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REPORT OF

ASSESSMENT WORK COMPILED PRIOR TO JANUARY, 1987 ON THE MINERAL CLAIM NAMED BELOW IN THE MINING DIVISION OF CARIBOO

> SHALOM CLAIM GROUP NTS 93G 1E / NTS 93H 4W 53° 4' N, 121° 58' W

> > FOR

OWNER AND OPERATOR OF CLAIM PINEGROVE RESOURCES LTD. P.O. 7280 Station M. Edmonton, Alberta T5E 2C6

FILMED

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DATE: April 10, 1987

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ABSTRACT

During the period June 16 to October 31, 1986 two VLF(EM-16) surveys and one magnetometer survey were conducted with several silt samples and bedrock chip samples taken in the Quesnel Gold Trough, Cariboo Mining Division, British Columbia. The surveys were carried out by this writer and another employee of Pinegrove Resources Ltd. The instruments used were a Geonics VLF(EM-16) unit with two receiving crystals; a Cuttler, Maine (NLK 24.0 kHz) and a Seattle, Washington (NLK 24.8 kHz) crystal, and an EDA Proton Magnetometer. A total of 120 kilometers was covered over two grid systems with three geophysical surveys.

Readings were taken every 25 meters on the Cuttler grid while readings on the Seattle grid were spaced every 15 meters. The results of the electromag survey and magnetometer survey are very good and the raw data is plotted on the cross sections endorsed in the Appendix of the report.

The electromag work has outlined several east/west and north/south possible conductive zones where the strong north/south trends appear similar to noted fault zones of the Barkerville-Wells area. The intersection of this strong north/south trend and the east/west trend bear closer examination.

Additional exploration work is recommended in the areas of the intersection of the north/south and east/west trends to the east of the Seattle grid baseline, and the more continuous east/west trends associated with the continuous north/south trends.

GEOLOGICAL - GEOPHYSICAL ASSESSMENT REPORT SHALOM #1 - #7

INTRODUCTION

The geological field work and the geophysical surveys (electromag, magnetometer) during the 1986 field season were commissioned by Mr. Anton Kozub, President of Pinegrove Resources Ltd., who owns the claim block, due to recommendations made by Pinegrove's consultants: Allan Frew, P.Geol., Wm. Howard Myers, P.Eng., and George Richardson.

The claim block is composed of seven claims identified as the Shalom #1 - #7 claims inclusive with a total of 94 units. The name, record number, map number, and total number of units in each claim are tabulated below:

Claim Name	Record No.	Map No.	No. of Units
Shalom #1	7470	93G1E	18
Shalom #2	7471	93H4W	18
Shalom #3	7472	93G1E	15
Shalom #4	7528	93H4W	12
Shalom #5	7529	93H4W	15
Shalom #6	7822	93H4W	6
Shalom #7	7821	93H4W	10
			94

The claim block is located west of Pinegrove Creek, north of Lightning Creek; between Hyde Lake and Pinegrove Creek. The centre of the property is more specifically located at co-ordinates 53° 4' north latitude and 121° 59' west longitude. The property is accessible from Quesnel and Wells, B.C. by way of Highway Number 26 a distance of approximately 50 kilometers and 30 kilometers respectively. The area is drained to the north by Pinegrove Creek, to the east by Lightning Creek, to the south by John Boyd and Ramos Creek and to the west by Mary Creek.

The terrain in the area of the claim block is quite varied with flat treed and logged areas to the west and south of the properties, while the north and east sections of

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the property are marked by stiff cliffs and slopes as the north side runs over the peak of Pinegrove Mountain. Pinegrove Mountain is the highest elevational point of the property (5,000 feet above sea level) which occupies the northwest portion of Shalom #4. Mountain glacial till of varying thicknesses covers the total area, ranging from a few feet to in excess of 100 feet thick, there occupying ancient stream valleys.

Access to the different portions of the claim block is accessible via old and new logging roads built while logging was carried out in previous years. Access takes place from three points off of Highway No. 26 and leads to different portions of the claim block. These points are; the 600 road from Cottonwood House Provincial Park, the Hyde Lake Road and the Troll Ski Resort Roads. These accesses provide availability to the southwest portion of the claim block, the south central and east portions of the claim block and the northeast portion of the claim block, respectively.

The area is heavily forested with predominantly pine and spruce and lesser amounts of balsam fir. Small patches of birch are widely spaced throughout the property. As a result or consequence, extensive woods-harvesting operations are in progress throughout the property.

The climate in this portion of British Columbia is moderate to cold. The area does experience chinook conditions during the winter months and the climate becomes very mild for brief periods of time. Snowfall in the area is moderate to heavy. In the summer the area experiences fairly consistent rain in early and late summer with extended dry hot spells in between.

The objective of the work undertaken is to get an overall reconnaissance of the area detailing any conductive anomalies and/or trends of possible mineralization and therefore, potential areas for gold exploration. Due to the terrain and little geophysics in the area two grids were established (see Maps 2 & 3) and a Geonics VLF(EM-16) survey was used. VLF(EM-16) lines for the Cuttler grid were spaced 250 m apart perpendicular to the baseline that started in the northwest corner of Shalom No. 1 and trended 120° AZ across the property. Readings were taken 25 m apart along the crosslines, with instrument facing grid Cuttler Station NLK (24.0

kHz). The VLF(EM-16) lines for the Seattle Grid (see Map No. 3) were spaced 200 m north apart in an east-west direction, perpendicular to the baseline that trended north/south along the boundary of Shalom #2 and Shalom #4 claims. Readings were taken every 15 meters with the instrument facing east using Seattle Station NLK 24.8 kHz. After this data was compiled, a magnetometer survey was under taken to observe the magnetic factor of the conductive anomalies observed. The magnetometer survey was done on the Cuttler grid with an EDA proton progression magnetometer using the tie line method verses the loop method, taking readings every 25 m, starting at Line #7 to Line #22. The data from both of the geophysical surveys, VLF(EM-16) and the EDA magnetometer have been represented in the Appendix and Map Illustration section respectively. The VLF(EM-16) data has been plotted from field notes without any filter corrections on cross sections while the magnetometer data is plotted on a map and explained more fully in the geophysical section of this report.

The geological work carried out for the property was compiled during the geophysical surveys. This entailed sporadic silt sampling of the streams, bedrock chip samples for assay, description of bedrock outcrops if available access found and location of outcrops. Due to the large area to cover and high degree of glacial drift only small bedrock locations were found and sampled. These are indicated on the map in the back pocket.

A breakdown of the costs and times of the VLF(EM-16) surveys, the magnetometer survey and the geological data are detailed in the Appendix of the report.

The qualifications and experience of the authors for this report are detailed in the Certificate section in the Appendix of this report.

HISTORY

Placer gold mining has been taking place in the Cariboo Placer Belt of the Quesnel Trough since the late 1800's. The majority of the placer gold was produced during the gold rush which started around 1861 and tapered off substantially near 1898 when the gold rush started in the Yukon. Placer gold was discovered in the Wingdam area and a shaft was driven vertically to get to the pay zone. This was abandoned shortly due to flooding. The Wingdam property is again under consideration by Silver Ridge Resources and a new shaft is under construction. Further, east the famous Barkerville area has undergone serges throughout the 20th century as people continue to explore for gold.

The only lode gold operations noted in the area in the past are: the Cariboo Gold Quartz Mine and the Island Gold Quartz Mine which started production in the 1930's. The only known mine in the Quesnel trough is the Mosquito Creek Mine located approximately 2 miles north of Wells. This mine produced gold from replacement type ore bodies in contrast to the gold produced from quartz veins with pyrite and gold in the original Cariboo Gold Quartz Mine. This mine appears to be still operating on a limited scale.

GEOLOGY

The area of the Shalom claims, located in the Wingdam area is not unlike other portions of the Cariboo where bedrock is covered with a mantle of glacial drift overgrown with trees and vegetation. This limits outcrop exposure to sharp breaks in slopes, road-cuts, old placer gold workings, top of ridges, incised stream beds and mountain tops.

Due to the situation of the claim area the geology of the map area is covered generally by 2 GSC Maps 93H and 93G; the geology of the McBride area and the geology of the Prince George area, respectively. These broad maps place the Shalom claims in the Cariboo group bounding the Nicola group to the west, thereby, the geology is composed of the Snowshoe and Kaza formations of Paleozoic age.

Specifically, the claims are underlain by the Cariboo Mountain group composed of the Snowshoe and Kaza formations containing various carbonate rocks, clastic sedimentary rocks and minor intrusive dikes. Despite the effects of deformation and regional metamorphism the rocks still commonly show original bedding and other sedimentary features. Many of the rocks are difficult to name due to small gradational, chemical and slight textural changes that occur. Overall, the area is composed mostly of schists and phyllites of varying chemistry with clastic siltstones and quartz and minor carbonate formations. Argillites and graphite phyllites are interrelated due to their close chemistry and only structural metamorphism due to high stress controls the chemistry of the rock. There is only one intrusive rock type in the area as mapped by R.B. Campbell in the GSC 1973 paper 72-35, Geology of McBride Map area. This intrusive bed runs across the lower south portion of the claims and consists of a foliated diorite and augite porphyry basalt, gabbroic in nature.

Structurally, the area has been mapped by Struik and R.B. Campbell and various theories have been proposed for the bedding features observed. The older theory suggests that the units are from Paleozoic age to Quaternary with faulting the reason for the lay of the beds in their present state. However, recently, mapping by Struik (1986) has suggested that there are four terranes with rocks in each terrane from Paleozoic to Cretaceous age and these terranes are separated by several thrust faults. Both theories, however, map a thrust fault running southeast to northwest across the lower third of the Shalom property. As can be seen in the Index Map in the Appendix. This fault is called the Eureaka thrust fault.

The general trend of the rocks cleavage and possible bedding is northwest and inclined to the southwest. Foliation is intense and varies with degrees of structural stress in the area.

The lode gold in the Cariboo area appears to come from two sources: large quartz veins associated or intersecting large north trending faults as noted in the Wells - Barkerville area or replacement deposits where hot fluids carrying mineralization have infiltrated limestone deposits and have replaced the limestone with mineralization carried in the fluids as mined by Mosquito Creek Mines.

GEOLOGICAL WORK

As shown in the Appendix various samples were taken for chemical analysis. These samples range from creek silt samples, bedrock chip samples and bedrock samples.

These samples are indicated on the geological claim map specifying their location (Appendix).

The silt samples taken from the creek beds were taken at a depth of 6" to 12" and it was attempted to take these samples in a medium to fine silt grain area. The channel samples and bedrock chip samples were taken as described below. The channel sample was used in a gossan zone were only loose sediment was available and no actual intact bedrock. Therefore, a channel 1"x1" by several feet long was cut into the gossan zone with a hammer and this material was analyzed. The bedrock chip samples were used where existing bedrock was found and geological information could be obtained.

The only difference between the bedrock samples and the channel samples is the material being sampled. The bedrock samples are made up of bedrock chips and the channel samples are made up of loose gossan material. Therefore, both samples were lumped together on the geological map.

All sample assay results are shown in the Appendix. Various preparations were made by Chemex Laboratories for the various samples assayed. The geochemical samples wer4e assayed directly for gold, while most of the bedrock chip samples underwent a 24 multi-element ICP analysis, and the rest of the samples were fire assayed for gold and silver.

The geochemical silt samples were sieved down to 35 mesh then ring-ground to 100 mesh. The sample was then fire assayed for gold with lead cupellation (i.e., dissolved in nitric, aqua regia) and finished by AA or Atomic Absorbtion.

The rock samples were crushed and then split down to 150 grams, then ringground to 100 mesh. Some of these samples were then fire assayed as above for gold and silver. The samples sent away for I.C.P. analysis were split to 0.20 grams and totally digested in chloric, nitric, hydrofluric acid digestion to dryness. Then sample was taken up in HCL for finishing (volume of 25 mls of 10% HCL), then the sample was run on the I.C.P. instrument.

For further details see the publications from Chemex Laboratories.

SAMPLE LOCATION AND DESCRIPTION

As noted in the Geological Work section of this report, the collection process of the sampling was summarized. A more detailed description of the locations and samples collected will be given below.

Locations of all geological samples taken and their corresponding assay results are shown in the Appendix. The samples on the geological claims map of the Shalom Claims and the assays as illustrations in the Appendix, respectively. The geological samples are broken up into three categories.

- 1) Prospector float samples
- 2) Geochemical silt samples, and
- 3) Geological bedrock chip samples (including the channel samples)

A description of the first category of samples, assayed, as noted below, was unable to be obtained since they were taken before the writer was hired.

GKR	-	86	-	000	1A		2	х	4	-1	Gouge	
GKR	-	86		000	1B		2	x	4	-2	Gouge	
GKR	-	86	-	000	2A							
GKR	-	86	-	000	2B							
GKR	-	86	-	000	3A							
GKR	-	86		000	3C							
GKR	_	86		000	4							

These samples are located in approximate areas since exact descriptions were unattainable.

The geochemical silt samples taken are numbered: Shalom #1 to Shalom #26 conclusively and were taken from the streams draining the Shalom property. The samples are described as fine sand to silt in size, largely composed of subrounded to rounded, frosted quartz and chert with minor amounts of ferromagnesium minerals and plagioclase. These samples, as noted in the geological work section of this report, were collected on sandbars, six inches below the surface of the ground. The results of the assays and specific locations of each sample can be found in the Appendix.

The bedrock chip samples and channel samples were taken from the limited outcroppings in the area. Geological mapping was considered but due to the limited coverage and unavailability of air photos this was abandoned for future consideration. The samples that were of interest for assaying are located on the Geological Claims Map located in the Appendix. A brief description of the samples, along with the corresponding sample number as located on the map and are given below.

SH1-100	Greenish quartz schist with micaceous mineralization
SH1-101	Black quartzose phyllite with minor graphite
SH1-102	Grayish green finely laminated chlorite schist
SH1-103/104	Kaolinized porphyrites quartz porphyry
SH1-105/107	Dark grey to black slatey argillite or phyllite
SH1-109	Grayish green to grayish black chlorite schist
SH1-111	Medium grained light green quartzite
SH1-112/113	Dark gray to black shale
SH1-114	Black shale with quartz oxidized iron banding
SH1-115	Slaty light gray to dark black shale
SH1-116/118	Greenish to whitish quartz chlorite porphyry
SH1-119	Grayish green to olive green micaceous schist
SH1-120	Grayish to black phyllite with minor quartz veining
SH1-121	Grayish green chlorite schist with minor quartz veins
SH1-122	Grayish black quartzose phyllite
SH1-123	Blocky black argillite with remnant cubic pyrite
SH1-124	milky white to grayish quartz in black argillite
SH2-100	Green shale to a dark gray or black shale
SH2-101/102	Black slate with quartz veining. Minor calcite.
SH2-103	Highly weathered with green to gray chlorite schist with platly mineralization and high degree of iron staining.
SH2-104	Very highly weathered black shale with no quartz, appears coal like (massive)
SH2-105	Black quartzose slate with 15% quartz veins parallel to cleavage
SH2-106	Medium to low grade greenish gray chlorite schist with minor quartz stringers.
SH2-107	Green chlorite schist with no quartz veining

- SH2-108 Soft black shaley material (argillite)
- SH2-109 Very low grade chlorite schist or meta argillite
- SH2-110 Reddish gray to greenish black chlorite schist
- SH6-100 Olive green shale with rusty clay size particles
- SH6-101 Quartz veins less than lcm thick
- SH6-102 Dark gray to black slate. With 10-20% quartz veining
- SH6-103 Grayish to black slate with quartz veining
- SH7-100 Chlorite schist with minor quartz veining and possible remnant ultramafic mineralization
- SH7-100A Quartzose chlorite biotite schist with quartz veining
- SH7-100B Quartzose chlorite schist
- SH7-101 Pale green flaky talc
- SH4-100/101 Light green quartz rich chlorite schist, minor talc.
- SH4-102 Oxidized reddish quartz with pyrite and limonite
- SH4-103 Very fine grained dark green podrphyritic basalt
- SH4-104 Dark green quartzose chlorite schist with disseminated calcite and pyrite

CHANNEL SAMPLES

- CH-AF1 and CH-AF2 Were taken across a gossan zone located as shown on the map bounded by a fissile slate. This material was composed of reddish to yellowish colored gouge with oxidation very evident.
- Shalom Channel Were taken further up the road from the above samples Samples #1/6 and is located in a similar gossan zone bounded by an apparent or possible meta-volcanic rock with a porphyritic texture.
- NOTE: The draftsman made an error in his legend. No soil samples were taken. The indicator shows the position of the bedrock chip samples.

PHYSICAL WORK

Two types of physical work were undertaken on the Shalom claim group: grid establishment and road maintenance.

The road maintenance took place on the logging roads that criss-cross the Shalom property as shown in Figure (5); Appendix, which is required by the Mineral Act - section 13, regulation 1a. The roads were cut and damaged by spring runoff due to improper drainage. These road cuts were repaired and drainage ditches replaced or manufactured. The cost of this physical work is itemized in the Assessment Report on page 8, Section D (D6 CAT, LOADER, BACKHOE AND A LOWBED).

The grids established can be noted on the Geophysical Maps provided in the Assessment Report in the Appendix. The grids established were flagged with orange flagging and the base stations on the baseline were multi-flagged with blue, yellow and orange flagging. On each crossline readings were marked by flagging at 15 meter intervals and markings indicating distances from the baseline. Two basic grids were established: east-west crosslines with a north-south baseline (referred herein as the Seattle Grid) and northeast-southwest crosslines with a northwest-southeast baseline (referred herein as the Cuttler Grid).

The cost of the established grade is incorporated in the Assessment Report under Section A (labour).

GEOPHYSICAL WORK

Magnetometer Survey

The writer has used a proton progression magnetometer under various field conditions and places, in the southeastern province of Manitoba and Ontario, to outline magnetic zones and fractures. Under the guidance of a consultant the data was collected and proper corrections taken into account, as outlined below. An EDA Proton Progression Magnetometer was used in the magnetic survey. The component measured was the vertical magnetic field and all values were corrected to a diurnal field of 58,000. A tie-line loop method was used instead of a loop method due to the time element involved and the terrain difficulties encountered. A loop method would have not been able to cover the entire area.

If unfamiliar with the tie-line method, it basically takes a series of points you tie together along a baseline within a small period of time, for example one hour. Then the survey is conducted and the instrument man takes readings in a grid pattern (no loop required) tying into the tie points as they are encountered. The tie-line points are corrected to any magnetic fluctuations and the survey points are corrected to the tie points providing the surveyors to take longer time from tying into a base station and therefore travelling longer distances.

The results of the magnetic data are presented in map form since the tabulated mathematical data takes up several hundred pages and is far too bulky for this report. The Magnetometer Map can be found in the back pocket (Appendix).

VLF (EM-16) Survey

The writer has used the VLF electromag in several instances and along with the geophysical consultants experience in the area (Wm. H. Myers) who has used the instrument on several different prospects to outline conductive zones, therefore, great care was taken to obtain accurate and the best possible field data, as outlined below.

A Geonics VLF(EM-16) instrument was used reading Cuttler Maine (NLK 24.0 kHz) and Seattle, Washington (NLK 24.8 kHz) for the respective Cuttler Grid and Seattle Grid shown in the Appendix. The lines of the Cuttler grid are spaced 250 meters apart, with readings taken every 25 meters and the instrument was facing north. The crosslines for the Seattle grid are spaced 200 meters apart, with readings taken every 15 meters and with the instrument facing east.

Due to the known structure in the area (Eureaka Thrust Fault) the grid systems were established to give any intersecting trends between the north-south faulting

system and any east-west geological features. A copy of all profiles copied from field notes and not filtered in any way are enclosed in the Appendix to this report. All data is plotted on percent rather than dip angle indicator scales, and all lines were run using the Geonics Limited EM-16 receiver serial #19010.

On Thursdays and Mondays when the station was off for maintenance the field crew caught up on their plotting of the raw data.

A brief description of each line ran during the survey is given below with possible interpretation of the results.

Cuttler Grid

This grid is composed of 22 lines, covering Shalom #1, #2, #4, #6, #7, with a total distance of 63.8 kilometers with all lines spaced at 250 m apart.

Line 0, 1, 2

These three lines are located in the northwest section of the claim block. The terrain in the area of the lines is located in the headwaters of the left branch of Mary Creek by the 600 Road. These lines show two possible east/west fault trends, that are moderate in strength and both do not show up in the third line but disappear.

Line 3, 4, 5, 6, 7, 8, 9, 10, 11

These nine lines run through the relatively flat section of the right branch of Mary Creek. The terrain is moderate to steeply sloping to the southwest and westerly direction. South of the baseline the area was logged off between lines 6 and 10. This made the traversing relatively easier. The slope to the east was steadily steeper as these lines approached Pinegrove Mountain on Line 14. The profiles to the north of the baseline became very quiet and minor to no conductive anomalies were recognized. Meanwhile to the south of the baseline moderate to strong readings were noted. These possible conductive fault zones or anomalous areas trend in an east/west direction with really strong anomalies becoming localized on Lines 9 to 11 with signatures disappearing on lines adjacent to these other lines. Possible tabular signatures can be noted, but again localized, on lines 7, 8, 9 and 10 just south of the baseline. Due to large amounts of overburden in the Mary Creek area and glacial tills some anomalous affects can disappear or appear due to depth of overburden and/or appearance of conductive clays.

Lines 12, 13, 14, 15

These four lines are located in the middle of the property west of the steep Ramos Creek Valley but on the moderate to gentle slope leading up to the peak of Pinegrove Mountain to the north. The slope south of the baseline is relatively gentle to moderate while as the line proceeds north it becomes steeper but doesn't move over the top of the Pinegrove Mountain ridge that trends east to west. Several strong anomalous zones are noted on these lines: one at the approach to the mountain peak north of the baseline, two separate forms right on the baseline and one at the very southern point of Shalom #2. These zones trend east/west and are very strong. No terrain affect can be accounted for them.

Lines 16, 17, 18

These three lines are located to the east of line 15 and in a complex terrain area. The terrain to the south of the baseline runs into the headwaters of Ramos Creek with various ravines, drainage chutes, etc. To the north of the baseline the terrain climbs up to the Pinegrove ridge and drops over a steeply dipping slope that runs northeast into the Pinegrove Creek then up another steep slope that moves into the Troll ski resort. The only strong anomalous zone noted is located close to the baseline and continues the east/west trend of the previous lines. Minor trends are noted in the north section by Pinegrove Creek and far south section in the complex Ramos Creek area.

Lines 19, 20, 21, 22

These four lines are located to the extreme east boundary of the Shalom property and on a side slope dipping to the east into Lightning Creek and Highway 24. The terrain is moderate to steep with Line 22 on the highway. Line 22 may be unreliable data due to hydro power lines near the highway. In the north section above the baseline the strong east/west trend is still prominent and indicates a continuous trend. The southern area below the baseline is still fairly complex due to some ground evidence of faulting locally due to steep ravines and drainage chutes.

Seattle Grid

The grid is composed of 18 lines covering the south portion of the Shalom claim block just south of Pinegrove Mountain. The total amount of lines ran is 31.1 kilometers with lines spaced 200 meters apart. The first baseline set up was the boundary between Shalom #2 and Shalom #4, with the crosslines running east/west as shown on the Grid Map in the Appendix and the ON Line is the extreme west boundary of the property.

Lines 0N and 2N

Both of these two lines are 200 meters apart with line 0N the extreme south claim block boundary. These two lines also cut across similar terrain. To the east of the baseline, the lines start well at the bottom of the Ramos Creek Valley and move up slope to the east through an area of steep ravines and run-off chutes. In the west direction the lines move up out of Ramos Creek up a steep slope sloping east then the lines move out onto a flat section with a slight west slope. There are three small possible conductive or small anomalous zones to be noted. These zones trend in a north/south direction and one is located to the west of the baseline and the other two to the east. These trends end somewhere between Line 2 and 4 but seem to continue strongly to the south connecting up to some magnetic anomalies compiled by airborne survey for the Wingdam property several years ago by Wm. H. Myers the geophysical, geological consultant and advisor to the writer.

Line 4N

This line is located 200 meters north of Line 2 and is higher up the headwaters of Ramos Creek. The terrain to the west is slightly sloping to the east into Ramos Creek then flattens off while the east line runs up the west dipping slope of Ramos

Creek and over a ridge into the east dipping shoulder of the Lightning Creek drainage. This line contains one strong conductive zone to the east and two minor zones to the west. As mentioned before, the anomalous zones from Line 0N and 2N do not continue but are cut off.

Lines 6, 8 and 10 North

These three lines are located 200 meters progressively north of Line 4. The terrain is basically similar as they are located in the moderate side slope of Pinegrove Mountain. In the west direction the terrain follows the same grade and is, therefore, relatively flat while the east part of the line is initially flat then falls sharply to the east into the Lightning Creek drainage system. The strong anomalous conductive zone continues on the east side of the baseline and the west side of the base line continues the anomalies started on Line 4 but these break sharply off like the very bottom anomalies; possibly due to overburden affects or they are just conductive clay anomalies. Another strong conductive zone begins just 200 to 300 meters west of the baseline on Line 8 and 10. These anomalies are strong in structure as the faulting system similar to other areas in the Cariboo, for example the Wells-Barkerville area.

Lines 12 and 14 North

These two lines are located 200 meters progressively north of Line 10. The terrain along these lines is moderate to the west and moderate to steep to the east of the baseline. Again to the east the line slopes steeply down to the east as the slope dips down into both Lightning and Pinegrove Creek. The strong anomaly to the east continues in attitude while the two farthest anomalies to the west pinch off and the two anomalies just west of the baseline pinch off as well.

Lines 16 and 18

These two lines are located 200 meters progressively north of Line 14. The terrain to the west is flat and moves into the headwaters of Mary Creek where the area has been logged off. The east section of the lines east of the baseline drops off the Pinegrove ridge as they move eastward. The peak of Pinegrove Mountain is located on Line 18N. The only anomaly or conductive zone left is the strong zone to the east of the baseline since in the west direction the area remains inactive. Due to the strength and continuation of the easterly north trending zone this is a possible major fault in the area.

CONCLUSIONS:

The VLF(EM-16) reconnaissance type profiles on the Shalom claims, ran during the 1986 field season, has produced some very interesting and possibly potential areas for further exploration work for possible gold mineralization. The continuous north/south and east/west trends shown on the map in the index are some of the areas worth investigation. The area of interest is basically situated in Shalom #2 and Shalom #4 since overburden and slope fluctuations increase and create interpretation problems as we move further north, east and west from this area. The magnetometer survey also appears to give a slight magnetometer fluctuation in these areas and therefore provides further information or evidence for further exploration.

RECOMMENDATIONS:

The intersection of the strong north/south trend and the several east/west trends centered just south of the peak of Pinegrove Mountain would be a potential area for further exploration. Further exploration work is also recommended for the more continuous east/west trends on the Cuttler Grid associated with apparent magnetometer anomalous zones. The work should be in the form of more detailed electromag profiles as immediate lines with possible input electromag as well as VLF, self potential surveys and possible shallow drilling with limited Lithogeochem analysis. This is considered to be a very worthwhile exploration programme and well worth the expenditures of monies to carry out the recommended work.

Respectively Submitted

Alan Samchek (Geol. Eng.)

Approved

Wm. H. Myers P.Eng.(B.C.) P.Geol.(Alta.) Geological-Geophysical Consult.



November, 1987

APPENDIX

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SUMMARY OF WORK COMPLETED IN 1986 FIELD SEASON SHALOM GROUP OF CLAIMS

A) Geophysics:

VLF(EM-16)

- transmitting station: Seattle, Washington

- total number of kilometers covered - 31 kilometers VLF(EM-16)

- transmitting station: Cuttler, Maine

- total number of kilometers covered - 64 kilometers Magnetometer

- total number of kilometers covered - 38.7 kilometers

B) Grid Establishment:

VLF(EM-16) Grid

- Seattle grid: total number of kilometers covered - 31.1 kilometers - Cuttler grid: total number of kilometers covered - 64 kilometers Magnetometer Grid

- total number of kilometers covered - 38.7 kilometers

C) Geochemical Sampling:

- 26 geochem samples collected

- 86 litho geochem samples collected

KILOMETERS OF VLF-EM SURVEY, 1986 SEASON Seattle Grid

Line #	<u> </u>
0N	3.1
2N	2.1
4N	2.8
6N	2.9
8N	3.6
10N	3.7
12N	3.8
14N	3.5
16N	2.3
18N	2.3

TOTAL 10 lines

31.1= 31 km

KILOMETERS OF VLF-EM SURVEY, 1986 SEASON Cuttler Grid

.

Line #	<u> </u>
0	1.0
1	1.5
2	2.0
3	2.4
4	3.0
5	3.4
6	3.4
7	5.3
8	3.1
9	3.0
10	2.8
11	2.7
12	2.5
13	2.7
14	3.0
15	4.1
16	4.4
17	4.0
18	3.8
19	3.5
20	2.2
21	1.4
22	0.6

TOTAL 22 lines

63.8= 64 km

ITEMIZED COST STATEMENT - SHALOM CLAIM GROUP

A) Labour:

Employee #1; June 15 - August 31; total days worked = 66 days; @138/day; total wages = \$9,108 Employee #2; July 16 - July 23; total days worked = 6 days; @\$138/day; total wages = \$828 Employee #3; July 24 - August 20; total days worked = 24 days; @138/day; total wages = \$3,312 Employee #4; September 10 - September 13; total days worked = 4 days; @\$138/day; total wages = \$552 Employee #5; June 1 - October 31; total days worked = 46 days; @\$180/day; total wages = \$8,280 Employee #6; September 15 - October 31; total days worked = 18 days; @\$138/day; total wages = \$2,484 Employee #5; June 15 - November 15; total days worked = 108 days; @\$138/day; total wages = \$14,906

TOTAL WAGES = \$39,470

B) Accommodations:

Employee #1; 66 days @\$50/day; total amount = \$3,300 Employee #2; N/A Employee #3; N/A Employee #4; N/A Employee #5; 46 days @\$50/day; total amount = \$2,300 Employee #6; 18 days @\$50/day; total amount = \$900 Employee #7; 108 days @\$50/day; total amount = 5,400

TOTAL ACCOMMODATIONS = \$11,900

C) Instrument Rental:

June 15 - October 31; VLF(EM-16); 108 days @\$30/day; total rental = \$3,240 September 1 - October 31; proton magnetometer; 54 days @\$55/day; total rental = \$2,970

TOTAL RENTAL FEE = \$6,210

D) Truck and Other Rentals:

Truck #1; 4x4 Jeep; June 15 - September 31; used 108 days @\$40/day; total = \$4,320 Truck #2; 4x4 Ford; June 1 - September 31; used 46 days @\$40/day; total = \$1,840 D6 Cat; July 26 - July 29; used 4 days @\$735/day; total = \$2,940 Loader; July 26 - July 29; used 4 days @\$860/day; total = \$3,440

D) Truck and Other Rentals: (Continued)

Backhoe; July 26 - July 29; used 4 days @\$1,125/day; total = \$4,500 Lowbed (Mob & Demob); July 29; used 1 day @\$650/day; total = \$650

TOTAL RENTAL FEE = \$17,690

E) Consultants Fees:

Consultant #1; June 9 - June 15; 7 days (3300/day; total = \$2,100; October 15 - October 19; 5 days <math>(3300/day; total = \$1,500Consultant #2; September 10 - September 12; 3 days (3300/day; total = \$900Consultant #3; August 7 - August 10; 4 days (3300/day; total = \$1,200

TOTAL FEES = \$5,700

F) Geochemical Assays:

13 rock (chip) samples; analysed for Au, Cu, Pb, Zn, and Ag; @\$30/sample; total cost = \$390

65 rock (chip) samples; analysed for Au and Ag; @ \$20/sample; total cost = \$1,300

26 geochem samples; analysed for Au; @\$14/sample; total cost = \$364 18 rock (chip) samples; analysed by I.C.P. (24 common elements) plus Au and Ag; @\$30/sample; total cost \$540

TOTAL ANALYSIS COST = \$2,594

G) Miscellaneous Cost and Cost of Report:

Office supplies - \$2,000 Field supplies - \$1,200 Report cost - \$500

TOTAL MISC, COSTS = \$3,700

H) Travel and Transportation Costs:

20% of the present sub-total of the Shalom claim group Travel Cost = \$16,500

I) Total Costs:

TOTAL ASSESSMENT COST = \$100,064

ILLUSTRATIONS







_ 5



SHALOM CLAIMS

۰.

SCALE 1:67000

ASSAY RESULTS

5

212 Brooksbank Ave. North Vancouver, B.C. V7J 2C1 Canada Phone: (604) 984-0221 Telex: 043-52597

: NONE



TC : PINE

EDMONTON, ALBERTA

Prep

code 205 Au ppb FA+AA

10

T5E 6C8

Sample

SH 7

ţ

description

Analytical Chemists Geochemists • Registered Assayers

Pt

ppb

< 50

+

P.C. #

	CERTIFICATE UF ANALYSIS]		
PINEGROVE RESOURCES LI	`C•	 CERT• # INVGICE #	:	A8616838-001-A 18616838
P.C. BOX 7280, STATIC	M	DATE	:	3-SEP-86

War Annahule

	Chemex L	.abs Ltd.	212 Nor Cana	Brooksbank A th Vancouver, B da V7J2
	Analytical Chemists · Geochem	nists • Registered Assayers	Phor Telex	ie: (604) 984-02 <: 043-525
FD : PINEGROVE P.C. BOX 7	RESOURCES LTD.	÷⇒ CERT• # INVGICE DATE	: A # : I : 2	8616837-001 8616837 7-AUG-86
EDMONTON, T5E 6C8	ALBERTA	P•C• #	: N	CNE

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ļ	Sample	Prep	Ag ppm	Au ppp				
	description	code	Aqua R	FA+AA				
	SH1-101-2	205	0.1	<5	~ ~		~ ~	
	SH1-112-2	205	0.2	<5				
	SH1-113-2	205	0.5	<5				
l	SH1-114-2	205	0.5	<5				
	SH1-117-2	Z 0 5	0.1	<5				
	SH1-124-2	205	0.1	<5				
1	SH2-100-2	205	0.1	<5		~ ~		
l	SH2-101-2	205	0.5	<5				
1	SH2-102-2	205	3.4	<5				
	SH2-104-2	205	1.2	<5				
ļ	SH2-105-2	205	0.4	<5				
	SH2-107-2	205	0.2	<5				
I	SH2-108-2	205	0.1	< 5				
ĺ	SH4-104-2	205	0.1	<5				
1	Sh6-102-2	205	0.6	<5				
ł	SH7-100B-2	205	1.4	85				

abarry & medel

Certified by HartBichler

VOI re- 4/85

E			C Analytica	he I Chemis	me "	-Geoche	emists	·Reg	Ltd	lssayers		212 Br North V Canada Phone: Telex:	ooksban ancouve (604) 9 04	k Ave r. B.C V7J 2C1 984-0221 43-52597										
TO : PINE P.O. Edho T5E	BOX 7 BOX 7 NTON, GCO	RESOU 280, Aljer	RCES Stati Ia	LTD.					**	CERT INVO DATE P.C.	. ‡ ICE : ‡	: AS : IS : 10 : NO	6171- 36171-)-OCT-)NE	10-00 10 -86	1-4									
Sample description	Ho ppm (ICP)	¥ ppm (ICP)	Zn ppm (ICP)	P ppa (ICP)	Pb pps (ICF)	Bi ppm (ICP)	Cd ppm (IC7)	Coppa (ICP)	Ni ppa (ICP)	Ba ppm (ICP)	Fe I (ICF)	Nn ppa (ICP)	C: pps (ICF)	89 % (1CP)	V ppa (ICP)	A1 : (1CP)	Be ppm (ICP)	C3 : (10P)	Cuppa (ICP)	Ag pp a AAS	Ii I (ICP)	Sr pça (ICP)	Na 1 (1CP)	K I (ICP)
581-101-2	2	<10	68	360	14	0	(0.5	11	38	705	5.05	330	180	1.63	84	9.94	1.5	0.16	34	<0.2	0.399	65	0.68	3.69
SH1-112-2	7	<10	540	>10000	18	3	0.5	3	101	1380	1.95	27	195	0.35	770	2.90	<0.5	7.14	120	0.4	0.129	405	0.04	1.49
SH1-113-2	15	<10	240	2150	24	<2	0.5	3	33	1290	1.64	21	185	0.23	1050	2.63	<0.5	0.17	111	0.3	0.123	62	0.05	1.15
SH1-114-2	16	<10	240	9550	26	(2	0.5	2	40	1650	1.69	21	210	0.15	780	1.37	<0.5	1.92	197	1.0	0.099	125	0.02	0.74
SH1-117-3	3	.10	83	1130	4	(2)	<0.5	30	74	125	7.89	1130	145	4.49	265	7.83	.0.5	£.20	195	40.2	1.500	250	3.03	0.25
SH1-124-2	2	(10	9	285	8	3	(0.5	1		600	0.58	- 20	1.0	0.12	5.	1.50	(0.5	0.0.	20		0.104	1050	0.03	0.54
5H2-100-2	3	(10	43	170	10		<0.5	2	17	55	7.34	1120	100	1.1.2	210	8.31	1.0	10.50	10	0.1	0.331	1530	0.31	0.04
SH2-101-2	6	<10	29	2390	15	2	(0.5	7	14	1240	0.60	42 20	210	0.14	625	5 70	10.5	0.33	275	2.0	A 571	-05	0.03	2.04
SH2-102-2	19	15	90	0290	10	1	10.0	2	11	1240	1.03	110	105	0.12	1.40	2.05	10.5	0.04	20	1 7	0 100	100	0.09	1.22
5H2-104-3	5.	<10	139	1350	10		10.5	2	11	1750	0.00	22	270	0.00	110	1 37	20 5	0.03	14	2.4	0.051	30	0.04	0.39
247-102-7	٥,	110	10	100	220	1	10.5		12	000	P 10	1000	155	0.00	92	10.20	2.0	0.04	70	0.4	0.000	77	0.51	5.15
2110 101 3	6	<10	133	210	134	 e	10.5	-1	0,0	525	2 17	1000	100	0.19	54	0.50	2.0	0.05	11	(0.2	0.051	93	0.69	4.05
SH2-107-2		110	20	310	144	-	(0.5	51	5.	526	10.10	000	125	2 25	225	3.92	(0.5	1.34	32	0.4	0.848	112	0.50	2.90
SH2-107-3 SH2-108-2	1	110	101	1000	12								1.7.4			1010	10.0							
SH2-107-2 SH2-108-2 SH4-104-2	3	<10	164	1330	12	(3	(0.5	31	24	500	0 50	54	185	0 12	765	1.19	(0.5	1 =9	32	0.1	0.083	95	0.02	0.47

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E			.,	Analytica	ne I Chemist		-Geoch		./AL.?*		Assayers		North Vancouv Canada Phone: (604 Telex:	er, B.C. V7J 2C1 984-0221 043-52597					
TC : F	APID 4832 124071 156 1.	PROPI - 73 :CN, 3	A ST A ST LJER	HANAG IA	EMENT	(R.)	P.M.)	LTB.		**	CERT IMVO DATE P.C.	. ; ::: ;	: A36163 • : 106163 : 19-A00 : NG42	68-001- 63 -86	1		ICNY	X02U2	
Easple deconction HT-100	1	1 72 569 72 569	4 pp2 (109) (10	בקן, אב (ככז) 73	? pps (159) 865	12 ppa (127) 22	21 pp# (100) (2	Ed ppm (102) (0.5	Ca ppa (1227) 24	81 ;;;a (127) 136	35 pps (107) 47	70 % 1271 5.81	35 293 C: 993 (ICP) (ICP) 167C 250	47 7 7 (109) 1.94	202 1091 105	x: : (1071 7.35	30 (pp .109) (0.5	Ca I Cu y (ICP) (IC 12.10	28 Ag 228 <u>31 A</u> 82 47 2.5
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10F)	(ICF)	(109)	1159	
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Chemex Labs Ltd. 212 Brooksbank Ave. -12 North Vancouver, B.C. V7J 2C1 Canada ·Analytical Chemists -Geochemists •Registered Assayers · Phone: (604) 984-0221 Telex: 043-52597 CERTIFICATE CE A HALVEIE TO : RAPID PROPERTY MANAGEMENT (R.P.M.: LTD. ** CERT. # : A3616368-001-INVOICE : 10010203 14832 - 73 A ST. DAIE : 19-AUG-38 EDHONICN. ALCERCA 2.0. ₽ : NONE 150 :01 ATTH: ICHY MCCUB na ppa 4 ppa 20 ppa 7 ppa 72 ppa 81 ppa Colppa Nilppa Bolppa Gellinn ppa Crippa Ng 2 9 ppa Al 2 Belppa Ca 2 Cu ppa Ag ppa 1 <u>(115) (115) (115) (115) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) (117) AAB (1 1 (11) 75 285 22 (2 (0.5 24 (11) 47 5)3) (157) (157) (183) (183 7 5) (10 5 (11))</u> Saucle 421111110 SHT-100 .0.5 24 132 1570 353 1.94 105 7.36 5.31 Q.5 12.10 47 0.5 0. ----gold 002 P.P.M. og pr Ton' platinion 35 P.M. (Soppb), Liber . to P.M. (Soppb), Jameluk 10 Instituted by your

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4	9-001-4 9 86	A861683 1861683 1-SEP- NONE	•	. ‡ ICE : \$	CERT INVO DATE P.O.	**					LID. ON M	l RCES STATI TA	RESOU 230. Alber	BOX BOX DNTON. 6CS	PIN P.O EDM TSE	TO :
ppm A1 1 Be ; ICP) (ICP) (I 96 8.57 1	Ng I V ((ICP) (1 1.67	pa Crppa P) (ICP) 90 190	Χη ρε (IC) 119	Fe 1 (ICP) 5.53	B3 ppm (ICP) 825	Ni ppa (ICP) 90	Co ppm (ICP) 30	Cd ppm (ICP) (0.5	Bi ppa (ICP) (2	Pb ppm (ICP) 14	P pp∎ (ICP) 865	In ppm (ICP) 98	¥ pps (ICP) (10	на ор (<u>1СР)</u> ()	ion	Sample descript SH 7
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8e pp s	Ca 🟅	Cu ppm	Ag pp∎	II I	Sr ppm	Na I	K I	
(ICP)	(ICP)	(ICP)	AAS	(ICP)	(ICF)	(ICP)	(ICP)	
1.0	5.46	65	(0.2	0.301	260	1.22	3.35	

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To:	PINEG	ROVE I	RESOL	JRCE	S LI	D
	P.O.	Box 72	280,	Sta	tior	1 'M''
	Edmon	ton,A	lbert	a	Г5Е	6C8
	.ttn:	Tony	Kozu	ıb		
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File No.	29310
Date	November 17, 1986
Samples	Rock

Servificate ASSAY ~~

LORING LABORATORIES LTD.

Page # 4

SAMPLE No.	PPB Au	PPM Cu	PPM Pb	PPM Zn	PPM Ag	
" <u>Geochemical</u> <u>Analysis</u> " " <u>Rock Samples</u> "						
Channel Sample #1	20	236	24	167	.5	
#2	10	225	27	236	.6	
#3	Ni1	42	14	201	.4	
#4	30	39	24	197	.4	
#5	10	55	20	275	.7	
#6	30	38	22	335	.6	
2x4-1 GOUGE	5	329	17	129	.3	
2x4-2	Ni1	41	14	131	.5	
CH-AF1	15	126	18	255	1.0	
CH-AF2	10	115	22	149	.8	
SH2-T4	70	199	28	65	2.0	
SH6-T5	Nil	15	18	169	.4	
SH7-T3	35	22	42	54	1.1	
	J Meredy Assays made	y Certi by me upo	fų тнат ім тне нег	THE ABOVE REIN DESCR	RESULTS ARE	THOSE

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

allow the notice

Edia

Assayer

To: PINEGROVE_RESOURCES_LTD..... P.O. Box 7280, Station "M". Calgary, Alberta T5E.6C8.... Attn: Joe Kozub



File No.	29008
Date	September 3, 1986
Samples	Rock

St ASSAY %

LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	PPM Ag	PPB Au	
"Geochemical			
Analysis"			
<u></u>	_		
SH1-100	. 2	NII	
SH1-101-1	.1	Ni 1	
SH1-102	. 2	Ni 1	
-103	.1	5	
-104	.2	Nil	
-105	Nil	Nil	
-106	. 1	Nil	
-107	.1	Nil	
-108	.2	5	
-109	.1	Nil	
SH1-110	.1	Nil	
-111	.2	Nil	
-112-1	1.6	10	
-113-1	2.6	15	
-114-1	.7	5	
-115	.7	5	
-116	Nil	5	
-117-1	.1	Nil	
-118	.5	5	
-119	. 4	5	
SH1-120	.3	10	
-121	.2	10	
-122	.5	10	
-123-1	. 4	15	
-124-1	2	Nil	
SH2-100-1		5	
-101-1	• • • 6 · 1	15	
SH2-102-1		15	
	n werend a	CUILIN THAT THE ABOVE RESULTS ARE THUSE	
	ASSAYS MADE BY WE	E UPON THE HEREIN DESCRIBED SAMPLES	
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Reports Retained one month.	\mathbf{v}	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	

Pulps Retained one month unless specific arrangements made in advance.

Assayer

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To:	PINEG	ROVE	RESC	URC.	ES L	ГD
	P.O.	Box 7	280	Sta	tion	"M"
	Edmon	ton,A	lber	rta	T5E	6C8
	Attn:	Joe	Kozu	ıb		

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made in advance.

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File	No. ²⁹⁰⁰⁸
Date	September 3,1986
Samı	oles ^{Rock}

Ser ASSAY or

LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	PPM	PPB	
<u> </u>	Ag	Au	
"Geochemical			
<u>Analysis"</u>			
SH2-103	. 4	5	
SH2-104-1	.9	~ 15	
-105-1	.2	30	
-106	. 4	20	
-107-1	. 4	15	
-108	.4	5	
-108-1	.2	Nil	
SH2-110-1	.1	5	
SH4-101-1	.1	25	
-102-1	. 2	20	
-104-1	.3	10	
-105-1	. 4	10	
SH6-100	.7	5	
-101	.4	Nil	
-102-1	.9	5	
SH7 100-a-1	.3	35	
100-ь-1	3.5	160	
SH7 100-c-1	Nil	5	
SH/-101-1	Nil	10	
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Rejects Retained one month	Mary >		\sim
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unless specific arrangements			D GOLY
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To: PINEGROVE RESOURCES LTDP.Q. Box 7280, Station "M" Edmonton, Alberta T5E 6C8 Attn: Tony Kozub

made in advance.



File No.	29310
Date	November 17, 1986
Samples	Sediment

Ser ASSAY a.

LORING LABORATORIES LTD.

Page # 2

SAMPLE No	PPB	
	Au	,
"Geochemical		
Analyzis		•
Analy 515		
SHALOM #1	Nil .	
2	10	
3	20	
4	Nil	
5	Nil	
6	10	
7	5	
8	10	
9	Nil	
SHALOM #10	10	
11	20	
12	5	
13	Nil	
14 .	10	
15	Nil	
16	Nil	
17	Nil	
1 8A	100	
18B	20	
SHALOM #20		
21		
22	N11	
23		
24		
23 STIAT OM #26		
SHALOM #20		
	71 Though Montify that the apove pressure ape those	
	ASSAVE MADE BY WE UPON THE REDEIN DESCRIPED SAMPLES	
	ASSATS MADE BT ME OF ON THE HEREIN DESCRIBED SAMPLES	
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	No providence	
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ss specific arrangements		

Assayer

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To:	
	.P.OBox.7280,Station "M"
e	.Edmonton,AlbertaTSE6C8.
i	Atta: Jony Kozub



File No	29310
Date	November 17. 1986
Samples .	Sediment

LORING LABORATORIES LTD.

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Page # 3

SAMPLE No.	PPB Au	- <u>-</u> _
" <u>Geochemical</u> <u>Analysis</u> " SHALOM A B SHALOM C 0+2 30N 0+000E 0+300N 0+155E 0+300N 0+710E 0+500N 5+95E 0+700N 0+640E 0+900N 0+600E	5 Ni1 Ni1 Ni1 Ni1 5 +1000 200 30	
Pulps Retained one month. Pulps Retained one month unless specific arrangements made in advance.	J Thereby Clertify that the above results are those assays made by me upon the herein described samples Warmand D Call	

To:	PINEGROVE RESOURCES LTD
	P.O. Box 7280, Station "M"
	Edmonton, Alberta T5E 6C8
	Attn: Tony Kozub
·	



File No.	29310
Date	November 17, 1986
Samples	Sediment

LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	OZ./TON GOLD
"Access Applypic"	
Assay Analysis	
0+500N5+95E	.266
	3
	ala fameliek
	I Hereby Certify that the above results are those assays made by me upon the herein described samples
Jects Retained one month.	S.
Pulps Retained one month unless specific arrangements	Jeller G

unless specific arrangements made in advance.

Assayer

CERTIFICATE

I, William Howard Myers, do hereby certify that I am an independent geological-geophysical consultant with offices at Suite #309 - 543 Granville Street, Vancouver, B.C., V6C 1X8, British Columbia. I have been actively engaged in my profession as an independent consultant in both oil and mining since 1952. I am a professional geologist, P.Geol., #16704 of the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I am also a member P.Eng., #14056, of the Professional Engineers of British Columbia. I now hold a Life Membership in both Societies.

I graduated from Fresno State College, Fresno, California in 1939 with high honors and a B.Sc. degree in Geology. I did graduate work at Stanford University, Stanford, California for a M.Sc. degree in Geology, 1939-41. After graduating I spent three years with the U.S. Geological Survey as a field geologist and eleven years in the field of geoghysical exploration for oil and minerals.

During the past 21 years since 1964, I have spent the majority of my time in the field and consulting for gold exploration in the Cariboo Area of British Columbia. In the past four years, I have carried out extensive geophysical surveys and research programmes for gold exploration in the Cariboo Area of British Columbia. Much of the work involved the techniques recommended by R.W.Boyle in Bulletin 280 of the Geological Survey of Canada. This publication does not follow the older conventional exploration techniques.

Over the exploration period I provided consultant survices, by approving field work, interpretations and compilation of results by the field supervisor, Alan Samchek (Geol. Eng.).

Wm. Howard Myers, P.Eng. B.C.) P.Geol.(Alta.) Geological-Geophysical Consultant



November, 1987

CERTIFICATE

I, Alan Samchek, do hereby certify that I am a graduate Geological Engineer from the University of Manitoba. I have been working actively in the mining industry for the past two years and am an Engineer in training with the APEGGA Society. I have been working under the guidance and direction of Wm. H. Myers a Geological - Geophysical Consultant residing in Vancouver, B.C.

Mr. Wm. H. Myers' credentials are noted on the following page.

During the exploration work completed, this writer plotted the data obtained in the field and supervised the field crews work in the field.

November, 1987

ALAN SANCHEK Engineer in Training Geological Engineer Edmonton, Alberta









