82-#747 — 10775

1982 EXPLORATION ACTIVITIES ON THE

ASTRIDE MINERAL CLAIM

YANKS PEAK PROJECT

CARIBOO LAKE AREA, B.C.

This report covers the following mineral claim
held by Suncor Inc.:

2003 Astride
on N.T.S. Sheet 93 A/14
Centered on 52°51'25"N 121°24'25"W
in the Cariboo Mining Division

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SUNCOR REPORT #9154

1982 EXPL'N ACTIVITIES ON THE ASTRIDE MINERAL CLAIM

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1.0 INTRODUCTION

The Astride Mineral Claim is one of a group of claims held by Suncor Inc., collectively referred to as the Yanks Peak Project. This project is one of three currently operated by Suncor in the area as shown on the Cariboo Gold Projects Property Location Map 81-044.

The other claims within the Yanks Peak project and the other two projects are covered under separate work submissions. Work was carried out on all three properties by the same crew in 1982. Exploration costs were estimated based on preliminary billings.

1.1 LOCATION AND ACCESS

The Yanks Peak property is located north of Yanks Peak approximately 12 km north of Keithley Creek. The Astride claim (#2003) can be found on N.T.S. Sheet 93A/14 at latitude 52°51'50" and longitude 121°24'25". The claims making up the Yanks Peak project are shown on Map 81-057D.

The property can be accessed by a good all-weather road from Williams Lake, via Likely, to Keithley Creek, then north on an old forestry road, which progressively worsens to a rugged 4-wheel drive trail. It is approximately a 1-1/2 hour drive from Keithley Creek to the property.

During 1982, Suncor based its field crews out of a camp at Keithley Creek. Supplies and limited helicopter support were obtained out of Williams Lake, B.C.

1.2 PHYSIOGRAPHY

The Astride claim lies to the N.E. of Yanks Peak which reachs an elevation of 1900 m. The claim straddles a V-shaped valley with the southerly flowing French Snowshoe Creek at its center.

The topography is moderately rugged and locally quite steep. Small tributaries cut generally E-W trending gorges on the west slope of the valley. These gorges yield good outcrop exposures.

Immediately north of the claim the vegetation is mostly sub-alpine meadow, with the occasional small bog. This grades into dense coniferous forest in the valley bottom and slopes off the claim. While it is locally boggy at its headwaters, the French Snowshoe Creek becomes quite fast flowing, exposing a good deal of outcrop along its path.

The climate is humid continental with cool, short summers. Snow does not leave most peaks until late June. The area receives between 75-150 centimeters of precipitation, of which the greater amount occurs as snow. Snowfalls in the past have varied greatly. An exceptionally heavy snowfall this past winter combined with an unusually wet summer kept water levels near springtime highs well into August. Most of the area is covered with dense coniferous forest and is densely undergrown.

The area is generally thinly till covered, but the thickness can be quite variable. The most recent glaciation was in the Pliestocene, when the continental Ice sheet covered the area to about the highest peak. Ice movement was in several directions and represents a complex glacial history. This complexity has prevented the location of a bedrock source for a number of placer gold deposits in the area.

1.3 PROPERTY HISTORY

The Astride Mineral claim was acquired by Suncor Inc. from Zelon Enterprises Ltd. under an option agreement early in 1981. During the 1981 field season, Suncor personnel carried out a limited geochemical and geological exploration program on this claim. (Hawkins P.A., 1981).

The Cariboo district, as a whole, has had a long history of placer and lode gold exploration and mining. There are a number of old underground workings and gold occurrences reported in the Yanks Peak area (Holland, S.S., 1954) and placer operations have been active on most of the creeks around Yanks Peak since the 1860's. Current placer mining operations can be found on Keithley, Little Snowshoe, and French Snowshoe Creeks.

In the Astride claim itself, there has been no known lode gold mining operations. A number of reported gold occurrances (Holland, S.S., 1954; Lang, A.H., 1938) are located within the Astride claim. These occurrances when not relocated during the 1982 field season. Some additional work in the area is evident beyond the work reported in the assessment files but it is of uncertain age.

1.4 1982 PROGRAM OUTLINE

Field work during the summer of 1982 on the Astride claim consisted of limited detailed geological mapping and an extensive reconnaissance soil geochemistry program.

Objectives of this program were to provide a good regional geochemical data base, confirm the government mapping of the area, obtain structural data, and prospect for old and new showings.

The 1982 program was designed to follow-up last year's stream sediment geochemistry survey and reconnaissance mapping results. Due to time constraints this summer, only a portion of the claim was mapped in detail. The soil geochemistry survey crosscut the geology, crossed the French Snowshoe Creek in the vicinity of 1981 stream sediment anomalies, and covered as much of the Astride claim as possible.

2.0 GENERAL GEOLOGY

There has been some recent controversy surrounding the geology of the Cariboo District; primarily concerned with reinterpreted age relationship. L.C. Struik has interpreted all the lithologies west of the Pleasant Valley Fault in this area, as either Hadrynian (correlative with the Kaza Group) or Devonian-Mississippian (Struik L.C., 1981). This strata was previously interpreted (Holland S.S., 1954; Brown A.S., 1963) as belonging to the Cariboo Group, and being Hadrynian to Cambrian in age. This discrepancy, still unresolved, exemplifies the complexity of the geology and structure in the Cariboo area. The general geology of the area covered by Suncor's Cariboo Gold Project will now be discussed, using "pre-Struik" terminology.

Suncor's Cariboo Gold Project is situated within the Lightning Creek Anticlinorium, in the Cariboo Mountains of south central British Columbia. The anticlinorium is made up of a belt of Proterozoic to Cambrian Kaza and Cariboo group rocks, which are overlain by a sequence of unmetamorphosed volcanic and sedimentary rocks of the Slide Mountain group. The belt trends NE-SW and is 25 km wide by 150 km long. The predominant lithologies on Suncor's Cariboo properties belong to Holland's (1954) Cariboo group.

Lithologically, the Kaza group rocks are schistose clastic sediments to a gritty feldspathic micaceous quartzite, which have been regionally metamorphosed in the greenschist facies (Sutherland Brown, 1963). To the north east, the Kaza group rocks are overlain by the Cariboo group rocks which consist principally of phyllites, micaceous quartzites, marble, and some limestone. The formations are intensely folded and locally highly altered due to hydrothermal activity. No rocks of the Slide Mountain group occur in the property area.

2.0 GENERAL GEOLOGY - (Continued)

A table of formations (modified after Campbell et al, 1973; Brown, A.S., 1963) is provided.

2.1 PROPERTY GEOLOGY

The rocks of the Astride Claim as with those of the whole Yanks Peak area, have a very complex structural history, which is not yet fully understood. The claim is underlain by two basic lithologies: a dark grey to black argillite, and interbedded greenish grey to medium grey phyllite, arengeous quartzite, and conglomerate. (Holland, S.S., 1981) interpreted that these were Cariboo Group rocks (the Midas and Snowshoe Formations) involved in overturned anticlines which were in turn part of the Jim Syncline. (Struik, L.C., 1981) on the other hand, believed these rocks are possibly as young as Devonian-Mississippian and are on the east flank of the Lightning Creek anticlinorium. He has also interpreted a N-S trending normal fault running through this area.

The regional strike is approximately 330°, although a more detailed study reveals local variation which undoubtedly would help to unravel the complex structure. Ground preparation for mineralization is good with abundant jointing, related quartz veining and a possible major fault (Struik, L.C., 1981).

2.2 ECONOMIC GEOLOGY

The Yanks Peak - Roundtop Mountain Area has periodically attracted attention as a gold camp, with renewed interest caused by current gold prices. The area has a recorded production of 5,204 fine ounces of gold from lode producers; most of this from the Cariboo Hudson Mine near Roundtop Mountain (Holland, S.S., 1954). In comparison, between 1874 and 1950, 69,237 ounces of crude gold were recovered by the districts placer operations (Holland, S.S. 1954). Recent placer activity has undoubtedly increased the placer total.

Early lode work in the Yanks Peak Area was a result of the discovery of placer gold near the mouth of Keithley Creek in 1860. Keithley, Little Snowshoe, Luce, and French Snowshoe Creeks have been and still are, active placer gold producers.

A number of showings are located in the Yanks Peak Area (see Holland, S.S., 1954) and evidence of lode workings (adits, tailings, pits, trenches, etc.) are plentiful. For the most part, it is difficult to locate all but the most recent workings.

No known lode workings are located on the Astride Claim, although filled-in old trenches may be present. French Snowshoe Creek, a producing placer creek, does have its headwaters located in this claim.

The only mineralization observed, was some minor galena found in a quartz vein in the French Snowshoe Creek at site VP-79. A sample of the mineralized quartz vein sent in for assay ran 0.08 oz/ton Ag, and 0.02% Pb-Zn combined. From the proximity of known showings to the Astride Claim it is quite likely that more mineralization will be discovered as prospecting proceeds.

2. ECONOMIC GEOLOGY - (Continued)

Due to time constraints and the small area covered, mapping only confirmed the presence of previously mapped lithologies. More mapping is needed to adequately determine structural relationships and to better prospect the area for mineralization.

2.3 GEOLOGICAL MAPPING AND PROSPECTION

A total of three mandays were spent geological mapping and prospecting the Astride Claim. Detailed mapping along French Snowshoe Creek was started, following-up on reports of extensive outcrop found in the 1981 program. Also, a traverse was carried out in the outcrop-rich west side of the claim. The general geology and structure (including quartz vein orientations) of the Astride Claim are presented on maps 82-208B and 82-208C, respectively.

From the mapping, to date it appears as though the black argillaceous unit which is believed to be the Midas Formation occupies a N.W. trending band in the center of the claim. It is bounded on either side by a lighter, more quartz-rich, and generally coarser grained group of sediments believed to be the Snowshoe Formation consisting of interbedded grey schists, phyllites, siltstones, sandstones, and minor conglomerate. The argillaceous unit was also found within the latter unit, but the exact relationship between the two has not yet been determined. It may be interbedded, isoclinally folded or consist of a synclinal or anticlinal structure.

3.0 GEOCHEMISTRY

The geochemistry program on the Astride Claim consisted of a limited but intensive rock sampling program carried out in conjunction with the mapping, and an extensive reconnaissance soil survey.

A total of 15 rock samples were taken for analysis; 13 for geochemical analysis; and 2 for assay. Results are presented in the Appendix and on Map 82-208D and are discussed later.

The soil survey consisted of three (3) equally spaced, 1 km long E-W trending lines, traversing the claim. Lines were 250 m apart with sample intervals every 25 m. The lines were put in by compass and chain method, with each station flagged. The grid (VP-82-36) is illustrated on Map 82-197. A total of 121 soil samples were collected.

One manday was spent surveying the grid, while 5 mandays were spent soil sampling and 3 mandays mapping and collecting rock samples.

3.1 SAMPLE AND DATA HANDLING

Soil samples were collected in 4" x 10" kraft water-proof paper sample bags and air dried before shipment.

All samples from the Cariboo Mountain Project were sent to Vangeochem Labs Ltd., 1521 Pemberton Avenue, North Vancouver, B.C., for geochemical analysis. Samples were analysed for Cu, Pb, Zn, Mo, W, Au, Ag.

Field data were recorded on Suncor's "Geochemical Sample Record" forms, while Vangeochem reported their results on Suncor's "Geochemical Labratory Report" forms.

3.2 ANALYTICAL METHODS

All geochemical samples from the Cariboo Gold Projects received a standard package of analyses at Vangeochem Labs Ltd., 1521 Pemberton Avenue, North Vancouver, B.C.

Cu, Pb, Zn, Ag, Mo

The analytical procedure used to determine hot acid soluble Cu, Pb, Zn, Ag and Mo in soil stream sediments and rock samples is outlined below:

Sample Preparation

(a) Geochemical soil, stream sediment or rock samples were received in the laboratory in wet-strength 3-1/2 x 6-1/2 Kraft paper bags and rock samples in 4" x 6" Kraft paper bags.

(b) The west samples were dried in a ventilated oven.

(c) The dried soil and stream sediment samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieves. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

Methods of Digestion

(a) 0.50 gram of the minus 80-mesh samples was used. Samples were weighed out by using a top-loading balance.

(b) Samples were heated in a sand bath with nitric and percholoric acids (15% to 85% by volume of the concentrated acids respectively).

(c) The digested samples were diluted with demineralized water to a fixed volume and shaken.

Method of Analysis

Cu, Pb, Zn, Ag and Mo analyses were determined by using a Techtron Atomic Absorption Spectorphotometer Model AA4 or Model AA5 with their respective hollow cathode lamps. The digested samples were aspirated directly into an air and acetylene flame, but Mo digestion were aspirated into an acetylene and nitrous flame. The results, in parts per million, were calculated by comparing a set of standards to calibrate the atomic absorption unit and displayed in a strip chart recorder.

The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and the laboratory staff of Vangeochem Lab Ltd.

Tungsten

The analytical procedure used to determine trace tungsten in geochemical samples by fusion is outlined below:

Sample Preparation

(a) Geochemical soil, stream sediments and rock samples were received in the laboratory in high wet-strength 4" x 6" Kraft paper bags or rock samples in 8" x 10" plastic bags.

(b) The wet samples were dried in a ventilated oven.

(c) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieves. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(d) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

Method of Dissolution by Fusion

(a) 0.50 gram of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance.

(b) Two grams of flux ($NaCO_3$ and NaCl) were mixed with each sample and the samples were fused over a muffled furnace in high temperature.

Method of Analysis

(a) The fused samples were then dissolved in de-mineralized water by heating in a hot water bath.

Method of Analysis - (Continued)

(b) A fixed volume was subsequently adjusted.

(c) An aliquot from each sample for tungsten analysis is developed in a strongly acid (HCl) solution of stannous chloride using a thiocyanate as the complexing agent.

(d) The tungsten-thiocyanate complex was extracted into 1/2 ml of a carbon tetrachloride and Tri-n-butyl phosphate solvent mixture.

(e) The concentration of tungsten was calculated colorimetrically by comparing the intensity of its color organic layer with a set of known standards prepared in a similar fusion as the samples.

The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and the laboratory staff of Vangeochem Lab Ltd.

Gold

The analytical procedure used to determine Aqua Regia soluble gold in samples is outlined below:

Method of Sample Preparation

(a) Geochemical soil, stream sediments or rock samples were received in the laboratory in wet-strength 4 x 6 Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.

(b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80-mesh fraction was transferred into a new bag for analysis later.

(c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

Method of Digestion

(a) 5.00 - 10.00 grams of the minus 80-mesh samples were used. Samples were weighed out by using a top-loading balance into beakers.

(b) 20 ml of Aqua Regia (3:1 HCl:HN03) were used to digest the samples over a hot plate vigorously.

(c) The digested samples were filtered and the washed pulps were discarded and the filtrate was reduced to abhout 5 ml.

(d) The Au comples ions were extracted into diisobutyl katone and thiourea medium. (Anion exchange liquids "Aliquot 336").

(e) Separate funnels were used to separate the organic layer.

Method of Detection

The gold analyses were detected by using a Techtron Model AA5 Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip

Method of Detection - (Continued)

chart recorder. A hydrogen lamp was used to correct any background interferences. The gold values in parts per billion were calculated by comparing them with a set of gold standards.

The analyses were supervised or determined by Mr. Conway Chun or Mr. Eddie Tang and his laboratory staff.

3.3 SOIL GEOCHEMISTRY

Soil sampling has outlined local anomalies in base and precious metals, these areas rarely extending over a distance of 100 meters. In a few cases, one site may contain high values in several elements, but generally, the anomalies are local and pertain to only one metal.

The soil samples were taken using a grid system, the road and stream were also used as control. Follow-up soil sampling could be done between the lines presently spaced at 250 m intervals to define anomalous areas. The following is a discussion of each element's population. A table of summary statistics is also provided.

Copper

The background range for copper varies from undetectable to 30 ppm Cu. The high of 62 ppm Cu at L2+50N, 2+50E is considered anomalous and coincides with other base metal values.

Lead

The background range for lead varies from 5 ppm to 50 ppm Pb. The high value of 520 ppm occurs with other base metal highs and is considered anomalous. A few soil samples have values between 100 ppm and 200 ppm. These samples are scattered throughout the grid and are not considered to be anomalous.

Zinc

Normal background values for zinc range from 5 ppm to 80 ppm Zn. The highest value of 1630 ppm Zn is in an area of anomalous values in Zn only, at L7+50N,

Zinc - (Continued)

between 7+75E and 9+00E. These high values have been attributed to the poor drainage in the area and the large percentage or organic material in the sample.

Molybdenum

The background values for molybdenum vary from the detection limit to 5 ppm Mo. The high value of 80 ppm Mo coincides with other base metal highs. A few values between 13 ppm and 34 ppm Mo are found along L7+50N between 3+50E and 4+25E. These values partially coincide with high Zn and Pb values.

Gold

The background values for gold range from the detection limit to 20 ppb An with a high of 230 ppb at L5+00N, 1+75E. Other isolated high values were obtained, but do not correlative with any base or precious metal highs.

Silver

Background values for silver range from detection limit to 1.2 ppm Ag. The high of 3.1 ppm Ag is located at L7+50N, 8+25E, but other silver values in the vicinity are considerably lower. The high value coincides with a high Zn value, although it has been determined that the latter is due to high organic content in the sample.

Tungsten

Background values for tungsten range from detection limit to 10 ppm W, with several values of 20 ppm W. A high of 40 ppm occurs at L7+50W, 5+00E and is coincidental with high copper and gold values.

3.4 ROCK GEOCHEMISTRY

During the few days spent geological mapping and prospecting the Astride Claim, 18 rock samples were collected. Because of the limited sampling, the values for rock geochemistry are not representative of the claim.

Weathered samples were taken from some of the old workings (YP-58, YP-59), however fresh samples were difficult to obtain. The higher values came from the host rock, the quartz veins proved to be barren of mineralization at these sites. Most values for rock geochemistry are considered to be within a low background range for the area.

Copper

All values for copper range from detection limit to 19 ppm Cu. No anomalous high values were found.

Lead

The normal background level for lead ranges from detection limit 30 ppm Pb. A high value of 68 ppm was obtained from an interfoliated quartz vein at YP-75.

Zinc

Most values for zinc range from 1 ppm to 100 ppm Zn, the normal background between 1 ppm and 20 ppm Zn. The high values of 175 ppm is from a piece of float near 7+70N, 3+75E (YP-73).

Molybdenum

Background values for molybdenum range from 1 ppm to 5 ppm Mo. The high of 25 ppm is found in the same sample as the zinc high at YP-73.

Gold

The background for gold ranges from detection limit to 20 ppm Au. The high of 30 ppm is from a lenticular interfoliated quartz vein hosted in a phyllite (Yp-76).

Silver

Background values for silver range from detection limit to 0.3 ppm Au. No high values for silver were obtained.

Tungsten

Tungsten values range from detection limit to 5 ppm W. Only one above background value of 10 ppm W was found but more than 50 percent of the samples were at or below the detection limit for Tungsten.

3.5 SUMMARY

The results of the rock geochemistry did not indicate any anomalous area. The results of the soil geochemistry program indicated areas where further detailed sampling is required to confirm possible anomalous areas. These areas are:

1) L2+50N, 2+50E
2) L7+50N, 7+75E - 5+00E
3) L5+00N, 1+75E

4.0 CONCLUSION

The 1982 Exploration Program has outlined three regions of anomalous geochemistry which warrant further additional follow-up. It is important to find out if the anomalous areas are just a local phenomenon or whether they are wide spread and related to the bedrock. Insufficient sampling of outcrop makes it difficult to determine the presence or absence of anomalous bedrock.

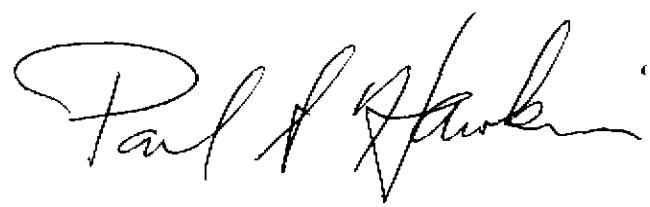
The area is structually complex, the different episodes of jointing and deformation should be studied in more detail to ascertain a proper sequence of events. It is of the up most importance to understand the mode of emplacement of the base and precious metals. The few days spent on the Astride Claim was not sufficient time to gather enough structural data to determine the geological history of the area.

The program in 1981 confirmed the presence of gold and silver in the secondary geochemical environment (Hawkins, P.A., 1981). In 1982, the program was designed to follow-up these anomalous areas. A few areas do appear anomalous and should be studies in more detail to determine the extent of the anomalies. The structure of the area is highly complex and warrants further detailed study both at a megascopic and microscopic scale.

4.1 RECOMMENDED 1983 PROGRAM

The 1983 program should include follow-up geochemistry to determine the extent of the anomalous areas. The grid lines are presently spaced at 250 m intervals. A more detailed study can be carried out by running N-S lines between the already existing lines as well as N-S lines east and west of the grid. Besides being utilized for soil geochemistry, the lines would also provide good control for detailed mapping, as opposed to the reconnaissance geologic mapping done in 1982.

The 1982 program did not include any ground geophysics that had been recommended in the 1981 report on the Yanks Peak Project (Hawkins, P.A., 1981). A geophysical survey using such instruments as proton magnetometer and VLF-EM could be useful in acquiring structual information. Such information should also be gathered by further mapping, but on a detailed scale. Study of handspecimens and thin sections should also be carried out to obtain further information on the structural history.



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APPENDIX

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YANKS PEAK PROJECT

CLAIM LISTING

CARIBOO LAKE AREA

Cariboo Mining Division

RECORD #	CLAIM NAME	LOT #	UNITS	ANNIVERSARY DATE	IN GOOD STANDING UNTIL	HECTARES
282	Old Timer	11337	1	Nov. 17/76	1984 (1986)	12.76
283	Jane	11338	1	Nov. 17/76	1984 (1989)	19.45
510	Junior	11341	1	Oct. 19/77	1984	20.83
511	Little Robert	11340	1	Oct. 19/77	1984 (1990)	16.69
512	Indian Broom	11333	1	Oct. 19/77	1984	18.07
512	Bella Coola	11342	1	Oct. 19/77	1984 (1990)	13.16
513	Frill Fraction	4676	1			
513	Tri Fraction	11346				
513	Junior Extension	11343				
565	Yanks Peak #2	10663	1	Feb. 1/78	1983	20.29
568	Bertha	11332				11.38
574	Yanks Peak	10662	1	Feb. 6/78	1983 (1987)	20.50
580	East Yanks Peak No. 2	10668	1	Feb. 6/78	1983	20.90
			1	Feb. 8/78	1983 (1988)	
602	Betty	11335				23.63
602	Betty Fraction	11334	1	Feb. 20/78	1985 (1991)	
603	Janes Extension No. 1	11331	1	Feb. 20/78	1985	17.86
654	Janes Extension No. 2	11345	1	April 12/78	1985	51.65
655	Junior Fraction	11336	1	April 12/78	1984 (1988)	4.69
656	Old Faithful	11339	1	April 12/78	1984 (1985)	18.73
1612	Cone		18	April 30/80	1983 (1985)	450.00
1611	Rose		10	April 30/80	1983 (1985)	250.00
2003	Astride		4	Sept. 22/80	1983	100.00
3179	YPE Fraction	10667	1	Feb. 18/81	1982 (1986)	5.97
3180	YP Fraction	10665	1	Feb. 18/81	1982 (1985)	1.34
3181	Yanks Peak #3	10664	1	Feb. 18/81	1982 (1992)	20.90
3182	East Yanks Peak	10666	1	Feb. 18/81	1982 (1989)	20.90
4049	Placer Lease		2	Dec. 9/80	1982	41.80
					TOTAL	1,181.50

Author's Qualifications

Paul Alan Hawkins, P. Eng., B.Sc. (Eng)
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Registered Professional Engineer, Province of Alberta

B.Sc. (Eng) Queen's University 1977
Geological Engineering (Mineral Resources)

Work History

May 1981	- Present	Suncor Inc.	Project Geologist
May 1978	- March 1981	Pan Ocean Oil Ltd.	Project Geologist
Feb. 1978	- April 1978	Gulf Minerals	Drill Geologist
May 1977	- Jan. 1978	Asamera Oil	Junior Geologist
July 1976	- Dec. 1976	Urangessellschaft	Senior Assistant
May 1976	- July 1976	Hollinger Mines	Drill Geologist
May 1975	- Sept. 1975	HBOG Mining	Field Assistant
May 1974	- Sept. 1974	Duval Corp.	Field Assistant

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    2nd Year Geology Student,
    University of Waterloo

15. Don Sabo

    1st Year Geology Student, University of Saskatchewan

16. Roy Lush

    Cook

17. Ernst Maas

    Helicopter Pilot

18. Cynthia Bonthoux

    Replacement Cook

1982 CARIBOO AND TCHAIKAZAN MEAN SALARY

CALCULATION

	Daily Rate	
P. Hawkins	$ 234.09	Projects Geologist Cordilleran
D. Dillon	102.26	Tchaikazan Party Chief
C. Lawerence	99.64	Senior Field Assistant
K. Lange	98.34	Senior Field Assistant
V. Rublee	70.49	Junior Field Assistant
K. Russell	70.49	Junior Field Assistant
R. Laing	95.73	Camp Manager
S. Barnhart	70.49	Junior Field Assistant
J. Boyd	78.33	Junior Field Assistant
R. Pressacco	80.36	Junior Field Assistant
G. Lalonde	117.49	Cook
D. Armstrong	99.64	Cariboo Party Chief
D. Newman	80.93	Senior Field Assistant
J. Mirynech	58.75	Junior Field Assistant
M. Ho	70.49	Junior Field Assistant
D. Sabo	70.49	Junior Field Assistant
R. Lush	117.49	
	$1,615.20	
AVERAGE	$ 95.01	

Paul A. Hawkins
September 6, 1982

CARIBOO GOLD PROJECT

1982 ANALYSIS COSTS

Lab: Vangeochem Lab Ltd.
1521 Pemberton Avenue
North Vancouver, B.C.

Rock Samples

Plastic Samples Bag 8" x 13" c/w 7" tie	0.19
Rock Samples Preparation	2.50
Cu Pb Zn Ag Mo	4.85
Trace Analysis Au	4.30
Trace Analysis W	3.75
Save Rejects	0.25
Rock Sample Analysis Cost	15.84

Soil and Steam Sediment Samples

Gusset hi-wet strength geochem bas 4" x 6"	0.07
Soil Sample Preparation	0.60
Cu Pb Zn Ag Mo	4.85
Trace Analysis Au	4.30
Trace Analysis W	3.75
Save Rejects	0.25
Soil and Stream Analysis Cost	13.82

A S T R I D E M I N E R A L C L A I M

ESTIMATED EXPENDITURES

Field Exploration Costs		
151.54 x 9	$1,363.86	
Camp Support		
137.51 x 4	550.04	
Analysis Costs		
120 Soil Samples x 13.82	1,658.40	
Shipping Charges	30.00	
TOTAL FIELD EXPENSES	$3,602.30	
+ 10%	360.23	
	$3,962.53	$3,962.53
Report Preparation		
Salaries 2 x 234.09	$ 468.18	
3 x 99.64	298.92	
3 x 99.64	298.92	
Typing & Repro & Data Pro., Draft	1,200.00	
	$2,266.02	$2,266.02
		$6,228.55

ESTIMATED FIELD EXPLORATION COSTS

YANKS PEAK PROJECT

Camp Costs

Food & Catering Costs	$ 25.00	
Equipment & Camp Costs	10.00	
Camp Fuel	2.50	
Transportation & Logistics	5.00	
	$ 42.50	$42.50
PRORATED SALARY	$ 95.01	$95.01

TRANSPORTATION COSTS

Truck Rental 2 x 1000	$2,000.00	
Fuel (month)	225.00	
Maintenance	300.00	
	$2,525.00	
Per Man Day Cost 6 x 30 = 180 manday	14.03	$14.03
		$151.54

GEOCHEMICAL DATA LISTING

*** MAPPER SYSTEM *** SUNCOR INC

DATE 111282 PAGE 1

.DATE 26 OCT 82 11:50:07 RID 6 26 OCT 82 PHAWK

*CHEMICAL LAB ANALYSIS REPORT FOR ASTRIDE CLAIM - YANKS PK. LAB : VGC (TYPE F)

	*RS.	PRJYR	ROCK.	SAMPLE.	MC	CU (PPM)	PB (PPM)	ZN (PPM)	AG (PPM)	AU (PPB)	W (PPM)
6.	50	0508	2	201554	0	12	29	26	0.3	30	0
7.	50	0508	2	201555	1	20	99	47	0.3	0	0
8.	50	0508	2	201556	0	6	9	0	0	15	1.2
9.	50	0508	2	201557	1	14	136	19	1.4	15	5
10.	50	0508	2	201558	1	19	13	69	0.0	20	0
11.	50	0508	2	201559	0	12	87	14	1.3	35	0
12.	50	0508	2	201560	5	19	66	95	1.0	15	0
13.	50	0508	2	201561	2	41	38	71	0.0	230	0
14.	50	0508	2	201562	2	16	14	40	0.0	0	0
15.	50	0508	2	201563	0	8	9	18	0.3	20	0
16.	50	0508	2	201564	15	16	13	99	0.3	25	5
17.	50	0508	2	201565	1	23	12	50	1.2	20	0
18.	50	0508	2	201566	1	20	29	36	1.2	5	0
19.	50	0508	2	201567	2	21	21	48	5	25	0.5
20.	01	0508	2	201568	2	18	41	59	2.2	45	0
21.	50	0508	2	201569	1	13	19	31	1.5	20	0
22.	50	0508	2	201570	1	12	25	34	0.4	0	5
23.	50	0508	2	201571	3	9	13	24	0.3	20	5
24.	50	0508	2	201572	2	8	26	24	0.4	55	5
25.	50	0508	2	201573	0	9	13	25	0.2	0	5
26.	50	0508	2	201574	3	11	15	52	0.1	20	5
27.	50	0508	2	201575	9	20	19	236	0.9	5	0
28.	50	0508	2	201576	7	12	58	269	0.6	0	5
29.	50	0508	2	201577	3	16	39	204	1.2	10	10
30.	50	0508	2	201578	0	12	34	63	1.0	10	0
31.	50	0508	2	201579	5	10	31	116	1.1	0	5
32.	50	0508	2	201580	5	20	35	109	0.5	20	0
33.	50	0508	2	201581	0	15	26	45	0.5	5	0
34.	50	0508	2	201582	0	11	22	39	0.1	10	5
35.	50	0508	2	201583	1	10	14	31	0.4	0	5
36.	50	0508	2	201584	0	16	19	40	0.4	40	5
37.	50	0508	2	201585	2	8	12	20	0.4	0	5
38.	50	0508	2	201586	2	12	19	41	0.3	10	5
39.	50	0508	2	201587	2	12	22	70	0.0	15	0
40.	50	0508	2	201588	2	15	17	38	0.2	0	0
41.	50	0508	2	201589	1	14	31	87	0.3	10	0
42.	50	0508	2	201590	1	12	34	70	0.6	20	0
43.	50	0508	2	201591	1	16	32	66	0.8	10	0
44.	50	0508	2	201592	2	14	29	65	0.2	15	5
45.	50	0508	2	201623	3	26	134	91	0.7	0	5
46.	50	0508	2	201624	1	19	49	46	0.5	0	0
47.	50	0508	2	201625	1	12	38	15	0.3	10	0
48.	50	0508	2	201626	2	8	29	20	0.2	10	5
49.	50	0508	2	201627	2	14	31	51	0.6	0	0
50.	50	0508	2	201628	3	26	88	114	0.2	10	0
51.	50	0508	2	201629	0	6	8	19	0.0	0	0
52.	50	0508	2	201630	2	5	11	21	0.1	0	0
53.	50	0508	2	201631	0	39	9	42	0.3	15	0
54.	50	0508	2	201632	0	19	15	51	1.0	10	0
55.	50	0508	2	201633	2	34	121	126	3.0	20	5
56.	50	0508	2	201634	1	23	31	71	0.0	0	0
57.	50	0508	2	201635	2	26	95	81	0.9	5	0
58.	50	0508	2	201636	3	19	57	51	0.4	30	0
59.	50	0508	2	201637	15	21	53	68	0.7	10	0

*CHEMICAL LAB ANALYSIS REPORT FOR ASTRIDE CLAIM - YANKS PK. LAB : VGC (TYPE F)

*	*RS.	PRJYR	ROCK	SAMPLE#	MO (PPM)	CU (PPM)	PB (PPM)	ZN (PPM)	AG (PPM)	AU (PPB)	W (PPM)
60.	50	0508	2	201638	21	17	34	70	1.1	0	0
61.	50	0508	2	201639	24	56	65	680	1.6	5	5
62.	50	0508	2	201640	13	26	29	1630	0.4	0	5
63.	50	0508	2	201641	3	33	33	300	0.6	10	0
64.	50	0508	2	201642	3	24	29	78	0.3	10	0
65.	50	0508	2	201688	2	18	33	68	0.1	25	0
66.	50	0508	2	201689	0	14	25	65	0.0	0	0
67.	50	0508	2	201690	3	48	43	130	0.2	30	40
68.	50	0508	2	201691	5	23	39	95	0.8	10	0
69.	50	0508	2	201692	3	15	25	300	0.2	10	10
70.	50	0508	2	201693	2	12	13	49	0.1	10	0
71.	50	0508	2	201694	2	14	23	52	0.1	80	0
72.	50	0508	2	201695	0	10	56	61	1.5	0	0
73.	50	0508	2	201696	1	43	31	73	1.6	5	0
74.	50	0508	2	201697	0	5	12	11	0.3	0	0
75.	50	0508	2	201698	1	14	19	26	0.2	0	0
76.	50	0508	2	201699	2	7	16	20	0.1	0	0
77.	50	0508	2	201700	1	11	22	33	0.2	10	0
78.	50	0508	2	201701	1	45	38	204	1.6	20	5
79.	50	0508	2	201702	4	28	24	500	0.5	15	20
80.	50	0508	2	201703	3	25	49	122	3.1	10	5
81.	50	0508	2	201704	1	29	34	111	0.8	0	0
82.	50	0508	2	201705	1	23	43	115	1.1	0	0
83.	50	0508	2	201706	3	17	33	120	0.6	10	0
84.	50	0508	2	201707	2	12	18	62	0.2	0	0
85.	50	0508	2	201708	1	16	21	74	0.0	0	0
86.	50	0508	2	202190	1	33	86	76	0.9	40	5
87.	50	0508	2	202191	2	18	70	32	0.4	15	5
88.	50	0508	2	202192	2	6	30	23	0.4	0	5
89.	50	0508	2	202193	0	27	460	76	1.1	5	5
90.	50	0508	2	202194	0	25	30	38	0.8	100	0
91.	50	0508	2	202195	0	31	29	59	0.7	0	0
92.	50	0508	2	202196	1	5	9	16	0.2	20	20
93.	50	0508	2	202197	2	16	18	57	0.0	0	0
94.	50	0508	2	202198	1	19	15	54	0.1	0	5
95.	50	0508	2	202199	2	13	15	80	0.2	0	5
96.	50	0508	2	202200	80	62	520	670	1.2	10	30
97.	50	0508	2	202201	9	37	193	256	0.6	10	10
98.	50	0508	2	202202	10	23	34	110	0.3	0	10
99.	50	0508	2	202203	2	21	27	51	0.7	15	10
100.	50	0508	2	202204	1	11	16	35	0.1	5	20
101.	50	0508	2	202205	1	16	19	62	0.8	0	0
102.	50	0508	2	202206	1	22	40	71	0.3	5	0
103.	50	0508	2	202207	0	26	46	94	0.5	0	10
104.	50	0508	2	202208	2	27	49	96	0.0	10	
105.	50	0508	2	202209	3	21	51	117	0.3	10	10
106.	50	0508	2	202210	2	12	20	43	0.5	5	20
107.	50	0508	2	202211	2	23	44	92	0.1	45	10
108.	50	0508	2	202212	1	11	21	41	0.7	10	20
109.	50	0508	2	202213	2	14	23	59	0.4	0	5
110.	50	0508	2	202214	1	15	39	83	0.2	0	5
111.	50	0508	2	202215	2	18	40	119	0.8	15	0
112.	50	0508	2	202216	2	19	32	96	0.2	0	0
113.	50	0508	2	202217	2	13	54	105	1.1	10	0
114.	50	0508	2	202218	1	11	21	51	0.1	15	20
115.	50	0508	2	202219	2	10	21	52	0.3	10	20
116.	50	0508	2	202220	4	14	26	54	0.3	10	20
117.	50	0508	2	202221	4	25	30	134	0.7	5	20
118.	50	0508	2	202222	4	23	24	173	0.0	15	5

*CHEMICAL LAB ANALYSIS REPORT FOR ASTRIDE CLAIM - YANKS PK. LAB : VGC (TYPE F)

*RS.	PRJYR	DOCK	SAMPLE#	MO	CU	PB	ZN	AG	AU	W
				AA(PPM)	AA(PPM)	AA(PPM)	AA(PPM)	AA(PPM)	AA(PPB)	AA(PPM)
119.	50	05082	202223	5	25	46	135	0.5	0	0
120.	50	05082	202224	3	24	37	76	0.4	5	0
121.	50	05082	202225	4	23	42	102	0.3	0	0
122.	50	05082	202226	2	17	19	49	0.3	10	10
123.	50	05082	202227	2	21	20	57	0.2	10	10
124.	50	05082	202228	2	25	26	89	0.4	0	20
125.	50	05082	202229	3	19	19	81	0.1	20	20
126.	50	05082	202230	2	19	41	92	0.9	20	10

127. ***** END REPORT *****

*** MAPPER SYSTEM *** SUNCOR INC DATE 111282 PAGE 1

.DATE 12 NOV 82 15:12:05 RID 65 12 NOV 82 PHAWK
*CHEMICAL LAB ANALYSIS REPORT FOR ROCKS FROM YANKS PEAK. LAB : VGC (TYPE F)

*RS	.PRJYR	.ROCK.SAMPLE	.CU	.PB	.ZN	.MO	.W	.AU	.AG
*	.	.NUMBER	.AA(PPM)	.AA(PPM)	.AA(PPM)	.AA(PPM)	.AA(PPM)	.AA(PPB)	.AA(PPM)
80	05082	CP0172	5	6	7	2	0	20	0.2
80	05082	CP0173	2	5	1	2	5	20	0.1
80	05082	CP0174	2	24	46	1	0	0	0.2
80	05082	CP0175	2	4	6	1	0	15	0.0
80	05082	CP0176	5	18	15	1	5	10	0.0
80	05082	CP0177	10	45	93	5	5	20	0.0
80	05082	CP0178	16	16	51	1	0	0	0.2
80	05082	CP0243	6	13	175	25	10	5	0.3
80	05082	CP0244	19	11	8	2	5	0	0.2
80	05082	CP0245	5	9	49	1	5	0	0.1
80	05082	CP0246	8	68	64	2	0	20	0.3
80	05082	CP0247	0	24	30	2	0	30	0.1
80	05082	CP0248	1	7	37	1	0	15	0.0
80	05082	CP0249	9	75	15	3	0	0	0.1
80	05082	CP0257	0	17	15	3	0	10	0.0

..... END REPORT .....

cc Paul Hawkins

rec'd OCT 1 1982 · Filing Fees · $400 · 200 · Sept 11/82

Province of British Columbia
Ministry of Mines and Petroleum Resources

Cariboo Mining Div.
RECORDED
SEP 23 1982
Quesnel, B.C.
Receipt No. 1371216

MINERAL ACT

Statement of Exploration and Development

I, Paul A. Hawkins (Name) Agent for Suncor Inc. (Name)

P. O. Box 38 (Address) P. O. Box 38 (Address)

Calgary, Alberta Calgary, Alberta

Valid subsisting F.M.C. No. 244686 Valid subsisting F.M.C. No. 244770

STATE THAT

1. I have done, or caused to be done, work on the Astride Mineral Claim(s) Record No.(s) 2003 Situate at Yanks Peak in the Cariboo Mining Division, to the value of at least .... dollars. Work was done from the 15th day of August 1982, to the 25th day of August 1982.

2. The following work was done in the 12 months in which such work is required to be done:

(COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)

A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by section 13 of regulations.)	COST
TOTAL PHYSICAL	

B. PROSPECTING (Details in report submitted as per section 9 of regulations.) (The itemized cost statement must be part of the report.)

	COST
TOTAL PHYSICAL AND PROSPECTING	

I wish to apply $........ of this work to the claims listed below.

(State number of years to be applied to each claim and its month of record.)

(For C and D sections, please turn over.)

C. DRILLING (Details in report submitted as per section 8 of regulations.)
(The itemized cost statement must be part of the report.)

	COST

D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL
(Details in report submitted as per section 5, 6, or 7 of regulations.)
(The itemized cost statement must be part of the report.)
(State type of work in space below.)

1982 Geological Mapping and Geochemistry	
(Suncor Report #9154)	6 228.55
TOTAL OF C AND D	6 228.55

Who paid for the above-described work? Name Suncor Inc.
Address P. O. Box 38
Calgary, Alberta

Portable Assessment Credits (PAC) Withdrawal Request	AMOUNT
Amount to be withdrawn from owner(s) account(s):	
Name of Owner	
(May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.) 1.	
2.	
3.	
4.	
TOTAL WITHDRAWAL	
TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL	6 228.55

I wish to apply $ 4 000 of this work to the claims listed below.
(State number of years to be applied to each claim and its month of record.)

2003 Astride (09) 4 units 5 years $4 000 + credit $401

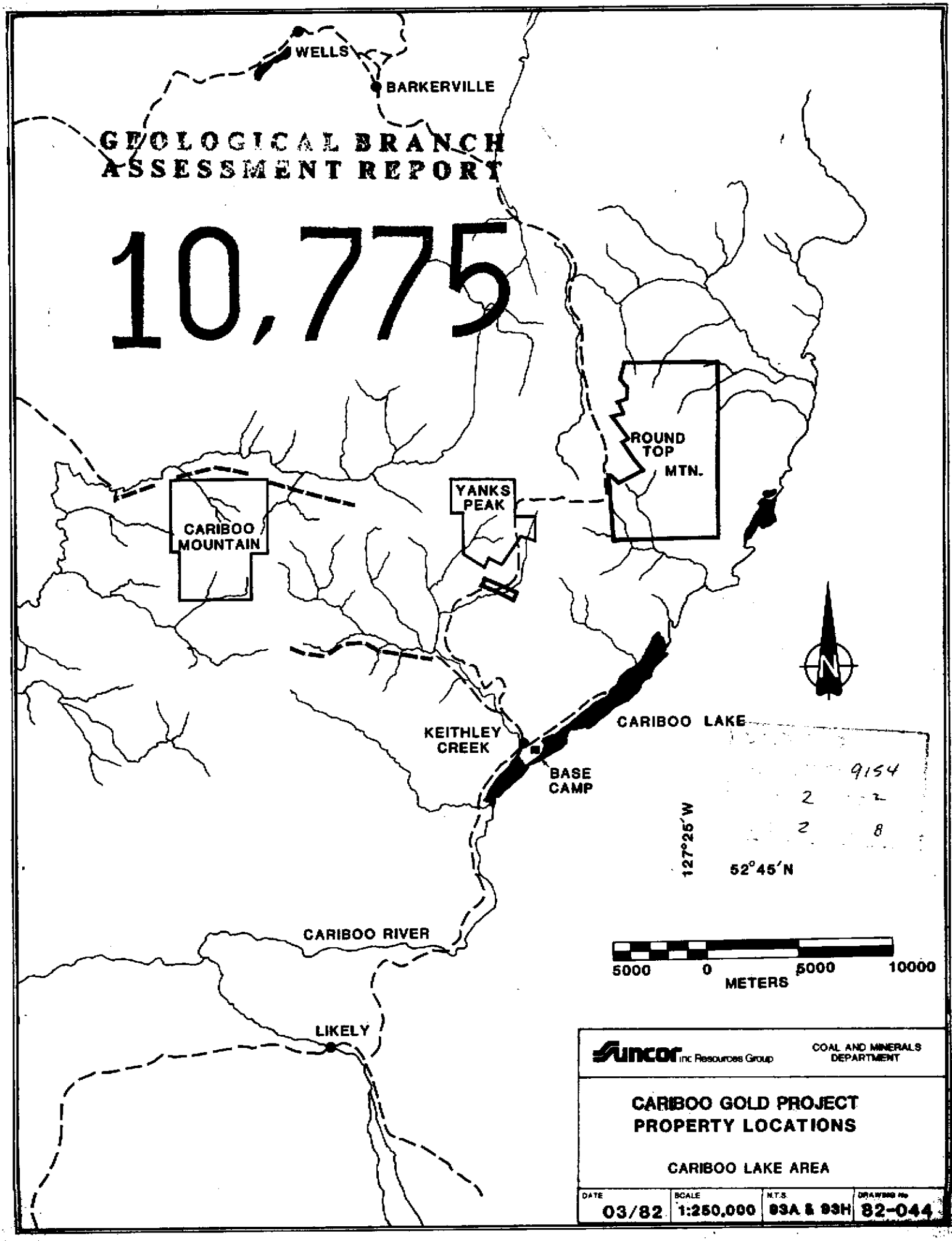
Value of work to be credited to portable assessment credit (PAC) account(s).
(May only be credited from the approved value of C and (or) D not applied to claims.)

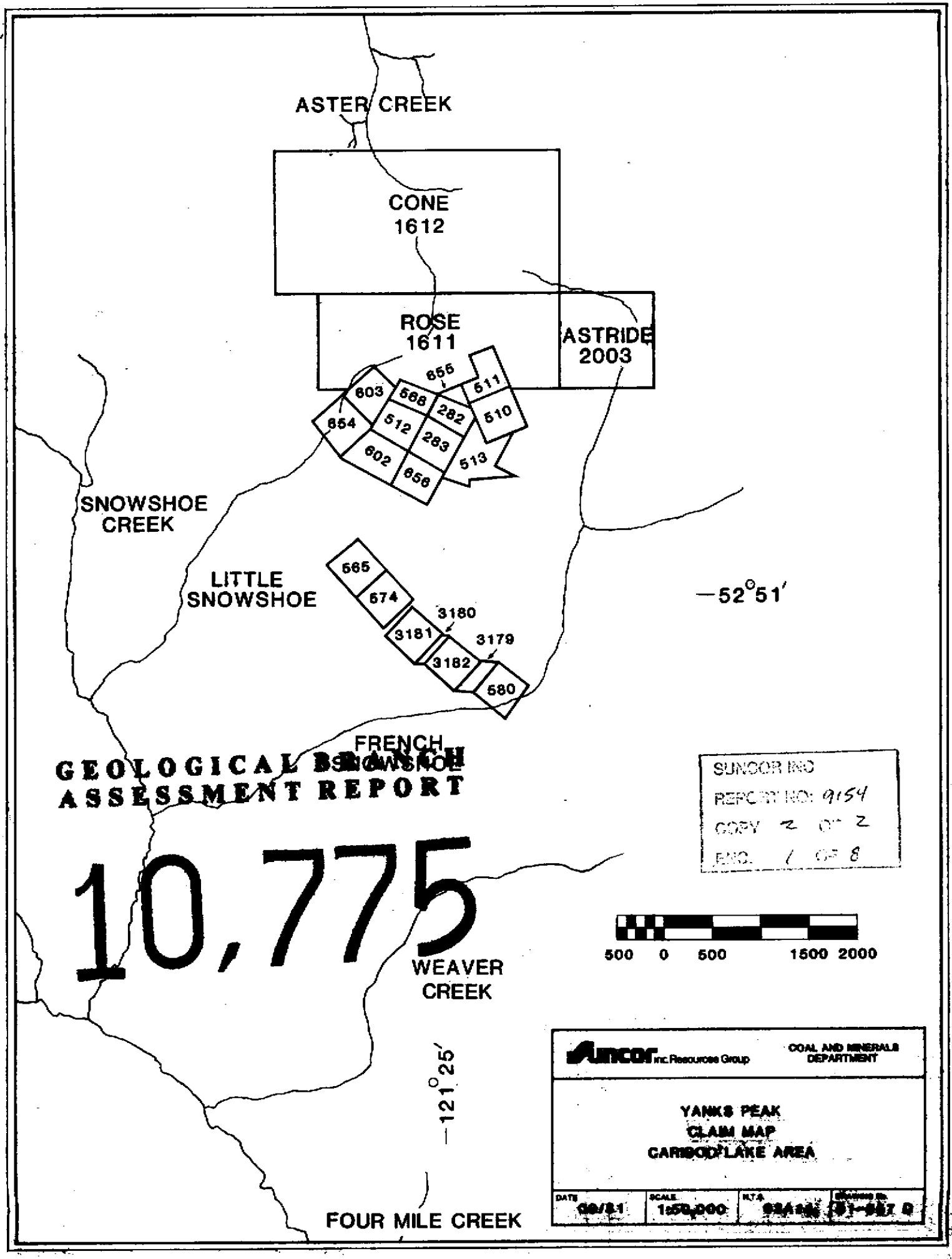
	Name	AMOUNT
In owner(s) name.	1. Suncor Inc.	2 228.55
	2.	
	3.	
In operator(s) name (person paying for the work).	1.	
	2.	
	3.	

Paul A. Hawkins
(Signature of Applicant)

Paul A. Hawkins
Projects Geologists

3068 (77-3091 (2)


WELLS
BARKERVILLE
GEOLOGICAL BRANCH
ASSESSMENT REPORT
10,775
ROUND TOP MTN.
YANKS PEAK
CARIBOO MOUNTAIN
KEITHLEY CREEK
CARIBOO LAKE
BASE CAMP
9154
127°25'W
52°45'N
CARIBOO RIVER
LIKELY
5000 0 5000 10000
METERS
Suncor Inc Resources Group
COAL AND MINERALS DEPARTMENT
CARIBOO GOLD PROJECT
PROPERTY LOCATIONS
CARIBOO LAKE AREA
DATE 03/82
SCALE 1:250,000
N.T.S. 93A & 93H
DRAWING No 82-044


ASTER CREEK
CONE
1612
ROSE
1611
ASTRIDE
2003
655
603
566
282
511
510
654
512
283
602
656
513
SNOWSHOE
CREEK
LITTLE
SNOWSHOE
565
574
3180
3181
3179
3182
580
-52°51'
FRENCH
GEOLOGICAL BRANCH
ASSESSMENT REPORT
10,775
WEAVER
CREEK
500 0 500 1500 2000
-121°25'
FOUR MILE CREEK
SUNCOR INC
REPORT NO: 9154
COPY 2 OF 2
ENC. 1 OF 8
Suncor Inc. Resource Group
COAL AND MINERALS DEPARTMENT
YANKS PEAK
CLAIM MAP
CARIBOO LAKE AREA
DATE
SCALE
1:50,000
N.T.S.

121° 24' 25"

To Roundtop Mtn.

N

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

LUCE CREEK
CLAIMS

(NOT MAPPED)

UNIT B

UNIT A

L750N

L500N

L250N

YP-73 YP-72 YP-71 YP-70 YP-69 YP-59 YP-60 YP-58 YP-61 YP-62 YP-63 YP-64 YP-65 YP-66 YP-67 YP-74 YP-75 YP-79 YP-80 YP-76

Trib.

Trib.

Trib.

52° 51' 50"

To Snowshoe Goldmine

French Snowshoe Creek

To Snarlberg (Yanks Peak)

UNIT A - dk. grey to black argillite/slate/phyllite with occasional pyrite cubes and variable silica banding.

- possibly Midas Fm. *

UNIT B - interbedded grey schists, phyllites, siltstones, sandstones, and conglomerates - schists may be quite quartz rich and sandstones are often quartzite.

- sandstones are locally slightly calcarous.
- minor disseminated pyrite throughout - especially in sandstones.
- lithologies generally appear somewhat gradational between above listed end members.
- paraconglomerate at YP-80 (basal congl.?)
- possibly Snowshoe Fm. *

LEGEND

- Claim Post Located in Field
- Estimated Claim Post Position
- Claim Boundary
- Road
- Creek
- L500N — Grid Line (for Grid YP-82-36)
- Area of Discontinuous Outcrop
- × YP-76 Geological Site and Number
- Geological Contact (known, approximate, assumed)
- Foliation (dip unknown, inclined, vertical)
- Joint (inclined, vertical)
- Quartz Vein (dip unknown, inclined, vertical)
- Joint in Quartz Vein (inclined, vertical)
- Bedding (dip unknown, inclined, vertical)

100 50 0 100 200 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,775

SUNCOR INC
REPORT NO: 9154
COPY 2 OF 2
ENC. 3 OF 8

Suncor inc. Resources Group — COAL AND MINERALS DEPARTMENT

(1)

GEOLOGY - STRUCTURE

ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-208-C

121° 24' 25"

52° 51' 50"

To Roundtop Mtn.

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

LUCE CREEK
CLAIMS

(NOT MAPPED)

UNIT B

YP-73(DKA-YP-264)
YP-72(DKA-YP-263)

L750N

YP-71
(CL-YP-244, 245)

YP-74(DKA-YP-265, 266, 267)
YP-75(DKA-YP-268)

Trib.

YP-80
(DKA-YP-273, 274)

YP-7a(DKA-YP-269)
YP-77(DKA-YP-270)
YP-78(DKA-YP-271)
YP-79(DKA-YP-272)

YP-70

YP-59
(CL-YP-239, 240)

YP-60
(CL-YP-241)

YP-69(CL-YP-243)

L500N

YP-58
(CL-YP-238)

YP-61(CL-YP-242)

YP-62

YP-63
YP-64

YP-65
YP-66
YP-67

L250N

To
Snowshoe
Goldmine

To Snarlberg
(Yanks Peak)

French Snowshoe Creek

UNIT A - dk. grey to argillite/slate/phyllite with occasional pyrite cubes and variable silica banding.
- possibly Midas Fm.*

UNIT B - interbedded grey schists, phyllites, siltstones, sandstones, and conglomerates - schists may be quite quartz rich and sandstones are often quartzite.
- sandstones are locally slightly calcarous.
- minor disseminated pyrite throughout - especially in sandstones.
- lithologies generally appear somewhat gradational between above listed end members.
- paraconglomerate at YP-80 (basal congl.?)
- possibly Snowshoe Fm.*

LEGEND

- Claim Post Located in Field
- Estimated Claim Post Position
- Claim Boundary
- Road
- Creek
- —L500N— Grid Line (for Grid YP-82-36)
- Area of Discontinuous Outcrop
- × YP-76 Geological Site and Number
- Geological Contact (known, approximate, assumed)
- Foliation (dip unknown, inclined, vertical)
- Joint (inclined, vertical)
- Quartz Vein (dip unknown, inclined, vertical)
- Joint in Quartz Vein (inclined, vertical)
- Bedding (dip unknown, inclined, vertical)

(DKA-YP-273, 274) - Rock Sample Numbers (underlined sample numbers were sent in for analysis)

100 50 0 100 200 Metres

*Formation names after Holland (1954)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,775

Suncor Inc. Resources Group — COAL AND MINERALS DEPARTMENT

GEOLOGY - SITE AND SAMPLE LOCATIONS

ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

(2)

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-208-D

121° 24' 25"

52° 51' 50"

To Roundtop Mtn.

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

LUCE CREEK
CLAIMS

(NOT MAPPED)

L750N

L500N

L250N

UNIT A

UNIT B

YP-59 YP-58 YP-60 YP-61 YP-62 YP-63 YP-64 YP-65 YP-66 YP-67 YP-69 YP-70 YP-71 YP-72 YP-73 YP-74 YP-75 YP-76 YP-79 YP-80

71° 42° 60° 57° 51° 40° 36°

Trib.

Trib.

Trib.

To Snowshoe Goldmine

To Snarlberg (Yanks Peak)

French Snowshoe Creek

UNIT A - dk. grey to black argillite/slate/phyllite; with occasional pyrite cubes and variable silica banding

- possibly Midas Fm.*

UNIT B - interbedded grey schists, phyllites, siltstones, sandstones, and conglomerates - schists may be quartz rich & sandstones are often quartzite.

- sandstones are locally slightly calcareous
- minor disseminated pyrite throughout - especially in sandstones.
- lithologies generally appear somewhat gradational between above listed end members.
- paraconglomerate at YP-80 (basal congl.?)
- possibly Snowshoe Fm.*

LEGEND

- Claim Post Located in Field
- Estimated Claim Post Position
- Claim Boundary
- Road
- Creek
- L500N — Grid Line (for Grid YP-82-36)
- Area of Discontinuous Outcrop
- × YP-76 Geological Site and Number
- Geological Contact (known, approximate, assumed)
- Foliation (dip unknown, inclined, vertical)
- Joint (inclined, vertical)
- Quartz Vein (dip unknown, inclined, vertical)
- Joint in Quartz Vein (inclined, vertical)
- Bedding (dip unknown, inclined, vertical)

100 50 0 100 200 Metres

* Formation names after Holland (1954)

Suncor Inc. Resources Group — COAL AND MINERALS DEPARTMENT

GEOLOGY

ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

3

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-208-B

121° 24' 25"

To Roundtop Mtn.

N

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

YP-82-36

LUCE CREEK
CLAIMS

Trib.

Trib.

Trib.

L7+50N

L5+00N

L2+50N

52° 51' 50"

0+00 1+00E 2+00E 3+00E 4+00E 5+00E 6+00E 7+00E 8+00E 9+00E 10+00E

201623 201624 201625 201626 201627 201628 201629 201630 201631 201632 201633 201634 201635 201636 201637 201638 201639 201640 201641 201642 201690 201691 201692 201693 201694 201695 201696 201697 201698 201699 201700 201701 201702 201703 201704 201705 201706 201707 201708 N.S.

201554 201555 201556 201557 201558 201559 201560 201561 201562 201563 201564 201565 201566 201567 201568 201569 201570 201571 201572 201573 201574 201575 201576 201577 201578 201579 201580 201581 201582 201583 201584 201585 201586 201587 201588 201589 201590 201591 201592 201688 201689

202190 202191 202192 202193 202194 202195 202196 202197 202198 202199 202200 202201 202202 202203 202204 202205 202206 202207 202208 202209 202210 202211 202212 202213 202214 202215 202216 202217 202218 202219 202220 202221 202222 202223 202224 202225 202226 202227 202228 202229 202230

To
Snowshoe
Goldmine

French Snowshoe
Creek

To Snarlberg
(Yanks Peak)

LEGEND

- Claim Post (Located in Field)
- Claim Post (Estimated Position)
- Claim Boundary
- Road
- Creek
- Geochemistry Sample Location on Grid Line
- ( ) Claim Number

100 50 0 100 200

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,775

SUNCOR INC
REPORT NO: 9154
COPY 2 OF 2
ENC. 6 OF 8

Suncor Inc. Resources Group — COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY
SAMPLE LOCATIONS
ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

(4)

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-197

REVISED 07/10/82

121° 24' 25"

52° 51' 50"

To Roundtop Mtn.

N

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

YP-82-36

L7+50N

L5+00N

L2+50N

0+00 1+00E 2+00E 3+00E 4+00E 5+00E 6+00E 7+00E 8+00E 9+00E 10+00E

Trib.

Trib.

Trib.

L7+50N	1+00E	2+00E	3+00E	4+00E	5+00E	6+00E	7+00E	8+00E	9+00E	10+00E
26/134/91/3	19/49/46/1	12/38/15/1	8/29/20/2	14/31/51/2	26/88/114/3	6/8/19/0	5/11/21/2	39/9/42/0	19/15/51/0	34/121/126/2
23/31/71/1	26/95/81/2	18/57/51/3	21/53/68/15	17/34/70/31	56/65/680/34	26/29/1630/13	33/33/300/3	24/28/70/3	48/43/130/3	23/39/95/5
15/25/300/3	12/13/49/2	14/23/52/2	10/56/61/0	43/31/73/1	5/12/11/0	14/19/26/1	7/16/20/2	11/22/33/1	45/38/204/1	28/24/500/4
25/49/122/3	29/34/111/1	23/43/115/1	17/33/120/3	12/18/62/2	16/21/74/1	N.S.				

L5+00N	1+00E	2+00E	3+00E	4+00E	5+00E	6+00E	7+00E	8+00E	9+00E	10+00E
12/29/26/0	20/99/47/1	6/188/9/0	14/136/19/1	19/13/69/1	12/87/14/0	19/66/95/5	41/38/71/2	16/14/40/2	8/9/18/0	16/13/99/15
23/12/50/1	20/29/36/1	21/21/48/2	18/41/59/2	13/19/31/1	12/25/34/1	9/13/24/3	8/26/24/2	9/13/25/0	11/15/52/3	20/19/236/9
12/58/269/7	16/39/204/3	12/34/63/0	10/31/116/5	20/35/109/5	15/26/45/0	11/22/39/0	10/14/31/1	16/19/40/0	8/12/20/2	12/19/41/2
12/22/70/2	15/17/38/2	14/31/87/1	12/34/70/1	16/32/66/1	14/29/65/2	18/33/68/2	14/25/65/0			

L2+50N	1+00E	2+00E	3+00E	4+00E	5+00E	6+00E	7+00E	8+00E	9+00E	10+00E
33/86/76/1	18/70/32/2	6/30/23/2	27/460/76/0	25/30/38/0	31/29/59/0	5/9/16/1	16/18/57/2	18/15/54/1	13/15/80/2	62/520/670/80
37/193/256/9	23/34/110/10	21/27/51/2	11/16/35/1	16/19/62/1	22/40/71/1	26/46/94/0	27/49/96/2	21/51/117/3	12/20/43/2	23/44/92/2
11/21/41/1	14/23/59/2	15/39/83/1	18/40/119/2	19/32/96/2	13/54/105/2	11/21/51/1	10/21/52/2	14/26/54/4	25/30/134/4	23/28/173/4
25/46/135/5	24/37/76/3	23/42/102/4	17/19/49/2	21/20/57/2	25/26/89/2	19/19/81/3	19/41/92/2			

LUCE CREEK
CLAIMS

To Snowshoe Goldmine

To Snarlberg (Yanks Peak)

French Snowshoe Creek

LEGEND

- Claim Post (Located in Field)
- Claim Post (Estimated Position)
- Claim Boundary
- Road
- Creek
- Geochemistry Sample Location on Grid Line
- ( ) Claim Number
- Cu/Pb/Zn/Mo Geochemistry Results (all in ppm)

100 50 0 100 200 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,775

SUNCOR INC
REPORT NO: 9154
COPY 2 OF 2
ENC. 7 OF 9

Suncor Inc. Resources Group — COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY

COPPER, LEAD, ZINC & MOLYBDENUM

(5)

ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-207-8

121° 24' 25"

To Roundtop Mtn.

N

CONE
(1612)

ROSE
(1611)

ASTRIDE
(2003)

YP-82-36

Trib.

Trib.

Trib.

L7+50N

L5+00N

L2+50N

52° 51' 50"

0+00 1+00E 2+00E 3+00E 4+00E 5+00E 6+00E 7+00E 8+00E 9+00E 10+00E

LUCE CREEK
CLAIMS

To
Snowshoe
Goldmine

French Snowshoe
Creek

To Snarlberg
(Yanks Peak)

LEGEND

- Claim Post (Located in Field)
- Claim Post (Estimated Position)
- Claim Boundary
- Road
- Creek
- Geochemistry Sample Location on Grid Line
- ( ) Claim Number
- Au, Ag, W — Geochemistry Results (Au in ppb, Ag and W in ppm)

100 50 0 100 200 Metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,775

Suncor inc. Resources Group — COAL AND MINERALS DEPARTMENT

SOIL GEOCHEMISTRY

(6)

GOLD, SILVER AND TUNGSTEN

ASTRIDE CLAIM
GRID: YP-82-36
CARIBOO GOLD PROJECT
CARIBOO LAKE AREA, B.C.

DATE	SCALE	N.T.S.	DRAWING No.
September, 1982	1:5000	93A/14	82-207-A