LOG NO: $1124 \quad$ RD
ACTION:
INC.
FILE NO: 87-791-16427

TELEPHONE: (604) 689-5533

## ASSESSMENT REPORT

GEOLOGY - GEOCHEMICAL REPORT
ON THE GOLD MINE AND GOLD HILL CLAIMS
Whistle Creek
Medley Area
Similkameen Mining Division
$92 \mathrm{H} / 8 \mathrm{E}$

CO-QRDINATES: $49020^{+}$North Latitude $120^{\circ} 08^{\prime}{ }^{\prime}$ West Longitude

MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES
Rec'd
NOV 181987
SUBJECT
FILE
VANCOUVER, BC.

OWNER OF CLAIMS:
PHILEX GOLD AND ENERGY CORPORATION
308-525 Seymour Street
Vancouver, B.C. V6B 3H7

OPERATOR:
PHILEX GOLD AND ENERGY CORPORATION

CONSULTANT:
HAROLD M. JONES, P.ENG. HAROLD M. JONES \& ASSOCIATES INC.

AUTHOR:
HAROLD M. JONES, P.ENG.


November 2, 1987

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## SUMMARY

The Gold Mine and Gold Hill claims are located in the Similkameen Mining Division 5 km due west of Hedley, B.C. They are owned by Philex Gold and Energy Corporation of Vancouver, B.C.

The property is underlain by metasediments and metavolcanics of the Upper Triassic Nicola Group into which are intruded a number of dioritic and andesitic dykes and sills. At least one granodiorite plug also intrudes the Nicola Group rocks.

Exploration in the 1930's tested several mineralized areas with a number of shallow pits, trenches, shafts and short adits. These workings proposed sulfide mineralization carry low values in goid associated with shears, veins and quartzcalcite breccia zones.

Work in the 1970's located a significant quartz-carbonate vein breccia zone. Its surface expression is a prominent gossan from which one sample was taken which assayed $2.046 \mathrm{oz} /$ ton gold. Two drill holes intersected this zone, assays from which returned low values in gold, arsenic, copper and zinc.

Philex Gold and Energy Corp. staked the property and conducted exploration programs in 1982, 1985 and 1987. Results of this work indicate a number of areas as being anomalous in gold and arsenic in the soils, some of which correspond with the areas of old workings. An airphoto study indicates that many of the lineaments are coincident with geochemically anomalous areas and some of the areas of known mineralization.

It is concluded that additional geological mapping, soil sampling and in some areas backhoe trenching should be conducted to expand the areas of interest tested in 1987. A geophysical survey, possibly horizontal loop EM, is also worthy of consideration.

## INTRODUCTION

Between June 1 and August 10, 1987, Philex Gold and Energy Corporation conducted fill-in geochemical soil sampling and geological mapping on Gold Mine and Gold Hill claims, located near Hedley, B.C. The purpose of the work was to provide additional data to that obtained from a previous exploration program as well as meet the assessment work requirements. Most of this work was under the supervision of B. Fenwick-Wilson, mining technician. The writer conducted limited geological mapping during the period August 7 to 9, 1987.

## Location and Access

$49^{\circ} 20^{\prime}$ North Latitude
$120^{\circ} 07^{\prime}$ West Longitude

The Gold Mine and Gold Hill claims are located within the Similkameen Mining Division in southern British Columbia approximately 5 km due west of Hedley (Figure 1). They are situated on the south side of the Similkameen River valley on the ridge between Whistle-Pettigrew Creek and Henri Creek, Elevations range from 550 m to 1525 m above sea level.

The claims are readily accessible by good logging roads which leave B.C. Highway 3 six km west of Hedley. The main logging road follows Whistle Creek but near the 6 km mark, a branch road leads to the claims. It is approximately 8 km by road to the property.

Roads are numerous within the claims area. In dry weather most parts of the property may be reached by two-wheel drive vehicles.

## Topography and Vegetation

The topography on the property is characterized by a rounded, moderately north sloping ridge bounded to the east and west by steep slopes and to the north by high cliffs. The lower slopes are well forested by moderately dense stands of pine and fir while the higher ground is more open with grassy patches within mature stands of timber. Underbrush is light.

| 0 |  | 100 | 200 | 300 MILES |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 100 | 200 | 300 | 400 | 500 xm. |

## PHILEX GOLD AND ENERGY CORP.

H. M.:JONES \& ASSOCIATES INC. VANCOUVER, B.C

GOLD MINE \& GOLD HILL CLAIMS
LOCATION MAP
hedLey area - similkameen m.d.


## Property

The property consists of two claims which may be described as follows (Figure 2):

| Claim Name | No. of Units |  | Record No. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Expiry Date* |
| Gold Hill | 15 |  | $1161(9)$ |  |
| Gold Mine | 15 |  | $1177(9)$ |  |
| September 8, 1987 |  |  |  |  |
| September 23, 1987 |  |  |  |  |

* will be extended one year upon acceptance of recent assessment work filing.

The claims are owned by Philex Gold \& Energy Corporation, 717-837 West Hastings Street, Vancouver, B.C. V6C 1B6.

The legal corner posts for both Gold Mine and Gold Hill claims were examined and found to conform with the mining regulations. Only one other post was seen and it was tied into the geochemical grid.

The northwest corner of Gold Mine claim overstakes a group of Crown grants and located claims; the eastern edge of both Gold Mine and Gold Hill claims slightly overly a number of located claims. All of these claims have precedence over Gold Mine and Gold Hill claims, consequently, the property boundary is slightly irregular (Figure 2).

## History and Previous Work

During the early 1930's, Hedley Gold Hill Mining Company owned all or part of the ground now covered by Gold Mine and Gold Hill claims. Their work included several short adits and shafts, one long adit and a number of trenches. Most of their work was concentrated on a quartz-calcite breccia zone well mineralized with pyrite and much lesser arsenopyrite, pyrrhotite, chalcopyrite, galena and sphalerite. Low values in gold were obtained from samples taken from the workings. They are located near the south-central boundary of Gold Mine claim.


Old pits and trenches, presumably dug by the same company, are located near the southwest corner of Gold Mine claim. These workings explore strongly sheared and fractured sediments.

Between 1927 and 1935, Hedley Sterling Gold Mines Ltd. explored the Patsy No. 2 Crown grant (L.3407), which lies immediately west of Gold Mine claim. During this period they explored five bedded shear zones with three short and one long adit and several open cuts. While the shears range up to 1.8 m wide, they are mineralized over very narrow widths -5 cm to 30 cm - with quartz and minor pyrite and/or arsenopyrite. Gold assays were generally $0.2 \mathrm{oz} /$ ton.

From 1973 - 1976, Canadian Occidental Petroleum conducted an exploration program on the HED claims, which are now a part of the ground covered by the Gold Mine claim. They initially located the area as a result of geochemical silt sampling programs which showed an anomalous stream sample. Examination of the stream led them to a gossan from which one sample assayed $2.046 \mathrm{oz} /$ ton gold. They explored the area by conducting geological mapping and soil surveys over a part of the HED claims and drilled three short holes totalling 240 m to test the gossan. Results of their work indicate one large area with strong, coincident, arsenic-gold anomalies and a second area with widespread but weaker coincident anomalies. These anomalous areas were never followed up with detailed exploration.

Drilling of the gossan located a quartz-carbonate vein breccia zone up to 15 m wide (drill intersection width). Low values in gold, arsenic, copper and zinc were obtained from the breccia zone.

During October 13 to 17, 1982 and August 12 to October 28, 1985, Philex Gold and Energy Corp. conducted geological, geophysical and geochemical surveys on Gold Mine and Gold Hill claims. Results of this work indicated a number of areas as being anomalous in gold and arsenic in the soils, some of which corresponded with the areas of old workings. An airphoto study indicated that many of the areas containing geochemical anomalies and known mineralization are coincident with airphoto lineaments.

Gold Mine and Gold Hill claims lie immediately west of Banbury Gold Mines' Henri Creek property which is being actively explored at the present time. In late 1985 Noranda Exploration Ltd. obtained an option on this property.

Across the valley at Hedley, Mascot Gold Mines recently commenced open pit mining on the Old Nickel Plate Mine property. They repor ted, on February 7, 1986, open pit reserves of 7.1 million tons averaging $0.15 \mathrm{oz} /$ ton gold.

Placer Development Ltd. are actively exploring the ground adjoining that of Mascot Gold Mines. Numerous other junior mining companies are also active in the area.

## GEOLOGY

## General Geology

The Hedley area is underlain by Upper Triassic Nicola Group volcanics and sediments into which were intruded small ultrabasic and large granite bodies of late Mesozoic Age. The latter intrusives almost surround the Nicola Group rocks, which in the general Princeton area consist of a thick succession of lavas through which are irregularily distributed lenses of tuffaceous and argillaceous rocks and occasional beds of limestone.

In the Nickel Plate Mine area, located 5 km east of the subject property, most of the sedimentary strata have been strongly metamorphosed to skarn by the intrusion of many sills and dykes into impure limy sediments. Gold mineralization associated with arsenopyrite occurs in skarn zones adjacent to diorite-gabbro sills and dyke. On the Gold Mine and Gold Hill claims skarn alteration appears to be absent although intrusions are present.

## Local Geology

Outcrop is well exposed on the claims in cuts along the main access roads and in cliffs at the north end of the property. Elsewhere it is usually restricted to rubbly
exposures on the top and sides of small rounded knolls and in low cliffs in areas of steep terrain (Figure 3).

The geology consists of a series of sediments and pyroclastics of the Nicola Group intruded by diorite and andesite(?) as narrow dykes and sills and as small stocks. Within the sediments are one or more calcite breccia zones and one large zone of "slump breccia". The following is a brief summary of the main rock units:
(a) argillite:
very dark grey to black, finely bedded, commonly with fine pyrrhotite on bedding plane fractures. This unit is generally silicified (hornfelsic). When well mineralized it is accompanied by a prominent limonite gossan. Locally, fractures and bedding planes are heavily coated with carbonate. Some beds are also calcareous.
(b) tuffs:
medium to dark grey, fine to medium grained, massive to finely bedded, composed mostly of feldspar with $5-10 \%$ mafic minerals, with minor disseminated pyrrhotite. Locally with shards of argillite and/or chert. Some horizons are calcareous.
(c) chert:
light grey to greenish grey to greyish brown, very fine grained, faintly bedded, with minor pyrite and/or pyrrhotite as disseminations and fracture coatings.
(d) limestone:
grey, fine to medium grained, massive but show faint bedding on weathered surface.
(e) "slump breccia":
a mixture of fine to very coarse blocks of rounded to angular limestone, argillite and tuff in a limy, sandy matrix. Fragments are in random orientation. This unit is correlated with Copperfield conglomerate mapped on the Nickel Plate Mine property (Ray and Dawson, 1987).

Intrusive Rocks
(a) granodiorite:
light grey, medium to coarse grained, predominantly feldspar with 5\%10\% hornblende, biotite and minor quartz. Occurs as small stocks.
(b) hornblende diorite:
light grey to light brown, fine to medium grained, mostly felspar with up to $10 \%$ fine lathes hornblende, occurs as narrow dykes and sills.
(c) andesite(?):
grey to greenish grey, medium to coarse grained, predominantly feldspar with abundant chloritized mafics. This unit resembles massive tuff sections but is coarser grained. Occurs as narrow dykes and as small stocks.

The sedimentary-pyroclastic package shows some variations in the area. To the west of the property, on Patsy No. 2 Crown grant, the geology is described as being impure limestone, chert, limestone and minor tuff at the base of the hill. Up slope to the east it grades into argillite (B.C. Min., 1937). Cherty sediments and argillite, similar to above, are present on the western and northern parts of Gold Mine claim.

The western and central part of Gold Hill claim and the eastern part of Gold Mine claim are predominantly interbedded argillite and tuffs, in about equal proportions. Minor limy beds and limy tuffs are also included in these areas.

The eastern edge of Gold Hill claim differs slightly in that there is an increase in cherty sections as well as the presence of one or more calcite breccia zones. The latter are argillite-tuff sections, strongly brecciated, cemented with calcite and/or quartz, and well mineralized.

A very coarse "slump breccia" is located at the eastern edge of Gold Hill claim, but widens to the north on ground held by Banbury Gold Mines Ltd.

Intrusive rocks are present at widely separated locations. Several narrow hornblende diorite dykes and/or sills occur within the argillites and tuffs in road cut exposures. These intrusives follow bedding, then cross-cut it, later to reform and follow bedding again. Little or no alteration of wall rocks is associated with these intrusives.

Several small irregular masses of granodiorite are exposed on Gold Mine claim near its southeastern corner (see Figure 3). These appears to be tongues emanating
from the stock lying to the east of the property on ground held by Banbury Gold Mines Ltd. Outcrop in this area is too sparse to determine the extent of these intrusives.

Andesite(?) intrusives are poorly exposed on Gold Mine claim. One forms cliffs at the north end of the property.

During the 1987 field program, geology was mapped on Grid 1 on a scale of 1:2500. Limited prospecting was also conducted in this area to search for the sources of the previously obtained geochemical anomalies.

The anomalous area on Grid 1 occurs in an area of carbonate breccias interbedded with fine-grained dark tuffs and medium to coarse grained crystal tuffs (diorite?). The breccia consists of limestone fragments, commonly about 20 mm square, but up to $40 \mathrm{~mm} \times 150 \mathrm{~mm}$, in a limy, sandy matrix (a finer grained version of Copperfield conglomerate?). The tuffaceous units commonly contain fine disseminated pyrite and pyrrhotite, and pyrite in small feldspar veinlets and masses. Fine grained magnetite is also disseminated in the tuffs.

In the vicinity of $15+50 \mathrm{~W}, 2+00 \mathrm{E}$ to $3+00 \mathrm{E}$ all rock is tuffaceous. Some fine grained, light coloured cherty tuffs are interbedded with the dark, medium grained variety. Minor sulfides are also present in this area.

## STRUCTURE

A sinuous north-northeast striking "main" fault is inferred to pass through the centre of the property. It is partially exposed in the gossanous area located on the "north branch" road (Area 2, Figure 3). This structure is well defined on the surface as a prominant 400 m long gulley trending S10W from the gossan zone. Beyond this point, the topographic feature fades out but re-appears to the south as a broad depression, the trough of which is occupied by a small creek.

North from the gossan zone a surface lineament swings to approximately N35E. It is inferred to be the northern continuation of the fault zone.

A number of air photo lineaments are shown on Figure 3. They mostly lie on the east side of the above inferred "main" fault zone and are concentrated in the general vicinity of the old workings in Area 1. Two sets of lineaments are present; one trending N45-70E, the other $\mathrm{N} 30-60 \mathrm{~W}$. Their surface expressions, in most cases, are shallow, drift-filled gulleys.

Variations in bedding was noted on the property on either side of the "main" fault. At the southwest corner of the Gold Hill claim bedding strikes about N30E, while on the "north branch" and main roads, immediately west of the gossan zone, the bedding strikes $\mathrm{N} 60^{\circ}-70^{\circ} \mathrm{E}$. This same change in attitude persists through to the northern end of the property.

To the east of the main fault, on Gold Hill claim, the bedding varies from N20-30E to the due nor th from the southeast to nor theast parts of the claim. This warping of the beds may be due to movement along the main fault with the west side displaced nor thward.

## GEOCHEMICAL SOIL SURVEY

In 1982, limited geochemical soil sampling was conducted in selected areas on the property. The results of this work demonstrated that soil sampling was warranted over a much larger area.

In 1985 a $100 \mathrm{~m} \times 50 \mathrm{~m}$ grid was laid out. This covered approximately 60 percent of Gold Hill claim and 50 percent of Gold Mine claim. All samples were analyzed for gold and arsenic and a number were also assayed for multi-elements by the I.C.P. method. Only gold and arsenic were plotted. They are shown on Figure 4.

Gold values are very low, with the majority being less than 5 ppb Au. Statistically, values between $10-30 \mathrm{ppb}$ are weakly anomalous, greater than 30 ppb Au are
anomalous. Similarly, arsenic values are also low. Values between 40-60 ppm As are weakly anomalous, greater than 60 ppm are anomalous.

Some of the more interesting areas, geochemically, on or near known mineralization are:
(a) Area 1:

Coincident gold and arsenic contours enclose the old workings. The anomalous gold area contains three high values $-110,110,810 \mathrm{ppb}$; the anomalous arsenic area contains three high values of 190, 340 and 1000 ppm As.
(b) Area 2:

Coincident gold and arsenic anomalies are present near the showing as well as along the southern strike of the inferred "main" fault zone. Gold values range from $10-350 \mathrm{ppb}$ Au, arsenic values from 40-600 ppm As.
(c) Area 3:

An arsenic anomaly with values ranging from 48 to 120 ppm As encloses a part of the area of old workings. Gold values are very low. However, a detailed grid over this area in 1982 located a number of anomalous values ranging from $15-470 \mathrm{ppb} \mathrm{Au}$ and $44-584 \mathrm{ppm}$ As. Also, one soil sample taken in 1985 to check the soil at a greater depth ( 45 cm vs normal depth of 15 cm ) returned an assay of $10,000 \mathrm{ppb} \mathrm{Au}$ and $10,000 \mathrm{ppm}$ As.

Rock samples taken from the old workings in this area returned significant values in gold. However, they are poorly reflected in the soil samples. It is apparent that if only several soil samples are anomalous, they are very significant.

In 1987, fill-in geochemical soil sampling was conducted in several areas found to be anomalous in gold and arsenic during previous exploration programs. These areas, which are shown on Figure 4, are:

Grid 1 - five lines totalling 1.2 kms were run N60W at 50 meter intervals for lengths varying from 225-275 meters. Samples were collected from the "B" horizon at 25 meter intervals along each line. A total of 51 samples were collected, packed in Kraft paper envelopes, and sent to Chemex Laboratories Ltd., 212 Brooksbank Avenue, North Vancouver, B.C. for 32 element I.C.P. analyses plus gold by fire assay and atomic absorption finish. Only gold and arsenic were plotted and are shown on Figure 6.
,



The assay results confirm the presence of anomalous values in gold and arsenic. These higher values appear to be restricted to a small area approximately 100 mx 100 m . More sampling is required to check for geochemical trends beyond this grid.

Grid 2 - nine samples were collected from this area at approximately 10 foot (3 meter) intervals to test for possible gold and arsenic values on trend from an old sluffed pit (Figure 4 and 7). Samples from here were processed as described above. These samples returned significant values in both gold and arsenic and indicate additional sampling is required in this area.

These samples were collected from the "C" horizon at depth from $25-60 \mathrm{~cm}$ to get beneath the "A" horizon, ash layer and any surface contamination.

Grid 3 - a grid was laid out (Figure 4 and 8) to add detail to an area of old pits. Lines were laid out at 20 meter intervals and samples collected from the "C" horizon at depths of $25-60 \mathrm{~cm}$ using a shovel. Due to old workings, strippings and rock outcrops, a number of grid locations were not sampled. Approximately 465 meters of grid was run and 57 samples collected.

Highly anomalous gold and arsenic values were obtained from some sample sites on this grid, roughly outlining an area of interest $50 \mathrm{~m} \times 50 \mathrm{~m}$. Additional sampling is required in this area to test an indicated nor thwest trend.

Grid 4 - a small grid totalling 320 meters of lines was laid out to test an area containing one old trench and anomalous assays from the previous survey (Figure 4 and 9). Lines were spaced at 20 meters and samples collected at 20 m intervals from the " C " horizon as in above grid. Six samples were collected here. Sample results from this area show several anomalous sites. This grid coverage is too small to be meaningful.




## DISCUSSION OF RESULTS

A comparison between geology and geochemical anomalies and inferred structures, the latter from airphotos, indicates that structure plays a major roll in localizing mineralization. The greatest number of inferred structures occur in the eastern half of the property, more specifically in the southeast and northeast quadrants respectively of Gold Mine and Gold Hill claims. Areas 1 and 3, containing old mineralized workings and Area 2, containing a prominent gossan, are located in this area.

Gold and arsenic anomalies are coincident with the "main" fault zone over a 500 m leng th of this structure. At the southern end of this anomalous trend the anomalies also coincide with an inferred northeast striking structure. Area 3(a) is situated at this intersection and Area 3 is just west of this structural intersection. Both of these areas contain mineralized old workings. Fill-in geochemical soil sampling in 1987 in Area 3 - Grid 3, confirms the area to be anomalous in gold and arsenic, and indicates a possible northwesterly trend. More detailed sampling followed by backhoe trenching is war ranted here.

Area 1 is bounded by two northwest and one northeast trending infer red structures. The coincident geochemical anomalies in Area 1 are also essentially delimited by these same structures. Geological mapping in this area noted very localized faulting and folding within the mineralized workings. This may be the most geologically disturbed area on the property.

In the northern part of the property, near the centre of Gold Mine claim, a coincident Au-As anomaly, located in 1985, was detailed in 1987 - Grid 1. The new sampling confirms the anomaly and localizes it to an area of mostly crystal tuffs (diorite?) with much less fine-grained bedded tuffs, argillite and limy breccia. Much of this area is very steep, talus and/or grass covered slopes with poor outcrop exposure. Detailed prospecting, geochemistry and geology are required to determine the significance of the Au-As anomaly in this area.

The relationship of geology to mineralization is not clear. The main difference in geology in the eastern part of the property is the probable increase in cherty beds, including chert, chert breccia and cherty argillite. A northerly trending breccia zone lies along and to the east of the eastern property boundary. All breccia zones contain abundant calcite.

## CONCLUSIONS

It is concluded that the geology and structure on the Gold Mine and Gold Hill claims is favourable for hosting gold mineralization. It is also concluded that several known mineralized areas and coincident structural-geochemically anomalous areas warrant additional exploration.

## RECOMMENDATIONS

It is recommended that the area covered by Grids 1 and 3 be expanded and that detailed geological mapping, soil sampling and prospecting be conducted in these larger areas. Grid 3 should also be tested by backhoe trenching.

The property should be examined and the data reviewed by a geophysicist to determine if a deep penetrating-type geophysical survey (horizontal loop EM?) might indicate mineralization at depth on one of the many structures cutting the property.

## REFERENCES

B.C.M.M. Annual Reports

1934 - Page D 20
1936 - Page D $9-10$
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Jones, H.M. (1979) - Letter Report on Banbury Gold Mines Property for W.G. Stevenson \& Associates.

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MacDonald, C.C. (1976) - Geology, Geochemistry \& Diamond Drilling of HED Claims, for Canadian Occidental Petroleum Ltd. Assessment Report No. 6060.

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Rice, H.M.A. (1960) - Geology \& Mineral Deposits of Princeton Map-Area, British Columbia, Geological Survey Canada Mem 243.

Tulley, D.W. (1982) - Report on the Gold Hill and Gold Mine Mineral Claim Group, Whistle Creek - Hedley Mine Area, Similkameen M.D., Hedley, B.C. Private Report for Philex Gold \& Energy Corporation.

## CERTIFICATE

I, Harold M. Jones, of the City of Vancouver, British Columbia, do hereby certify that:

1. I am a Consulting Geological Engineer with offices at \#605 - 602 West Hastings Street, Vancouver, B.C.
2. I am a graduate of the University of British Columbia in Geological Engineering, 1956.
3. I have practised my profession as a Geological Engineer for over 30 years.
4. I am a member of the Association of Professional Engineers of British Columbia, Registration No. 4681.
5. I examined the Gold Mine and Gold Hill claims between October 13-17, 1982, conducted geological mapping and supervised a soil sampling program on the claims. Between September 17-30, 1985 I conducted geological mapping and supervised a magnetometer survey on the same claims. Between August 7 to 9, 1987 I conducted limited geological mapping on the property.
6. I have also conducted geological mapping and compiled reports on: Banbury Gold Mines property which adjoins the Gold Mine and Gold Hill claims to the east (1975); Zurich Energy Corp. property on Cahill Creek, $9 \mathrm{~km} \cdot$ due east of the subject claims (1982).
7. I have no interest, nor do I expect to receive any interest, direct or indirect, in the Gold Mine or Gold Hill claims or in any securities of Philex Gold \& Energy Corporation.

Dated at Vancouver, B.C. this 2nd day of November, 1987.


## STATEMENT OF QUALIFICATIONS

I, Brian Fenwick-Wilson of Mount Baldy Ski Area, Box 687, Osoyoos, B.C. do hereby certify that:

1. I took two years geology at Lancing College, England.
2. I have been engaged as a prospector and geological technician for 41 years. My career to date in the mineral exploration field may be summarized as follows:
(a) 1946-1952
(b) 1952-1966
(c) 1.967
(d) 1967-1971
(e) 1971-1973
(f) 1974
(g) 1975-1977
(h) 1978-1979
(i) 1980-1987
(j)

Self-employed prospector
Exploration Manager and Director of several syndicates and private companies
Utica Mines and Exploration Syndicates
Amax Exploration
Cero de Pasco
Newmont Mining and private companies Self-employed and with two exploration syndicates
Director of American Fluorite and a Director and Exploration Manager of other public companies
Director and Exploration Manager of numerous public and private companies I have conducted many and extensive exploration programmes during the past 16 years.
3. I supervised and actively participated in the exploration program on the Gold Mine and Gold Hill claims between June 1 to August 10, 1987.
B. Fenwick-Wilson


Geologic Technician and Prospector

## APPENDIX I

## STATEMENT OF EXPENDITURES

Wages:
B. Fenwick-Wilson
June 4-7, August 5-8, 1987
$7 \frac{1}{2}$ days at $\$ 150 /$ day ..... $\$ 1,125.00$
G. McCool
June 4-6, August 6-7, 1987
$4 \frac{1}{2}$ days at $\$ 70 /$ day ..... 315.00
M. Fenwick-Wilson
June 4-6, August 6-7, 1987
$2 \frac{1}{2}$ days at $\$ 90 /$ day; 2 days at $\$ 100 /$ day ..... 425.00
A. Ross
August 7-9,1987
3 days at $\$ 100 /$ day ..... 300.00
H.M. Jones, P.Eng.
August 7 - 9, 1987
3 days at $\$ 350 /$ day
$1,050.00$$\$ 3,215.00$
Food and Accommodation:
Golden Dawn Motel and meals ..... 542.67
Transportation:
$4 \times 4$ truck rental and gas ..... 429.05
Budget Truck rental and fuel ..... 310.65739.70
Assays:
Chemex Labs Ltd. ..... 2,716.00
Freight samples ..... 18.752,734.75
Field and Supplies:
Sample bags, flagging, thread, etc. ..... 177.20
Equipment Rental: ..... 75.98
Travel:
Vehicle, meals, etc. ..... 262.24
Phone calls, Misc.: ..... 45.34
Report and map preparation
Report ..... 550.00
Drafting ..... 150.00
Secretarial ..... 100.00800.00
TOTAL EXPENDITURES ..... $\$ 8,592.96$

ASSAY CERTIFICATES

TO : PHILEX GOLD \& ENERGY CORP.
$717-837 \mathrm{~W}$. HASTINGS ST. VANCOUVER; B.C.

CERTIFICATE OF ANALYSIS A8720055

| SAMPLE DESCRIPTION | PREP CODE |  | An ppo PAHA | $\begin{array}{r} \mathrm{Al} \\ \% \end{array}$ | As | $\underset{\text { ppon }}{\text { AR }}$ | $\begin{gathered} \mathrm{Ba} \\ \mathrm{ppon} \end{gathered}$ | $\mathrm{Be}$ | $\underset{\text { pion }}{\mathbf{B i}}$ | $\frac{\mathbf{m}}{}$ | $\underset{\text { Od }}{\text { Od }}$ | Co prom | $\mathrm{Cr}$ | $\mathrm{Cpm}_{\mathrm{p}}$ | F | G. <br> ppom | H8 | $\begin{aligned} & \mathbf{K} \\ & \% \end{aligned}$ | Lam | $\underset{\%}{N}$ | $0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1161 | 2012 | 238 | 1510 | 2.11 | $2.6>$ | $>10000$ | 90 | $<0.5$ | $<2$ | 1.79 | $<0.5$ | 39 | 10 | 987 | 14.15 | $<10$ | $<1$ | 0.10 | 10 | 0.45 | 1805 |
| -62 | 201 | 238 | $<3$ | 0.63 | $<0.2$ | 75 | 380 | $<0.5$ | $<2$ | 1.30 | 1.5 | 2. | 2 | 25 | 0.74 | $<10$ | 2 | 0.14 | < 10 | 0.16 | 2580 |
| $\cdots 70$ | 2012 | 238 | $<3$ | 2.42 | $<0.2$ | 35 | 300 | $<0.5$ | $<2$ | 0.41 | 0.5 | 4 | 8 | 23 | 2.08 | $<10$ | $<1$ | 0.11 | $<10$ | 0.34 | 1845 |
| . 71 | 2012 | 238 | $<5$ | 2.81 | $<0.2$ | 90 | 230 | $<0.5$ | $<2$ | 0.41 | $<0.5$ | 3 | 11 | 34 | 2.46 | $<10$ | $<1$ | 0.10 | 10 | 0.40 | 1030 |
| - 72 | 201 | 238 | 13 | 2.96 | $<0.2$ | 90 | 200 | $<0.3$ | $<2$ | 0.39 | $<0.5$ | 10 | 13 | 33. | 2.48 | $<10$ | 2 | 0.14 | $<10$ | 0.43 | 908 |
| 173 | 201 | 238 | $<5$ | 2.86 | $<0.2$ | 45 | 200 | <0.5 | $<2$ | 0.41 | $<0.5$ | 10 | 12 | 40 | 2.84 | $<10$ | $<1$ | 0.19 | 10 | 0.48 | 919 |
| 174 | 201 | 238 | 10 | 2.03 | 1.0 | 60 | 100 | $<0.5$ | $<2$ | 5. 58 | 0.5 | 15 | 19 | 134 | 3.26 | $<10$ | $<1$ | 0.09 | $<.10$ | 0.96 | 899 |
| 175 | 201 | 238 | $<5$ | 2.85 | $<0.2$ | 40 | 210 | $<0.5$ | $<2$ | 0.39 | $<0.3$ | 9 | 15 | 33 | 2.60 | $<10$ | $<1$ | 0.08 | 10 | 0.42 | 724 |
| - 76 | 201 | 238 | $<5$ | 2.75 | 0.2 | 25 | 1.30 | $<0.3$ | $<2$ | 0.60 | 0.5 | 13 | 22 | 86 | 3.70 | $<10$ | $<1$ | 0.14 | 10 | 0.82 | 591 |
| - 77 | 201 | 238 | $<3$ | 3.21 | $<0.2$ | 10 | 300 | $<0.3$ | $<2$ | 0.36 | 0.5 | 10 | 12 | 37 | 2.66 | $<10$ | $<1$ | 0.09 | 10 | 0.48 | 749 |
| 178 | 201 | 238 | $<3$ | 1.90 | $<0.2$ | $<3$ | 150 | $<0.3$ | $<2$ | 0.40 | 0.5 | 9 | 17 | So | 3.09 | $<10$ | $<1$ | 0.09 | 10 | 0.63 | 8.73 |
| 1. 79 | 201 | 238 | $<5$ | 2.66 | $<0.2$ | 20 | 250 | $<0.5$ | $<2$ | 0.36 | 0.5 | 8 | 12 | 31 | 2.44 | $<10$ | $<1$ | 0.05 | 10 | 0.41 | 972 |
| 180 | 201. | 238 | $<5$ | 2.13 | 0.2 | 40 | 140 | $<0.5$ | $<2$ | 0.37 | 0.5 | 9 | 11 | 34 | 2.07 | $<10$ | $<1$ | 0.10 | 10 | 0.28 | 658 |
| - 81 | 201 | 238 | $<5$ | 1.95 | $<0.2$ | 15 | 180 | $<0.5$ | $<2$ | 0.36 | 1.0 | 7 | 14 | 28 | 1.95 | $<10$ | $<1$ " | 0.08 | 10 | 0.29 | 805 |
| -82 | 201. | 238 | $<5$ | 1.94 | $<0.2$ | 15 | 220 | $<0.5$ | $<2$ | 0.35 | 0.5 | 7 | 11 | 22 | 1.92 | $<10$ | $<1$ | 0.09 | 10 | 0.31 | 91.3 |
| - 83 | 201 | 238 | $<5$ | 1.80 | 0.2 | 20 | 140 | $<0.3$ | $<2$ | 0.28 | $<0.5$ | 5 | 13 | 18 | 1.77 | $<10$ | $<1$ | 0.09 | $<10$ | 0.27 | 476 |
| - 84 | 201 | 238 | 15 | 1.73 | 0.4 | 60 | 120 | $<0.5$ | $<2$ | 0.36 | $<0.5$ | 6 | 13 | 30 | 2.30 | $<10$ | $<1$ | 0.08 | 10 | 0.46 | 649 |
| 1185 | 201 | 238 | $<5$ | 1.95 | $<0.2$ | 45 | 150 | $<0.3$ | $<2$ | 0.30 | 0.5 | 7 | 12 | 34 | 2.20 | $<10$ | $<1$ | 0.11 | 10 | 0.37 | 664 |
| -86 | 201 | 238 | $<3$ | 1.72 | $<0.2$ | 20 | 120 | $<0.5$ | $<2$ | 0.26 | 0.5 | 6 | 1.1 | 20 | 1.77 | $<10$ | $<1$ | 0.07 | $<10$ | 0.27 | 328 |
| 187 | 201 | 238 | $<3$ | 1.88 | $<0.2$ | 35 | 110 | $<0.3$ | <2 | 0.20 | 0.5 | 5 | 11 | 25 | 1.87 | $<10$ | $<1$ | 0.05 | $<10$ | 0.29 | 314 |
| - 88 | 201 | 238 | $<5$ | 1.95 | $<0.2$ | 20 | 150 | $<0.5$ | $<2$ | 0.26 | $<0.3$ | 3 | 10 | 16 | 1.56 | $<10$ | $<1$ | 0.07 | 10 | 0.22 | 495 |
| - 89 | 201 | 238 | 20 | 1.66 | 0.2 | 30 | 200 | $<0.3$ | $<2$ | 0.39 | 1.5 | 7 | 13 | 29 | 1.87 | $<10$ | $<1$ | 0.14 | 10 | 0.26 | 575 |
| - 90 | 201 | 238 | $<5$ | 1.78 | $<0.2$ | 35 | 170 | $<0.3$ | $<2$ | 0.45 | 0.5 | 7 | 12 | 24 | 2.01 | $<10$ | $<1$ | 0.09 | 10 | 0.31 | 1035 |
| - 91 | 201 | 238 | 10 | 2.14 | 0.2 | 10 | 190 | $<0.5$ | $<2$ | 0.41 | 1.0 | 9 | 14 | 41 | 2.49 | $<10$ | $<1$ | 0.14 | +10 | 0.45 | 699 |
| - 92 | 201 | 238 | $<3$ | 1.69 | $<0.2$ | 5 | 150 | $<0.5$ | $<2$ | 0.29 | $<0.3$ | 5 | 8 | 22 | 1.66 | $<10$ | 1 | 0.08 | $<10$ | 0.23 | 560 |
| 93 | 201 | 238 | 55 | 2.32 | $<0.2$ | 25 | 150 | $<0.3$ | $<2$ | 0:31 | 0.3 | 9 | 15 | 35 | 2.23 | $<10$ | $<1$ | 0.09 | 10 | 0.35 | 562 |
| - 94. | 201 | 238 | $<5$ | 2.01 | $<0.2$ | 40 | 160 | $<0.3$ | $<2$ | 0.27 | $<0.5$ | 8 | 14 | 28 | 2.05 | $<10$ | $<1$ | 0.08 | 10 | 0.34 | 903 |
| 195 | 201. | 238 | $<3$ | 2.28 | $<0.2$ | 35 | 190 | $<0.5$ | 2 | 0.20 | $<0.5$ | 7 | 11 | 25 | 1.97 | $<10$ | $<1$ | 0.05 | $<10$ | 0.29 | 970 |
| 196 | 201 | 238 | $<3$ | 2.31 | 0.2 | $<3$ | 130 | $<0.3$ | $<2$ | 0.38 | 1.0 | 6 | 10 | 24 | 1.61 | $<10$ | $<1$ | 0.07 | 10 | 0.25 | 469 |
| - 97 | 201 | 238 | $<5$ | 2.44 | $<0.2$ | 15 | 160 | $<0.5$ | $<2$ | 0.33 | 0.5 | 9 | 17 | 28 | 2.45 | $<10$ | $<1$ | 0.10 | 10 | 0.43 | 359 |
| 98 | 201 | 238 | $<5$ | 2.01 | $<0.2$ | 35 | 110 | $<0.5$ | $<2$ | 0.33 | 0.5 | 7 | 19 | 26 | 2.07 | $<10$ | $<1$ | 0.09 | 10 | 0.37 | 328 |
| - 99 | 201 | 238 | 10 | 2.36 | 0.6 | 40 | 110 | $<0.3$ | $<2$ | 0.61 | 1.5 | 14 | 31 | 90 | 3.97 | $<10$ | $<1$ | 0.08 | 20 | 0.75 | 688 |
| - 100 | 201 | 238 | $<5$ | 1.96 | $<0.2$ | 10 | 190 | $<0.5$ | $<2$ | 0.32 | $<0.5$ | 7 | 13 | 18 | 1.92 | $<10$ | 1 | 0.09 | $<10$ | 0.28 | 797 |
| - 101 | 201 | 238 | $<5$ | 2.31 | 0.2 | 20 | 180 | $<0.5$ | $<2$ | 0.46 | 1.0 | 9 | 15 | 43 | 2.64 | $<10$ | $<1$ | 0.11 | 10 | 0.31 | 587 |
| - 102 | 201 | 238 | $<5$ | 1.86 | $<0.2$ | 2.15 | 150 | $<0.5$ | $<2$ | 0.28 | 0.5 | 6 | 10 | 24 | 1.86 | $<10$ | $<1$ | 0.06 | 10 | 0.31 | 476 |
| -103 | 201 | 238 | $<5$ | 1.81 | $<0.2$ | 15 | 100 | $<0.3$ | $<2$ | 0.40 | 0.5 | 8 | 12 | 36 | 2.10 | $<10$ | $<1$ | 0.08 | 10 | 0.38 | 472 |
| - 104 | 201 | 238 | $<5$ | 1.93 | 0.8 | 35 | 340 | $<0.3$ | $<2$ | 1.20 | 2.0 | 9 | 17 | 39 | 2.39 | $<10$ | 1 | 0.13 | 20 | 0.33 | 1865 |
| - 105 | 201 | 238 | $<5$ | 2.95 | $<0.2$ | 210 | 180 | $<0.3$ | $<2$ | 0.34 | 0.3 | 10 | 15 | 37 | 2.51 | $<10$ | 1 | 0.06 | 10 | 0.47 . | 41.5 |
| - 106 | 201 | 238 | $<9$ | 2.02 | $<0.2$ | 25 | 160 | $<0.3$ | $<2$ | 0.25 | 0.3 | 8 | 11. | 26 | 1.90 | $<10$ | $<1$ | 0.07 | 10 | 0.31 | 1115 |
| -107 | 201 | 238 | 5 | 2.39 | $<0.2$ | 35 | 240 | $<0.5$ | 2 | 0.50 | 0.5 | 11 | 24 | 42 | 3.27 | $<10$ | $<1$ | 0.12 | 10 | 0.44 | 647 |

## Chemex Labs Ltd.

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To : PHILEX GOLD a ENERGY CORP.
117-837 W. HASTINGS ST. VANCOUVER, B.C. V6C 186


Page No. : 2-A VANCOUVER, B.C. V6C 1B6
Project
Cominits: ATTN: B. PENWICX - WILSON

Tot Pages: 3 S-AUG-87

Invoice : $\mathrm{I}-87200$
P.O. NONE

CERTIFICATE OF ANALYSIS A8720055

| SAMPLE DESCRIPTION | $\begin{aligned} & \text { PREP } \\ & \text { COOE } \end{aligned}$ |  | Au ppb FARAA | $\begin{gathered} \text { A1 } \\ \% \end{gathered}$ | Aspm | $\stackrel{\text { Ae }}{\text { ppon }}$ | $\begin{gathered} \mathrm{Ba} \\ \mathrm{ppm} \end{gathered}$ | $\mathrm{Be}$ | $\begin{array}{r} \mathrm{Bi} \\ \mathrm{pgin} \end{array}$ | $\underset{\text { \% }}{ }$ | $\underset{\operatorname{ppon}}{C d}$ | $\begin{gathered} \text { Co } \\ \text { ppin } \end{gathered}$ | $\underset{p r m}{C r}$ | $\underset{\text { ppom }}{\text { Cu }}$ | $\begin{array}{r} F_{E} \\ \% \end{array}$ | On | $\mathrm{H}$ | $\begin{aligned} & \mathbf{K} \\ & \boldsymbol{\%} \end{aligned}$ | La | $\begin{aligned} & \mathbf{M}_{8} \\ & \% \end{aligned}$ | $\begin{gathered} \mathbf{M n} \\ \text { ppon } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LINE 0-01 W | 201 | 238 | 10 | 2.28 | $<0.2$ | $<5$ | 120 | $<0.5$ | $<2$ | 1.05 | $<0.5$ | 18 | 16 | 65 | 3.35 | $<10$ | $<1$ | 0.15 | 10 | 0.34 | 827 |
| LInE 0-02 W | 201 | 238 | $<5$ | 2.42 | $<0.2$ | $<5$ | 210 | $<0.5$ | $<2$ | 0.88 | $<0.5$ | 21 | 12 | 65 | 3.53 | $<10$ | $<1$ | 0.14 | 10 | 0.33 | 1410 |
| LINE 0-03 W | 201 | 238 | 10 | 1.74 | $<0.2$ | 5 | 150 | <0.5 | $<2$ | 1.68 | 0.5 | 43 | 9 | 164 | 2.98 | $<10$ | $<1$ | 0.14 | 10 | 0.33 | 1440 |
| LINP 0-04 W | 201 | 238 | $<5$ | 2.50 | $<0.2$ | $<5$ | 140 | <0.5 | $<2$ | 0.75 | 0.5 | 10 | 10 | 35 | 3.17 | $<10$ | $<1$ | 0.14 | 10 | 0.25 | 605 |
| LINE 0-05 W | 201 | 238 | 40 | 1.70 | $<0.2$ | 15 | 160 | $<0.5$ | $<2$ | 0.67 | $<0.5$ | 13 | 7 | 61 | 2.83 | $<10$ | $<1$ | 0.18 | 10 | 0.20 | 775 |
| LINE 0-07 W | 201 | 238 | 230 | 2.19 | $<0.2$ | 110 | 200 | $<0.5$ | 2 | 3.07 | $<0.5$ | 41 | 11 | 262 | 4.05 | 10 | $<1$ | 0.17 | 10 | 0.44 | 1465 |
| LINE 0-08 w | 201 | 238 | 600 | 1.92 | $<0.2$ | $<5$ | 150 | $<0.5$ | $<2$ | 0.81 | 0.5 | 19 | 10 | 67 | 2.50 | $<10$ | $<1$ | 0.17 | 10 | 0.26 | 648 |
| LINE 0-09 W | 201 | 238 | 115 | 2.56 | $<0.2$ | 15 | 290 | $<0.5$ | $<2$ | 1.12 | 0.5 | 26 | 10 | 76 | 3.40 | $<10$ | $<1$ | 0.19 | 10 | 0.32 | 2170 |
| LINE 0-10 W | 201 | 238 | 5 | 1.40 | $<0.2$ | $<5$ | 170 | $<0.5$ | $<2$ | 0.36 | $<0.5$ | 6 | 5 | 17 | 1.31 | $<10$ | $<1$ | 0.07 | $<10$ | 0.14 | 1150 |
| LINE 0-11 W | 201 | 238 | 20 | 2.57 | $<0.2$ | 105 | 140 | $<0.5$ | $<2$ | 0.32 | $<0.5$ | 9 | 10 | 28 | 2.09 | $<10$ | $<1$ | 0.05 | 10 | 0.24 | 435 |
| LINE 0-12 W | 201 | 238 | $<5$ | 2.40 | $<0.2$ | 10 | 210 | $<0.5$ | $<2$ | 0.46 | <0.5 | 11 | 10 | 20 | 2.21 | $<10$ | $<1$ | 0.10 | 10 | 0.24 | 1115 |
| SON OTW | 201 | 238 | $<5$ | 2.61 | $<0.2$ | 20 | 110 | $<0.5$ | 2 | 0.60 | $<0.5$ | 16 | 12 | 62 | 3.71 | $<10$ | 1 | 0.16 | 10 | 0.29 | 332 |
| SCN O2W | 201 | 238 | $<5$ | 0.76 | $<0.2$ | 15 | 50 | $<0.5$ | 2 | 0.36 | $<0.5$ | 4 | 9 | 14 | 1.27 | $<10$ | $<1$ | 0.11 | $<10$ | 0.11 | 212 |
| SON O3W | 201 | 238 | 20 | 2.17 | $<0.2$ | 5 | 180 | $<0.5$ | $<2$ | 0.90 | 0.5 | 21 | 10 | 124 | 3.01 | $<10$ | $<1$ | 0.11 | 10 | 0.27 | 746 |
| Scen 04w | 201 | 238 | 40 | 3.14 | $<0.2$ | 70 | 200 | $<0.5$ | $<2$ | 1.16 | $<0.5$ | 59 | 12 | 201 | 5.71 | $<10$ | $<1$ | 0.20 | 10 | 0.32 | 1280 |
| S0N OSN | 201 | 238 | 15 | 3.86 | $<0.2$ | 90 | 310 | $<0.5$ | $<2$ | 1.28 | $<0.5$ | 44 | 10 | 286 | 5.25 | $<10$ | 4 | 0.13 | 10 | 0.56 | 949 |
| son oow | 201 | 238 | $<3$ | 2.24 | $<0.2$ | 30 | 120 | $<0.5$ | $<2$ | 0.67 | $<0.5$ | 17 | 10 | 54 | 3.25 | $<10$ | $<1$ | 0.16 | 10 | 0.25 | 656 |
| sow 07w | 201 | 238 | 10 | 3.62 | $<0.2$ | 35 | 200 | $<0.5$ | $<2$ | 0.47 | $<0.5$ | 15 | 15 | 43 | 3.17 | $<10$ | 2 | 0.08 | 10 | 0.31 | 517 |
| SON 08w | 201 | 238 | 80 | 2.48 | $<0.2$ | 55 | 210 | $<0.5$ | $<2$ | 0.79 | $<0.5$ | 33 | 11 | 129 | 4.29 | $<10$ | $<1$ | 0:20 | 10 | 0.34 | 1375 |
| SON OSN | 201 | 238 | 5 | 1.94 | $<0.2$ | 35 | 130 | $<0.5$ | $<2$ | 0.60 | $<0.5$ | 17 | 7 | 70 | 2.87 | $<10$ | 2 | $0: 10$ | 10 | 0.23 | 536 |
| son 10w | 201 | 238 | $<5$ | 1.62 | $<0.2$ | 20 | 100 | $<0.3$ | 2 | 0.37 | $<0.3$ | 8 | 6 | 26 | 2.26 | $<10$ | $<1$ | 0:25 | $<10$ | 0.19 | 569 |
| son 1 iw | 201 | 238 | 40 | 1.87 | $<0.2$ | 35 | 120 | $<0.5$ | $<2$ | 0.47 | $<0.5$ | 10 | 8 | 37 | 1.77 | $<10$ | $<1$ | 0.15 | 10 | 0.21 | 350 |
| LiNe Sos osw | 201 | 238 | 5 | 2.50 | $<0.2$ | 30 | 120 | $<0.5$ | $<2$ | 0.42 | $<0.3$ | 16 | 11 | 43 | 2.76 | $<10$ | $<1$ | 0.08 | $<10$ | 0.28 | 583 |
| IINe sos and | 201 | 238 | 5 | 1.05 | $<0.2$ | $<3$ | 90 | $<0.5$ | 2 | 0.44 | $<0.5$ | 9 | $s$ | 17 | 1.53 | $<10$ | $<1$ | 0.07 | $<10$ | 0.13 | 589 |
| LINE sos osw | 201 | 238 | 5 | 2.21 | $<0.2$ | 15 | 110 | $<0.5$ | 2 | 0.35 | $<0.5$ | 16 | 7 | 68 | 3.89 | $<10$ | 1 | 0.18 | 10 | 0.23 | 427 |
| LIne sos 00w | 201 | 238 | 70 | 2.58 | 0.8 | 330 | 310 | $<0.5$ | 4 | 4.73 | $<0.3$ | 43 | 11 | 253 | 6.91 | 10 |  | 0.13 | $<10$ | 0.67 | 1100 |
| LINE SOS 07N | 201 | 238 | 85 | 2.44 | $<0.2$ | 135 | 190 | $<0.5$ | $<2$ | 1.11 | $<0.5$ | 37 | 15 | 214 | 4.54 | $<10$ | $<1$ | 0.18 | 10 | 0.70 | 1315 |
| LINE SOS 08W | 201 | 238 | 25 | 1.88 | $<0.2$ | 30 | 190 | $<0.5$ | $<2$ | 0.42 | $<0.5$ | 6 | 6 | 17 | 1.61 | $<10$ | $<1$ | 0.09 | $<10$ | 0.21 | 869 |
| LINE SOS OON | 201 | 238 | $<5$ | 1.94 | $<0.2$ | 5 | 90 | $<0.5$ | 4 | 0.12 | $<0.5$ | 6 | 6 | 16 | 1.68 | $<10$ | $<1$ | 0.03 | $<10$ | 0.19 | 356 |
| LINE sos low | 201 | 238 | $<5$ | 1.50 | $<0.2$ | 5 | 90 | $<0.5$ | 2 | 0.26 | $<0.3$ | 8 | 7 | 14 | 1.61 | $<10$ | $<1$ | 0.04 | $<10$ | 0.16 | 537 |
| LINE SOS 1IW | 201 | 238 | $<5$ | 2.52 | $<0.2$ | 5 | 220 | $<0.5$ | 2 | 0.40 | $<0.3$ | 11 | 11 | 24 | 2.22 | $<10$ | $<1$ | 0.04 | 10 | 0.26 | 912 |
| Line sos 12W | 201 | 238 | $<5$ | 2.07 | $<0.2$ | 15 | 110 | $<0.5$ | $<2$ | 0.44 | $<0.3$ | 11 | 14 | 36 | 2.53 | $<10$ | $<1$ | 0.17 | 10 | 0.36 | 361 |
| 100N - ONW | 201 | 238 | $<5$ | 2.13 | $<0.2$ | 10 | 140 | $<0.5$ | $<2$ | 0.51 | $<0.5$ | 18 | 7 | 51 | 2.71 | $<10$ | $<1$ | 0.14 | $<10$ | 0.26 | 728 |
| 100N - O2N | 201 | 238 | $<5$ | 1.36 | $<0.2$ | 20 | 150 | $<0.5$ | 2 | 0.39 | $<0.5$ | 8 | 4 | 17 | 1.32 | $<10$ | $<1$ | 0.11 | $<10$ | 0.14 | 866 |
| 100N - O3W | 201 | 238 | 35 | 2.62 | 0.2 | 15 | 90 | $<0.5$ | $<2$ | 0.37 | $<0.5$ | 7 | 5 | 19 | 1.61 | $<10$ | $<1$ | 0.04 | $<10$ | 0.15 | 371 |
| 100N - O4N | 201 | 238 | $<5$ | 0.80 | $<0.2$ | 5 | 150 | $<0.5$ | $<2$ | 0.22 | $<0.5$ | 5 | 4 | 11 | 1.15 | $<10$ | < 1 | 0.06 | $<10$ | 0.10 | 443 |
| 100N - 09w | 201 | 238 | $<5$ | 2.67 | $<0.2$ | 25 | 270 | $<0.5$ | 2 | 0.55 | $<0.5$ | 14 | 10 | 42 | 2.39 | $<10$ | $<1$ | 0.12 | 10 | 0.23 | 1350 |
| 100N - Oow | 201 | 238 | $<5$ | 2.21 | $<0.2$ | 15 | 240 | $<0.5$ | 2 | 0.55 | $<0.5$ | 11 | 12 | 29 | 2.27 | $<10$ | $<1$ | 0.20 | 10 | 0.25 | 1175 |
| 100N = 07N | 201 | 238 | 5 | 2.71 | $<0.2$ | 15 | 170 | $<0.5$ | $<2$ | 0.36 | $<0.5$ | 12 | 11 | 44 | 2.39 | $<10$ | $\leq 1$ | 0.06 | 10 | 0.28 | 353 |
| $100 \mathrm{~N}-\mathrm{OSN}$ | 201 | 238 | $<5$ | 1.92 | $<0.2$ | 5 | 180 | $<0.5$ | 2 | 0.45 | $<0.3$ | 7 | 1 | 14 | 21.96 | $<10$ | , 21 | 0.06 | $<10$ | 0.20 | 743 |

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$717-837$ W. HASTINGS ST. VANCOUVER, B.C. V6C 1 B6

CERTIFICATE OF ANALYSIS A8720055


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Commals: ATTN: B. FBNWICX - Wilsoon

## CERTIFICATE OF ANALYSIS A8720055


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