checked by Ledoux & Company of New York. In every case the checks confirmed the accuracy of the first assayer.

#### DEVELOPMENT

A shaft was sunk to the south of the vein to a depth of 100 feet, and a level established at 90 feet. Approximately 600 feet of lateral work has been done at this level, of which 480 feet is on the vein system, while the remaining 120 feet is cross-cutting.

The vein was first followed to the east for a distance of 40 feet, showing from 1 to 2 feet of quartz in a well mineralized schisted zone. The western end of the vein, where first encountered, showed a width much greater than the width of the drift, consisting of quartz much fractured and impregnated with sulphides.

A second vein was later found, angling from the main vein toward the south, and dipping at an angle of 32 degrees. Calculations show that this second vein will intersect the main vein 15 feet below the present level. The main vein has a dip of 55 degrees, consequently, the southern vein must be a branch of the main vein.

Diamond drill holes Nos. 7, 9, and 10 crossed the vein about 25 feet below the level of the drift, or about 10 feet below the intersection of the veins, while the other holes, with the exception of one, crossed the vein at much greater depth.

The drifts on the veins have proven ore bodies, in places, several times wider than the width of the drift, and in sampling it was necessary to drill holes into the wall, in places, to get the width of the vein. Both the quartz and the schist showed good mineralization, and the vein itself presents a remarkably fine appearance. Promising values in gold have been obtained both in the main vein and the southern branch, as well as in the extension east.

#### RECOMMENDATIONS.

Considering the amount of work done, the results have been most satisfactory. The fracture has the appearance of being a strong one, and is accompanied by a large schisted zone, which evidently traverses the whole property. Our work has been confined to a few hundred feet along this strike. It is only a matter of common sense to look for and expect other ore shoots along this fractured and schisted zone.

RECOMMENDATIONS continued.

I would recommend sinking deeper on the present ore body in order to further open up the ore indicated by the diamond drill. I would also recommend more diamond drilling along the east and west extension of the vein in an effort to pick up more ore shoots. The holes should be about 300 feet apart and about 250 feet deep. I believe that other ore bodies will be located without much difficulty.

I would suggest also doing some surface work, consisting of stripping and cross-trenching along the strike of the present ore zone, which work could be carried on during the summer months pending the completion of the road, after which the development work recommended could be economically undertaken.

I consider the Ossian the best property I have examined in the past two years, and believe its possibilities of making a producer are very bright. I strongly recommend the development work recommended above, and believe that the results will fully justify the effort.

Yours very respectfully,

J. W. Morrison,

B.Sc. M.E.

MAY 27, 1926



ASSAY RESULTS - OSSIAN MINES LIMITED

MORRISON  
# 27  
\* 20.67  
Gold

SAMPLE NO.	WIDTH OF SAMPLE	DESCRIPTION	VALUE
	LEFT FACING TOWARDS SHAFT RIGHT FACING TOWARDS SHAFT		
70A	5' diagonal	Breast of drift. 42' West 109. - - -	2.40
49A	7' "	" " " 37' " " - - -	1.60
48A	6' Vertical Left	32' West of 109 - - - - -	2.00
48A	6' " Right	32' " " " - - - - -	1.20
47A	5' " Left	27' " " " - - - - -	4.80
47A	6' " Right	27' " " " - - - - -	4.20
46A	5' " Left	22' " " " - - - - -	.80
46A	6' " Right	22' " " " - - - - -	6.40
45A	3' " "	17' " " " - - - - -	4.00
18A	6' Roof	12' " " " - - - - -	2.40
17A	5' "	7' " " " - - - - -	2.40
16A	3' "	2' " " " - - - - -	.80
15A	3' 6" Roof	3' East of 109 Plug - - - - -	1.20
14A	4' "	8' " " " " - - - - -	4.00
1A	5' Roof	At 108 Plug - - - - -	3.20
2A	3' Vertical Right	5' East of 108 Plug - - - - -	5.60
2A	3' " Left	5' " " " " Quartz & Schist -	2.80
3A	3' " Right	10' " " " " " Quartz & Schist	9.60
3A	4' " Left	10' " " " " " Quartz & Schist	1.20
4A	5' Roof	15' " " " " " Schist & Quartz -	4.00
5A	4' "	20' " " " " " Schist & Quartz -	4.80
6A	6' Vertical Right	At 107 Plug - - - - -	1.60
6A	3' Roof	Schist and quartz - - - - -	.40
7A	4' 6" Roof	" " " 5' East of 107 - -	.80
8A	3' Roof	10' East of 107 - - - - -	.40
8A	6' Vertical Left	10' " " " Schist & Quartz - -	2.80
9A	4' Roof	15' East of 107 - - - - -	2.40
10A	6' Right-Center of roof	20' " " " - - - - -	3.60
11A	3' Vertical Right		
11A	Horizontal Roof	25' " " " - - - - -	4.00
11A	6' Vertical Left	25' " " " - - - - -	2.80
12A	4' Vertical Right		
12A	3' Horizontal	30' " " " - - - - -	2.80
12A	6' Vertical Left	30' " " " - - - - -	1.40
13A	6' " Right	35' " " " - - - - -	2.80
13A	4' Roof	35' " " " - - - - -	.40
19A	6' Vertical Right	40' " " " - - - - -	1.60
19A	6' Horizontal Roof	40' " " " - - - - -	2.20
20A	5' Vertical Right	45' " " " - - - - -	.80
20A	7' Roof	45' " " " - - - - -	1.00
21A	5' Vertical Right	50' " " " - - - - -	2.20
21A	7' Roof (Mixed)	50' " " " - - - - -	1.60
22A	6' Vertical	At 106 Plug - - - - -	.80
22A	8' Roof	" " " - - - - -	.40
23A	4' 6" Vertical Right	5' East of 106 Plug - - - - -	1.60
23A	5' Roof	5' " " " Quartz & Schist -	trace
23A	6' Vertical Left	5' " " " - - - - -	.80
24A	6' " Right	10' " " " - - - - -	3.20
24A	4' Roof	10' " " " - - - - -	.40
24A	6' Vertical Left	10' " " " - - - - -	trace

SAMPLE NO.	WIDTH OF SAMPLE	DESCRIPTION	VALUE
25A	3' Vertical Right	15' East of 106 Plug	2.00
25 <sup>1</sup> / <sub>2</sub> A	3' Roof	15' " " " "	2.80
26A	4' Vertical Right	20' " " " "	4.40
26 <sup>1</sup> / <sub>2</sub> A	5' Roof	20' " " " "	3.20
27A	4' " Schist & Quartz	25' " " " "	4.00
28A	6' Vertical Right	30' " " " " Quartz & Schist	2.40
29A	6' Vertical Right	At Plug 105	2.40
29 <sup>1</sup> / <sub>2</sub> A	4' Roof	" " " Schist	.40
30A	7' Vertical Left	10' East of 105 Plug	2.80
31A	7' " "	15' " " " "	3.00
32A	8' " "	20' " " " "	4.00
33A	3' Vertical Right	25' " " " "	3.60
33 <sup>1</sup> / <sub>2</sub> A	6' " Left	25' " " " "	1.60
34A	6' " "	30' " " " "	2.00
35A	6'6" " "	35' " " " "	1.60
36A	7' " "	40' " " " "	3.20
37A	5' Roof	9'6" to Plug 104	4.80
OA	5' Vertical Roof	Bend of short drift	1.60
<u>DRILL HOLES IN HANGING WALL</u>			
50A	2'9" Quartz )	Opposite Sample No. 18 12' West 109	.40
50 <sup>1</sup> / <sub>2</sub> A	1'10" Mixed )		.80
51A	5 feet	Opposite Sample #17. 7' West of 109	1.00
52A	5 "	" " #16 2' " " "	.80
53A	5'6"	" " #15 3' East " "	3.80
54A	5'	" " #14 8" " " "	.40
55A	5'6"	" " #1 At Plug 108	1.60
56A	5'6" Mixed	" " #10 20' East of 107	1.60
57A	5'6" "	" " #11 25' " " "	.80
58A	5'	" " #23 5' East of 106	1.60
59A	5'	" " #24 10' " " "	.80
60A	5'	" " #25 15' " " "	2.00
61A	5'	" " #26 20' " " "	2.20
62A	5'	" " #31 15' East of 105	2.80
63A	5'	" " #32 Last 18" not recovered	2.00
64A	5'	" " #33 25' East of 105	5.20
65A	5'	" " #34 30' " " "	2.00
66A	5'6"	" " #35 35' " " "	6.40
67A	5'6"	" " #36 40' " " "	3.60
68A	5'6"	" " #37 9'6" West of 104	5.60
69A	5'	" " #0 Around bend of short drift at 104	5.20

SAMPLE NO.	WIDTH OF SAMPLE	DESCRIPTION	VALUE
<u>NO. 2 OR NORTH DRIFT</u>			
38B & A	6' Diagonal	Breast of Drift. 58'6" West 106 - -	.80
38A	7' "	" " " 53'6" " " - -	2.00
39A	4' Vertical Right	48'6" West of 106 - - - - -	1.60
40A	5' " "	43'6" " " " - - - - -	.80
41A	6 1/2' " "	38'6" " " " - - - - -	1.20
42A	7' " "	33'6" " " " - - - - -	.80
43A	6' " "	28'6" " " " - - - - -	.60
44A	7' " "	At point of division of drift 23'6" West of Plug 106 - - - - -	.60
88-107W	30" Quartz	34' West of 107 - - - - -	2.80
89-107W	24" "	38' " " " - - - - -	.60
90-107W	30" "	42' " " " - - - - -p - - - - -	4.00
91-109W	42" "	7 1/2' West of 109 - - - - -	3.00
92-106W	24" Quartz	Hanging wall 23 West of 106 - - - - -	8.80
93-106W	36" "	Next 3' from sample 92 towards footwall - - - - -	trace
94-109W	48" Quartz	12' West of 109 - - - - -	3.20
95-109W	48" "	15' " " " - - - - -	1.20
96-109W	48" "	18' " " " - - - - -	trace
97-106W	48" "	28' " " 106 - - - - -	.60
98-109W	60" "	20' W" " 109 - - - - -	.40
99-106W	42" "	Hanging wall 38' West of 106 - - - - -	2.80
100-106W	18" Schist	" " 38' " " " - - - - -	1.40
101-109W	60" Quartz	23' West of 109 - - - - -	4.20
102-109W	60" "	28' " " " - - - - -	4.80
103-109W	54" "	33' " " " - - - - -	2.00
104-106W	48" "	52' " " 106 - - - - -	2.00
105-106W	14" "	Hanging Wall 53'6" West of 106 - - - - -	1.60
106-106W	24" "	Footwall 6' East of 106 - - - - -	3.20
107-109W	48" "	Face 52' West of 109 - - - - -	1.20
70-106W	66" Quartz	20' West of 106 - - - - -	.80
71-106W	72" "	25' " " " - - - - -	8.40
72-106W	60" "	30' " " " -m- - - - -	1.60
73-106W	60" "	35' " " " - - - - -	3.20
105-111W	18" Quartz	46' West of 111 Face - - - - -	1.40
106-111W	24" "	41' " " " Hanging Wall - - - - -	3.20
107-111W	18" "	13' North of 111 Hanging Wall No. vein	2.00
108-111W	60" "	36' West of 111 - - - - -	2.80
109-111W	60" "	30' " " " - - - - -	
110-111W	60" "	25' " " " - - - - -	
111-111W	60" "	20' " " " - - - - -	4.00
112-111W	60" "	16' " " " - - - - -	2.40
113-114W	48" Quartz	20' West of 114 North vein - - - - -	2.40
114-114W	48" "	25' " " " " " - - - - -	.80
115-114W	42" "	30' " " " " " - - - - -	4.80
116-114W	8" "	32' " " " Hanging Wall - - - - -	15.20
117-114W	42" "	38' " " " North vein - - - - -	12.80
118-114W	80" "	43' " " " " " - - - - -	8.00

# 24  
1728

OSSIAN MINES LIMITED

A S S A Y S

<u>SAMPLE NO.</u>	<u>WIDTH OF SAMPLE</u>	<u>DESCRIPTION</u>	<u>VALUE</u>
122-114W	36" Quartz	45' West of 114 North Vein	\$ 4.80
123-114W	24" "	50' " " " " "	5.60
124-114W	30" "	55' " " " " "	3.20
125-114W	18" "	60' " " " " "	3.20
126-114W	12" "	65' " " " " "	11.20
127-114W	12" "	86' " " " Face	2.40
128-114W	18" "	86' " " " Face Hangingwall	2.00

ASSAY RESULTS  
of the  
OSBORN MINES LIMITED

Sample No.	WIDTH OF SAMPLE	DESCRIPTION	VALUE
1-102E	16" quartz	70' east of C.C.	.80
2-102E	18" "	18' " " "	1.20
3-102E	18" "	18'6" " " Face	
4-102E	24" schist North	18'6" " " "	.80
5-102E	18" quartz	24' east of C.C.	5.20
6-102E	24" schist South	24' " " "	
7-102E	18" quartz	28' " " "	.40
8-102E	12" quartz	33' " " "	1.60
9-102E	18" " & Schist	38' " " "	6.40
10-101W	30" quartz	East side of crosscut 30'	3.20
11-101W	30" "	West " " " 35'	3.60
12-101W	42" "	East " " " 35'	.60
13-101W	60" "	East " " " 38'	4.00
14-101W	72" " & Schist	Face of drift 30'6" west No. 4 Plug	3.40
17-104W	72" "	Poof 10' west of 104	4.00
18-104W	60" "	Footwall half 15' west 104	4.80
19-104W	48" " & Schist	Hangwall half 15' " "	4.00
20-104W	60" "	Footwall half 20' " "	2.40
21-104W	48" " & Schist	Hangwall half 20' " "	2.00
22-104W	60" "	Footwall half 25' " "	3.20
23-104W	48" " & Schist	Hangwall half 25' " "	4.20
24-104W	48" "	Footwall half 35' " "	4.80
25-104W	60" " & Schist	Hangwall half 35' " "	2.40
26-104W	36" "	Footwall half 40' " "	3.60
27-104W	48" "	Hangwall half 40' " "	1.20
28-104W	Grab sample	35 to 45 feet West of 104	32.40
29-104	18" quartz	Footwall below fault 45' west 104	1.00
30-104W	48" " & Schist	Hangwall side 45' west of 104	6.60
31-104W	36" Schist	Above fault 50' west of 104	3.20
32-104W	36" quartz	Vein 62' west of 104	4.00
33-104W	60" " & Schist	Hangwall of vein 62' west of 104	2.40
34-104W	48" "	Slash at 104 in vein	2.00
35-104W	36" "	Vein 55' west of 104	2.80
36-104W	60" " & Schist	Hangwall side 67' west of 104	2.40
37-104W	Grab sample	60 to 67 feet west of 104	9.20
38-104W	54" quartz & Schist	Hangwall half 67' west of 104	1.20
39-104W	42" "	Footwall under fault 67' west of 104	2.80
40-104W	42" "	7' N.E. 104, going East, 72' west 104	2.00
41-104W	18" "	Between slips center of vein	4.00
42-104W	54" " & Schist	Hangwall over slips 72' west 104	2.40
43-104W	30" "	Footwall half 72' west 104	1.60
44-104W	30" " & Schist	Hangwall 77' west of 104	1.40
45-104W	30" "	Footwall half 77' west of 104	4.40
46-104W	60" "	Hangwall 81' west of 104	1.20
47-104W	60" "	Hangwall 86' west of 104	1.60
48-104W	72" "	Hangwall 90' west of 104	2.40
49-104W	Grab Sample	70 to 80 feet west of 104	13.60
50-105W	36" quartz	Upper half footwall 25' west 105	4.00
51-105W	12" "	" " " 30' " "	2.40
52-105W	24" "	" " " 35' " "	5.20
53-105W	48" "	Lower half Hangwall 40' " "	.80
54-105W	30" "	Upper half footwall 40' " "	
55-105W	60" " & Schist	" " Hangwall 37' " "	.60
56-105W	60" "	" " " 42' " "	.80

SAMPLE No.	WIDTH OF SAMPLE	DESCRIPTION	VALUE	
57-105W	60"	Quartz & schist	Upper half hangwall 47' west 105	1.20
58-105W	60"	" " "	" " " 53' " "	.40
59-105W	60"	" " "	" " " 56' " "	.80
60-105W	72"	"	Footwall half 65' west 105	6.00
61-105W	48"	"	" " " 68' " "	18.40
62-105W	60"	"	" " " 72' " "	8.00
63-105W	Grab sample		65 to 72 feet west of 105	4.80
64-105W	60"	Quartz	72' west of 105	2.00
65-105W	60"	"	80' " " "	2.40
66-105W	60"	"	64' " " "	1.20
67-105W	60"	"	88' " " "	.80
68-105W	36"	Schist-	92' " " "	3.20
69-105W	48"	Quartz	92' " " "	2.40
70				.80
71				8.40
72				1.60
73				3.20
74-106W	72"	Quartz	40' west of 106	6.80
75-106W	72"	"	45' " " "	1.60
76-106W	48"	"	52' " " " Hangwall	1.20
77-106W	36"	Schist	52' " " "	2.80
78-106W	24"	Quartz	Hangwall north side of drift 56'	6.00
79-106W	48"	"	56' west of 106 south side of drift	3.20
80-106W	54"	"	60' " " "	4.00
81-106W	66"	" & Schist	64' " " "	5.60
82-106W	48"	"	68' " " "	7.20
83-107W	48W	"	12' west of 107	8.40
84-107W	48"	"	17' " " "	1.20
85-107W	48"	"	21' " " "	3.80
86-107W	42"	"	25' " " "	12.80
87-107W	30"	"	29' " " "	6.80
88-107W	30"	"	34' " " "	2.80
89-107W	24"	"	38' " " "	
90-107W	30"	"	42' " " "	4.00
91-109W	42"	"	7 1/2 west of 109	
92-106W	24"	"	Hangwall 23' west of 106	8.80
93-106W	36"	"	Next to hangwall south from No. 92 23' west of 106	
94-106W	48"	"	12' west of 109	3.20

# RUSSIAN MINES LIMITED

M.P. 121102

SPLIT CORES FROM HOLES 7, 8, 9, 10 and 11.

August 22, 1925.

Hole No.	Depth	Width	Values	Remarks
✓ 7	129'-132'	3 feet	.80	Mineralized schist. 132' to 135' core missing.
✓ 7	- 135'-146'	11 "	16.80	Mineralized quartz
8	193½'-196½'	3 feet	.80	Quartz & Pink Rhyolite
8	200'-203½'	3½ "	Trace	Quartz & Pink Rhyolite
9	115'-120'	5 feet	.40	Mineralized schist with dark streaks
✓ 9	120'-122'	2 "	4.00	Quartz to north of main vein
9	138'-149½'	11½ "	13.00	Quartz, fairly well mineralized. 4½' core missing. ground Chalcopyrite showing.
✓ 10	71½' to 74½'	3 feet	2.80	Quartz, some mineral. vein to north of main vein.
✓ 10	144'-149'	5 "	3.20	Mineralized schist, some quartz.
✓ 10	151'-155'	4 "	Trace	Mineralized schist. little quartz.
✓ 10	171'-175'	4 "	.80	Heavily mineralized schist. 8' core missing.
✓ 11	222½'-227½'	5 feet	.80	Mineralized schist
✓ 11	227½'-235'	5½ "	10.40	Quartz, fair mineral. 1 ft. core missing.

**OSSIAN GOLD MINES, LIMITED**

(NO PERSONAL LIABILITY)

#12

ADMINISTRATIVE OFFICE.

20 DOUGLAS ST.  
GUELPH, ONTARIO.

MINES ADDRESS.

KIRKLAND LAKE  
ONTARIO

BOX 330.

20 Douglas St.,

Guelph, August 17th, 1927.

Mr. Walter Hurd,

Narberth, PA.

Dear Walter:-

I have received a list from J.W. Morrison showing where the assays were taken by M.E. Bouzan. For convenience, I have added on either side of the list the results of the assays by the Temiskeming Laboratories and by J.W. Bell, and enclose a copy herewith. I believe this completes the engineering data that you have asked for.

With kindest regards, I am,

Yours sincerely,

F.R. Bennetto

*per F.R.*

B/JM.



RESULTS OF SAMPLING OF

OSSIAN MINES LTD., by

M. L. Bouzan

Value by Temisk. Lab. No.		Value by J.W. Bell	Width	Distance apart.	Location
2.80	1	2.40	1/4 feet	1/4 feet	at Plug 206
0.40	2	0.40	"	"	East of plug
0.40	3	0.60	"	"	206.
0.20	4	0.20	"	"	East
0.40	5	0.80	"	"	"
0.60	6	0.80	"	"	"
0.40	7	0.60	"	"	"
0.40	8	0.40	"	"	"
trace	9	0.40	"	"	"
0.40	10	0.60	"	"	"
0.20	11	0.80	"	"	"
1.00	12	1.40	"	"	"
0.60	13	0.80	"	"	"
trace	14	0.60	"	"	"
1.00	15	1.20	"	"	"
trace	16	0.60	"	"	"
0.60	17	0.80	"	"	"
0.40	18	0.40	"	"	"
0.60	19	1.00	"	"	Brest of
0.40	20	0.40	"	"	east drift
6.40	21	6.80	"	"	1/4 feet west of
23.20	22	9.00	"	"	plug 206.
56.60	23	34.60	" 3 In.	" 25'	West
2.40	24	2.00	" 6 "	"	"
3.80	25	4.00	" "	"	"
2.20	26	1.60	" "	"	"
8.80	27	8.60	" 4 "	"	"
1.40	28	1.20	" 6 "	"	"
0.40	29	0.40	" "	"	"
0.60	30	2.20	" "	"	"
4.80	31	4.80	" "	"	"
0.20	32	0.60	" 6 "	"	"
0.40	33	0.40	" 8 "	"	"
2.20	34	0.80	" "	"	"
1.00	35	1.40	" "	"	"
2.20	36	1.40	" "	"	"
0.60	37	0.60	" 6 "	"	"
trace	38	0.40	" 6 "	"	"
1.60	39	1.40	" "	"	"
0.80	40	0.60	" "	"	"

Brest of west drift.

1917 Bulletin  
published by M.L. Bouzan

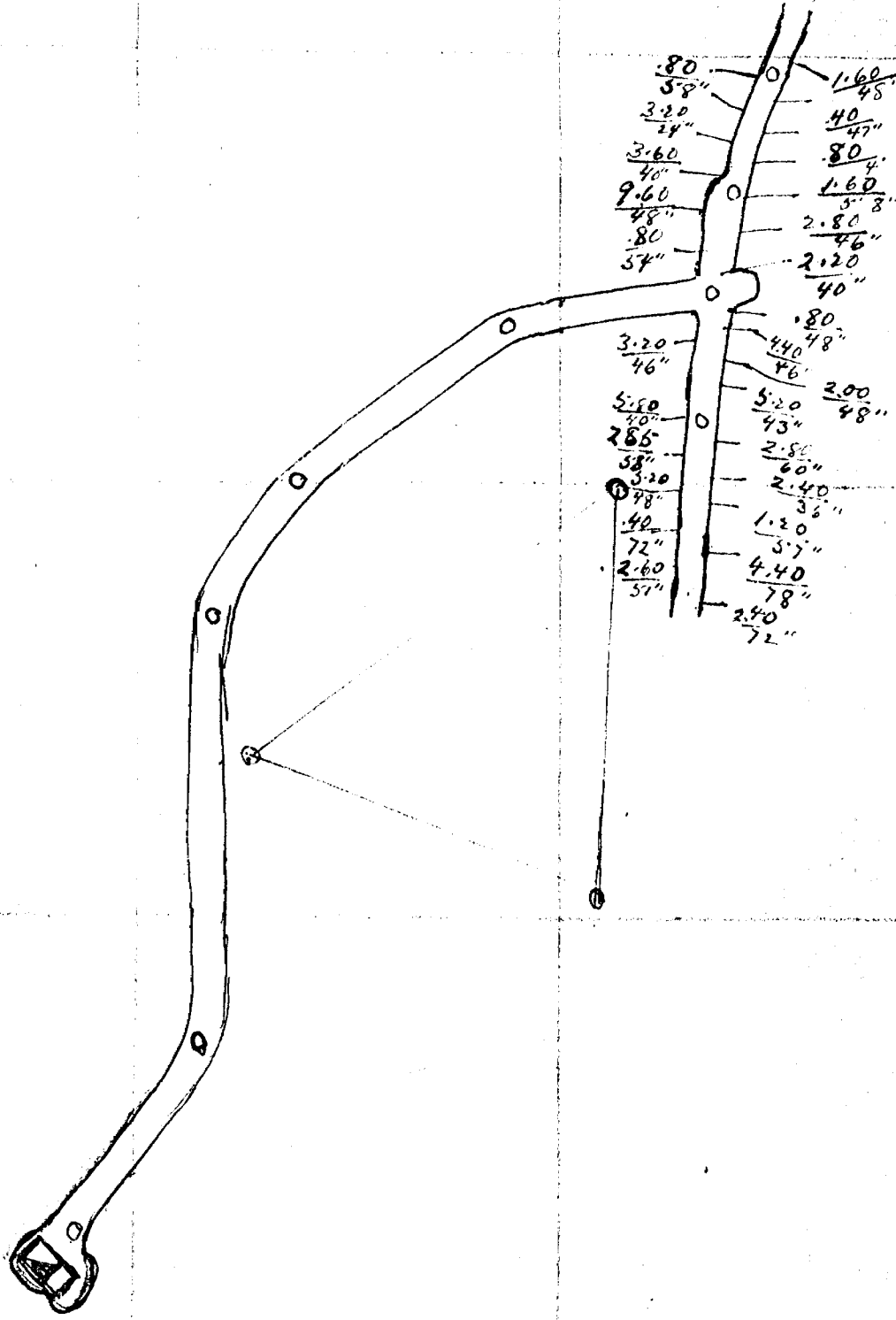


DR. F. R. BENNETTO

193 WOOLWICH STREET

QUELPH

SCALE 40' = 1 inch





32D05SE0376 63.3915 OSSIAN

030

REPORT

on

OSSIAN GOLD MINES LTD.

MINING CLAIMS 11131-2 etc.

OSSIAN TOWNSHIP

ONTARIO

by

PERCY E. HOPKINS

Toronto, March 22nd, 1928.

REPORT ON

OSSIAN GOLD MINES LIMITED

MINING CLAIMS 11131-2 ETC., OSSIAN TOWNSHIP,  
ONTARIO.

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INTRODUCTION:

In accordance with arrangements, I examined the underground workings and made a careful sampling of the vein on the 90 and 200 ft. levels between February 18th and 24th, 1928. The property was revisited on March 16th, 1928, for the purpose of checking some of the samples which were low according to J.W. Morrison's assay plan furnished me. I was assisted in sampling by John Drybrough and Messrs. T. and W. Ramsay of Kirkland Lake. Many of the diamond drill cores were also examined and some of the promising looking sections were collected for assay. The analyses were made by J.W.N. Bell of Haileybury and Thos. Heys & Sons and the Provincial Assay Office at Toronto. The assay results, together with a composite geological plan of the underground workings made with a Brunton compass, accompany this report.

Owing to the ground being covered with 4 feet of snow, it was impossible to examine the surface geology. However, the writer is somewhat familiar with the geology, having been over the property on three previous occasions.

LOCATION AND ACCESSIBILITY:

The property consists of 22 surveyed mining claims in one block, Nos. 11181-9; 11131-3; 11090-11200; 11344, 11413, 12020-1; 12716-7 and 12577-8, with approximately 1,114 acres.

The group is situated in Ossian township, about 8½ miles distant by a well-out-out but ungraded wagon road from Dalby siding on the Nipissing Central railway about midway between Kirkland Lake and Rouyn.

The nearest properties being worked at present are the Walsh-Katrine Gold property 4 miles to the south where some exploration is being done on the 500-ft levels and on the Interprovincial Lead and Zinc property in Ben Nevis township, 8 miles to the northwest; on the latter property a mining plant is being installed.

TIMBER, WATER, ETC:

The altitude is about 1,000 feet, the highest hill being about 100 feet above the valleys. A portion of a small lake occurs on the claims and two small creeks cross the property. Trees suitable for building and mine timber and fuel are plentiful. Electric power could be brought from the Argonaut Mine, 9 miles to the west.

DEVELOPMENT:

Development work consists of a two-compartment vertical shaft, 210 feet deep with 300 and 500 feet of lateral work at the 90 and 200-ft. levels, respectively; 19 diamond drill holes with a total footage of 5500 feet and a considerable amount of surface work. The shaft and underground workings are on claims 11131 and -2.

EQUIPMENT:

On the property there are two boilers, compressor, hoist, blacksmith shop, office, cookery, sleep camps and other small buildings.

GEOLOGY:

Approximately 75 per cent. of the surface is drift-covered. The outcrops are dominantly massive Keewatin basic lavas with subordinate amounts of agglomerate and rhyolite. The flows, as indicated by diamond drilling, dip to the north. Both the acid and basic rocks are in places quite rusty due to the abundance of iron pyrites and carbonate. Massive grey Algoman syenite porphyry is reported to occur three quarters of a mile to the west of the property and also one mile to the northeast.

The main rhyolite flow which strikes slightly north of west across claims 11132, 11131 and 11185, is 500 feet in width. In the rhyolite on claims 11132 and 11131 is a strong east-west fractured zone containing large lenses of

quartz which in places contain erratic gold values, and on which most of the exploration work has been done.

The underground workings are completely in massive altered rhyolite varying in colour from greenish grey to pink and chocolate. Close to the veins secondary minerals, such as chlorite, carbonate, sericite and pyrite are common, indicating hydrothermal alteration. The greenish colour in the rocks is quite frequently due to the presence of chlorite along slip planes. Rhombs and veinlets of carbonate are common: frequently the rock has a conchoidal fracture and is quite brecciated. Under the microscope can be seen phenocrysts of quartz, acid feldspars, oligoclase and some orthoclase in a finer groundmass of quartz, carbonate, and shreds of sericite and chlorite.

VEIN:

The vein occurs in a fault zone and is traceable on the surface for some 600 feet varying in width from one to 20 feet. It strikes nearly east and west and dips  $45^{\circ}$  to the north. On the 90-ft. level the vein averages over 5 feet wide; at one point it is 25 feet in width, due partly to ~~a bulge~~ <sup>folding</sup> in the formation and partly to vein-overlapping by faulting. To the west the vein splits with one branch heading west and the more pronounced fracture going northwest. On the 200-ft. level the vein averages about 5 feet in width for a length of 200 feet. The adjoining wall rock contains considerable pyrite which quickly diminishes 6 to 12 inches distant from the vein,

and the tendency was to get too large a proportion into the sample but the samples were large and their size corrected this tendency to a great degree.

The assaying was done by J.W.N. Bell of Haileybury, whose work is satisfactory. Checks were also run on 10 pulp samples from points most likely to carry values, by C.H. Heys of Toronto, and his results corresponded with those by Bell. Further, to ensure there had been no mistake in the sampling or assaying ten check samples were taken from the best looking places and the samples halved and assayed by C.H. Heys and the Provincial Assay office. These results also checked closely with the first results.

In examining the diamond drill cores, it was found that the vein in some cases had all been taken for assay. However, 14 samples of the more promising-looking sections were collected for assay.

The vein in the shaft near the surface was too rusty to sample.

#### ASSAY RESULTS:

The values were low in the channel sampling, averaging below \$1.00, which is much different from previous results which averaged \$3 to \$4. The highest result obtained was \$2.60. About 90 per cent of the samples were well under \$1.00. No values occur in the mineralized schist walls.

Eleven of the diamond drill core samples gave \$1.00 and under, while three, namely, diamond drill Nos. 7, 11 and



14 gave  $\frac{2.90}{4.5}$  }  $\frac{8.10}{5.7}$  } and  $\frac{1.40}{1.77}$  } respectively. Apart from

d.d. No.11 these results are also lower than Morrison's results, as shown on the accompanying table on diamond drill results. However, cores which have been exposed so long, *not under lock and key* should not be expected to check. P.E.X.

CONCLUSION:

The ground was covered with 4 feet of snow, hence this report is based on a through sampling of the vein on the 90- and 200-ft. levels.

The vein is well defined, with iron pyrites fairly evenly, but scantily distributed throughout the quartz, and extending in places for a foot or so into the adjoining rhyolite wall. The quartz occurs, in a well defined shear which should continue for many hundreds of feet. The rhyolite has been sheared, sericitized, pyritized and chloritized, which are favourable indicators for gold. On the whole, the vein is of a mineable size and looks very attractive, but the gold values in the 200 to 400 feet developed/are too low to warrant any further expenditure in the immediate vicinity of the present workings.

RECOMMENDATIONS:

I recommend that no further work be done underground at present but that sufficient work be done to patent the claims. In the summer months a detailed map should be made along the strike of the vein with the hope of finding a place

where the easterly extension of the shear zone <sup>may</sup> ~~will~~ pass  
out of the rhyolite and extend into the basalt. Trenching  
should be done in this vicinity and if the shear zone with  
values is found some diamond drilling would be advisable.  
(A few good values were obtained east of the shaft on the  
surface). If <sup>sufficient</sup> values of interest are found not too far dis-  
tant from the shaft, then the drift on the 200 ft. level  
could be extended in this direction.

P.E.H.

P.E.H.

Respectfully submitted,

*P. E. Hopkins*

Toronto, Ontario.

March 28th, 1928.

DIAMOND DRILL RESULTS, OSSIAN GOLD MINES LTD.

Diamond Drill No.	Sample No.	Footage	Description of vein or remarks	Width	Gold Per Ton #	Results by J.W. Morrison
1	101	225-240	2/3 quartz, 1/3 rhyolite little pyrite	15	0.40	\$2.40 from footage 240-245? 5ft.
3	--	335-345	no core in box	-	-	\$34.00 " " 312-317? 5ft. (19-24)
4	--	205-210	" " "	-	-	2.00 " " 180-185 ✓ 5ft.
5	--	115-120	" " "	-	-	22.80 " " 102-107? 5ft.
6	--	35-45	" " "	-	-	0.70 " " 36-45 5ft.
7	109	129-132.5	quartz & pyrite	3.5	0.20	
7	110	135-141.5	quartz	6.5	0.40(Bell) 0.40(Heys)	16.80 " " 135-146 ✓
7	111	142.5-146 (200-204)	quartz, little pyrite	4.5	2.90(Bell): 5.00(Heys):	11 ft.
8	103	(193.5-196.5)	" rhyolite "	6.75	0.20	
9	107	120-121.8	" " "	1.8	0.60	
9	108	138-150	50% quartz, rhyolite pyrite	12.	0.20(Bell): 0.40(Heys):	13.60 " " 138-149.5 ✓ 11.5
10	104	144.4-148.2	Quartz, rhyolite, pyrite	3.8	0.80(Bell): 0.40(Heys):	3.20 " " 144-149 5
10	105	151-155	rhyolite & pyrite	4.0	0.20	
10	106	170.6-176	quartz rhyolite & pyrite	4.4	0.20	
11	102	237.5-243.2	quartz	5.7	10.60(Heys): 8.10(Bell):	\$10.40 " " 227.5-233 5.5
14	98	55.5-60	quartz much pyrite	4.5	0.40	
14	99	153-154	" little "	1	1.40	2.40 " " 152-154 2
14	100	174-180	" " "	6	0.40	

NOTE: Drilling was done in 1925 and samples collected from core boxes in 1928 by P.E. Hopkins.

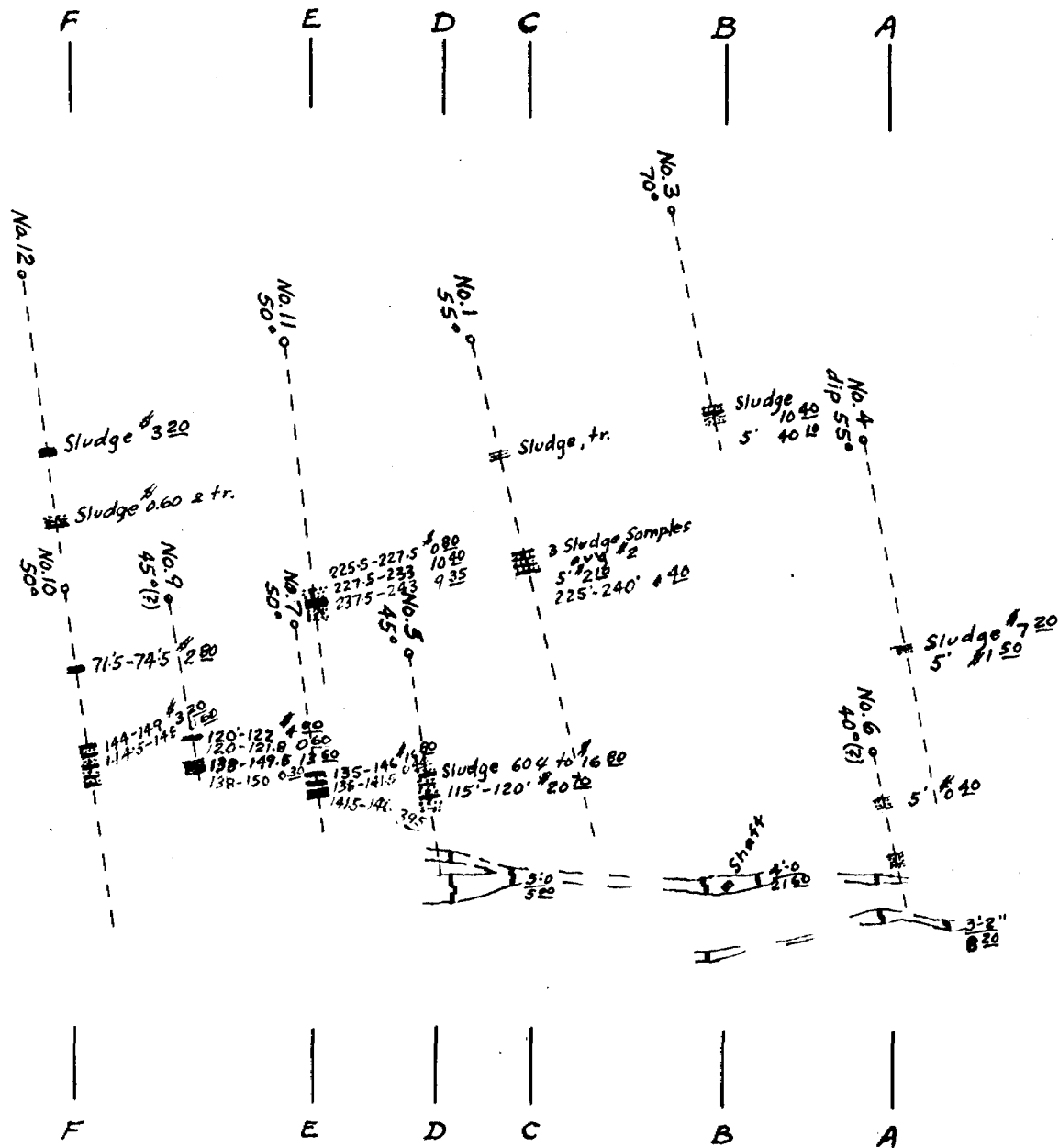
SYNOPSIS OF D.D. RESULTS.

Hole.	Mine Office.	P.E. Hopkins.
1.	From 226.5' to 240' shows mineralisation; a 5' section of core was split and gave an assay (Huff & Bell) of 2.10. The three sludge samples covering this section average 2.00.	A 15' section from 225' to 240' which was the remaining half of this split core section gave an assay of :40.
3.	From 335' to 355' shows min. schist and a little quartz. 335' to 340' sludge sample gave 10:40. At this point a split core assay is reported Huff-34:00 and Bell-46:20.	This intersection could not be checked as no core remained.
4.	At 180' to 186' min. schist and quartz is noted. A sludge assay at this point gave 7:20. A 5' section of split core assayed by both Huff & Bell gave an average value of 1:50.	
5.	From 98' to 120' shows well min. schist and quartz. Sludge values over this distance range from 0:60 to 16:80. A split core section from 115' to 120' gave Huff-22:80 and Bell 18:60.	
6.	A min. schist and quartz zone appears to be cut from 25' to 45' also at 81' to 82.5'. Negligible values were obtained in this hole.	
7.	From 129' to 146' a well min. quartz and schist zone was cut. <u>From 135' to 146' a split core assay gives 16:80 for 11'</u>	A check was obtained on this section by taking two assays. <u>135 to 141.5' gave :40 Bell and Heys. 141.5' to 146' gave 2:90 Bell and 5:00 Heys.</u>

CONT.

Hole.	Mine Office.	P.E. Hopkins.
9.	<p>The log of this hole shows well min. quartz from 120' to 121.5'. A split core assay here gives <u>4:00 for 2'</u>.</p> <p>From 138' to 149.5' a well min. quartz vein was cut. This 11.5' section gave a split core assay of <u>13:60.</u> (4.5' of this core was reported ground.)</p>	<p><u>Check assay of this section 1.8' at 0:60.</u></p> <p><u>From 138' to 150' gave 0:20 Bell, 0:40 Heys.</u></p>
10.	<p>At 71.5' to 74.5' min. qtz. is noted. Split core assay gives 2:80.</p> <p>From 142' to 175' a well min. zone was intersected. The section <u>144' to 149'</u> gave a split core assay of <u>3:20 for 5'.</u></p>	<p><u>144.4' to 148.2' gave 0:80 Bell, 0:40 Heys.</u></p>
11.	<p>Min. schist and quartz from 222.5' to 233' was cut. Split core from 227.5' to 233' gave an assay of 10:40 for 5.5'</p>	<p>From 237.5' to 243.2' gave 10:60 Heys and 8.10 Bell. It is possible that this section represents the same footage as the mine sample as the values are very close.</p>
12.	<p>Log shows from 161' to 164.5' a quartz vein with a little schist and well mineralised in places. A sludge sample ran 3:20.</p> <p>From 215' to 226' well min. schist with some quartz is shown. Sludge samples here are Tr. and 0:60.</p>	

OSSIAN GOLD MINES Ltd.



Plan of Surface  
showing D.D. Holes  
1-3-4-5-6-7-9-10-11-12.

Scale, 100':1".



# HAILEYBURY ASSAY OFFICE

J. W. N. BELL, ASSAYER AND MINING ENGINEER

No. File 1.

HAILEYBURY, Ont., March 3rd., 1928. 92

## CERTIFICATE OF ASSAY

I have assayed 111 sample of rock brought in by Percy E. Hopkins, Esq., and found the following:

No.	MARKS	GOLD Ounces per ton	VALUE, per ton \$ c	SILVER Ounces per ton	COPPER Per Cent.	ZINC Per Cent	REMARKS
1091	1	.01	.20				
1092	2	.02	.40				
1093	3	Trace					
1094	4	.02	.40				
1095	5	.02	.40				
1096	6	Trace					
1097	7	.015	.30				
1098	8	.01	.20				
1099	9	.04	.80				
1100	10	.02	.40				
1101	11	Trace					
1102	12	.02	.40				
1103	13	.01	.20				
1104	14	.03	.60				
1105	15	.08	1.60				
1106	16	.02	.40				
1107	17	.03	.60				
1108	18	.04	.80				
1109	19	.065	1.30				
1110	20	.05	1.00				
1111	21	Trace					
1112	22	.02	.40				
1113	23	.04	.80				
1114	24	.06	1.20				
1115	25	.025	.50				
1116	26	.01	.20				
1117	27	Trace					
1118	28	.03	.60				
1119	29	.02	.40				
1120	30	.02	.40				
1121	31	.04	.80				
1122	32	.02	.40				
1123	33	.01	.20				
1124	34	.035	.70				
1125	35	.02	.40				
1126	36	.03	.60				
1127	37	.025	.50				
1128	38	Trace					
1129	39	.01	.20				
1130	40	.01	.20				
1131	41	.01	.20				
1132	42	.02	.40				
1133	43	.02	.40				
1134	44	.025	.50				
1135	45	.01	.20				
1136	46	.01	.20				
1137	47	.085	1.70				
1138	48	.085	1.70				
1139	49	.01	.20				



*J. W. N. Bell* Assayer

# HAILEYBURY ASSAY OFFICE

J. W. N. BELL, ASSAYER AND MINING ENGINEER

No. 2.

HAILEYBURY, Ont., March 3rd., 1928. 92

## CERTIFICATE OF ASSAY

I have assayed 111 sample of rock brought in by Percy E. Hopkins, Esq., and found the following:

No.	MARKS	GOLD Ounces per ton	VALUE, per ton \$ c	SILVER Ounces per ton	COPPER Per Cent.	ZINC Per Cent.	REMARKS
1140	50	.02	40				
1141	51	.02	40				
1142	52	.01	20				
1143	53	.02	40				
1144	54	.01	20				
1145	55	.045	90				
1146	56	.06	1 20				
1147	57	.015	30				
1148	58	.045	90				
1149	59	.01	20				
1150	60	Trace					
1151	61	.015	30				
1152	62	.07	1 40				
1153	63	.03	60				
1154	64	.04	80				
1155	65	.015	30				
1156	66	.055	1 10				
1157	67	.025	50				
1158	68	.04	80				
1159	69	.02	40				
1160	70	.05	1 00				
1161	71	.02	40				
1162	72	.01	20				
1163	73	.01	20				
1164	74	Trace					
1165	75	.02	40				
1166	76	.01	20				
1167	77	.02	40				
1168	78	.02	40				
1169	79	.02	40				
1170	80	.025	50				
1171	81	.01	20				
1172	82	.065	1 30				
1173	83	.01	20				
1174	84	.03	60				
1175	85	Trace					
1176	86	.01	20				
1177	87	.01	20				
1178	88	.05	1 00				
1179	89	.01	20				
1180	90	.01	20				
1181	91	.13	2 60				
1182	92	.02	40				
1183	93	Trace					
1184	94	.055	1 10				
1185	95	.01	20				
1186	96	.08	1 60				
1187	97	.01	20				
1188	98	.02	40				



*J.W.N. Bell*



# HAILEYBURY ASSAY OFFICE

J. W. N. BELL, ASSAYER AND MINING ENGINEER

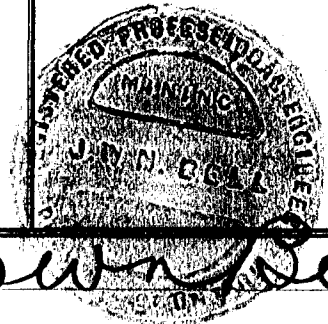
No. 3.

HAILEYBURY, Ont., March 3rd., 1928. 92

## CERTIFICATE OF ASSAY

I have assayed 111 sample of rock brought in by Percy E. Hopkins, Esq., and found the following:

Lab. No.	MARKS	GOLD Ounces per ton	VALUE, per ton \$ c	SILVER Ounces per ton	COPPER Per Cent.	ZINC Per Cent	REMARKS
1189	99	.07	1.40				
1190	100	.02	.40				
1191	101	.02	.40				
1192	102	sample	missing				← (see next sheet)
1193	103	.01	.20				
1194	104	.04	.80				
1195	105	.01	.20				
1196	106	.01	.20				
1197	107	.03	.60				
1198	108	.01	.20				
1199	109	.01	.20				
1200	110	.02	.40				
1201	111	.145	2.90				



*J. W. N. Bell*  
Assayer

# HAILEYBURY ASSAY OFFICE

J. W. N. BELL, ASSAYER AND MINING ENGINEER

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

HAILEYBURY, Ont., March 13th., 1928. 192

## CERTIFICATE OF ASSAY

I have assayed -1- sample of rock brought in by P. E. Hopkins, Esq., and found the following:

Lab. No.	MARKS	GOLD Ounces per ton	VALUE, per ton		SILVER Ounces per ton	VALUE, per ton		REMARKS
			\$	c		\$	c	
1379	102	.41	8.	20				sample had to be re-pulverized, as some would not go thru 80 mesh

*J. W. N. Bell* Assayer

# THOMAS HEYS & SONS

ESTABLISHED 1873

**ANALYTICAL CHEMISTS  
AND ASSAYERS**

ANALYSES AND ASSAYS  
of Foods, Fertilizers, Paints, Oils,  
Gasoline, Coal, Metals, Ores,  
Textiles and All Products

INVESTIGATIONS  
and Reports on Manufacturing  
Processes  
Mine Sampling and Assay Plans

TELEPHONE ELGIN 3574  
TORONTO ARCADE, YONGE STREET  
TORONTO. **March 15th/28**

.....**Mr. Percy E. Hopkins**.....

.....**Toronto**.....

Dear Sirs:—

We hereby certify that we have made a careful assay of the samples of **Ore Pulp**.....  
received from you and report results as follows:—

Samples Marked	Gold Oz.	Value Per Ton	Silver Ozs.	Copper %	Nickel %	Lead %	Zinc %	Platinum Ozs.
# 17	0.01,	\$ 0.20						
# 20	0.01,	\$ 0.20						
# 21	0.04,	\$ 0.82						
# 43	0.04,	\$ 0.82						
# 44	0.82,	\$ 0.82						
# 56	0.08,	\$ 1.64						
# 86	0.01,	\$ 0.20						
# 87	0.01,	\$ 0.20						
# 88	0.08,	\$ 1.64						
# 89	0.01,	\$ 0.20						
# 104	0.02,	\$ 0.41						
# 108	0.02,	\$ 0.41						
# 110	0.02,	\$ 0.41						
# 111	0.28,	\$ 5.74						
# 111, Check	0.25,	\$ 5.12						

102 (see next sheet)

Yours truly,  
*Charles Heys & Sons*  
*[Signature]*

# THOMAS HEYS & SONS

ESTABLISHED 1873

## ANALYTICAL CHEMISTS AND ASSAYERS

ANALYSES AND ASSAYS  
of Foods, Fertilizers, Paints, Oils,  
Gasoline, Coal, Metals, Ores,  
Textiles and All Products  
INVESTIGATIONS  
and Reports on Manufacturing  
Processes  
Mine Sampling and Assay Plans

TELEPHONE ELGIN 3574  
TORONTO ARCADE, YONGE STREET  
TORONTO, Feb. 29th/28

.....Mr. P. E. Hopkins.....

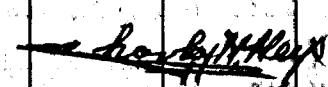
.....Consulting Geologist.....

Dear Sirs:—

We hereby certify that we have made a careful assay of the samples of Diamond Drill Core received from you and report results as follows:—

Samples Marked	Gold Oz.	Value Per Ton	Silver Ozs.	Copper %	Nickel %	Lead %	Zinc %	Platinum Ozs.
102	0.52,	\$10.66	0.50					

Yours truly,





ONTARIO

DEPARTMENT OF MINES  
OFFICE OF PROVINCIAL ASSAYER

East Block, Parliament Bldgs., Toronto, Ont.

March 21st. /28.

Dear Sir:-

*Ossian*

we beg to report the following on the samples submitted for assay:-

No. II2	.....	Gold.....	\$1.60 per ton.
II3	.....	" .....	0.20 per ton.
II4	.....	" .....	0.80 per ton.
II5	.....	" .....	0.40 per ton.
II6	.....	" .....	0.20 per ton.
II7	.....	" .....	0.20 per ton.
II8	.....	" .....	0.40 per ton.
II9	.....	" .....	0.20 per ton.
I20	.....	" .....	0.40 per ton.
I21	.....	" .....	0.20 per ton.
I22	.....	" .....	0.80 per ton.
I23	.....	" .....	0.20 per ton.
<del>I24</del>			

yours truly,  
*W. K. McNeill*  
Provincial Assayer.

Mr. P.E. Hopkins,  
Toronto, Ont.

# THOMAS HEYS & SONS

ESTABLISHED 1873

ANALYTICAL CHEMISTS  
AND ASSAYERS

ANALYSES AND ASSAYS  
of Foods, Fertilizers, Paints, Oils,  
Gasoline, Coal, Metals, Ores,  
Textiles and All Products  
INVESTIGATIONS  
and Reports on Manufacturing  
Processes  
Mine Sampling and Assay Plans

TELEPHONE ELGIN 3574  
TORONTO ARCADE, YONGE STREET

TORONTO, March 22nd./28

.....Mr. Percy E. Hopkins.....

...Toronto.....

Dear Sirs:—

We hereby certify that we have made a careful assay of the samples of...Ore.....  
received from you and report results as follows:—

Samples Marked	Gold Oz.	Value Per Ton	Silver Ozs.	Copper %	Nickel %	Lead %	Zinc %	Platinum Ozs.
# 112	0.08,	\$ 1.64						
# 113	0.01,	\$ 0.20						
# 114	0.04,	\$ 0.82						
# 115	0.04,	\$ 0.82						
# 116	0.01,	\$ 0.20						
# 117	0.02,	\$ 0.41						
# 118	0.02,	\$ 0.41						
# 119	0.02,	\$ 0.41						
# 120	0.08,	\$ 1.64						
# 121	0.04,	\$ 0.82						
# 122	0.08,	\$ 1.64						
# 123	0.01,	\$ 0.20						

Yours truly,  
*Thomas Heys & Sons*  
*Charles H. Heys*



32D05SE0376 63.3915 OSSIAN

**Jas. G. MacGregor**

MINING GEOLOGIST

804 Northern Ontario Building,  
TORONTO, March 18th, 1936.

Mr. Walter E. Hurd,  
President, Ossian Mines Limited,  
709 Excelsior Life Building,  
TORONTO.

Dear Mr. Hurd:

The following is a brief summary of the results secured in the check drilling conducted on the property of Ossian Mines Limited.

The purpose of the drilling was to check the high results previously secured in the drilling conducted some years ago. For checking purposes Holes 5, 7, 9, and 3 were singled out, and new holes were drilled alongside the original ones, within 18 inches in most cases, having the same strike and dip. The following is a summary of the results secured in these further holes.

Hole 5-A: The original drilling recorded ore assaying 1.14 ounces across a width of 5 feet, between 102' and 107'.

The check hole returned the following:

101'9"	-	102'9"	-	.11 ounces
102'9"	-	106'6"	-	nil
106'6"	-	108'9"	-	.08 ounces
108'9"	-	112'4"	-	nil
112'4"	-	113'2"	-	1.04 ounces
113'2"	-	115'2"	-	.12 ounces

A little free gold was observed in the core at 113', and while fair values were secured the average was not as high as the former hole.

Hole 7-A: In the former hole an assay was recorded of .84 ounces from 135'8" to 145'.

The check hole yielded the following results:

130'6"	-	135'2"	-	nil
135'2"	-	141'	-	nil
141'	-	145'	-	.08 ounces

This hole failed to check.

Jas. G. MacGregor

MINING GEOLOGIST

Mr. Walter E. Hurd,  
Ossian Mines Limited. - 2

March 18th, 1936.

Hole 9-A: In the former hole an assay was recorded of .68 ounces from 138' to 148'.

The following are the results secured in the check drilling:

111'	-	113'	-	.03 ounces
143'	-	145'10"	-	.02 ounces
145'10"	-	150'	-	.04 ounces
150'	-	152 $\frac{1}{2}$ '	-	.05 ounces

This hole also failed to check the former result.

Hole 3-A: In the former hole an assay was recorded of 1.7 ounces from 312' to 317'.

In the check hole the following result was secured:

337'	-	340'10"	-	.12 ounces
------	---	---------	---	------------

Hole 6-A: This was a new drill hole east of Hole 5. A few quartz sections were encountered, and the following results were secured:

103 $\frac{1}{2}$ '	-	104'9"	-	.01 ounces
105'9"	-	106'9"	-	.20 ounces
106'9"	-	110'	-	.02 ounces
112'	-	114'	-	.15 ounces

The sludge from 105' to 110' ran .02 ounces.

From the above it is quite evident that the new drilling failed to check the former results, and bearing in mind the fact that the underground workings also failed to reveal the presence of ore values, I am of the opinion that the former results cannot be accepted as accurate.

Drilling has now been stopped, and I would recommend that some surface prospecting and trenching be conducted during the coming season.

The above is a condensed resume of the drilling, and a more complete report will follow in due course.

Very truly yours,

JGM/C

Jas. G. MacGregor





32055E0376 63.3915 OSSIAN

050

REPORTS - re TRENCHING / GEOLOGY

by

F. E. TOWSLEY

for

OSSIAN GOLD MINES LTD.

1939.

Chemins, Ont.,  
July 13, 1939.

Ossian Gold Mines Ltd.,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

re: Trench #1

Trench #1 was continued south for a total distance of 346 ft. where it was stopped. The trench is entirely in rhyolite. The last thirty is fairly well mineralized with fine pyrite and will be sampled and assayed. The trench at the end was again barren rhyolite and was stopped.

Two series of minor faults were disclosed in this trench. One series bearing south east and the other north west. These faults, I believe, have a great bearing on the structure of the property and I believe are criteria of two major faults on the property, which probably are outlined on surface by the two swamp areas which cut across the property in a general north westerly direction. These can be noted on the geological map being sent under separate cover.

re: Trench #2

Trench #2 is a continuation of an old trench located 508 ft. east of Post #3 of Claim L-11133. This trench bears S 12° W and is being continued from a 110 ft. S 12° W of the claim line. The trench is in a highly sheared gossan, which originally appeared to have been an igneous conglomerate, or an agglomerate the inclusions of which are rhyolite. The matrix on surface is so badly weathered that it is impossible to determine its original state, but is probably an andesite. There is considerable massive sulphide in this, the bigger per cent of which is pyrite with small amounts of pyrrhotite and chalcopyrite. This will be blasted into and the fresh surface sampled. In the meantime, other trenches will be dug parallel to Trench #2 both to the east and to the west. This is the best prospect that I have seen on the property, other than the main showing, to date.

re: Map

A copy of the geological map is being forwarded under separate cover. This map is fairly complete

for the north west part of the property, but may be revised from time to time. It will be noted on the west boundary of Claim L-11131 a fault breccia is shown. This is an andesite with rather angular fragments of rhyolite and I believe will prove to be in a major north-south fault zone. Another fault zone may roughly parallel the east boundary of Claim L-11131, while still another may be found in the creek and swamp area of Claims L-12577, L-12716, and L-15891.

Work will be continued on the map and probably more proof of these fault zones will be found to the south which undoubtedly will be a great help in finding ore bodies and also in tracing the original showing.

Very truly yours,

"FRED E. TOWSLEY"

C O P Y

Cheminis, Ont.,  
July 17, 1939.

Ossian Gold Mines Ltd.,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

re: TRENCH #1

Three samples were cut from the south end of Trench #1 and will be sent for assay at the end of the week. A log of these samples will be forwarded at a later date.

re: TRENCH #2

Trench #2 has been continued to a point 150 ft. south of the claim line between L-11133 and L-11186. This is a 40 foot advance over the old trench. At this point, the trench went into a low spot and filled with water so rapidly that I stopped working here. However, when we get dry weather we will again start here. The new part of the trench is all in very rusty highly sheared gossan. At present, we are drilling in this trench preparing to blast several pits, which will be sampled and sent for assay at the end of the week.

re: TRENCH #3

Trench #3 is located 608 ft. east on the claim line, of Post #3 of Claim L-11133. This trench has been dug 50 ft. north of the claim line and 20 ft. to the south. It is entirely in rusty sheared gossan similar to that found in Trench #2. Holes are also being drilled here in preparation to blasting and sampling.

The rock in this trench as well as in Trench #2, is very encouraging and should give some values in gold. The shearing is over a good width and the mineralization is consistent, being chiefly pyrite with small amounts of chalcopyrite bornite and possibly arsenopyrite.

re: MAPPING

The mapping is being continued but lately we have been held back to some extent by heavy rains. We are making some progress though, and from time to time I will send in new geologic maps.

re: ASSAYING

The Haileybury Assay Office has quoted a price of \$1.00 per assay, and we will send all of our samples to them. These will be sent once a week, probably on Friday with instructions to send results to Toronto and Cheminis.

Very truly yours,

"FRED E. TOWSLEY"

C  
O  
P  
Y

Cheminis, Ontario,  
July 21, 1939.

Ossian Gold Mines Limited,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

Re: Trench #2

Since the last report, four pits have been blasted in this trench. These pits were put in where the shearing was most intense and where mineralization was particularly good. The fresh rock is a rhyolite schist with considerable talc and sericite. The mineralization in every case is good being both massive and in the pyrite with considerable more chalcopyrite than was noted on surface. There are many narrow sulphide veinlets throughout. Channel samples are being taken and will be sent for assay this week-end. Tags will be sent at that time.

Re: Trench #3

Trench #3 has been continued from twenty to thirty-five feet south of the claim line. The highly sheared condition of Trench #2 is found in this trench with good mineral. Preparations are now being made to put several pits in this trench. Channel samples will be taken and sent for assay at that time.

Re: Mapping

Geologic mapping is still being carried on and should be completed shortly.

Very truly yours,

"FRED E. TOWSLEY"

C  
O  
P  
Y

OSSIAN GOLD MINES LIMITED

S A M P L E      L O G

July 22nd, 1939.

<u>SAMPLE NO.</u>	<u>LOCATION</u>	<u>SAMPLE WIDTH</u>	<u>DESCRIPTION</u>
1	Trench #1, 331 to 336 ft. South of picket line Claim L-11131.	5 ft.	Massive pink rhyolite. Poor mineralization. Finely disseminated pyrite.
2	Trench #1, 311 to 316 ft. South of picket line Claim L-11131.	5 ft.	Rhyolite, finely disseminated pyrite. Poor to fair mineralization.
3	Trench #1, 271 to 276 ft. South of picket line Claim L-11131.	5 ft.	Rhyolite. Scant mineralization. Finely disseminated pyrite.
4	Trench #2, 76.5 to 79.5 ft. South of claim line Claim L-11186.	3.0 ft.	Highly sheared rhyolite with some talc. Good mineralization both finely disseminated and in narrow veinlets. Largely pyrite with small amounts of chalcopyrite and bornite.
5	Trench #2, 79.5 to 83.5 ft. South of claim line Claim L-11186.	4.0 ft.	Highly sheared rhyolite with some talc. Mineralization as in Sample #4.
6	Trench #2, 83.5 to 86.5 ft. South of claim line Claim L-11186.	3.0 ft.	Schisted rhyolite with some talc. Few quartz stringers. Good mineralization, both in veinlets and disseminated. Pyrite with small amounts of chalcopyrite and bornite.
7	Trench #2, 19.5 to 21.8 ft. North of claim line Claim L-11133.	2.5 ft.	Slightly schisted rhyolite. Fair mineralization in veinlets and disseminated.
8	Trench #2, 44 to 44.8 ft. North of claim line. Claim L-11183.	1.8 ft.	Rhyolite schist. Fair mineralization as in Sample #7. Some rust included in this sample.
9	Trench #2, 97 to 99.5 ft. North of claim line. Claim L-11133.	2.2 ft.	Rhyolite schist. Good mineralization both in veinlets and finely disseminated. Pyrite and small amounts of chalcopyrite and bornite. Some rust included in this sample.
10	Trench #2, 55 to 58.5 ft. South of claim line. Claim L-11186.	3.5 ft.	Schisted rhyolite. Some talc. Good mineralization, both disseminated and in veinlets. Mainly pyrite. Some rust in sample.
11	Trench #2, 58.5 to 62 ft. South of claim line. Claim L-11186.	3.5 ft.	As above.

C.  
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Y

Cheminis, Ontario,  
July 27, 1939.

Ossian Gold Mines Limited,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

Re: Trench No. 3

Trench #3 has been continued to 75 ft. south of the claim line. It is still a highly sheared gossan containing a large percentage of mineral. The mineralization is mainly pyrite but more sphalerite and galena has been noted near the end of this trench than has been previously noted. I believe that there will be more chance of values to the south than in other places. Holes have been drilled in this trench and pits put in but as yet they have not been sampled as the weathering and rust are below the bottom of the pits. These will be deepened before sampling in order to get fresh rock for the assay.

Re: Assaying

The results from the samples taken in Trenches #1 and #2 have been received here. Two copies of the results were sent to me. I am sending one of these with this report, as a copy may not have been forwarded to you. The results are very disappointing, but I have hopes that the results from Trench #3 will be better due to the better mineralization. Samples from this trench will be sent for assay as soon as possible.

Re: Map

Another map is being prepared and will be sent on the next mail day. This map covers considerable more of the property than the one originally sent.

Very truly yours,

"Fred E. Towsley"

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Cheminis, Ontario,  
August 1, 1939.

Ossian Gold Mines Limited,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

re: MAPPING

I am sending a copy of the geological map under separate cover. This map is nearly complete. The work on this map should be complete by the end of this week or possibly the middle of next week. The copy I am sending covers the entire northern part of the claims and some of the south western claims.

re: STAKING

I have not had the opportunity as yet of looking over the open ground to the west, but will do so this week. I am going to look over Claims L-11025; L-11026; L-10939; L-11027; L-11028; L-10940; L-11029; L-11030; and L-11567, which I believe are now open. If these claims are open and the ground appears favourable, I will procure licenses and stake them early next week.

re: TRENCH #3

Trench #3 has been continued to 95 ft. south of the claim line and considerable drilling and blasting done since the last report. The blasting has opened up some very nice mineralization which should carry some gold values. There is at least five per cent. mineral in the gossan or rhyolite schist. This mineralization about 90-95% massive and disseminated pyrite, the remainder being chalcopryite, galena and sphalerite. There are also a few narrow quartz stringers present, which were not found in Trench #2. The more varied mineralization and the quartz stringers are more favourable for the finding of gold than the conditions noted in Trench #2 so I believe that it is reasonable to expect some values.

re: SAMPLING

Trench #3 has been sampled, the samples being sent for assay today. The logs of these samples are enclosed.

Yours very truly,  
"FRED. E. TOWSLEY"



OSSIAN GOLD MINES LIMITED

Log of Samples

Sent for Assay - Aug. 1/39.

#12	Trench #3	2.6 ft.	75 to 77.6' North of claim line east wall.	Rhyolite schist. Fair fine mineralization. Pyrite with small amounts of chalcopyrite. Some rust.
13	" 2	3.9 ft.	48.4 to 52.3' North of claim line east wall.	Rhyolite schist. Fair to good mineralization. Pyrite with small amounts of chalcopyrite.
14	" 3	3.0 ft.	48 to 51 ft. South of claim line east wall.	Rhyolite schist. Good mineralization. Massive and disseminated pyrite with small amounts of chalcopyrite, galena, and sphalerite. Some carbonate. Few quartz stringers.
15	" 3	2.5 ft.	51 to 53.5' South of claim line east wall.	Rhyolite schist. Same as Sample #14.
16	" 3	4.0 ft.	56.5 to 60.5' South of claim line. Bottom of pit.	Rusty rhyolite schist. Good mineralization. Massive and disseminated pyrite with small amounts chalcopyrite, galena, and sphalerite. Considerable carbonate. Few quartz stringers.

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Cheminiis, Ontario,  
August 9, 1939.

Ossian Gold Mines Ltd.,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

re: TRENCH #3

Due to the poor results obtained from the samples in the Trench #2, #3 area no further work will be done in the vicinity. As I have stated before, this particular section looks particularly good but evidently gold bearing solutions were not present when the other minerals were deposited, and is probably due to lack of acid intrusives.

re: TRENCH #4

Trench #4 was started at a point 190 ft. east on the claim line of post #3, claim L-11182. The bearing of the trench is N 30° E. The trench has been dug 100 ft. north of the claim line and 25 ft. south. The flat quartz mass mentioned in the last report was followed to the south, but is apparently nothing but a loose capping as it stops abruptly about 25 ft. south of the claim line at which point it is 2 ft. in thickness. The quartz overlies schisted greenstone with out a great deal of mineral. North of the quartz is schisted greenstone.

A small pit was put in at the south end of the quartz blowing the cap off and exposing rather tightly sheared pillow lava with scant mineral.

At the north end of the trench about 2,500 square ft. of stripping was done exposing a number of narrow barren quartz stringers.

A few samples from this section will be taken and sent for assay.

re: TRENCH #1

Trench #1 will be started again today and continued as far south as possible. This is being done to determine whether the fault found between the shaft and trench #1 has offset the quartz vein to the south, or if the vein is later than the faulting.

Very truly yours,

"FRED E. TOWSLEY"

OSSIAN GOLD MINES LTD.

Log of Samples Sent for Assay

August 22, 1939.

<u>No.</u>	<u>Location</u>	<u>Length</u>	<u>Description</u>
17	Tr. #4 - 9 ft. South of claim line.	26 in.	Schisted greenstone. Scant to poor mineralization. Mainly cube pyrite. Some rust and carbonate.
18	Tr. #1 - 455.5 ft. South of picket line.	18 in.	Greenstone. Fair mineralization. Very fine cube pyrite.
19	Tr. #1 - 457.0 ft. South of picket line.	24 in.	Rhyolite. Good mineralization. Fine cube pyrite. Some rust.
20	Tr. #1 - 464.8 ft. South of picket line.	24 in.	Rhyolite. Good mineralization. Fine pyrite. Some rust.
21	Tr. #1 - 466.8 ft. South of picket line.	18 in.	Greenstone. Poor mineralization. Cube pyrite.
22	Tr. #1 - 500.3 ft. South of picket line.	5.0 ft.	Rhyolite. Good mineralization. Massive and cube pyrite.

Cheminis, Ontario,  
August 25, 1939.

Ossian Gold Mines Ltd.,  
331 Bay Street,  
Toronto, Ontario.

Dear Sirs:

re: TRENCH #1

Trench #1 was stopped yesterday 600 ft. south of the picket line. The trench was entirely in rhyolite other than the two narrow sections of greenstone previously mentioned.

Quartz and calcite stringers were found in two different places, 510 ft. and 532 ft. south of the picket line. Pits were put in at these places, but the stringers were found to be flat and did not extend down over eighteen inches. These stringers are barren, although the adjacent rhyolite was well mineralized as usual.

re: TRENCH #5

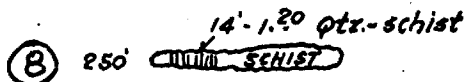
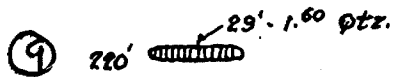
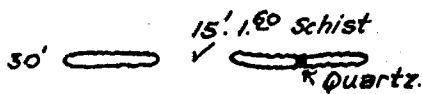
Trench #5 was started 613 ft. west of Post #2 Claim L-15891, on the claim line, and 14 ft. N 5° E. This trench was put in here because the only definite contact between the rhyolite and greenstone was found here. The contact zone is a breccia with rhyolite fragments in a greenstone ground mass. The trench has been continued N 5° E for a distance of 32 ft. The contact is located 21 ft. north of the south end of the trench, and is striking between N 70° W and N 80° W. A sketch showing the location of the trench is enclosed.

Six samples were sent for assay on August 22nd, 1939, A log of these samples giving location, width, and description is enclosed. etc.

Very truly yours,

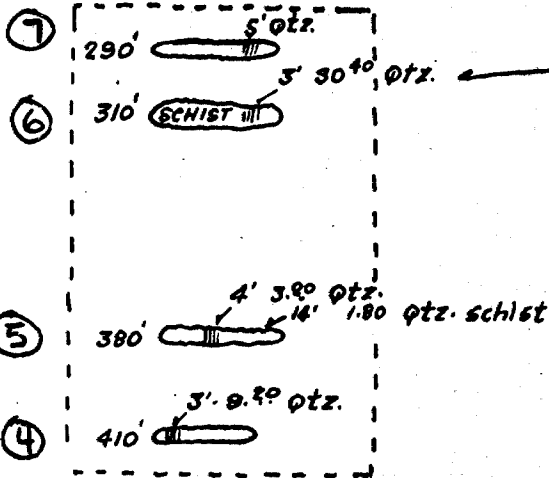
"FRED E. TOWSLEY"

WEST  
0'

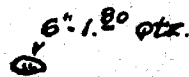
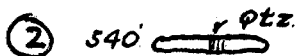


L. 11131

L. 11132



PAN CONCS  
10:1'  
256.00 Gold  
5oz. Silver.



EAST.

TRENCHING AND ASSAY PLAN  
OSSIAN CLAIMS  
Scale 1" = 60'

WEST.

0'

30'

15' 60' SCHIST  
QUARTZ

11

140' SCHIST

17' 2' 40' QTZ-SCHIST  
16' 120' SCHIST  
19' 12' 20' QTZ  
13' 60' QTZ

10

170' SCHIST

QTZ

9

220' 29' 160' QTZ

8

250' 14' 20' QTZ-SCHIST  
SCHIST

L. 11131

L. 11132

7

290' 5' QTZ

PAN CONCT'S  
10:1  
256<sup>00</sup> Gold  
5 oz. Silver.

6

310' SCHIST  
3' 30' 40' QTZ

100'  
143' 00"

5

380' 14' 320' QTZ  
14' 180' QTZ-SCHIST

4

410' 3' 920' QTZ

3

460' SCHIST

2

540' QTZ

BL

# TRENCHING & ASSAY PLAN

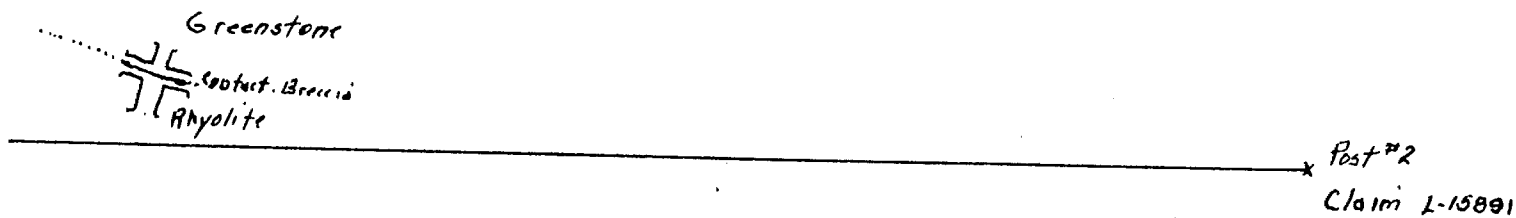
## OSSIAN CLAIMS. ① 600' SCHIST

SCALE 1"=60'

EAST.

6' 180' QTZ

By GORDON HARDY



Sketch showing Trench #5

Scale: 100' = 1"

# OSSIAN GOLD MINES LIMITED

(NO PERSONAL LIABILITY)

709 EXCELSIOR LIFE BUILDING  
36 TORONTO STREET  
TORONTO

## GENERAL INFORMATION

The property of the Ossian Gold Mines Limited, situate in Ossian Township, about half-way between Kirkland Lake, Ontario, and Noranda, consists of twenty-three patented mining claims, containing approximately 1,114 acres in one block.

The following are reports and maps descriptive of this property:

1. Location map.
2. Survey map of mining claims.
3. Surface map of original sampling.
4. Report by K. B. Heisey, and maps of check sampling on Dome Mines' results.
5. Report by J. W. Morrison with plans and maps.
6. Report by P. E. Hopkins with accompanying maps.
7. Report by J. G. MacGregor.
8. Ontario Department of Mines report by T. L. Gledhill, together with geological map.

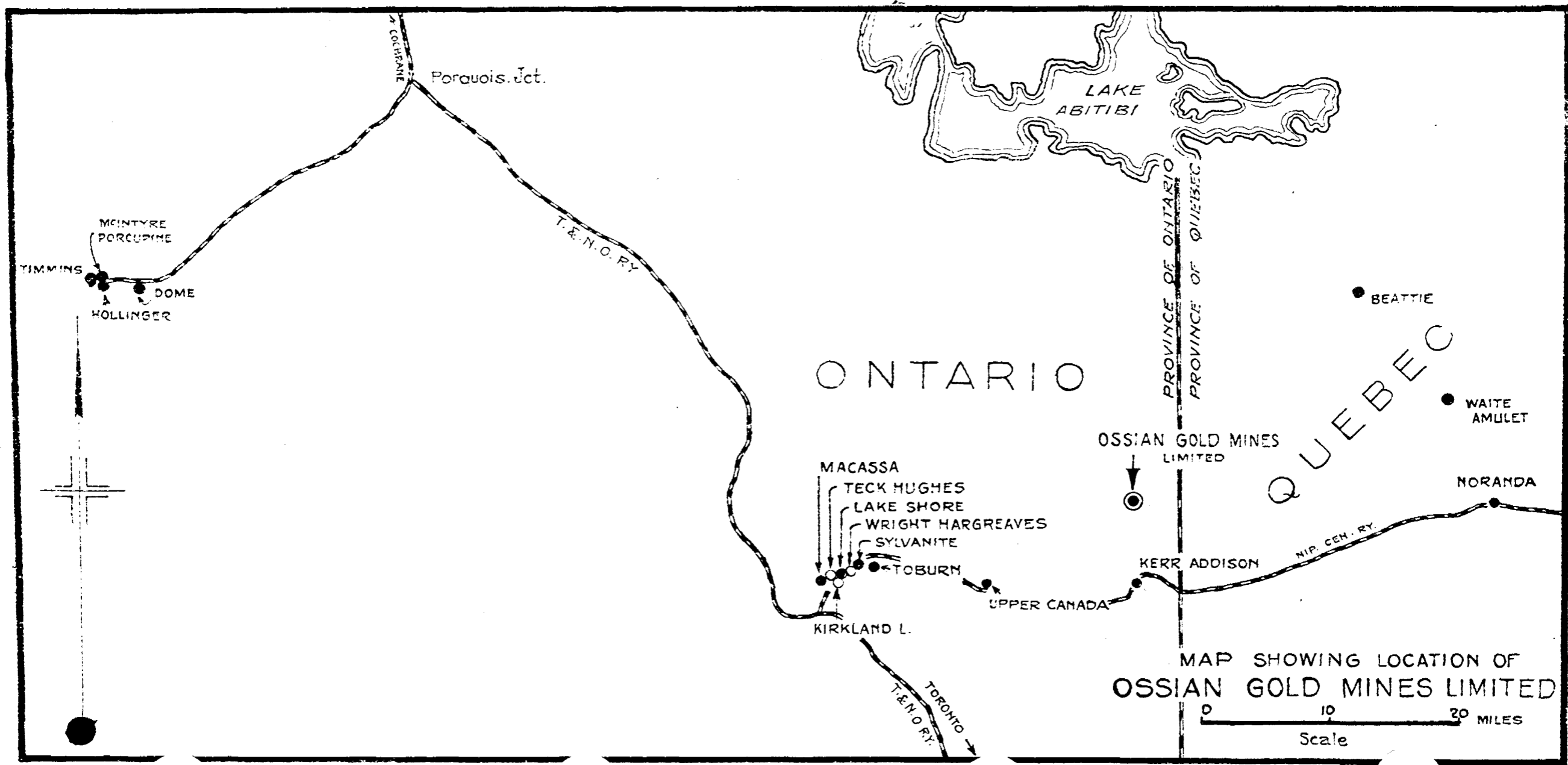
OSSIAN GOLD MINES LIMITED

Per

*W. G. Chipp*

Secretary.







320655E0376 63.3915 OSSIAN

060

*L. L. L.*

# 8

ORGANIZATION  
DEVELOPMENT  
FINANCING

H. E. BOUNSALL  
MINING

EXAMINATIONS  
AND REPORTS  
ARRANGED

March 30, 1943.

Messrs. Ossian Gold Mines Ltd.,  
Excelsior Life Bldg.?  
Toronto, Ont.

Dear Sirs:

Following is an opinion after thoroughly going over all the reports of your Ossian Twp., property.

On claim L 11132, K.B.Heisey, laid out on his original surface plan, what he considered to be the most likely section of the mine, he secured

3 feet wide	\$30.40	Gold at \$20.67
4 feet "	3.20	" "
3 feet "	9.20	" "

These assays were secured in surface channels, close to a short fault which may have considerable to do with the Gold deposition in your property.

Why no underground work was done in this area is hard to understand, as it is very close to present underground workings.

Mr Jas McGregor, March 1936, report, inrechecking showed only two good sections, namely,

Hole 3 A.	46 inches	.12 ozs--	\$ 4.20
Hole 6 A.	96 inches	.12 "	\$ 4.20

These two holes are approximately 90 feet apart in the same area as Heisey suggested for development, and the only interesting holes put down by him, he probably never saw Heisey's surface report, or he probably would have had more interest in this section which so far has been unexplored.

I beleive there is a chance of making ore in the vicinity of the fault, and for an unknown distance east. It looks as though the wider sections of the veins were thoroughly explored but the narrower sections 36" to 48" were passed up.

New large mines five miles south including Kerr-Addison are being developed successfully, and I believe the Ossian property, is intersting enough to suggest a series of drill holes in the area outlined. If good results were obtained in drilling, it would not entail any heavy outlay to explore this area underground, as it is just thirty feet eastv of the shaft.

Due to the dip of the veins, to the north, if ore is found, a new shaft further north would be necessary, but the present shaft, is satisfactory for exploration purposes.

I am,

Yours very truly,

*M. E. Bounsell*



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070

REPORT  
by  
C. S. LONGLEY of PAYMASTER CONSOLIDATED MINES LTD.  
for  
MINEDEL MINES LTD  
(until 1947 - OSSIAN GOLD MINES LTD.)  
1949

**HEAD OFFICE**

**PAYMASTER CONSOLIDATED MINES, LIMITED**

(INCORPORATED IN CANADA)

**SOUTH PORCUPINE, ONTARIO**

ADDRESS ALL CORRESPONDENCE TO COMPANY, NOT TO INDIVIDUALS

September 22, 1949

Minedel Mines Limited,  
36 Toronto St., Toronto, Ontario

Dear Sirs:-

Following please find report on Minedel Mines Limited. This report is based on an examination of the property on September 14 to 17, 1949 accompanied by a sampler from Paymaster. I was guided in this examination by previous reports on the property.

**Accessibility:**

Highway No. 66 is paved from Swastika to the Quebec boundary. The road from highway No. 66 to Cheminis, two miles, is a good gravel road used by Kerr Addison Mine for hauling heavy machinery from Cheminis. This is the end of graded roads. From Cheminis to Labyrinth Lake, four miles, the road is hilly and in places so rough that it is scarcely passable for a car. This road leads to a dock used by hunters etc. There were several small boats tied up at the dock.

From the top of the hill a quarter mile south of the dock and just in sight of the lake there is a wagon road leading out to the north west across Waterhen creek and then north along the east west of Labyrinth Lake. The bridge across the creek needs minor repairs. There was reported to be a good trail crossing this road leading from a bay on Labyrinth Lake to the Minedel Mine. We failed to find this trail. When we approached the north end of the cove we took a line due west crossing a swamp that shows on the map to be 1 1/2 miles but seemed to be at least double that wide. We entered the Minedel Mine property at the centre of the east boundary and continued west to the shaft area. We left the car at 4 P.M. on Wednesday and reached the mine at 2.15 P.M. on Thursday.

Returning we followed the trail towards Derby as far as the Cheminis winter road near the south edge of the Minedel Mine property. Then we followed the Cheminis winter road for a quarter of a mile to where we

7

S. A. PAIN

Mining Engineer  
SWASTIKA, ONTARIO  
CANADA

12th January 1962

Mr I. D. Noll  
2901 Avenue J  
Brooklyn (10) N. Y.



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Dear Mr Noll;

Thank you for your letter of the 1st and for the print of the McIntyre letter, which I return herewith.

Evidently Robinson and myself were thinking along similar lines, but I would like to keep away from the shallow levels of the big quartz vein and drill it deeper, as it approaches the lava contact on its flat north dip, and east and west.

I have now seen all the data in the Government Geologist's office in Kirkland Lake, and found just what I wanted.

Just where all the work has been done it is one of those spotty quartz masses, but these all represent a "blow-out" from something more confined and regular, which could be valuable when located.

Next thing is to locate the money. So here is wishing both of us a Happy and Prosperous New Year.

Yours sincerely,

# 19

S. A. PAIN

Mining Engineer

PHONE 567-3542

P.O. BOX 181

KIRKLAND LAKE, ONTARIO

28th May 1966

Mr I. D. Noll  
Brooklyn N.Y.

Dear Mr Noll;

Replying to your query as to the conflicting reports concerning exploration at Ossian Gold Mine thirty years ago.

According to the various reports in the files of the resident geologist of the Ontario Department of Mines at Kirkland Lake, there was some question as to the difficulty of reconciling the results of surface sampling, underground sampling, and diamond drilling as conducted by four or five different engineers.

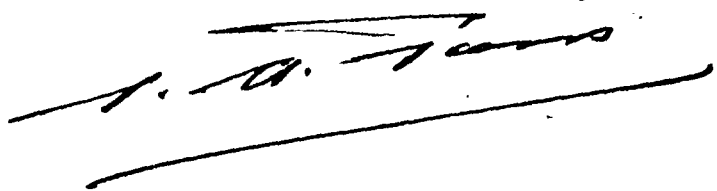
In spite of their disagreements I would point out that the Morrison D.H.5 showing \$22.80/5ft was checked by McGregor D.H.5A showing 1.04 oz/lft. Then, the Morrison D.H.11 showing \$10.40/5.5ft from 227.5 to 233ft was closely checked by Hopkin's assay of \$10.60 from 237.5 to 243.2 ft. Apparently there was no core left in the box at the Morrison footage when checked by Hopkins, and Morrison must have missed sampling the 237.5 to 243.2 ft section.

Heisey obtained values on surface, apparently when checking sampling of an engineer from Dome. Heisey remarks that the shaft, 90 ft at his time, was sunk away from where he obtained values.

There is some question of the workings not being on the vein that was diamond drilled. This can only be decided by examination of mine surveys and surveys of drill holes. I have copies of the Hopkins underground assay plans, but have no data regarding location or surveys of drill holes.

When times are ripe I would think you would be well advised to dewater the workings to the 90 ft level and put out some short holes north and south at that level. Then, if that locates values, put down holes to depth. It would pay to do surface stripping and sampling at the same time.

Yours truly,





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090

REPORT ON  
MINEDEL MINES LIMITED  
OSSIAN TOWNSHIP PROPERTY

FORM NO. L4-911.P. REPORT PAPER GRAND & TOY

Toronto, Ontario.  
19 December, 1972.

Prepared by  
L. G. Phelan, M.A.Sc., P.Eng.  
Consulting Geologist



REPORT ON  
MINEDEL MINES LIMITED  
OSSIAN TOWNSHIP PROPERTY

Minedel Mines Limited holds a group of patented claims in Ossian Township, northeastern Ontario. The following is a resume of the known geology and an appraisal of the possibility of occurrences of economic mineral deposits on the property.

Property:

The Minedel property consists of 23 contiguous patented mining claims in the northwest quarter of Ossian Township, in northeastern Ontario. The claims are situated about seven miles north of Virginiatown and the Kerr Addison Gold Mine, and approximately sixteen miles southwest of the copper-zinc deposit recently discovered by Iso Mines in Hebecourt Township, Quebec.

The claims total approximately 1,100 acres and are numbered as follows:

L 11131 to 11133 inclusive  
L 11181 to 11189 inclusive  
L 11344  
L 11413  
L 11999  
L 12000  
L 12020 and 12021  
L 12577 and 12578  
L 12716 and 12717  
L 15891

A gravel road extending north from North Virginiatown to Mist Lake crosses the southwest corner of the property. Mist Lake, one-half mile northwest of the claim group is also accessible to float- or ski-equipped aircraft.

History:

Gold was discovered on the property in the early 1920's. In 1925 Ossian Gold Mines Limited acquired the ground and did trenching and diamond drilling. In the period 1925-27 a shaft was sunk to 210 feet and 1,100 feet of lateral work was done on two levels. Marginal quantities of gold were indicated. Limited further surface work was done in 1939.

Minedel Mines Limited acquired the ground in 1947. Re-examinations, and resampling programs were done in that era, without significant new discoveries.

The copper-zinc discovery in nearby Hebecourt Township, which was made by Iso Mines Limited in the fall of 1972, has revived interest in the area and prompted a reappraisal of the Minedel ground.

General Geology:

Ossian Township is situated within the extensive and prolific Archaean "greenstone" belt extending from Timmins, Ontario to Chibougamau, Quebec. Within this greenstone belt, Ossian Township occupies the south-central part of a roughly elliptical area between the Porcupine-Destor Fault and the Larder Lake Fault, and extending from north of Kirkland Lake through Noranda, which is underlain by basalts, andesites and rhyolites with some interbedded sediments.

The bulk of the Township is underlain by intermediate to mafic volcanics with minor felsic flows and tuffs. Strikes are roughly east-west with steep dips. Traversing the north-central part of the Township is a bed or series of beds of rhyolite and rhyodacite breccia, agglomerate,

tuff, and ash, with a width of up to one-half mile. While structures are not too clearly defined, this rhyolite would appear to occupy an anticlinal axis, with more mafic volcanics on both limbs.

The Minedel claims cover a large part of this rhyolite breccia horizon and its flanks, so that from north to south a traverse of the property would encounter basalts in the extreme northeast, followed by andesite and dacite flows and agglomerates with minor rhyolite, pillowed andesite and dacite, the rhyolite breccia and tuff, andesite and dacite flows, and finally andesite and dacite agglomerates, again with minor rhyolite.

A north-south fault with left hand displacement roughly bisects the claim group. Northeast-trending faults are mapped about 3/4 miles north and south of the property.

Economic Geology of Minedel Claims:

The reports of various engineers and geologists who examined the property between 1924 and 1949 have been made available to the writer. The gold deposit on which the shaft was sunk is a quartz vein occupying an east-west shear in the rhyolite, with northerly dip of  $45^{\circ}$  -  $55^{\circ}$ . The vein has been traced on surface for 600 feet and up to 400 feet underground. Widths vary from inches up to 25 feet. The vein has been sampled at various times by several engineers, and while each reports some excellent assays (an ounce per ton or better over mining widths) there are wide variations in both individual samples and in averages. The variations are probably attributable to the presence or absence of free gold in individual samples, and it is difficult to draw any definite conclusion

other than that the material tested would appear to be of submarginal average grade at current gold prices.

Of perhaps greater immediate significance are the reports of the geological environment in which the vein occurs. The host is a sheared rhyolite breccia with abundant disseminated pyrite and lesser copper, zinc, and lead sulfides. One trench is described as exposing a 100-foot width of rhyolite carrying 2 to 3% disseminated pyrite and specks of chalcopyrite and bornite. Another trench is reported as containing "good massive and disseminated mineralization, in large part pyrite, with smaller amounts of chalcopyrite, bornite, sphalerite, and galena." In most of the other available reports and drill logs the pyrite is prominently mentioned, and there are repeated occurrences of chalcopyrite. It is quite apparent that the quantities of copper seen did not approach commercial grades; however, the widespread sulfides, and the presence of copper in that environment are considered significant, as discussed further below.

Conclusions:

Over the past ten to fifteen years, the genetic relationship of copper-zinc deposits of a specific type with a very specific geological environment has clearly and definitely been established. Noranda, Lake Dufault, Mattagami, Texas Gulf, etc., and the more recent Matabi and Iso discoveries, are examples.

While there remain some differences of opinion among geologists as to details of origin of the base metal deposits, there is no question about the association of these deposits with a geological environment of

the type occurring on the Minedel claims. Obviously such rock types and sulfide occurrences are far more widespread than orebodies; however, since the orebodies occur in these rock types, this is the logical place in which to search, and the Minedel property is considered to be a good base metal exploration prospect.

As to the gold possibilities on the property, a first perusal of available data suggests that something better than the known mineralization would have to be found to make a mineable deposit. Closer geological study would appear to be warranted.

Recommendations:

The property has in the past been subjected to a very considerable amount of surface prospecting, and it is unlikely that any sizeable undiscovered massive sulfide deposit is exposed on surface. However, any sizeable massive base metal deposit of the Noranda or Iso type, that is not too deeply buried beneath rock or overburden, should respond to both magnetic and electromagnetic geophysical techniques.

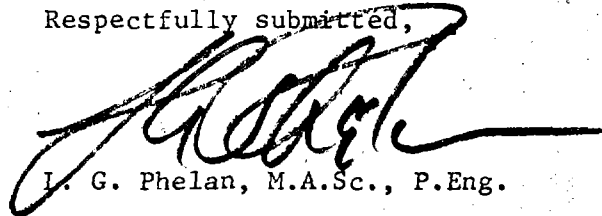
It is therefore recommended that a 100 x 300 foot line grid with north-south orientation be cut over the property and that magnetic and electromagnetic surveys be carried out over this grid. Roughly 36 line miles of linecutting and of surveys would be required, and cost will be of the order of \$9,000.00.

Assuming encouraging results, a geological examination and/or perhaps some geophysical detailing, followed by trenching and stripping if overburden is shallow, might be required, at an estimated cost of \$2,000 - \$3,000.00.

Again assuming favorable results and/or unexplained anomalous conditions, the Company should then be prepared to undertake a diamond drilling program. All-up costs, on such a program, with the usual long moves between holes, would probably be in the \$10.00 to \$12.00 per foot range. If a minimum of 2,000 to 3,000 feet of drilling is anticipated, costs would range between \$20,000 and \$36,000.00.

Staking is in progress in the area at the present time and it is not known if open ground is available. There is an area of about one-half mile to the west and one and one-half miles to the east of the Minedel ground where the same rhyolite breccia is known to exist. Should any of this ground prove to be open, the Company would be well-advised to stake it and extend the geophysical surveys accordingly.

Respectfully submitted,



I. G. Phelan, M.A.Sc., P.Eng.

Consulting Geologist.

Toronto, Ontario.

19 December, 1972.

CERTIFICATE OF QUALIFICATION

I, LEO GERARD PHELAN, do hereby certify that:

1. I am a practising consulting geologist with offices at 360 Bay Street, Toronto, Ontario.
2. I am a graduate of the University of Toronto and have been granted the degrees of Bachelor of Applied Science in 1947 and Master of Applied Science in geology in 1949.
3. I am a member of the Association of Professional Engineers of Ontario, Manitoba and British Columbia, a member of the Canadian Institute of Mining and Metallurgy and a fellow of the Geological Association of Canada.
4. I have no interest, direct or indirect, in the properties or the securities of Minedel Mines Limited nor do I expect to receive any such interest whatsoever.
5. Information in this report is based on my personal experience in and knowledge of the area, on publications of the Ontario Department of Mines, and on Company records, reports, and plans.



L. G. Phelan

Toronto, Ontario.

19 December, 1972.



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REPORT ON MINEDEL MINES PROPERTY

IN OSSIAN TOWNSHIP, ONTARIO

Toronto, Ontario  
October 1973

Duncan R. Derry, P.Eng.

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REPORT ON MINEDEL MINES PROPERTY  
IN OSSIAN TOWNSHIP, ONTARIO

INTRODUCTION

Derry, Michener & Booth were asked to review available data on previous activities on the Minedel property in Ossian Township and to pay a visit to it in order to appraise both the possibility of developing the known gold-bearing quartz veins and of locating other occurrences of gold or base metals.

The information on previous activities was compiled by Mr. O. E. Leigh of our firm and this compilation is included as an Appendix to the present report. Following this compilation a visit was paid to the property by Dr. D. R. Derry on October 17th, 1973 under the guidance of Mr. James Bardon of Virginiatown. The old trenches and shaft site were inspected, the ore dump was sampled in a preliminary fashion and the geology of the area surrounding the mine workings was noted. Subsequently a visit was paid to the Recording Office in Kirkland Lake in order to confirm the boundaries of the property held by Minedel Mines and to learn the status of adjoining ground.

PROPERTY AND LOCATION

The property consists of 23 patented claims (Nos. L11344, L15891, L12716 and 17, L11181-1189 inclusive, L11131-1133

inclusive, L12577 and 78, L11413, L12000, L11999, L12020, and L12021). The total area covered is approximately 1,116 acres.

These claims lie in the west-central part of Ossian Twp., Ontario which adjoins the Quebec boundary.

The property is reached by a moderately good bush road from rail at Cheminis Station to the Mist Creek crossing (which is in the southwest corner of the Minedel property), a distance of about 8 1/2 miles and from that point access is on foot for about 1 1/2 miles to the original mine site.

The property is covered by a quite heavy second growth of spruce, poplar, birch and pine. About 75 to 80% of the area is drift covered but the covering does not appear to be deep in the parts of the property that were inspected. It may be deeper towards the eastern boundary.

#### HISTORY

The showing of gold in quartz was made sometime prior to 1923. Reports of examinations and work programmes of which we have evidence have been described in more detail in the attached Appendix but may be summarized as follows:-

July 1923 - "Ossian Gold Mines Limited" - Report by K. B. Heisey describing trenches and the shaft and 90 foot level workings and recommending further work.

May 1926 - Report by J. W. Morrison describing results of 19 diamond drill holes and work on the 90 foot level where 600 feet of lateral driving had been done, 480 feet of which was on the vein. Sampling of this level was reported and an assay plan shows quite consistent and encouraging results. He recommended deepening of the shaft and development of a deeper level.

March 1928 - A report by Percy Hopkins, Consulting Geologist. This describes the above work and in addition 500 feet of lateral work on the 200 foot level. He sampled the latter level and resampled the 90 foot level that had previously been sampled by Mr. Morrison. Hopkins did not confirm Morrison's sampling on the 90 foot level and obtained similarly modest values on the 200 foot level. Hopkins recommended no further underground work for the time being but suggested surface mapping in detail and trenching especially towards the east.

1934 - A sample of the dump work was sent to Noranda with a possibility of being treated at the Kerr Addison mill.

The results given by Noranda were as follows:-

"Average material"	-	0.03 oz./ton gold and 0.02 oz./ton silver
"Selected material"	-	0.125 oz./ton gold and 0.12 oz./ton silver

March 18, 1936 - J. G. MacGregor (Consultant) letter to Walter Hurd, President of Ossian Mines. He reported drilling five new holes to check some of the previous holes. One checked fairly well but the others got lower values than the original holes.

1947 - Property acquired by Minedel Mines.

1949 - Paymaster Consolidated sampled trenches and did some additional drilling. They also sampled the dump from which 13 grab samples averaged 0.09 oz./ton. A selected sample of mineralized quartz assayed 0.47 oz./ton.

December 1972 - A report by L. G. Phelan reviews former work and recommends cutting a new grid (amounting to 36 line miles) on which to carry out magnetic and electromagnetic surveys over the entire property. This work would be followed by trenching and drilling if results were encouraging.

#### GEOLOGY

The known gold mineralization on surface and underground work occurs in a belt of acid volcanics (rhyolite to dacite) that is between 1200 and 2500 feet wide and extends from the east property boundary westerly to 1500 feet (according to O.D.M. Map P-630) beyond the west property boundary. This belt of acid volcanics is bordered on both sides by andesite

pillow lava. From observed pillow facings the bordering andesite lavas face away from the enclosed acid volcanics which thus would form the axis of an anticlinal fold.

The dacite is light-weathering but grey to purple in fresh break. Near the south part of the belt the rock appears more like a rhyolite and contains very fine sulphides (mainly pyrite) resulting in rusty weathering.

At, and west of, the west boundary of the property, especially on the road to Mist Lake, coarsely fragmental dacite was observed by the writer in several outcrops. This may represent a volcanic centre or may be the equivalent of the rocks containing the mine workings. The acid volcanics thus may not be closed off to the west as indicated on the Government Map. More detailed mapping would, however, be required to establish this point.

#### MINERALIZATION

Since the shaft is collapsed and the workings flooded, many of the trenches partly slumped in or overgrown and no drill core available, the character of the ore had to be deduced mainly from the material seen on the ore dump and from a few trenches that are still open. From these observations the vein, which strikes roughly east-west and dips 45° to the north, consists of milky white quartz with relatively "tight"

walls in rhyolite or dacite. No prominent shearing was seen in the vein itself but in some cases the lava walls were moderately sheared. Quartz is not banded and carries relatively few rock inclusions. Pyrite is seen quite frequently but is not really abundant and would certainly not represent more than 2% of the vein material. No sulphides other than pyrite were seen but sulphides of copper and lead have been reported in previous work.

No samples were taken on the trenches as these would be misleading without considerable work to show clean surfaces and the extent of the quartz.

There are two rock dumps, the easterly being evidently barren rock from cross-cuts through unmineralized rock and the westerly dump consisting of quite finely-broken material with a high quartz content, evidently representing the vein material. A rough measurement of the dimensions of this ore dump give an approximate figure of 1800 to 2500 tons depending on regularity of this original surface on which the dump material was placed.

Six samples were taken in grooves cut along the sloping sides of the dump covering an aggregate length of 86 feet. These were assayed by the Swastika Laboratory and give the following results (for location see sketch). The assay certificate from Swastika Laboratories is attached as Appendix II.

<u>Sample No.</u>	<u>Length</u>	<u>Gold ozs./ton</u>	<u>Silver ozs./ton</u>
M1	12.5	0.025	0.02
M2	12.0	0.03	0.04
M3	15.0	0.025	0.03
M4	15.0	0.015	0.02
M5	15.0	0.04	0.03
M6	17.0	0.05	0.05
Average		0.031	0.032

It must be stressed that the sampling was only from a few inches below surface of the dump and thus consists of material mined in the later stages of development. To obtain a sample that was really representative of the whole pile would require cutting deep trenches through it in order to include material deposited in the early stages of the operation. The above average results are only about one-third of the average of 13 grab samples taken by Paymaster. It is possible that the latter were coarser lumps which may tend to carry more of the gold than the finer material that constituted the recent samples.

#### CONCLUSIONS

A study of the field records leads one to the conclusion that the sampling reported by Morrison is not reliable. It is noted that Morrison did not himself take the samples which were taken by one Bouzan. Possibly the samples had become



mixed with material from another source or the person taking the samples was inexperienced and selected only the best mineralized material. At all events, Percy Hopkins, a very careful and experienced geologist, in sampling the same workings arrived at about 25% of the values reported by Morrison and Hopkins' checks of drill core were similarly lower. These later results, taken with the records of early trench sampling and the check of dump material listed above, suggests that the true grade of the quartz vein is not more than 0.09 oz./ton (\$9.00 at \$100 gold). Obviously short sections could be obtained that would give a considerably higher figure but mining these selectively would not be an economic proposition. Underground mining of material of the above estimated grade on a relatively small scale would not be profitable even on the basis of gold at \$100/oz. In the event of a substantial further increase in the price of gold the proposition should be reviewed.

This brings us to the exploration possibilities outside the area of former workings. In gold it is quite likely that additional quartz veins could be found by exploration diamond drilling but there is no evidence to suggest that they would be of better grade than the vein in which work has been carried out to date.

In regard to base metal possibilities the chances, on purely geological reasoning, seem much better. The acid

volcanics are very similar to those which carry some of the recently-discovered deposits in Quebec, e.g. the Iso and New Inco orebodies in Hebecourt Twp. The mineralization in the rusty-weathering rhyolites near the south boundary of the belt looks quite promising although no base metal sulphides appear to have been reported from this area. Much of it, however, is covered by drift especially to the east.

As far as is known no ground geophysical work has been carried out on the property. There is little doubt that many airborne electromagnetic surveys have included this property and it must be assumed either that no strong conductors were obtained or that the information was withheld by the company financing the airborne programme in the hope of the Minedel property coming open. In any case it is rather unlikely that a large undetected massive sulphide deposit exists within 250' of surface on the property. On the other hand, it is possible that one or more small lenses could occur under covering and have been missed, or only showed minor indications in the airborne surveys. The possibility of such sulphide lenses would offer a reasonable objective for a ground electromagnetic survey.

#### RECOMMENDATIONS

In view of the belt of favourable acid volcanics with a marked resemblance to formations that have been found to contain

commercial base metal deposits on the Quebec side of the boundary a programme of ground electromagnetic surveys is recommended. This survey should cover at least the belt of acid volcanics and 1,000' on each side of it. A consulting geophysicist with whom I discussed this matter recommended the Turam for these conditions.

This recommendation follows quite closely that of Mr. L. G. Phelan and, as he noted, we should beforehand arrange for a grid to be cut at least over the area noted above if not over the entire property.

Prior to starting a grid or geophysical work it would be wise to acquire added protection by staking claims contiguous to the east and west boundaries of the property to cover the projection of the belt of rocks of most interest. A check at the Recording Office in Kirkland Lake showed that the ground on both sides of the property appears to be open. I would be most concerned about the easterly extent and would suggest that a minimum of six additional claims be staked there and possibly four on the west side. If these claims were staked on contract by a professional staker I think it would probably cost about \$100 per claim but it might be done more cheaply if it were handled by Mr. James Barnard but I have no idea if he is prepared to undertake this.

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Following the completion of a geophysical survey and its interpretation provision should be made for follow-up work either by diamond drill testing directly or by a preliminary screening by drilling through the drift to obtain geochemical samples from bedrock surface. The latter would not replace diamond drilling but might give better grounds for concentrating the latter and saving money in the long run. In any case, an amount of not less than \$34,000 should be held in readiness for a follow-up programme in the event that this is warranted.

A further programme of more detailed drilling would be required in the event that the reconnaissance drilling gave encouragement.

SUMMARY OF ESTIMATED COSTS

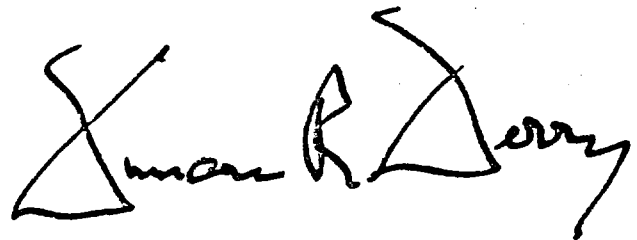
Phase I

Staking a minimum of 10 additional claims @ \$100/claim	\$ 1,000
Line cutting (covering acid volcanic belt and 1000' each side on the property and extending east and west of boundaries) 26 line miles @ \$90	2,400
Geophysical survey. Turam @ \$225/line mile	6,000
Additional for magnetic survey	1,100
Supervision and reporting on results	<u>1,500</u>
Total	\$12,000

CERTIFICATE OF QUALIFICATION

I, Duncan R. Derry, residing at Adamson's Lane, Port Credit, Ontario, do hereby certify that:

1. I am a consulting geologist and partner of the firm Derry, Michener & Booth with offices at Suite 2302, 401 Bay Street, Toronto, Ontario.
2. I am a graduate of Cambridge University from which I obtained a degree of B.A. in Honour Science. I also hold the degrees of M.A. and Ph.D. from the University of Toronto. I have been practising my profession for 45 years.
3. I am a registered Professional Engineer in the Province of Ontario.
4. I have no interest nor do I expect to receive any interest directly or indirectly in Minedel Mines Limited.
5. This report, including the Conclusions and Recommendations, is based upon an examination of data supplied by Minedel Mines and a visit to the property held by this Company in Ossian Township on October 17th, 1973.



Duncan R. Derry, Ph.D., P.Eng.

Toronto, Ontario  
October 30, 1973

## APPENDIX I

MINEDEL MINES LIMITED  
(formerly Ossian Mines Ltd.)  
OSSIAN TOWNSHIP, ONTARIO

### SUMMARY OF INFORMATION FROM ASSEMBLED DATA

PROPERTY AND LOCATION - N.T.S. - 32 D/4  
Lat. - 48°13'; Long. 79°33'

The property, consisting of 23 contiguous patented mining claims in Ossian Twp., Ontario, adjoining the Quebec border, are situated about eight miles north of the Kerr Addison gold mine.

A gravel road to Misty Lake in Ossian Twp. crosses the southwest corner of the property.

### HISTORY

Originally discovered in the early 1920's the Ossian Gold Mining Company acquired the ground in 1925 and undertook trenching and diamond drilling. During 1925-27 a shaft was sunk to 210' and approximately 500' of lateral development was completed on the 90 foot or first level and about 450' of development on the second or 200 foot level. Additional surface sampling and drilling were completed in 1935-36 and further sampling by Paymaster Consolidated Mines was undertaken in 1949. The present company acquired the ground in 1947.

### GENERAL GEOLOGY

The geology as shown on O.D.M. Map P-630, Ossian Twp. at a scale of 1" to 1/4 mi. (see xerox attached) shows an east-west trending belt of acid volcanics, up to 1/3 mile wide and pinching out to the west. This rhyolite is bounded to the north, west and south by andesites.

The gold-bearing quartz-carbonate veins lie in the approximate centre of the east-west trending rhyolite belt on claims L-1131 and L-1132.

The economic geology as described by the O.D.M. on Map P-630 is as follows: "gold and pyrite-bearing quartz veins occur in a zone of sheared felsic fragmental volcanic rocks along with leucophyre dikes. The largest vein (Shaft vein) is tracable for 600' east-west, reaching widths as great as 20'. The vein dips 45° north and extends to a depth of 200'.

Grab samples from the underground workings, as shown on the mine plans, contained amounts of gold as high as \$2.60/ton (gold at \$20.67/oz.). Gold assays from nil to 0.20 oz./ton were reported in several short lengths of diamond drill core (O.D.M. N.A.- 1936)".

Outcrop is abundant and the maximum depth of overburden recorded in the drill logs is 30' but generally it is in the order of 5'±.

DIAMOND DRILLING

In 1925, 19 drill holes were put down and all but hole 17, which cannot be located, are shown on the attached sketch plan. Most of the assays appear to have been taken from the sludge, if my interpretation of the old drill logs is correct, and the highest assay is \$34.00/ton with gold at \$20.67/oz. However, the significant intersections as shown on the attached plan and other details of each hole are tabulated below:

Hole No.	Intersection (ft.)	Width (ft.)	\$ Value*	oz. Au per ton	O.B. Depth	Depth of Hole	Inclination
1	240-245	5.0	2.40	0.11	6'	504'	55°
2	-	-	-	-	30	479	-
3	312-317	5.0	34.00	1.64	5.5	400	70°
4	180-185	5.0	2.00	0.10	4	327	55°
5	102-107	5.25	22.80	1.10	2	180	45°
6	36-45 (?)	5.0	0.70	0.03	5	116	N.A.
7	135-146	11.0	16.80	0.81	4	181	50°
8	-	-	-	-	4	221	N.A.
9	138-149.5	11.5	13.60	0.66	8	150	50°
10	144-149	5	3.20	0.155	11	300	50°
11	227.5-233	5.5	10.40	0.50	11	307	50°
12	160.5-165.5	5.0	tr.	tr.	5	261	50°
13	-	-	-	-	5	640	65°
14	152-154	2.0	2.40	0.11	6	214	N.A.
15	199.5-202.5	3.0	1.20	0.06	5	236	50°
16	-	-	-	-	5	217	N.A.
17	-	-	-	-	4	228	N.A.
18	170-175	5.0	2.80	0.135	7	204	50°
19	172-173.5	1.5	0.60	0.03	6	256	55°

\* Gold at \$20.67/oz.

N. A. - not available

Some of the above values are shown on a longitudinal sketch map dated October 24, 1949, by C. S. Longley and are purported to show projections made by Morrison who supervised the drilling in 1925.

A letter addressed from Mr. James G. MacGregor to Mr. W. Hurd, President of Ossian Gold Mines, dated March 18, 1936, indicates that five additional holes - 3A, 5A, 6A, 7A and 9A were drilled about that time. Four of these new holes, 3A, 5A, 7A, and 9A, were drilled alongside the original holes, within 18" in most cases, with the same azimuth and dip. The best assay was in hole 5A which obtained 1.04 oz. Au/ton, 10" from 112'4" to 113'2" followed by 0.12 oz. Au/ton over 2' from 113'2" to 115'2". These results compare with the assays in the original hole #5 at 1.10 oz. Au/ton over 5' from 102 to 107'. Hole 3A returned 0.12 oz. Au/ton over 3'10" from 337' to 340'10". All other assays, from these 4 holes as reported in this letter were 0.08 oz. Au or less. In general, it was concluded that only one of the five holes approximately checked the original drilling.

Hole 6A, a new hole drilled east of #5, and apparently not a direct check on hole 6A, returned 0.20 oz. Au/ton over 1' from 105'9" to 106'9" and 0.15 oz. Au/ton over 2' from 112' to 114'.

While examining the property in 1949, Paymaster Consolidated resampled sections of core from the earlier 1925 drilling programme by Ossian Mines and supervised by a Mr. J. W. Morrison. Samples from four of the holes were over comparable sections as follows:

- Hole # 7 - Paymaster Sample from 135 to 141.5' gave \$0.40/ton.  
- Morrison Sample (1925) from 135-146' returned \$16.80/ton.
- Hole # 9 - Paymaster Sample from 136-150' returned \$0.20 to \$0.40/ton.  
- Morrison Sample (1925) from 138-149.5' returned \$13.60/ton.
- Hole #10 - Paymaster Sample from 144.4 to 148.2' returned \$0.40 to \$0.80/ton.  
- Morrison Sample (1925) from 144 to 149' - \$3.20/ton.
- Hole #14 - Paymaster Sample from 153 to 154' - \$1.40/ton.  
- Morrison (1925) from 152 to 154' returned \$2.40/ton



UNDERGROUND SAMPLING

The underground sample plans of 1928 by P. E. Hopkins indicate the best value on the first level was \$1.70/4.6' (0.08 oz. Au/ton). Rechecks by the Provincial Assayer and by T. Heys & Company gave \$0.80 and \$1.60/ton respectively over the same footage.

On the second level the best assay shown is \$2.60/3.5' (0.125 oz. Au/ton) and about 40' further along the drift the second best assay gave \$1.60/5.2' (0.07 oz. Au/ton). Most of the other assays were traced to \$0.80/ton.

Exhibit #27 lists five foolscap pages of underground assays for the first level and these show results generally in the \$1.00 to \$5.00 range going as high in grab samples as \$32.40/ton. These assays are much higher than those mentioned above but do not appear to be the assays plotted on the underground blueprint plans. The pages are only entitled "Assay Results - Ossian Mines Ltd.". The year and the sampler are not stated. However they do, in part, correspond to one plan of the first level at 1" to 30' dated May 21st, 1926 by Morrison. All of these assays appear higher than are plotted on the blueprints and the source of this information is required.

Exhibit #12, a copy of which is attached, consists of a letter dated August 17th, 1927 and a sketch map of the second level and were forwarded to Mr. W. Hurd of Narberth, Pennsylvania from Mr. F. R. Bennetto and list assays east and west of Survey Plug 206 on the second level. The values listed in the letter do not correspond to the values shown on the sketch nor to the values shown on the other blueprints of the second level. The values listed with check assays by Temiskaming Laboratories and by J. W. Bell (presumably on samples taken under Morrison's direction) are stated as being over widths of 2' to 8' and are 4' apart. The best assays by Bell, which are on average the lower of the two sets of assays, extending from 4' west of survey plug 206 to 28' west of the plug are listed as follows:

\$ 6.80 ton  
\$ 9.00 ton  
\$34.60 ton  
\$ 2.00 ton  
\$ 4.00 ton  
\$ 1.60 ton  
\$ 8.60 ton

All of the other assays to the east are about \$1.00/ton or less and further west are under \$1.50/ton except for two

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adjacent samples at \$4.80/ton (0.23 oz. Au) and \$2.20/ton (0.10 oz. Au/ton).

How all of these underground assay lists and assay plans correlate is not known and further information is required for proper assessment of the data.

#### SURFACE SAMPLING

The surface trench samples taken in 1924 by K. B. Heisey and stated as being check sampling on the part of Dome Mines Limited are shown on the attached plan and the better assays are listed below:

- Trench #1 - 48" - \$21.60/ton (1.10 oz. Au/ton)
- Trench #2 - 3 zones - the best being 36" at \$2.00 ton (0.097 oz. Au/ton)
- Trench #3 - 2 zones - 36" of \$3.40/ton (0.165 oz. Au/ton) and 36" of \$2.40/ton (0.11 oz. Au/ton)
- Trench #4 - Grab sample - \$4.60/ton (0.22 oz. Au/ton)
- Trench #5 - 38" at \$8.20 (0.40 oz. Au/ton)
- Trench #6 - 60" of \$4.00 (0.19 oz. Au/ton)
- Trench #7 - not given
- Trench #8 - several assays, the best being 84" of \$0.80 (0.04 oz. Au/ton) and 36" of \$1.00 (0.048 oz. Au/ton)
- Trench #9 - not shown
- Trench #10 - no assays given

Paymaster Consolidated Mines Ltd. examined the property in 1949 and in a letter addressed to Minedel Mines Limited, dated September 22nd, it was stated that in trench #4 the vein width is 30' horizontally but this exposure may represent a roll of the vein near the surface and is probably not indicative of the true width. In trench #5, the vein varies in width from 18" to 48" over a length of 10'. Paymaster sampled some of the trenches and all assays over 0.05 oz. Au/ton are described as follows:

- Trench #1 - Two adjacent samples returned 0.08 oz. Au/ton over 24" and 1.47 oz. Au/ton over 24" each.
- Trench #2 - Paymaster failed to find mineralization.
- Trench #3 - 24" of 0.17 oz. Au/ton.
- Trench #5 - 36" chip sample grading 0.62 oz. Au/ton and a 48" chip sample grading 0.13 oz. Au/ton.
- Trench #6 - 36" chip sample grading 0.10 oz. Au/ton. 36" channel sample grading 0.38 oz. Au/ton.

Trench #1 had been filled in and the north contact of the vein was not observed. Paymaster concluded that their results confirmed Mr. Heisey's results (Dome Mines, 1924) and in several cases were somewhat higher. The detailed results of Paymaster sampling and a sketch map are attached.

#### SAMPLING OF THE VEIN QUARTZ DUMP

There are two dumps at the Minedel prospect; one of vein quartz and the other of volcanics and schists and both are apparently of equal size. The quartz dump was estimated at that time to contain 1,055 tons. Paymaster during their examination, collected 13 grab samples which returned an arithmetic average grade of 0.09 oz./ton and a selected grab sample of mineralized quartz assayed 0.47 oz./ton.

#### OTHER SAMPLING

In 1934 a sample of dump rock was sent to Noranda Mines for smelter testing and assayed .03 oz. Au, .02 oz. Ag as well as 0.02% Cu, 88.6% silica and 3% Fe. In addition, another sample of selected rock assayed 0.125 oz. Au, 0.12 oz. Ag as well as 0.08% Cu, 77.7% silica and 7.6% Fe.

#### SUMMARY

The reported copper mineralization that is described in some reports does not appear in any of the assay data except those samples sent to Noranda for smelter tests. These two samples returned 0.02% and 0.08% Cu respectively, the latter from a handpicked specimen. The gold values from various periods of sampling indicate there is an erratic nature to the values and the high grade samples reported in Exhibit #27 could perhaps be the original sampling and those values which now appear on the underground plans are in fact only check samples and are much lower.

The Paymaster samples of quartz from the dump returned low values (i.e. 0.09 oz. Au/ton or \$9.00 with gold at \$100.00). The veins could be stripped by bulldozer as the overburden is generally quite shallow. However, the majority of the assays appear to be low, but the difference in values between the Morrison sampling and the Hopkins sampling on the first level and the Hopkins sampling and Bouzan sampling (Exhibit #12) in the second level requires some explanation.

*O. E. Leigh*

O. E. Leigh, P. Eng.



REFERENCES

- (1) Map 37(g) - Ben Nevis Area - Scale 1" to 1 mi.  
(to accompany O.D.M. Vol. 37, Pt. 3 - 1928).
- (2) Map 50-6A - Ossian Twp. - 1950 - 1" to 1000'  
(to accompany G.S.C. Paper 50-6, Ossian Twp.,  
Ontario - J. B. Currie).
- (3) Map P-630 - Ossian Twp. - 1971 - 1" to 1/4 mi.
- (4) Map 2046 - Scale 1" to 4 mi.
- (5) Aeromagnetic Map 47G - 32 D/4

APPENDIX II

Shaft

Shaft

LEGEND

5      Sample location & number  
0.04/17.0'      Gold oz/ton over length (ft.)

N-S SECTION

M.N.

1. 0.025/12.5'  
 2. 0.03/12.0'  
 3. 0.025/15.0'  
 4. 0.015/15.0'

6. D  
 X      Y  
 0.05/17.0'

5.  
 0.04/15.0'

Surface

X

Y

C

B

E-W SECTION

MINEDEL MINES LTD.

ORE DUMP

Scale: 1" = 20'  
DERRY, MICHENER & BOOTH  
Oct 18, 1973

## SWASTIKA LABORATORIES LIMITED

## Certificate of Analysis

No. 43966

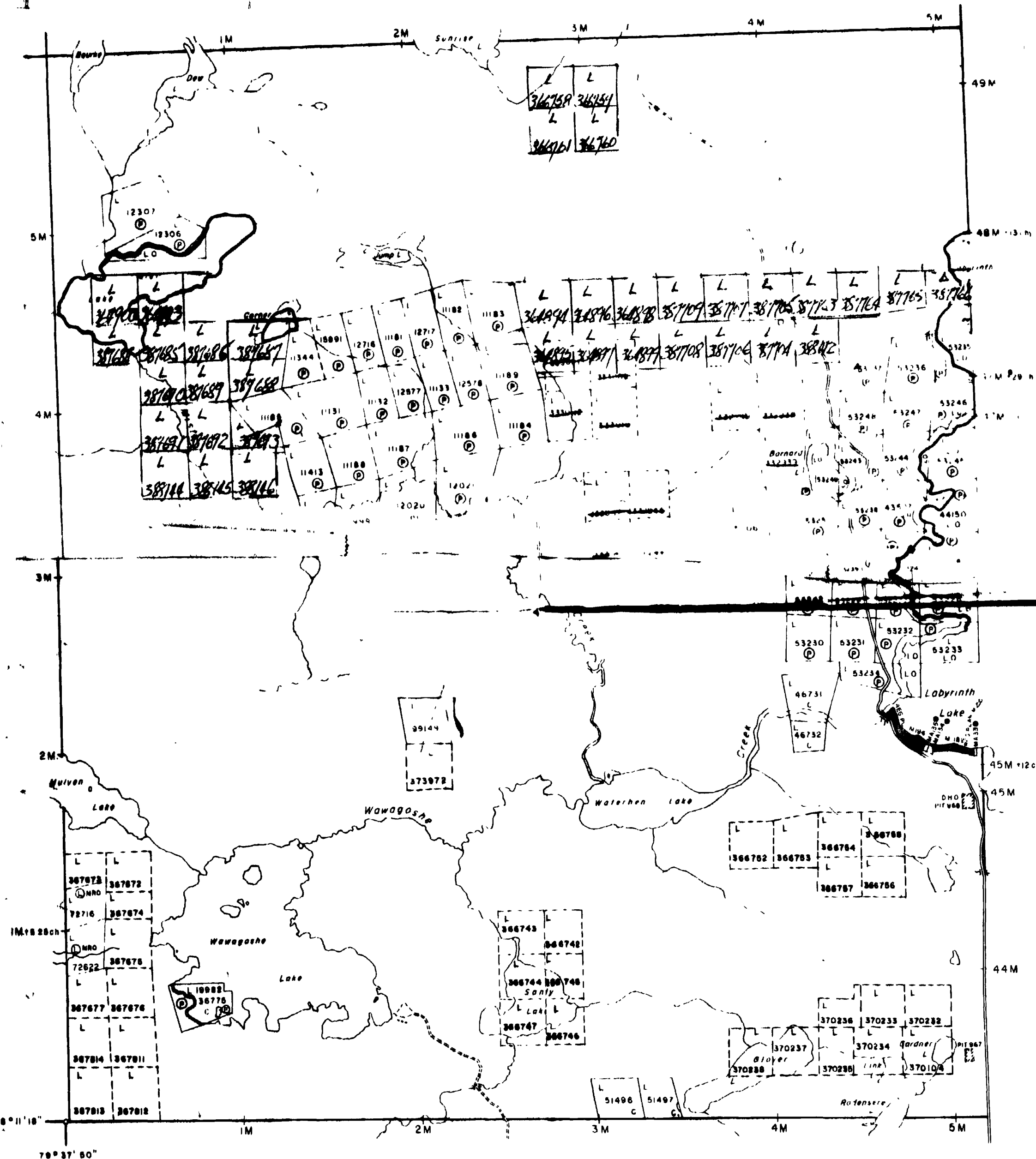
We have assayed six samples of oreReceived Oct. 17/73 and submitted by Messrs Derry, Michener & Booth,Attention: Duncan Derry, Esq. with the following results:

Sample No.	Gold Ozs/ton	Silver Ozs/ton
M 1	0.025	0.02
M 2	0.03	0.04
M 3	0.025	0.03
M 4	0.015	0.02
M 5	0.04	0.03
M 6	0.05	0.05

SWASTIKA LABORATORIES LIMITED,

per: *E. C. Derry*

PONTIAC TWP - M.382



KATRINE TWP - M.357

PROVINCE OF QUEBEC

McGARRY TWP - M.369

THE TOWNSHIP OF

OSSIAN

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH 40 CHAINS

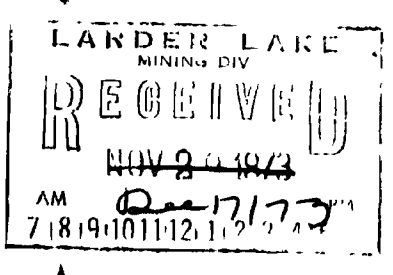
LEGEND

PATENTED LAND	⊙
CROWN LAND SALE	⊙
LEASES	⊙
LOCATED LAND	⊙
LICENSE OF OCCUPATION	⊙
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEL	—
MINES	—
CANCELLED	—

NOTES

400' surface rights reservation around all lakes and rivers

Summer resort locations patented for surface rights only shown thus ⊙

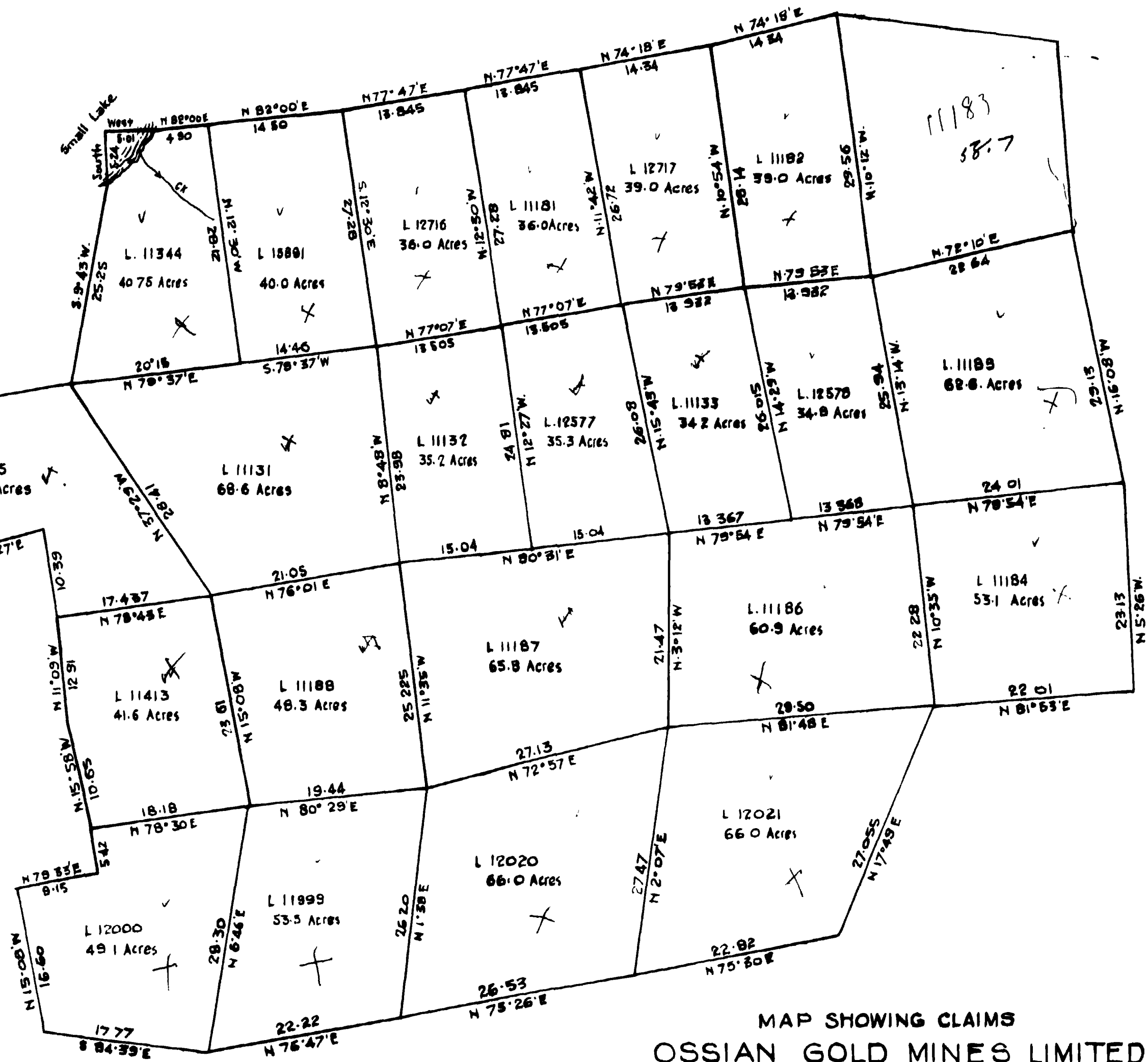


PLAN NO. M.378

ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

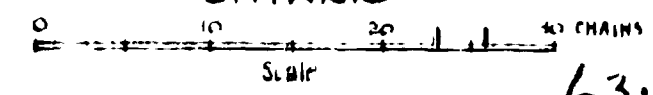






MAP SHOWING CLAIMS  
 OSSIAN GOLD MINES LIMITED  
 TOWNSHIP OF OSSIAN

ONTARIO



63.3915

111600



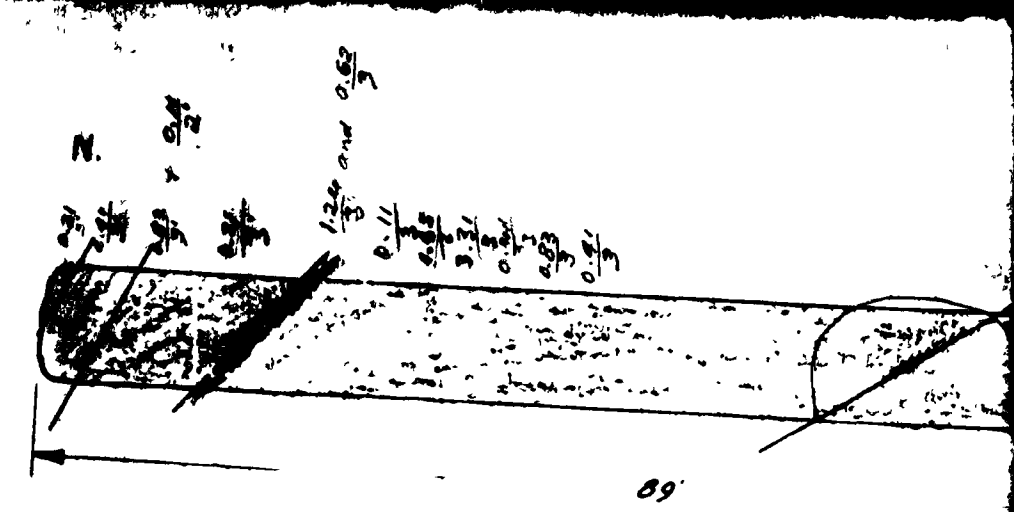
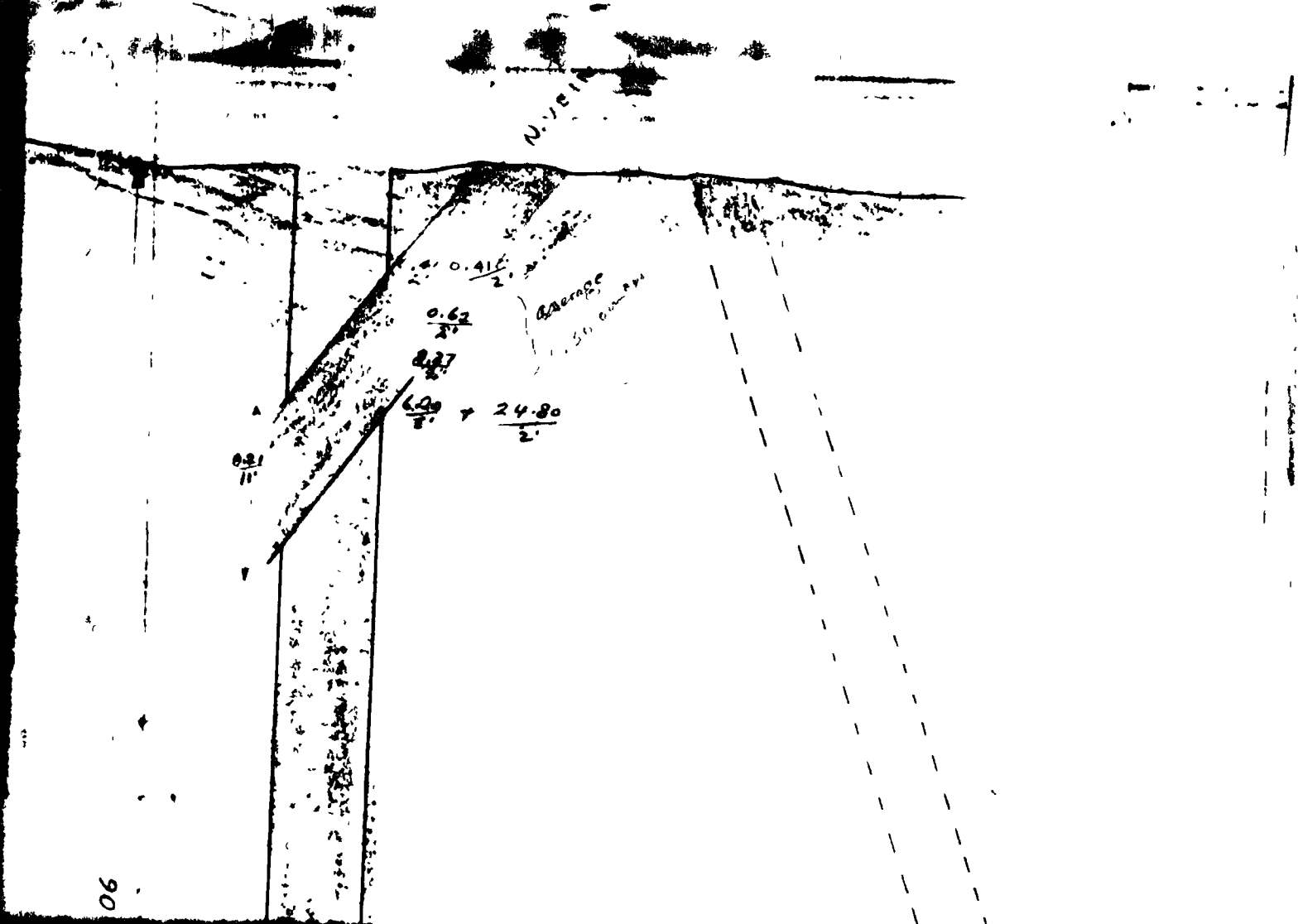
320658E9378 63.3915 OSSIAN

OSSIAN MINES, LTD.

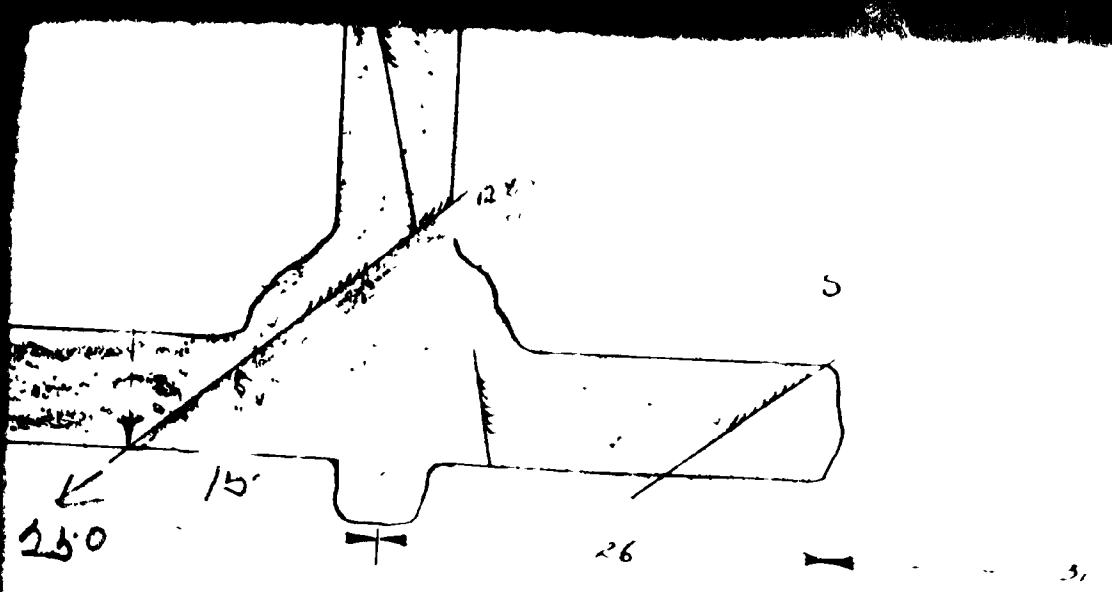
Steel Section Mine Workings,  
A-1075

July 13, 1923

*Handwritten scribble*



220



udina = crion, N + 5

Scale 10 ft = 1 inch

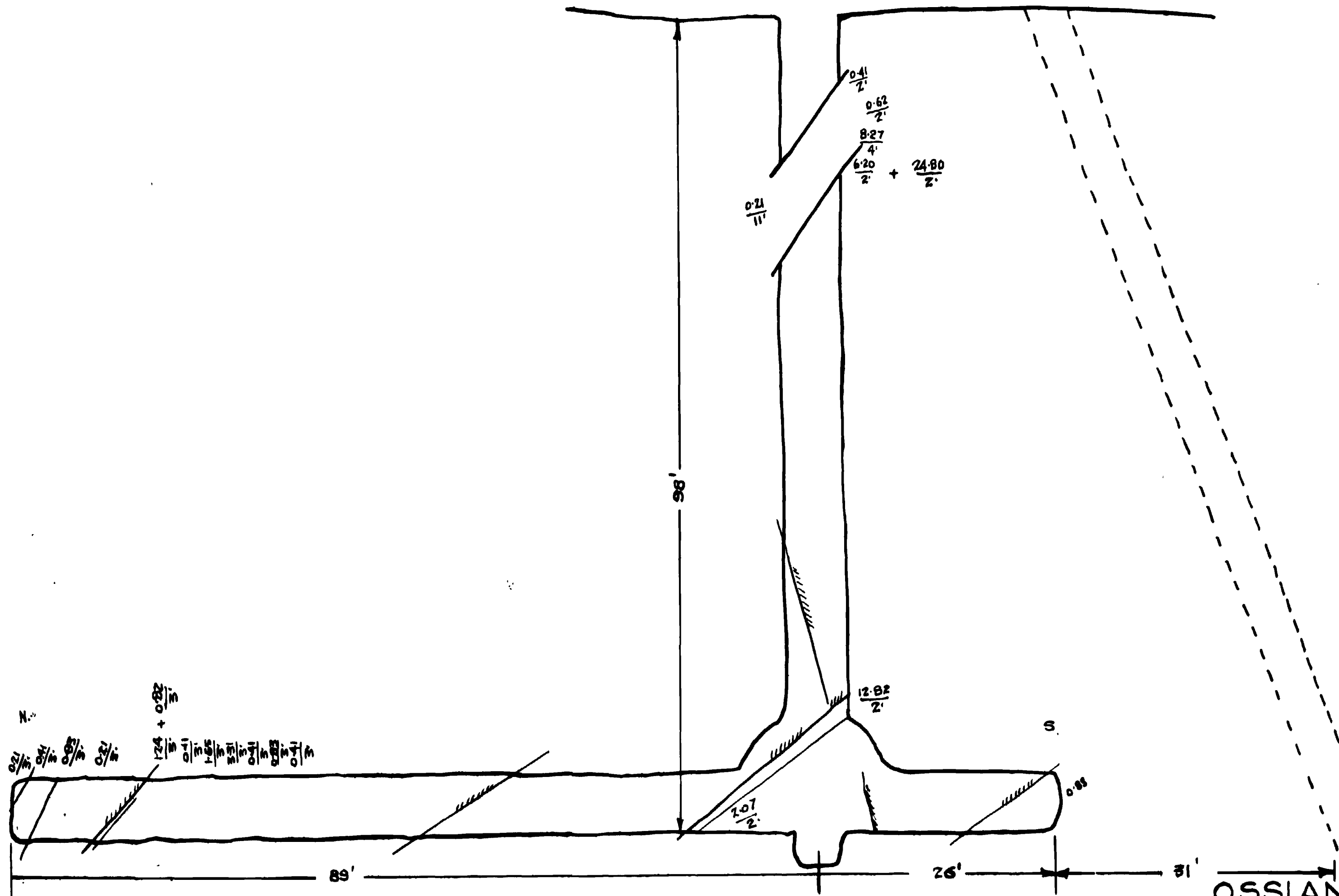
vert. v.

ult Plane, 7 Draw

chist

ALL RIGHTS RESERVED  
BY THE AUTHOR

65  
23

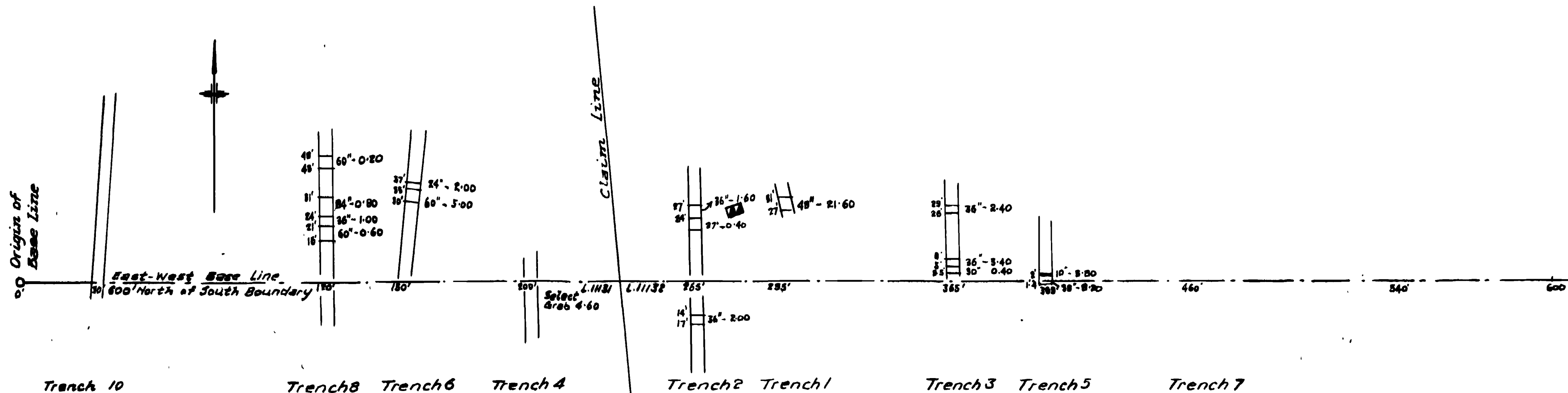


OSSIAN GOLD MINES LIMITED  
 VERTICAL SECTION MINE WORKINGS WITH ASSAYS  
 JULY, 1923.

LEGEND  
 // Quartz Vein  
 / Fault Plane and drag  
 LONGITUDINAL SECTION N. & S.  
 Scale 10' = 1"

63-3915





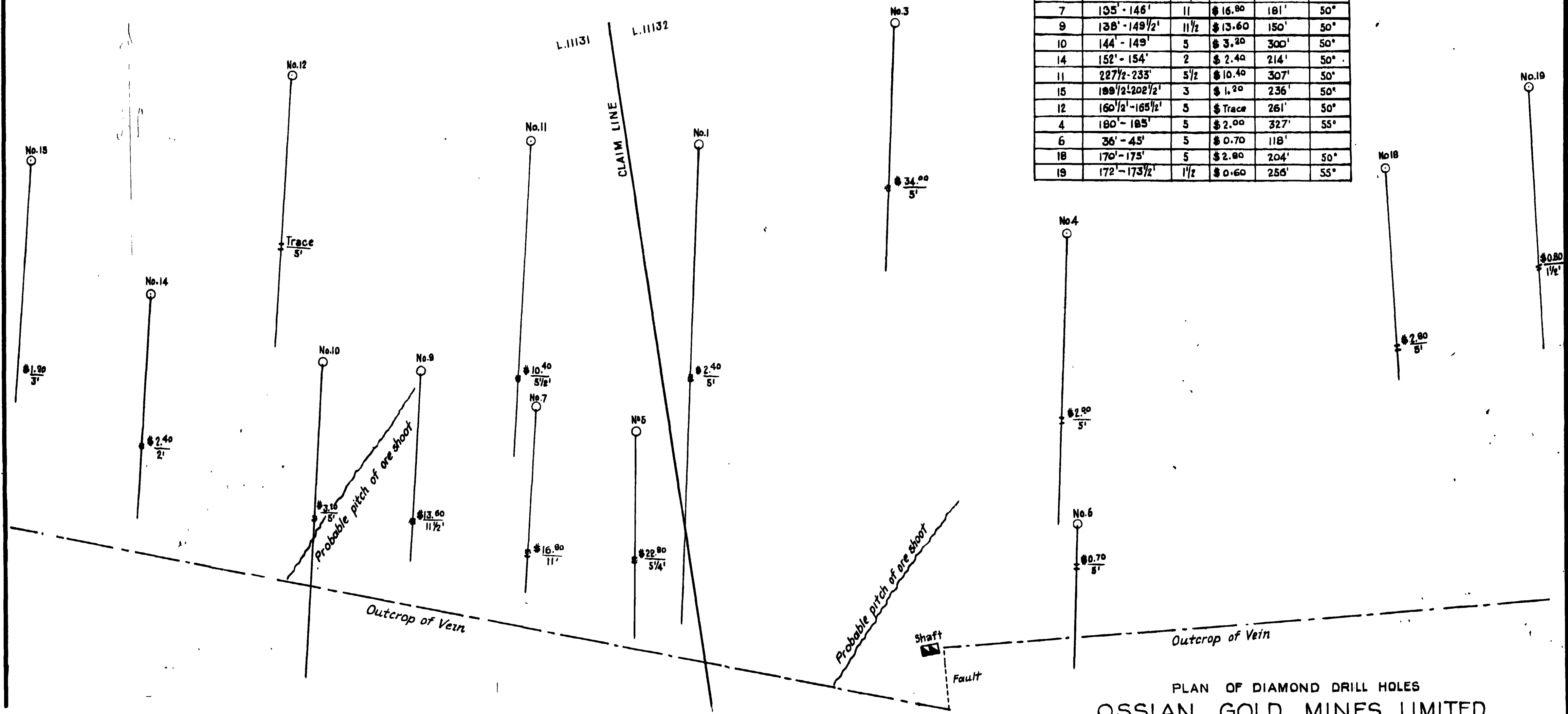
OSSIAN GOLD MINES LIMITED  
 CHECK SAMPLING  
 ON PART OF  
 DOME MINE'S RESULTS  
 SCALE 30' = 1" JUNE 10<sup>TH</sup> 1924 K.B. HEISEY.



320658E0376 83.3815 0561AN

RECORD OF HOLES

No of Hole	Depth of Vein in hole	Width	Value	Depth of Hole	Dip
3	312' - 317'	5'	\$ 34.00	400'	70°
1	240' - 245'	5'	\$ 2.40	504'	55°
5	102' - 107'	5/4'	\$ 22.80	180'	45°
7	135' - 146'	11'	\$ 16.80	181'	50°
9	138' - 149 1/2'	11 1/2'	\$ 13.60	150'	50°
10	144' - 149'	5'	\$ 3.20	300'	50°
14	152' - 154'	2'	\$ 2.40	214'	50°
11	227 1/2' - 233'	5 1/2'	\$ 10.40	307'	50°
15	189 1/2' - 202 1/2'	3'	\$ 1.20	236'	50°
12	160 1/2' - 165 1/2'	5'	\$ Trace	261'	50°
4	180' - 185'	5'	\$ 2.00	327'	55°
6	36' - 45'	5'	\$ 0.70	118'	
18	170' - 175'	5'	\$ 2.80	204'	50°
19	172' - 173 1/2'	1 1/2'	\$ 0.60	256'	55°

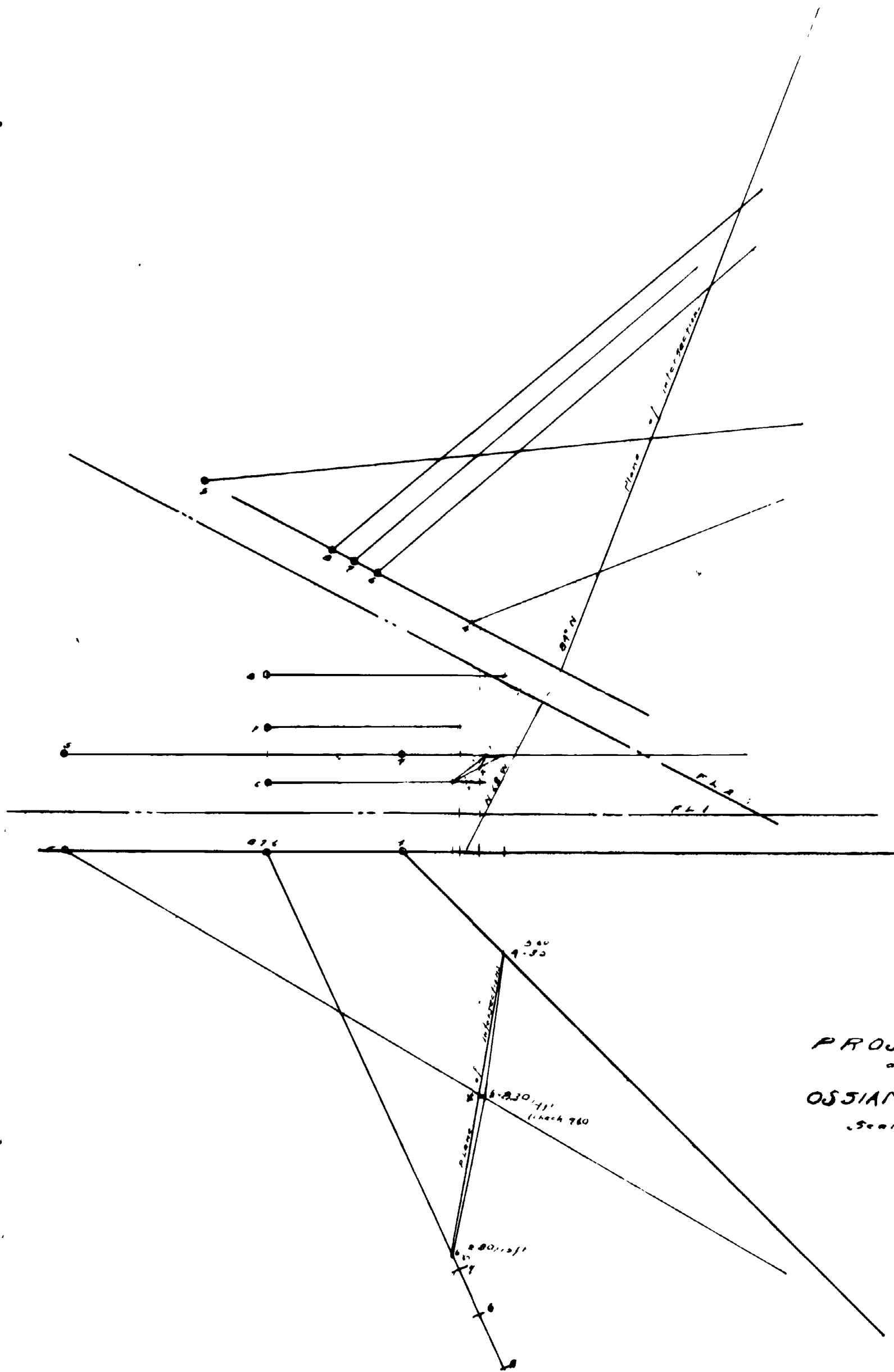


PLAN OF DIAMOND DRILL HOLES  
 OSSIAN GOLD MINES LIMITED

J.W Morrison Scale 40' = 1" Nov. 4<sup>th</sup> 1925 6339/15



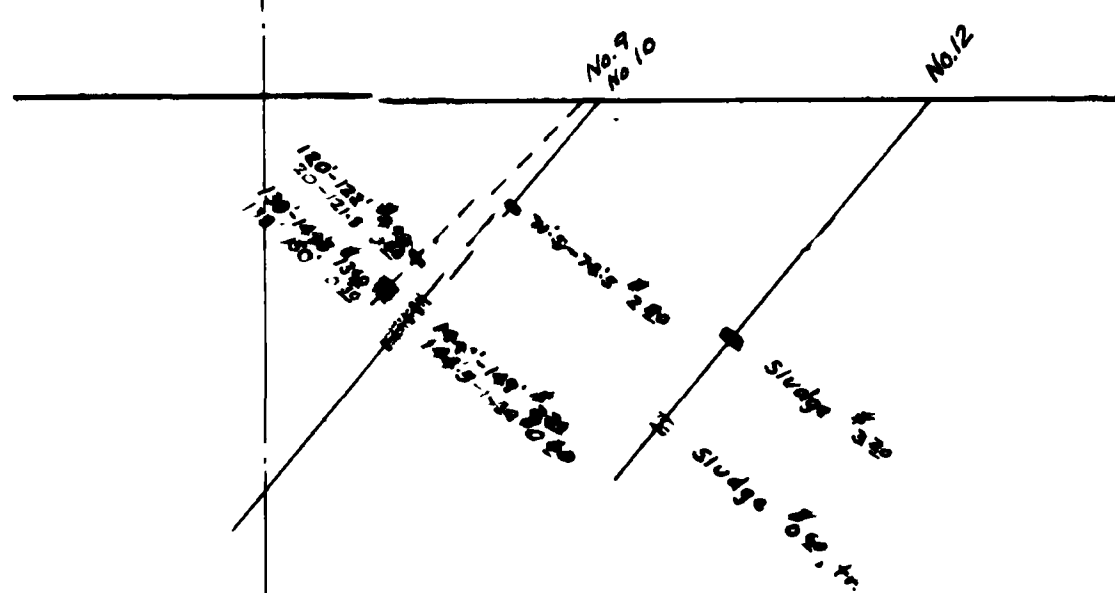
320850E6378 83.3016 0661AN



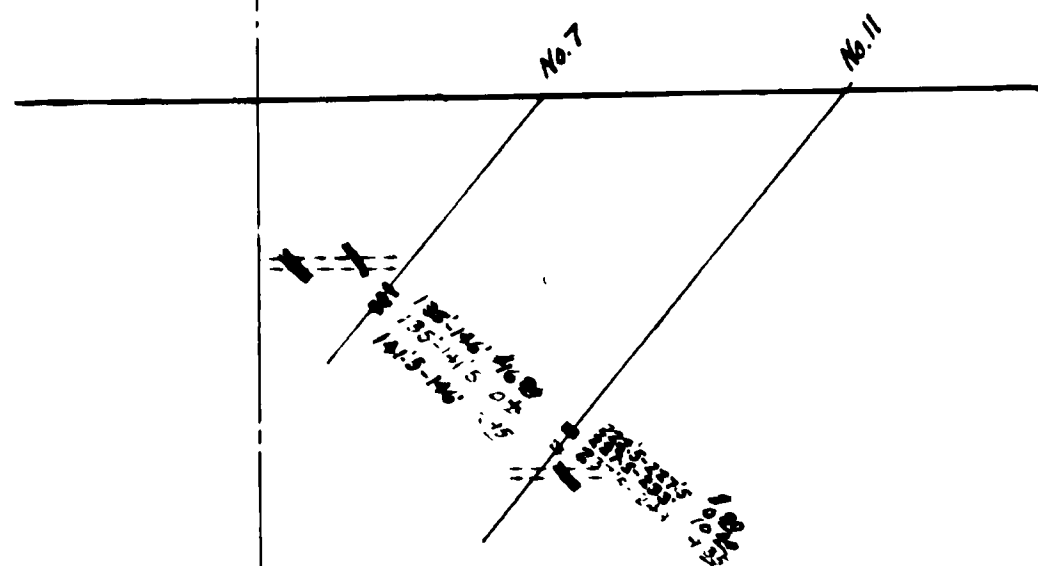
PROJECTION  
of  
OSSIAN Drilling  
Scale 200 ft = 1 in



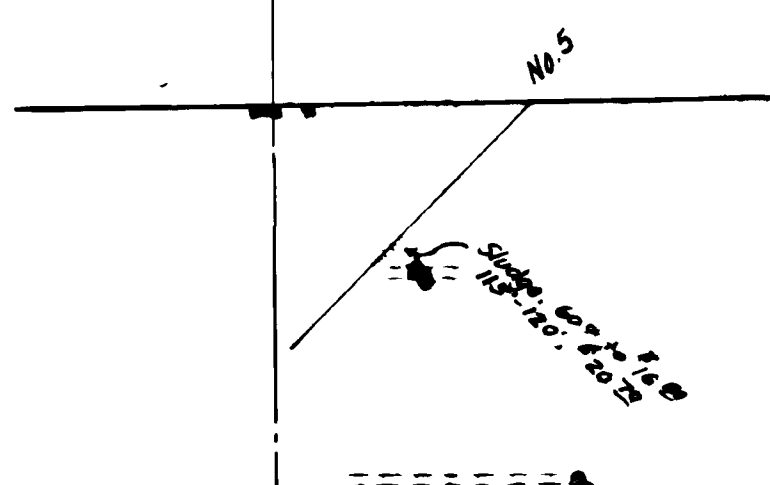
32066E0376 63.3915 0661AN



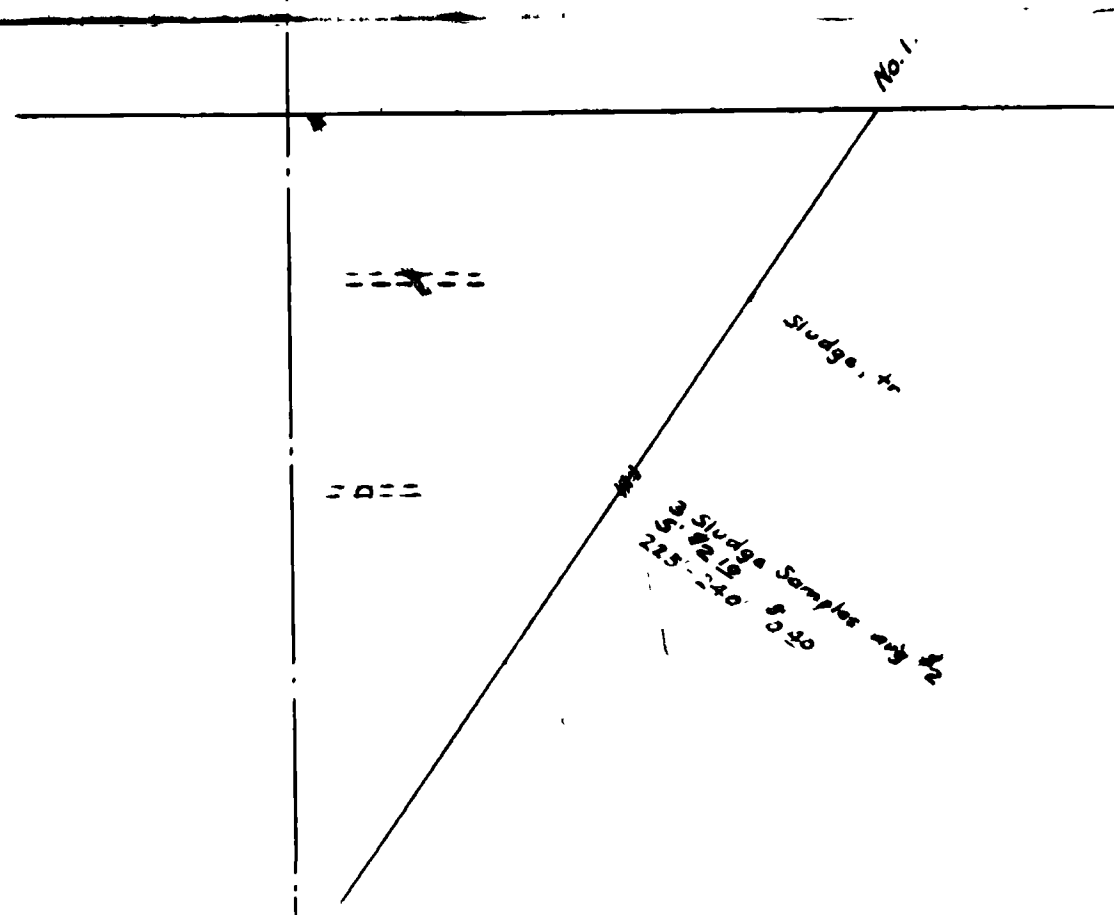
SECTION F-F



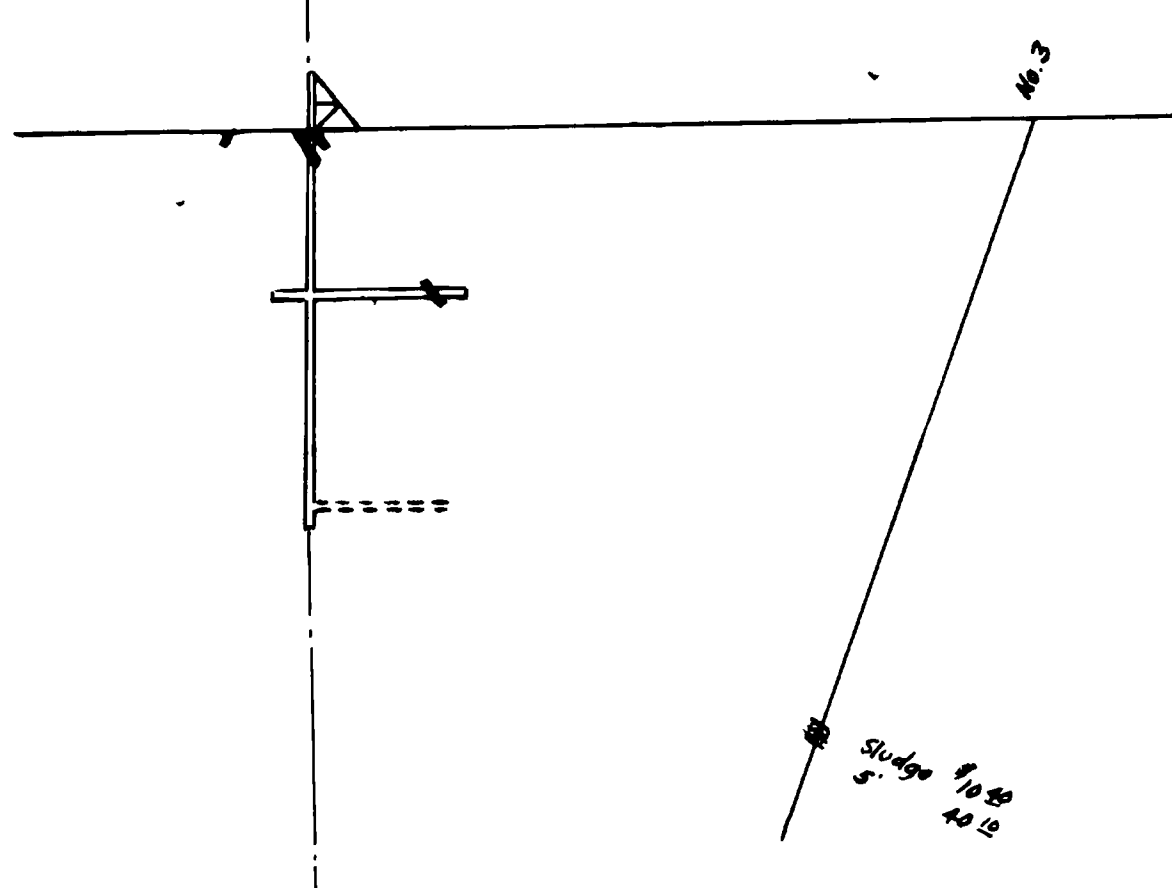
SECTION E-E



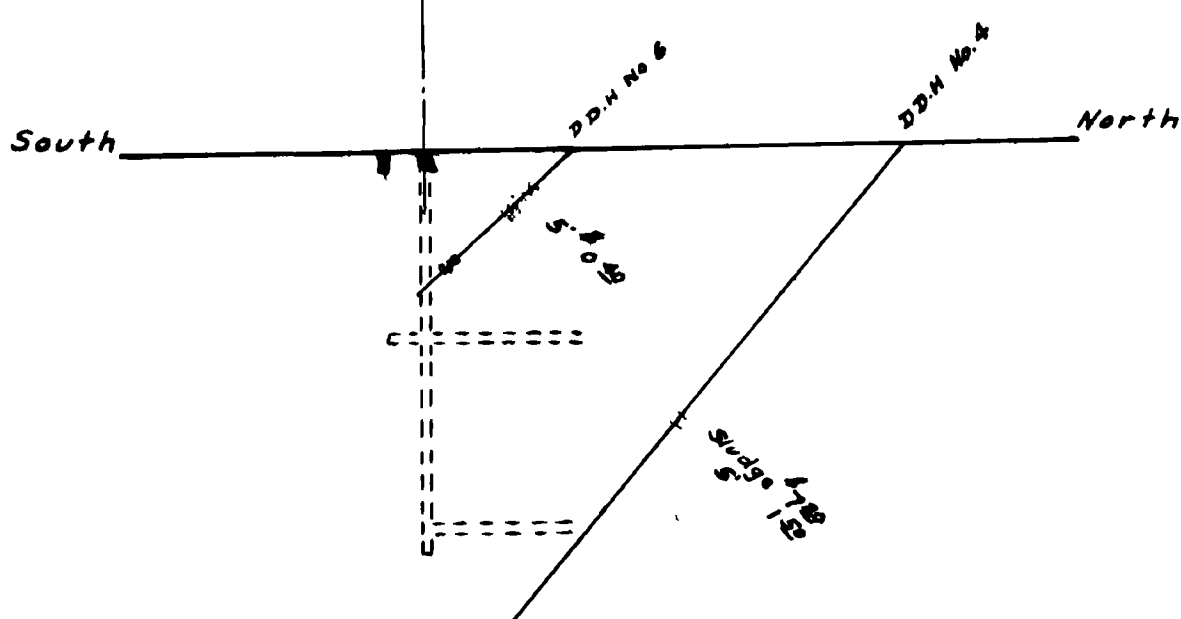
SECTION D-D



SECTION C-C



SECTION B-B



SECTION A-A



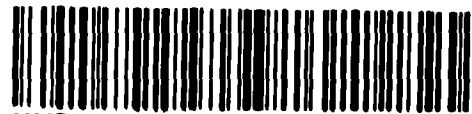
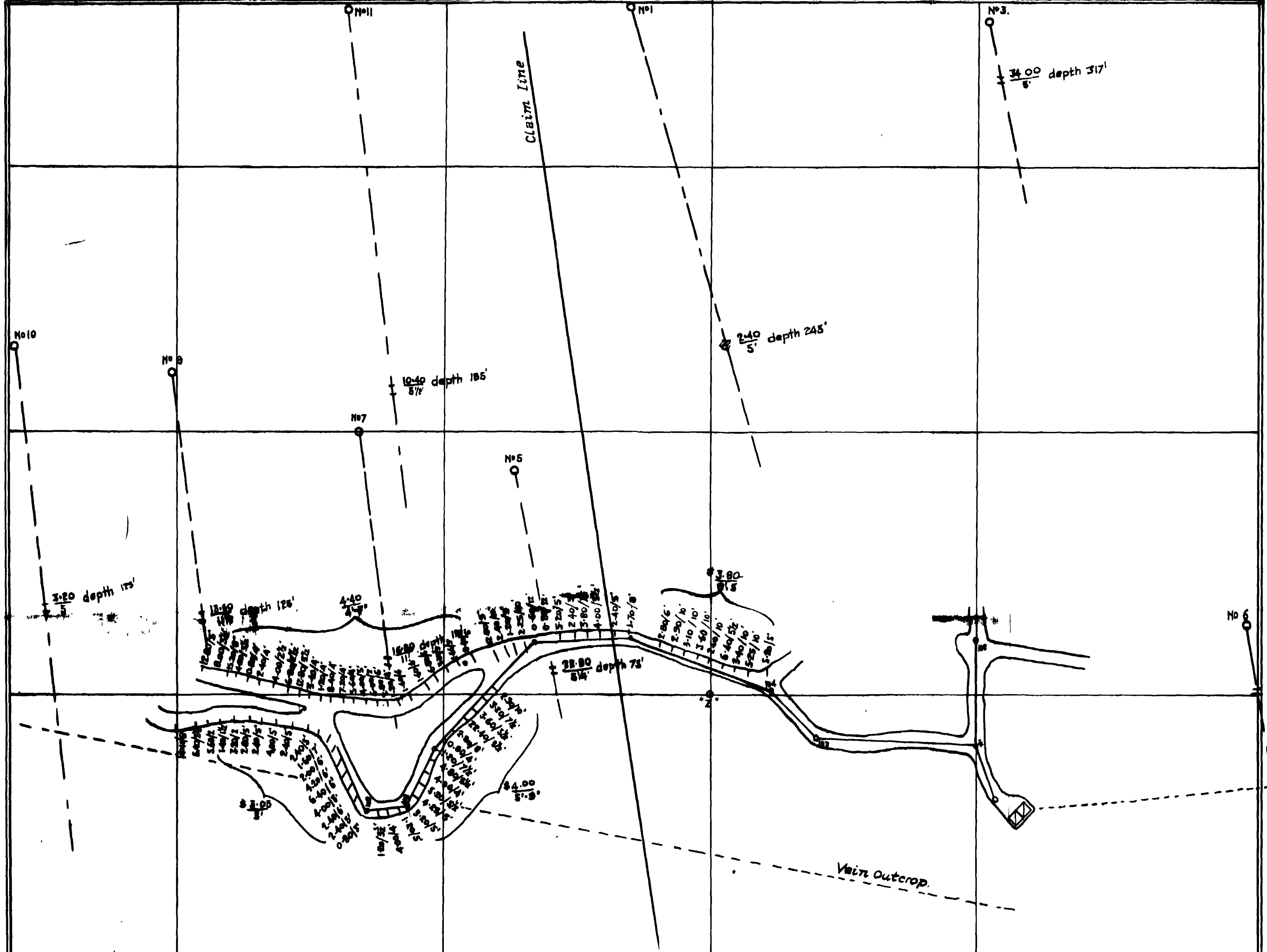


Diamond Drill Plan  
 Ossian Mines Limited  
 Scale 50' = 1"



Looking West  
 Vertical Section of Diamond Drill Holes  
 with Vein intersection of each hole at  
 right angles to strike of vein. The vein  
 shows an average dip of 50 degrees.





32D068E0378 03.3915 0861AN

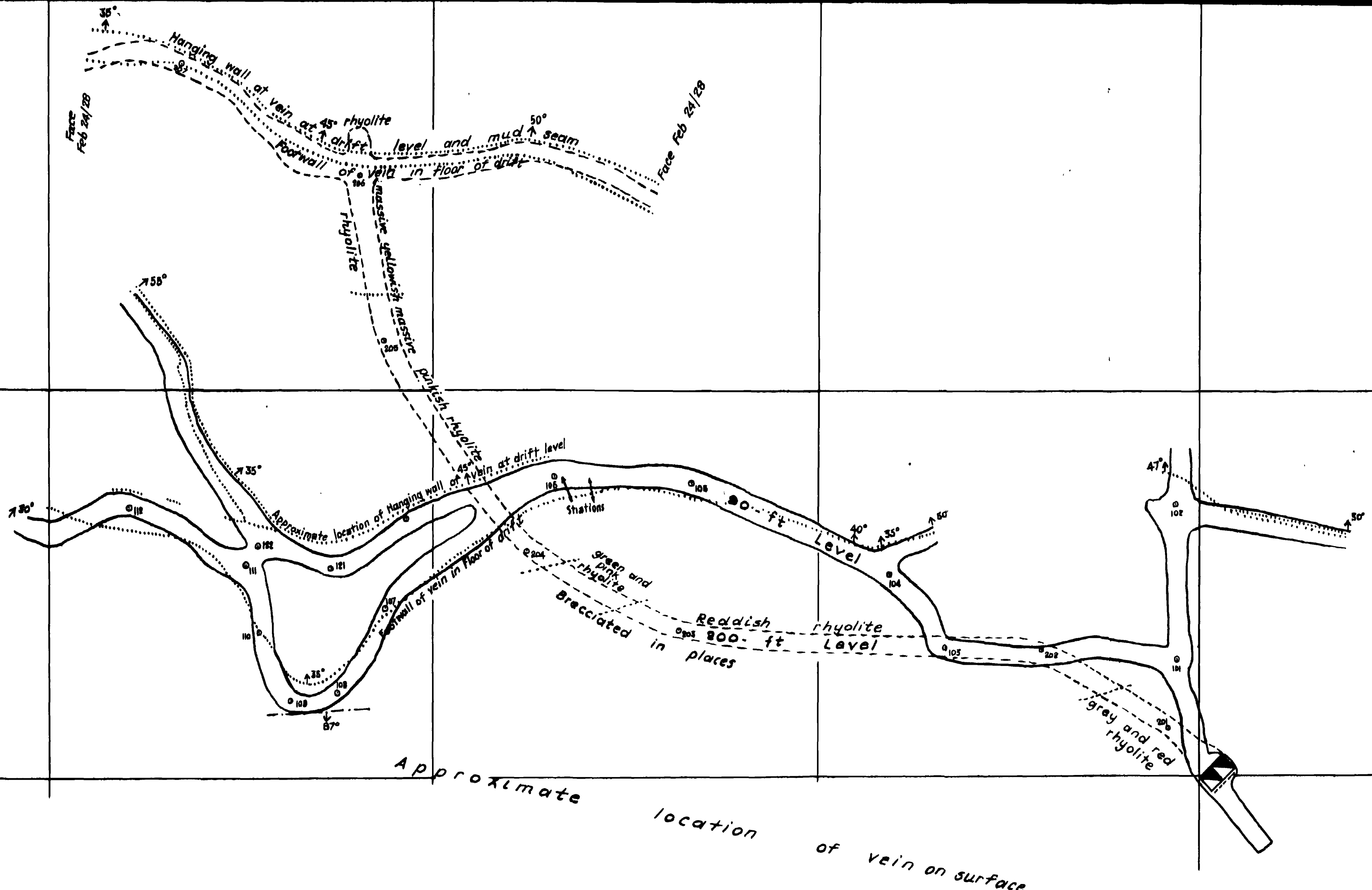
290

ASSAY PLAN  
**OSSIAN GOLD MINES LIMITED**

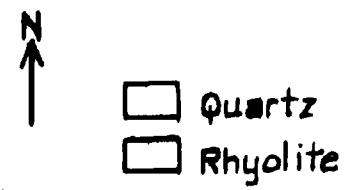
TAKEN IN 5' AND 4' SECTIONS. HOLES WERE DRILLED IN WALLS TO GET WIDTHS OF VEIN WHERE NECESSARY

63.3915

Scale 30'-1" May 21<sup>st</sup> 1926  
 J.W. Morrison



Approximate location of vein on surface



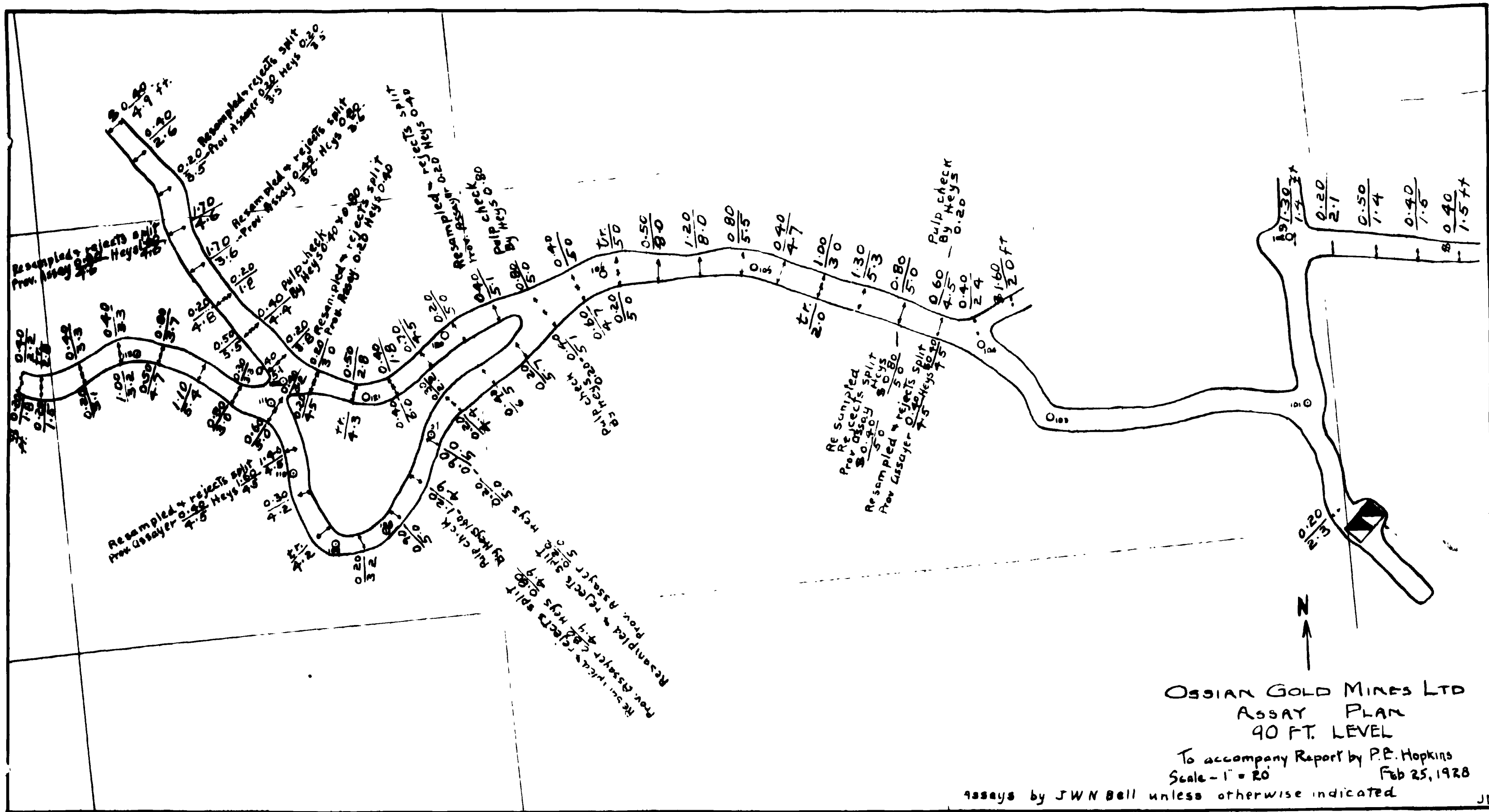
OSSIAN GOLD MINES LIMITED  
 COMPOSITE GEOLOGICAL PLAN  
 90' AND 200' LEVELS  
 To accompany Report by P.E. Hopkins  
 Scale 1" = 20' Feb 20<sup>th</sup> 1928



32D056E0378 83 3815 OSSIAN

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OSSIAN GOLD MINES LTD  
 ASSAY PLAN  
 90 FT. LEVEL

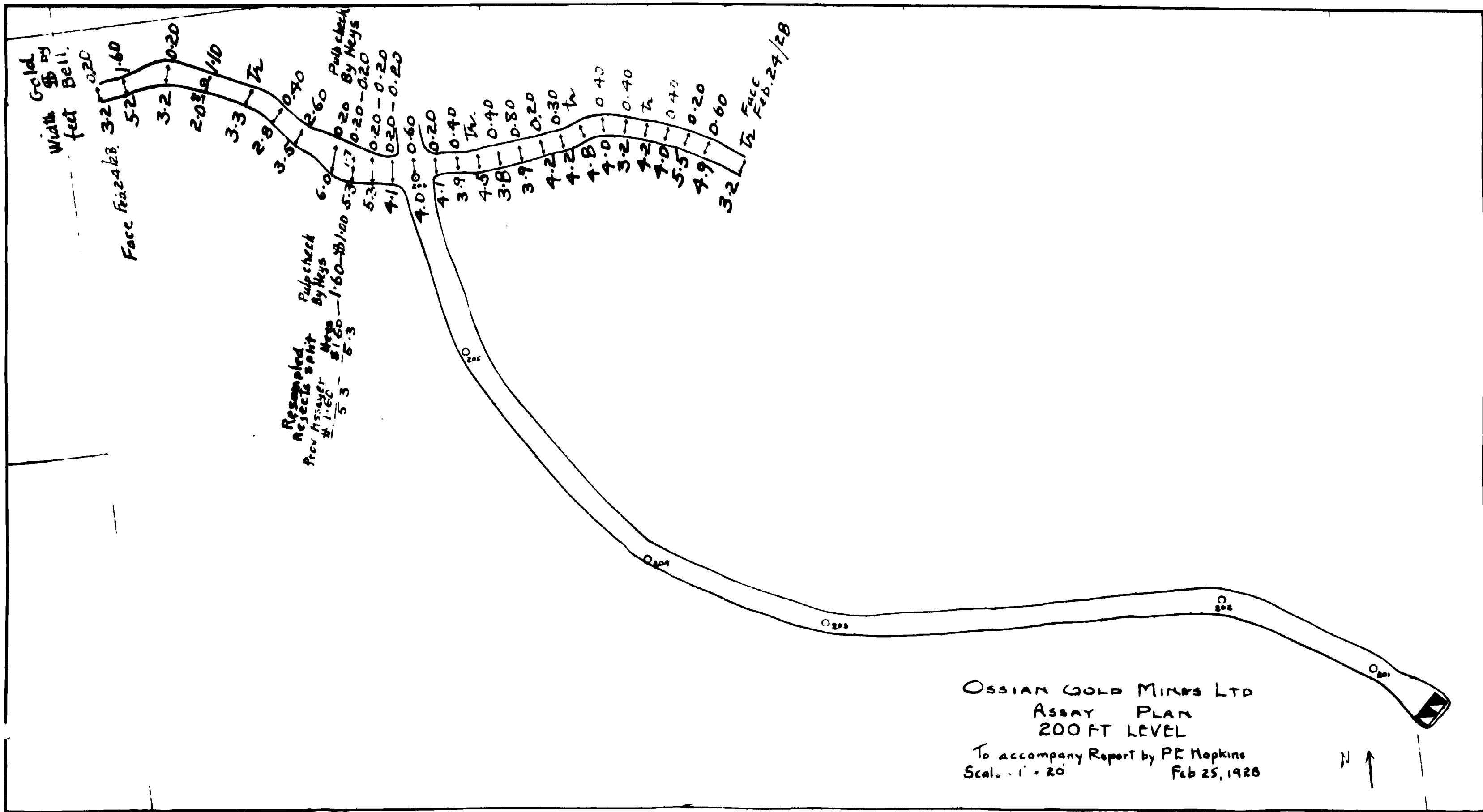
To accompany Report by P.E. Hopkins  
 Scale - 1" = 20' Feb 25, 1928

Assays by JWN Bell unless otherwise indicated

63-3915



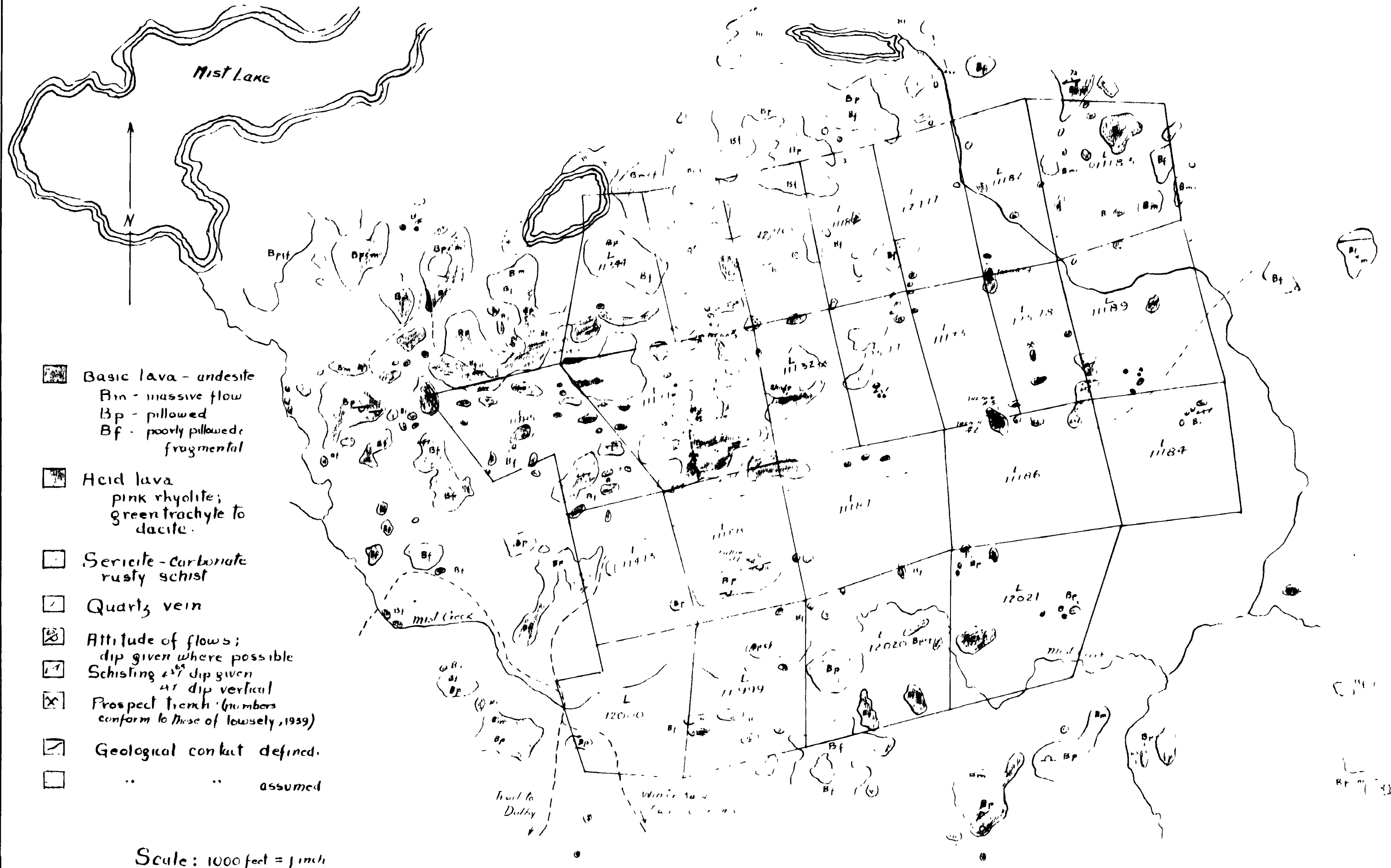
32065SF0378 63 3915 OSSIAN



320055E0376 83 3915 0551AN

320

63.3915



320955E0376 83.3915 0851AN