GEOLOGICAL, TRENCHING AND ROTARY DRILLING REPORT, 1986
on the
BEE CLAIMS
Whitehorse Mining District
N.T.S. $105 \mathrm{D} / 14$
Latitude $60^{\circ} 047^{\prime}$
Longitude $135^{\circ} 1^{\prime}$

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Owner: Silver Sabre Resources Ltd.
Date: November, 1986
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## CHAPTER ONE：INTRODUCTION

1－1：INTRODUCTORY STATEMENT


#### Abstract

The following report describes exploration activities conducted by Silver Sabre Resources on 1 ts wholly owned BEE claims during the 1986 field season．Drilling below the mineralized shear zone on the baseline between $1600 E$ and $1700 E$ conflrmed the presence of anomalous gold values at depth． Drilling of the previously known quartz sulphide vein between L1100E and $1200 E$ stopped short of the vein itself but intersected a $⿴ 囗 十$ ineralized gtringer with $1,650 \mathrm{ppb}$ Au over 5 feet occurring at depth， 10 metres to the south of the known vein．Trenching in the area confirmed the continuity of the mineralized vein and its structure giving it a strike length of 60 metres and an average width of 40 cm ．


1－2：LOCATION AND ACCESS

The BEE and CEE claims are comprised of a block of 84 Yukon quartz mining claıms located on mapsheet $105 \mathrm{D} / 14$ at latitude $60047^{\prime} \mathrm{N}$ and longatude 135012＇W．The claims are situated within the Whitehorse city limits， 1.2 kilometres west of Crestview and 1.5 kilometres south of the Alaska Highway．

The property is accessible by an all－weather road which departs the Alaska Highway and leads to the abandoned Haeckel gki hill and Whitehorge Gun Club．From here，four wheel drive cat roads provide good access to several parts of the property．The property is also accessible from Crestview using a four wheel drive road（see Figures 1 and 2）．



The BEE claims were initially staked in December, 1974 with additional ataking of BEE and CEE claims up to July, 1985. Table 1 eummarizes the status of the 84 units prior to this latest work.

1-4: PREVIOUS WORK

Exploration worik on the property between 1974 and 1979 appears to have been inilted to prospecting and blast trenching. In 1979, Whitehorae Copper Mines Ltd. optioned the property and carried out linecutting, I.P., soil sampling, geological mapping and trenching. This work was done on the eastern part of the claias in an effort to locate copper ineralization. Resultg were not encouraging and the option was dropped.

Silver Sabre Resources carried out limited geophysical surveys and soll sampling on the main showing in 1982 resuiting in two diamond drill holes.

In 1983. Silver Sabre cut a new grid between the main showing and the Whitehorse Copper grid. C.E.M.. magnetometer and VLF-EM surveys were carried out on this grid and some cat trenching was done in the aame year.

Between August, 1984 and June, 1985 a lımıted amount of regional geological mapping and geochemical sampling was undertaken by Noranda Exploration. A report was submitted in December 1985; results were encouraging. During this period, Silver Sabre Resources carried out a trenching program using a $D-7$ caterpillar tractor (Reid, 1985).

In August 1985, Noranda Exploration optioned the BEE claims. The work program consisted of a cut and flagged grid (Grid No. 3), soil sampling, magnetometer survey and HLEM survey and a limited amount of geological

TABLE 1

## CLAIM STATUS

| CLAIM NAME | GRANT NO. | DUE DATE | OWNER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BEE 1-12 | Y91728-739 | Dec. 6. 1987 | Salver | Sabre | Resources |
| BEE 21-24 | Y91748-751 | Dec. 6, 1987 | " | * | ${ }^{\prime}$ |
| BEE 25-27 | YA3106-108 | July 29, 1988 | " | " | * |
| BEE 28-35 | YA18302-309 | Sept. 27. 1988 | " | * | * |
| BEE 36-59 | YA86575-598 | April 26, 1987 | " | " | - |
| BEE 60-63 | YA92340-343 | July 2, 1987 | " | " | * |
| CEE 1-6 | YA82524-529 | July 3. 1987 | " | " | " |
| CEE 7 | YA82530 | July 3, 1987 | " | " | - |
| CEE 8 | YA82531 | July 3, 1987 | " | - | " |
| CEE 10-13 | YA82532-535 | July 3, 1987 | " | " | " |
| CEE 14-19 | YA82576-581 | July 4, 1987 | " | " | " |
| CEE 20-27 | YA85579-586 | Oct. 9. 1987 | " | " | * |
| CEE $24(N)-26(N)$ | YA86010-012 | Oct. 23, 1987 | " | " | " |

mapping. Between October and December, a cat trenching program was carried out in order to follow up initial results. Following this, Noranda dropped its option on the property.

1-5: 1986 WORK PROGRAM

The 1986 work program conducted by Silver Sabre Resources consisted of 660 feet of rotary drilling in 3 holes, cat trenching using a $D-7$ and detalled geological mapping of the 1985 Noranda grid. The work was carried out during late September and October. The program was aimed at further evaluation and delıneation of existing showings as well as defining new areas with good potential to host mineralization.


#### Abstract

The BEE and CEE claims occur at the north end of the Whitehorse Copper Belt within the whitehorse Trough. The Trough represents a 650 kilometre long Meaczoic sedimentary basin. Regional mapping by Bultman (1979) and Christie (1957) indicate the Trough is a northwest trending synclinorium. Upper Trıassic Lewes River Group volcanics, volcaniclastics, limestone and argillite form the base of the trough. These are overlain by the Lower Jurassic Laberge Group coarse to fine-grained clastıcs and the Upper Jurassic Lower Cretaceous clastic and coal sequences of the Tantalus Formation. Deformation of these sequences generally consists of broad, gentle, anticlinal and synclinal folds.

The Mesozolc clastic sequences are intruded by the Cretaceous Coast Intrusions consisting of granite, granodiorite, diorite and monzonite. One such granitic intrusion forms the southern part of Haeckel Hill and the BEE clams. The northern part of the BEE claıms consists totally of Lewes River Group greywacke, siltstone, arkose, argillite, limestone, chert as well as volcanic tuffs and clasticg. In the central part of the claims, a highly siliceous rhyolite plug of probable Tertiary age 1 s exposed. Numerous felsic to intermediate dykes exposed on the property are likely related to these intrusive events.


Geological mapping at a $1: 2500$ scale was concentrated on the existing Noranda grid. Two reconnaissance traverses were also done.

Rocks in the immediate area of the grid are part of the Upper Triassic Lewes River Group. These rocks are intruded by a late Cretaceous biotite granite to the south of the grid. In the central portion of the grid. the sediments are intruded by an oblong sheped rhyolite plug trending northwest. The plug forms concordant sills in some areas while being discordant in others and is associated with several dykes of felsic to intermediate composition.

The Lewes River Group is composed predominantly of greywacke, arkose, siltstone, argillite, limestone as well as inor chert and tuffaceous sequenceg. South of the baseline these sediments generally strike NW/SE and dip $30^{\circ}$ to $50^{\circ} 5 W$. North of the baseline the sediments generally strike $N E / S W$ and dip $30^{\circ}$ to $40^{\circ} \mathrm{NW}$. The orientation of these beds andicate an open anticline with the fold axis trending at appoximately 1100. The rhyolite plug appears to be intruded into the central part of the anticline and has cauged some local deformation doming and silicification of the surrounding sediments. The degree of silicification 15 difficult to distinguish as many of the local rocks in the area are naturally siliceous and have likely been previously thermally altered by the large biotite granite intrusion to the south and the northeast.

The gold bearing shear zone occurring along the baseline and trending at $090^{\circ}$ occurs sub-parallel to the fold axis and cuts the rhyolite plug and the northern limb of the anticline east of L1600E.
The following is a table of formations for the area:
Tertiary
Unit 4: Rhyolite, grey to brown grey, weathers white, aphanitic to feldspar hornblende porphyritic, fractured and often gossaned. Up to 15\% pyrite and pyrrhotite. Highly siliceous with zones of network quartz veining.
Tertiary and/or Late Cretaceous
Unit 3: Blotite granite, leucocratic to biotite rich with lesser porphyry, fine to medium grained.
Upper Triassic - Lewes River Group
Unit 2: Greywacke brown, fine to medium gralned; arkose; fine grained white siltstone and black to white chert sequences. Variable amounts of volcanic and tuffaceous material.
Unit 1: Black argillite and argillaceous sequences of limestone, greywacke and debris flow breccias made up of various clasts.

## 2-3: MINERALIZATION


#### Abstract

Two types of maneralization were observed on the property. The first consigts of intensely silicified rhyolite with 10\% pyrite, pyrrhotite and minor arsenopyrite. These zones are generally associated with areas of parallel and stringer network quartz veins and often contain minor galena and sphalerite. The best occurrence of this is in the shear zone exposed on the baseline in TR-85-3 and TR-85-5.

The second type of mineralization consists of quartz veins with up to $80 x$ sulphides consisting of patches and disseminations of pyrite. pyrrhotite, galena, sphalerite as well as minor chalcopyrite and arsenopyrite. The best example of this 13 the 60 metre long veln between L1100E and L1200E. Dther examples are L1000E, 925 N and the north side of the top of Haeckel Hill. These veins appear to develop in shear and fracture zones along an east-west linear trend close to the trend of the


#### Abstract

axial plane of the anticline. Intense silicification and quartz veining along fractures are often observed in the exposures surrounding these veins.

Both vein types have anomalously hagh gold values, however higher silver values are obtained from the more galena-sulphide rich veins. Maneralized veins generally strike at $90^{\circ}$ to $125^{\circ}$ while barren quartz veins occur at various angles.


## 2-4: GEOCHEMISTRY

Several soll anomalies from the 1985 Noranda geochemical program were examined. A 420 ppm Pb and 0.6 ppr Ag anoraly at L1200E, 1200 N occurs on the ski slope. No source could be found, however the anomaly may be a result of an overburden covered mineralized vein sluffing down from above. This 15 also the likely cause of the 100 ppm and 160 ppm As anomalies at L1000E, 1050 N respectively. The 50 ppb Au anomaly at L1600E, 625 N occurs in a swampy area with a well developed organic horizon. No outcrops were seen in the area and the source 19 likely placer. The 410 ppb Au anomaly at L2000E, 675 N likely has a placer source as well since the sample was taken in a glacial till bank and there is no multi-element anomaly association.

## 3-1: TRENCHING PROGRAM


#### Abstract

A D-7E caterpillar bulldozer with a ripper, contracted from Tony Fekete of Whitehorse, was used to trench four areas on the property. TR-86-2 and TR-86-3 succeeded in reaching bedrock while TR-86-1 and TR-86-4 were terminated as a result of deep overburden.

TR-86-3 is located at $9+75 \mathrm{~N}, 11+20 \mathrm{E}$. The trench succeeded in exposing the previously drilled vein structure for a strike length of 10 metres. The vein is composed of quartz with up to $80 \%$ galena, sphalerite, pyrrhotite, pyrite and a manor amount of chalcopyrite. It has a true wadth of 40 cm . trends at $102^{\circ}$ and 15 steeply dipping with the hangwall to the north. See Figure 3.

TR-86-2 exposed only a manor amount of bedrock. The trench occurs to the west of $T R-86-3$ at $9+75 N$, 1100E. The vein was not encountered, however insufficient bedrock exposure in the trench prevented a reliable evaluation With respect to the continuity of the vein in this area. A major parallel jointing pattern at $100^{\circ}$ was observed though. See Figure 3.


3-2: ROTARY DRILLING PROGRAM

On September 24. 1986 a Shramn rotary drill rig, contracted from Midnıght Sun Drilling of Whitehorse, was mobilized to the property. A total of 660 feet in three holes from three separate set-ups were drilled in an effort to 1 ntersect mineralization associated with a major east-west shear zone occurring on the property. Rotary holes were drilled without water


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except RDH-B-86-1 and 2 which made a significant amount of water below the ground water table. The following 15 a sumary of the three holes; detailed logs and results are in appendix 2.
RDH-B-86-1 was collared at 1025 N .1650 E and drilled due south at \(-60^{\circ}\). The hole was drilled in order to test the downward extent of a \(1,300 \mathrm{ppb}\) Au/0.37 m encountered in TR-84-1.
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## Summary Loq:

```
0-95: Black, grey white, highly silicified cherty giltstone with local greywacke. 10\% pyrite and pyrrhotite. Minor quartz vein material.
95-105: Black calcareous argillite.
105-110: Grey silicified rhyolite dyke?
110-170: Black argillite and argillaceous limestone, \(10 \%\) disseminated pyrite cut by calcite veins with minor pyrite.
170-210: Mainly white crystalline limestone and calcite vein material.
210-225: Argillaceous limestone, recrystallızed.
225-250: Grey silicified rhyolite.
250: End of hole.
Gold values of up to 280 ppb Au over 5 feet were encountered in a highly silicified cherty siltstone sediment with \(10 \%\) pyrite and pyrrhotite. A 50 foot argillaceous limestone sequence from 120 feet to 170 feet contains anomalous gold values of up to 50 ppb . These values are associated with quartz calcite pyrite stringers or possibly with some form of replacement associated with the \(10 x\) pyrite and slight recrystallization observed with the sequence.
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RDH-B-86-2 was collared at $1008 \mathrm{~N}, 1705 \mathrm{E}$ and was drilled at $011^{\circ} \mathrm{Az} /-$ 600S. It was drilled to further test the shear zone withan the rhyolite

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plug/sill below a 20 ppb Au/0.9 m anomaly in TR-85-5.
    Summary Loq:
    0-145: Grey, highly silicified rhyolite with 10x pyrite. Sili-
        clfied and gossaned fractures.
    145-175: Black argillaceous limestone and calcareous argillite.
        10% pyrite, minor silicification.
175-225: Silicified, grey whate rhyolite wath minor feldspar horn-
        blende porphyry.
225-260: Black arg1llaceous limestone with some gossaned quartz
    vein fragments.
260-265: Silicified rhyolite.
265: End of hole.
The highest gold value obtaıned was 70 ppb/5 feet within a silicified rhyolite section. The anomaly is likely attributable to weakly mineralized quartz vein stringers within the rhyolite. Other anomalies in the section are likely related to the same cause.
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RDH-B-86-3 was collared at 9+55N, $11+65$, 5 metres west of DDH-83-2. It was drilled at $020^{\circ} \mathrm{Az} /-700 \mathrm{~N}$. The purpose was to test the quartz sulphide manalızed fracture zone previously massed in DDH-83-2.

## Summary Loq:

0-20: Whate crystalline tuffaceous siltstone.
20-150: Brown arkose and greywacke, $10 \%$ pyrite disseminated. Cut by many quartz vein stringers with pyrite, pyrrhotite and locally minor galena.

150: End of hole.

Hole three encountered the haghest gold intersection, 1650 ppb Au from 50-55 feet. Within this section occurs pyrrhotite bearing quartz vein material. This $1 s$ likely stringer mineralization associated with the main mineralized fracture zone 50 feet to the north. This zone was not




> FIGWREG
> BEE CLAIMS
> RDH B-86-3
encountered as the hole stopped short of $1 t$.

3-3: LANDSAT STUDY

A brief examination of Thematic Mapper magery for the BEE claims area indicates a correlation between several electromagnetic linear and circular features and geologic features observed on the ground. The most significant of these $1 s$ an east-west trending linear occurring at the same orientation and position as the shear zone exposed in the trenches east of L1600E. The landsat linear has a length of several kilometres.

The other significant landsat feature observed is an irregular, oblong shaped, circular image which occurs where the rhyolite plug crops out on the property. This $1 s$ a possible indication of doming resulting from the force of emplacement of the rhyolite.

The 1 mages observed above are best seen on bands 4. 5, 6 of the thematic mapper using the sequence: DCP ID 321, DCP FI. DCP FC.

Drilling below TR-85-3 and TR-85-5 confirmed the presence of anomalous gold values up to 280 ppb Au/5 feet occurring at depth. Sample intervals with anomalous gold values should be resampled as should the bracketing intervals. Two samples should be taken and averaged with the existing value such that a more accurate value 13 obtained for the interval. Should a substantial increase in gold values be obtained, then further work in the order of diamond drilling is warranted. Otherwise no further work $1 s$ recommended in the 1 mediate area.

Potential for mineralization exists to the east and west of the grid along strike of the existing shear zone. The limestone to the east has the potential to host skarn deposits and manto type replacement deposits along the trend of the shear. Detailed prospecting and reconnaissance grid soils should be conducted. A cat trench perpendicular to the assumed strike should also be considered as glacial tills in the area will likely screen out any subsurface geochemical signatures. A reevaluation of the existing I.P. data should be considered for this area as well and some reconnaissance EM and mag lines perpendicular to the strike of the existing shear.

Further work in the form of contour soil lines and detailed prospecting to the west of the grid around Haeckel Hill should be conducted. Any anomalies found should be trenched.

Prospecting of the perimeter of the oblong shaped feature and the linear feature observed in the landsat imagery should also be considered.

Respectfully submitted,



Wayne Reid Geologist

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Morrison, G.W. Open File EGS-1979-6.
Reid. W.. 1985. Geology. Prospecting and Geochemistry Report on the BEE and CEE claims. Noranda $1 \pi t e r n a l$ company report.
Walcott, P.E., May, 1981. A Report on Induced Polarızatıon Surveys for Whitehorse Copper Mines.
Wheeler. J.0.. 1959. Whatehorse Map Area, Yukon 105D. G.S.C. Memoir 312.

I, Steve Mackay of the city of Edmonton, Alberta, do nereby certify that:

1. I was employed as a geologist by Noranda Exploration Company, Limited (NPL) for the past three field geason (1984, 1985, 1986) prior to the start of work on thls project.
2. I am a graduate of the University of Alberta with a Bachelor of Science Degree in Geology.
3. I am a member of the Canadian Institute of Mining and Metallurgy and a member in training of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
4. I supervised and performed part of the work described in this report.
5. I have no direct or indirect interest in Silver Sabre Resources Ltd. nor do I expect to receive any interest directly or indirectiy in the securities of this company.


## STATEMENT OF QUALIFICATIONS

I. Wayne Reid, of the City of Whitehorse in the Yukon Territory, do hereby certify that:

1. I have been employed as a Geologist by Noranda Exploration Company, Limited (No Personal-Liability) since 1976.
2. I am a graduate of Memorial University of Newfoundland with a Bachelor of Science Degree in Geology.
3. I am a Fellow of the Geological Association of Canada, a member of the Yukon Professional Geoscientists and the Prospectors and Developers Association.
4. I helped plan and supervise part of the work described in this report.
5. I have been associated, through Noranda, with this project since 1984, however I have no direct or indirect interest in Silver Sabre Resources Ltd. nor do I expect to receive any interest directly or indirectly in the securites of this company.

N. Wayne Reid

Senior Project Geologist
Noranda Exploration Company, Limited (No Personal Lıabılity)

## APPENDIX 1

## ROCK SAMPLE DESCRIPTIONS

AND

## GEOCHEMICAL RESULTS

GPIJECT: GEE CLAIMS

| SAMFPL | HUCATIUN: DESCRIPT!DN |  | Assays |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2\% | 1 mom | 1 | 0pat | 1 | DJm |  | pos | Doma |
| Nu. |  | I |  | 0 |  | If, | 1 | Ag |  |  | As |
| 47513 | , | 1 | 48 | 372 | , | 900 |  | 3.4 |  | 5 | 34 |
| 47514 | 1See Eiagram of vein TR-96-3 and RDH-5-86-3 | 1 | 780 | 1060 |  | 340800 |  | 144.8 |  | 170 | 12 |
| 475:5 | 16ins samples |  | 96 | 314 |  | 398 |  | 1.6 |  | 5 | 60 |
| 47516 |  | I | 72 | 340 | : | 120 |  | 1.2 |  | 5 | 28 |
| $475: 7$ | 1 | 1 | 650 | 1 488200 | 1 | 12000 |  | 106.0 |  | 2188 | 128 |
| 47519 | ! | 1 | 170 | 600 | 1 | 318 |  | 2.0 |  | 5 | 142 |
|  |  |  |  | 1 | 1 |  | 1 |  |  | 1 |  |
| 475:9.3n5ras - TR-85-2 |  |  | 34 | 560 | 1 | 650 | 1 | 1.5 |  | 5 | 26 |
|  | 1 | 1 |  | 1 | 1 |  | 1 |  |  |  |  |
| 47520 | Luartz vein with oud of foo, 6ri, Son. Tod of |  | 144 | 3400 |  | 17890 | 1 | 8.6 |  | 951 | 720 |
|  | 15ki mill, mortin side. | ! |  | 1 | 1 |  |  |  |  | ! |  |
|  | 1 | i |  | , | 1 |  | 1 |  | , | 1 |  |
| 47521 | 10uartz vein, minor sulonides disserd and along | 1 | 44 | 66 | 1 | 116 |  | . 4 |  | 5 | 14 |
|  | Ifractures. Ski inll delaw claim posts. | 1 |  | , | 1 |  | 1 |  | , | 1 |  |
|  | : | 1 |  |  | 1 |  | 1 |  |  | 1 |  |
| 47523 | Hornfels zone, rusty gossamed graywacke or | 1 | 14 | 62 | 1 | 132 |  | . 4 |  | 5 | 50 |
|  | isossisly fine gr. intrusive. If ereek soutn | 1 |  | , | 1 |  | 1 |  | , | i |  |
|  | 10 fl (1400. | 1 |  | , | ' |  | 1 |  | , | ! |  |
|  | 1 | ; |  | , | ! |  | 1 |  |  | 1 |  |
| 47523 | Fine gr. Dlack grey siliceous siltstone with | 1 | 8 | 4 | : | 14 |  | . 2 |  | 5 | 26 |
|  | Iminor alt'n on fractures, locally calcareous | 1 |  |  | , |  | 1 |  | , | , |  |
|  | 1 isman |  |  |  | 1 |  | 1 |  |  | 1 |  |
| 47524 | Fine er. nommiets of saliceous calcareous | ; | 360 | 10 | 1 | 38 |  | . 4 |  | 5 | 6 |
|  | 1 seciment frobitrench behind Roverts olace. | 1 |  | , | I |  | , |  |  |  |  |
|  |  |  |  |  | 1 |  | 1 |  |  | ' |  |
| 47525 | \| Fancom dras samsles of calcareous siltstone, |  | 二0) | 20 |  | 5 |  | .3 |  | 5 | 34 |
|  | Isome of whicn are migaly silicified with $10 \%$ |  |  |  | ; |  | 1 |  |  | , |  |
|  | pyrite and gossarned. From traverse at tos of |  |  |  | 1 |  | 1 |  |  |  |  |
|  | ins11. | 1 |  | , | 1 |  | : |  |  |  |  |
|  | i | 1 |  |  | 1 |  | 1 |  |  | 1 |  |
| 8:351 | 1 Fractured and bleached cherty tuffaceous rock |  | 52 | 29 | 1 | 54 | ; | . 6 |  | 5 | 94 |
|  | iminor cissem. sulonides. | 1 |  |  | 1 |  | 1 |  |  | 1 |  |
|  | 1 | I |  |  | 1 |  | 1 |  |  | 1 |  |
| 8:952 | , Dherty tuffaceous siltstone - shlicifiec | 1 | 68 | 154 | ; | 94 | 1 | 1.0 |  | 48 | 60 |
|  | ;opeeri black with sulonude filled fractures |  |  |  | 1 |  | 1 |  |  | 1 |  |
|  | $11^{3} y$, Po, manor En ano Son?). |  |  |  | 1 |  | , |  |  |  |  |
|  | 1 l | : |  |  | , |  | ; |  |  |  |  |
| 81553 | Gossanous vugty ouartiz vein with 5x sulohides |  | 23 | 126 | 1 | 109 |  | 1.2 |  | 10 | 42 |
|  | : |  |  |  | 1 |  | 1 |  |  | - |  |
| 8.954 | Quartz veir, vuggy, py cubes weathered out, | , | 28 | 186 |  | 64 |  | 3.0 |  | 100 | 2 |
|  | 110\% sulonades, 5 , Py, Sph, Fo. |  |  |  | 1 |  | 1 |  |  | 1 |  |
|  | 1 |  |  |  | 1 |  | 1 |  |  | , |  |
| 81356 | Guassmed guart 2 veifi with $48 \%$ sulonides, Er, | ; | 189 | 1000 | 1 | 36600 |  | 28.8 |  | 240 | 52 |
|  | IS2h, Fy, fo ano nematite |  |  |  | 1 |  | I |  |  | 1 |  |
|  | 1 |  |  |  | 1 |  | 1 |  |  | ! |  |
| 3593 | Trassive sulonide verm, manly Po with dalena | 1 | 320 | 140004 | 1 | 36400 | \| | 206.0 |  | 140 | 182 |
|  | dafic sjhalerite. From old blast trench at |  |  |  | 1 |  | , |  |  | 1 |  |
|  | - wooer orill 51 tes. |  |  |  | 1 |  | 1 |  |  | 1 |  |
|  |  | 1 |  |  | 1 |  | , |  |  | : |  |




| こご |  |  | －3ivs |  |  |  |  |  |  |  |
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| －－－－－－－－－－－－－｜\％ecs |  |  | －5ainute |  |  |  |  |  |  |  |
| $\because \because 1$ | i | ．nescifinev do units | No． |  | 12 |  | Ln | Ag 1 AE ；Au |  |  |
|  | $2: 5$ |  |  | 91537： |  | 10 | ． 891 | ．${ }^{\text {a }}$ | $45 i$ | 20 |
|  |  |  |  |  | 1 | 1 | ， | i | 1 |  |
| 1 | 1 |  |  | ； |  | ； | ； | ， | 1 |  |
| $35 i$ |  | SSaine－arghlaceous limestone，rearystajijzes． |  | 916381 | $24!$ | 201 | 361 | ． 2 | 61 | ： 5 |
| 1 | ！ | ． |  | 1 | ： | 1 | － | 1 | ！ |  |
| 200 | 2251 | Ef\％sihicifleu fraguerts with Gl5s．Syrate．Sume Py |  | 916351 | 451 | 381 | ：7400 | ． 61 | 351 | 10 |
|  | ， |  |  | 1 | ！ | ． | 1 | 1 | $!$ |  |
| ： |  |  |  | ， | 1 | 1 | 1 | 1 | $!$ |  |
| 2wi | ： |  |  | ， | 1 | ； | ， | 1 | 1 |  |
|  | 331 |  |  | 3.6401 | 501 | 150， | 168i | ． 3 | E） | 泡 |
| ； | ， |  |  | 1 | 1 | 1 | － | 1 | 1 |  |
| － 5 | Em； |  |  | 9164i： | $63:$ | $45^{\circ} \mathrm{i}$ | ：50） | ．+1 | 271 | 10 |
|  | ！ | A：ty iroto asteratior．Only man caicite． |  |  | 1 | 1 | 1 | ； | $!$ |  |
| ＇ | 1 |  | 1 | ， | 1 | 1 | 1 | 1 | 1 |  |
| 235. | 2481 |  |  | $9164{ }^{2}$ | 5.1 | 2d！ | 1301 | ．${ }^{\text {2 }}$ | 281 | 10 |
|  | ！ | firaciores．30\％gossaned fractures，mimor calcite． |  | ！ | 1 | 1 | ； | 1 | 1 |  |
|  | 1 |  | ． | 1 | 1 | 1 | 1 | 1 | 1 |  |
| 340 | 3451 | ．Sane as above， |  | 926431 | 691 | 531 | 1811 | ． 61 | 411 | 10 |
|  | ！ |  | ， | ， | ， | 1 | 1 | 1 | 1 |  |
| 245 | 350： | ．Same as above． | I | 9i644： | 401 | 281 | 1441 | ． 31 | 251 | 5 |
|  |  |  | 1 | 1 | ； | 1 | ； | 1 | 1 |  |



| E: |  |  | ASSAYS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Samile: |  |  |  |  |  |  |
| a | 1401 | Sane as ajove excesi $50-50$ ramo. it coaings on misie | 9i533 | ${ }^{1}$ | 331 | 341 | . 3 | 701 |  |
|  | 1 | Erey shlicified rocks, ay deaitios on sossaned rocks | 9:534 | :51 | $28:$ | 381 | .a) | 2801 | 0 |
|  | 1 | -x1c:zed. | ; | 1 | 1 | 1 | 1 |  |  |
|  | : |  | 1 | 1 |  | 1 | 1 | 1 |  |
| 241 | :501 |  | 9:5351 | 341 | 341 | 961 | . 2 | 130 | 10 |
|  | 1 | Simestone with ie\% py, ainor simicification and cryato- | 92526 | 281 | 451 | 1871 | . 21 | 1801 | 20 |
|  | ' | Erystalline cascite. | , | 1 | 1 | 1 | 1 | i |  |
|  | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  |
| $=8$ | $15 \%$ |  | 91527: | 381 | 421 | 1161 | . 21 | 120: | ¢ |
|  |  | fsilica riel frazurnts. | 915281 | 971 | $1: 81$ | 3291 | . 71 | 1301 | z |
|  |  |  | 1 | 1 | 1 | 1 | 1 | $!$ |  |
| . b $^{\text {a }}$ | :7e: | 'Sane as ajove excess 50 -50 rais. | 91599 | 311 | 581 | 1301 | . 41 | 901 | 15 |
|  |  |  | 915301 | 2 | 581 | 1681 | . ${ }^{1}$ | 110: |  |
| . 78 | : 90 | 60\% shlicified grey wite rnyo.ite with micro nold | 915311 | 19 | 461 | 991 | . 21 | 130. | 38 |
|  |  | .laths, oftern atering to to anc miour colorite as well | 915321 | 14. | 271 | 441 | . 3 | 100 | s |
|  | 1 | las local Py. $20 \%$ dack are. as well as limey arg. | 1 | 1 | 1 | I | 1 | । |  |
|  | 1 | ! | 1 | ! | 1 | 1 | 1 | 1 |  |
| 160! | 1901 | Aspy or fy with mite grey shicifiea myolite. Local | 915331 | 171 | 301 | 441 | . 2 | 1201 |  |
|  | 1 | igossaming. 2 fragnents of liney arg. | 915341 | 161 | 231 | 361 | . 3 | 1301 | 15 |
|  | ; | : | 1 | 1 | 1 | 1 | : | 1 |  |
| $: 90$ | 20: | Same as ajove. | 915351 | 201 | 261 | 561 | . 21 | $90:$ | 70 |
|  | 1 | 1 ! | 915361 | 221 | 511 | 771 | . 21 | 4001 | 20 |
| $\begin{array}{r} 2001 \\ 1 \end{array}$ | 210 | 160 x fresn intrusive myolite. Six\% winte vitreous felc-1 | 915371 | 271 | 291 | 841 | . 21 | 1301 | 10 |
|  | : | 1 isar latns, 20x atz, 20x suotite. 18\% nomblence and | 915301 | 281 | 301 | 781 | . 21 | 1001 | :10 |
|  |  | local pyrate. Scme frasments siow cilurite atteration. | ! | 1 | 1 | 1 | 1 | 1 |  |
|  |  | 1 ) | 1 | i | 1 | 1 | 1 | ' |  |
|  | ; |  | 1 | , | ; | 1 | 1 | ! |  |
|  | : | f Some reict Ielcsars orsever. | 1 | , | 1 | 1 | ; | ! |  |
|  | ! | 1 ; | ! | 1 | ; | : | : | 1 |  |
| 3 | 20 | lider fresh as amve. gex siticified reatish orown and | 9:539 | 381 | 35 | 601 | . ${ }^{1}$ | $4{ }^{\prime}$ | :5 |
|  | , | imite frayments. | 915401 | 661 | 301 | 691 | . 3 | 1id | : |
|  | ! |  | 1 | 1 | 1 | 1 | 1 | 1 |  |
| Sa | 3 c |  | 915411 | 311 | 291 | 791 | . 31 | 42, | j |
|  |  | Ingit grey to black tecaily mecrystallizec. | $91542 i$ | 501 | 301 | 921 | . 3 | 331 | 10 |
|  |  | 1 ) | 1 | 1 | 1 | 1 | 1 | 1 |  |
| Ser | $2+8$ | 160\% arc. 1mestone. $30 \%$ siiscifiec and gossamed frag- | 9:543 | 591 | $24!$ | 781 | . 21 | 70 | 15 |
|  | ; |  | 9 i 5441 | 491 | 251 | 661 | . ${ }^{1}$ | 701 | 15 |
|  |  | 1 , | ! | ! | 1 | 1 | 1 | 1 |  |
| 3401 | 258 |  | 92545 | 331 | 161 | 471 | . 21 | 321 | : |
|  |  | :often gossaned. | 9:546; | $18 i$ | 291 | 651 | . 21 | 681 | : |
|  |  | $1{ }^{1}$ | ; | 1 | ; | 1 | 1 | 1 |  |
| 20 | 2001 | 15\% as above. g5x grey mine Enicified riyolite witn | 915471 | 41 | 681 | 69 | . 21 | 651 | 5 |
|  |  | idx 3 y , local colorite. | 92548 | 111 | 241 | 391 | . 21 | 90. | 10 |
|  | ' | 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |
| 25d | 255 |  | 915491 | 131 | 161 | 411 | . 21 | 13i | 10 |
| , |  | iwite locally dlack recrystalized, :4\% Py. Rhyolite | 1 | 1 | 1 | 1 | 1 | ! |  |
| , | ! | , fragments have calcite atang fractures. | 1 | 1 | 1 | 1 | 1 | 1 |  |
| ; | , | , 1 | 1 | 1 | 1 | 1 | 1 | 1 |  |






