

# Searchlight Resources Inc.

218-744 West Hastings Street, Vancouver, British Columbia, Canada, V6C 1A5

Phone: (604)684-2361 or (604)271-6556

86-911-15461

## GEOCHEMICAL REPORT

on the

AIM PROPERTY

VERNON MINING DIVISION

BRITISH COLUMBIA

Latitude: 50° <sup>07.5'</sup> ~~08~~ N  
Longitude: 118° <sup>32.4'</sup> ~~33~~ W

N.T.S. 82 L/2E

**Owner:** Steven E. Arnold,  
Site 23, Comp 23, RR #1  
Vernon, B.C.  
V1T 6L4

**Operator:** KD Resources Inc.  
Box 298  
Vernon, B.C.  
V1T 6M2

FILMED

by

David M. Nelles B.Sc.

November 28, 1986

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GEOLOGICAL BRANCH  
ASSESSMENT REPORT

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## INTRODUCTION

The Aim property, situated in the Vernon Mining Division approximately 33 kilometers east-southeast of Lumby, B.C., comprises one 20 unit modified grid mineral claim located in October, 1985 to encompass ground previously held by Mohawk Oil Co. Ltd.

The 1985-6 assessment program on the property consisted of two separate heavy mineral and stream sediment geochemical surveys focusing on the isolation of precious metal bearing creeks.

At the request of Mr Bob York-Hardy of KD Resources Inc., the writer reviewed the data generated from these programs. This data forms the basis of this report.

## LOCATION AND ACCESS

The Aim property is situated in the Vernon Mining Division on N.T.S. sheet 82 L/2E, centered near on 50° 08' north latitude and 118° 33' west longitude, about 33 kilometers east-southeast of the town of Lumby, B.C. (Figure 1).

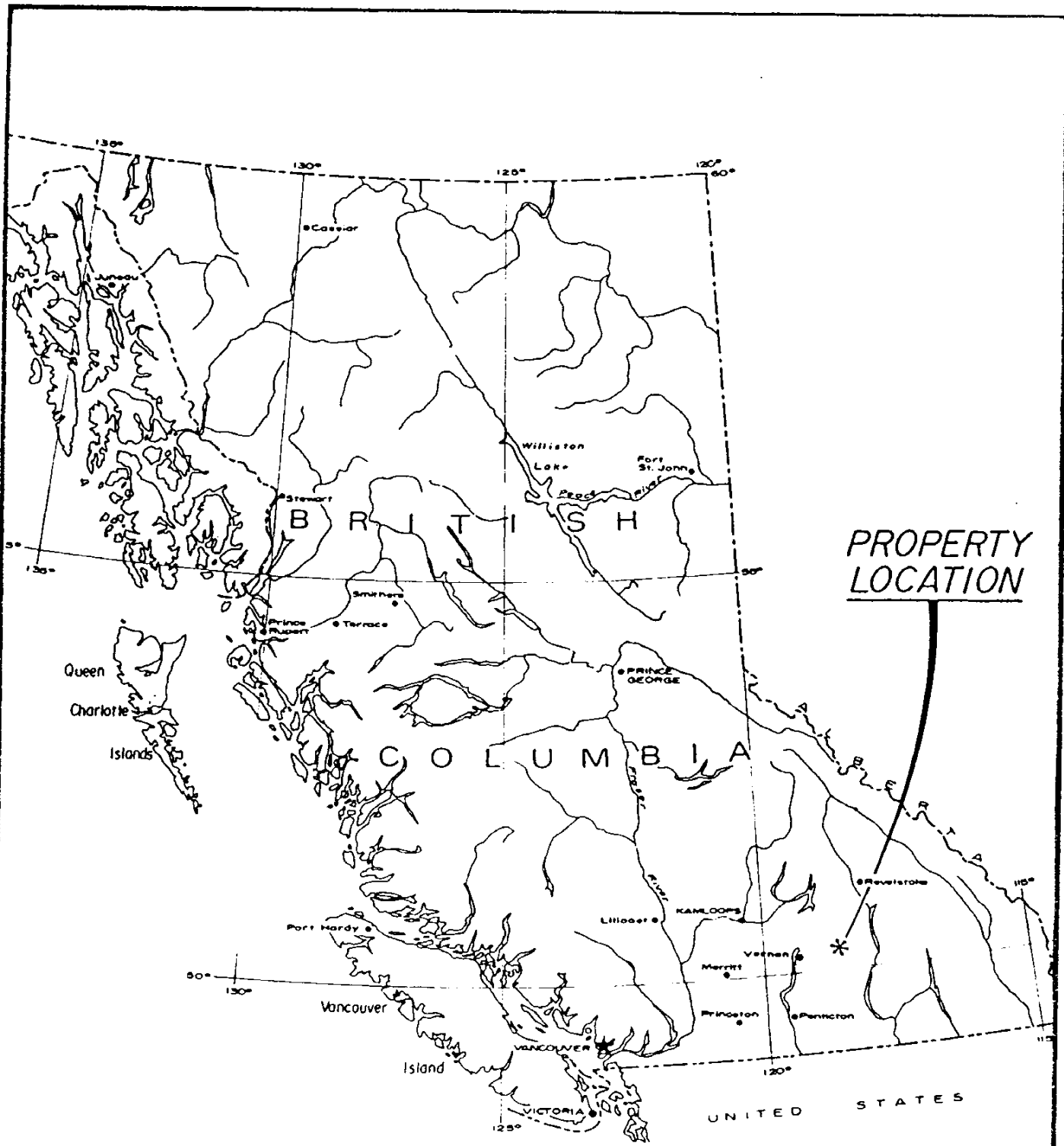
The property is accessed via logging roads west of highway 6 at Heckman Creek, approximately 14 kilometers north of Monashee Pass. These roads can, under most circumstances, be negotiated by two-wheel drive vehicles.

Vernon, the closest center providing facilities for both supplies and lodging as well as service by major airlines and railways, is located a further 26 km west of Lumby.

## PHYSIOGRAPHY AND VEGETATION

The property lies on the western edge of the Monashee (Columbia) Mountains and within the Omineca physiographic division of the Canadian Cordillera. The area is typified by moderate to steep slopes, well incised creeks and relatively broad ridges. Elevations on the property range from 1,250 meters (4,100 feet) on Heckman Creek to over 1,530 meters (5,025 feet) atop the ridge which divides the claim. The higher parts of the property are generally under snow until late May. As overburden masks much of the lower elevations, only limited exposures of bedrock can be seen on ridge tops and in creek beds.

Vegetation, consisting of mature stands of cedar, fir and spruce, is uniformly distributed over the claims, except where recent logging activity has occurred. In these areas alder and willow predominate.



**PROPERTY  
LOCATION**

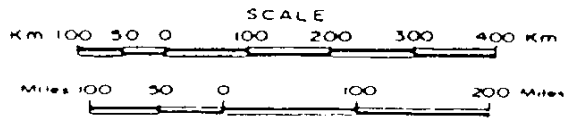
**KD RESOURCES INC.**

**AIM PROPERTY**

Vernon Mining Division, British Columbia

**LOCATION MAP**

SEARCHLIGHT RESOURCES INC.



Scale: as shown

Date: Nov. 26, 1986

Figure 1

## PROPERTY

The Aim property consists of one 20 unit (5W 4S) modified grid claim staked in accordance with Ministry regulations. The claim was located in September, 1985 by the current owner Steven E. Arnold to cover ground previously held by the Pita 9 claim. The claim was recorded on October 22, 1985 and was subsequently assigned record number 2018. KD Resources Inc. are the current operators.

## HISTORY

The property is located in an area that has seen active precious metal exploration dating back to the 1850's. Prospects such as the St. Paul, Monashee, Morgan, Silver Bell and the Straw are all located in the district and have undergone extensive development over the past century.

Recent programs of exploration in the the area of the Aim property were carried out by Mowhawk Oil Co. Ltd. on their Pita claims between 1981 and 1984. This work included geological mapping, heavy mineral and stream sediment geochemistry and geophysics. Through these programs, several significant gold and base metal geochemical anomalies were defined.

In the course of the 1985-6 field program, a total of 13 stream and 6 heavy sediment samples were extracted from creeks draining the property.

## REGIONAL GEOLOGY

The Monashee area is characterized by a NW-SE belt of Paleozoic sedimentary and volcanic rocks overlain to the north by Triassic sediments and volcanics, and intruded to the south by plutonic rocks of Jurassic age.

The oldest unit mapped in the area includes argillaceous sediments, volcanoclastic rocks and limestone pods belonging to the Carboniferous to Permian Thompson Assemblage. The individual members are interdigitated on a relatively fine scale and have yielded fossils of Late Mississippian, Pennsylvanian and Permian ages. Late Triassic fossils have also been obtained from some localities, but similarities between these rocks and the Slovan Group sediments to the north often preclude differentiation.

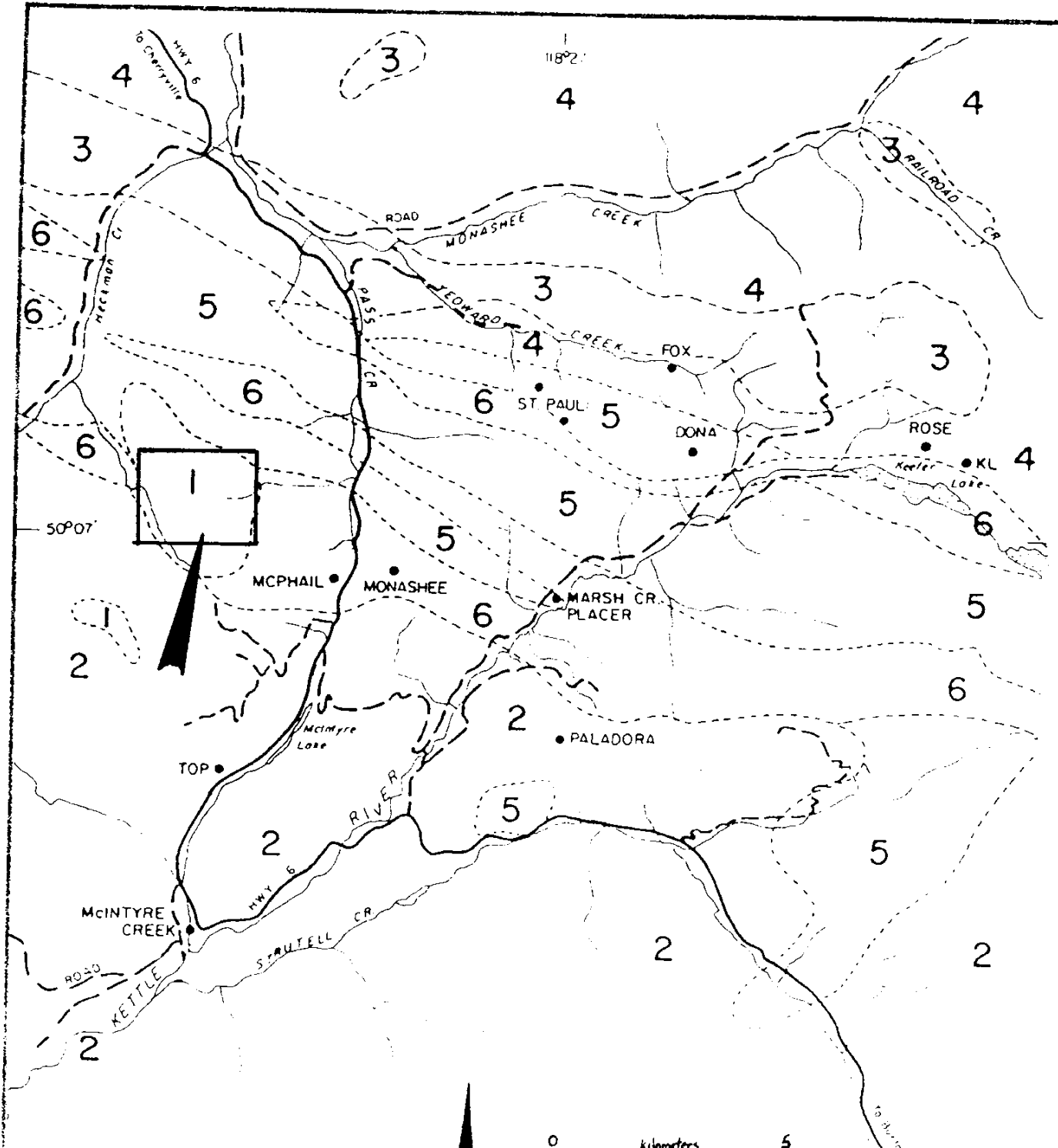
The sequence is believed to have undergone sub-greenschist facies metamorphism coeval with Jurassic-Cretaceous orogenic events (Wheeler et al., 1972), though some deformation may have preceded deposition of the Upper Triassic sediments (Read and Ukulitch, 1977).

The Thompson Assemblage rocks are unconformably overlain to the north by a sedimentary formation belonging to the Slovan Group, as well as volcano-sedimentary rocks belonging to the Nicola Group. Scattered fossil occurrences indicate both groups to be of Late Triassic age. Metamorphism of these rocks is relatively low grade and, like in the assemblage to the south, is believed to be related to Mesozoic orogenic events.

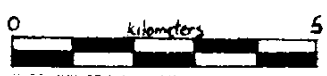
To the south, the Thompson Assemblage has been intruded by plutonic rocks belonging to the Late Jurassic Valhalla Complex. The predominant rock type is a massive granodiorite, although composition has been observed to vary widely. The emplacement of these intrusives is believed to have been responsible for the widespread deformation of the older volcanic and sedimentary rocks.

The youngest consolidated unit mapped in the Monashee Mountain area occurs east of Heckman Creek in the area of the Aim claim. Here, Tertiary plateau basalts have been extruded atop both Paleozoic and Mesozoic rocks.





- TERTIARY**  
 1 Plateau lava - basalt
- JURASSIC**  
 2 Intrusive Rocks
- TRIASSIC**  
 3 Nicola group - andesite, basalt  
 4 Slocoan Group - mixed sedimentary & volcanic rocks
- CARBONIFEROUS & PERMIAN (MAY INCLUDE TRIASSIC)**  
 5 Thompson Assemblage - siliceous argillite, volcanoclastics, quartzite, breccia, greenstone  
 6 Limestone - chert
- Geological contact  
 • Mineral occurrences



**KD RESOURCES INC.**

**AIM PROPERTY**

Vernon Mining Division, British Columbia

**REGIONAL GEOLOGY**

SEARCHLIGHT RESOURCES INC.

Scale: 1: 125 000

Date: Nov. 26, 1986

Figure 3

## GEOCHEMISTRY

In October 1985, as part of a preliminary exploration program, six stream sediment samples were taken at key points on the property's main drainages (Figure 4). Once extracted, the samples were bagged, labeled and shipped to Chemex Labs in North Vancouver, B.C. Here they were dried, sieved through -80 mesh screens and split. Subsamples were then digested in a nitric-aqua regia solution and analyzed by ICP (30 element). To complete the element spectrum subsamples were also analyzed for gold.

Gold analysis required ten grams subsamples to be fused with ten milligrams of gold-free silver metal. The fusion was then cupelled and the resulting silver bead parted with dilute nitric acid and treated with aqua regia. The remaining salts were then dissolved in dilute HCl and analyzed for gold via atomic absorption spectrometer with a five parts per billion detection limit.

As a follow up to the preliminary stream sediment sampling, a program of heavy mineral sediment geochemistry was carried out on Monashee Pass and Big Goat creeks and their tributaries. As the survey was completed following a dry summer, the flow of water near the creeks' headwaters was too low to allow proper sampling techniques. As a result, stream sediment samples were collected as an alternative where water levels were low.

Heavy mineral sediment samples consisted of approximately five kilograms of concentrate derived from between 0.25 - 0.75 cubic meters of alluvial material. This concentrate was placed in plastic bags, labelled and shipped to Chemex Labs in North Vancouver, B.C. Here, samples were first floated in tetrabromoethane to isolate minerals with a specific gravity greater than 2.95 +/- 0.1 grams/cubic centimeter. This fraction was then dried and separated into + and -80 mesh fractions. Subsamples of the -80 mesh fraction were then analyzed for gold and silver, while +80 mesh subsamples were only analyzed for gold.

The method for gold analysis is as described for stream sediments. Silver analysis required one gram portions of each sample to be digested in concentrate perchloric-nitric acid for approximately two hours. The digested sample was then cooled and made up to 25 ml with distilled water. The solution was then mixed and solids were allowed to settle. Silver concentration was determined using corrected atomic absorption techniques with a detection limit of 0.1 parts per million.

## RESULTS AND INTERPRETATIONS

Results from both the 1985 and 1986 stream sediment geochemical surveys were disappointing in that no obvious anomalies were obtained from either the ICP, gold or silver analyses. For this reason, this form of geochemical survey is not perceived as effective in this particular environment.

Assay results from several of the heavy mineral sediment samples were, however, anomalous in gold. Both the fine (-80 mesh) and coarse (+80 mesh) fractions of samples HM-1 and 5 and the fine fraction of samples HM-2 and 6 contained anomalous concentrations of gold. Samples containing coarse gold are interpreted as having been taken close to the bedrock source, while those with fine gold were probably extracted some distance downstream from the source.

Sample HM-5 was taken on a tributary to Monashee Pass Creek draining the Crown grants in the southeast corner of the property. Although the nature of the mineralization on these lots is not known, it is probable that the gold originated in this area. Additional work is needed to determine the actual source.

Sample HM-6 was taken on Monashee Pass Creek. Because the gold it contained was all -80 mesh, a distal bedrock source is indicated. As this sample was extracted downstream from sample HM-5, the gold likely originated from the same source.

Sample HM-1, taken on Big Goat Creek, contained anomalous concentrations of both fine and coarse gold. Unfortunately, tributaries draining from the east enter Big Goat Creek near the sample location so that it is not known from which drainage the gold originated. Dry conditions precluded further heavy mineral sediment sampling upstream, but the coarseness of the gold appears to indicate a proximal source.

Sample HM-2 was extracted on an east flowing tributary to Big Goat Creek, and contained only fine gold. As the area drained by this creek has a common divide with one of the tributaries entering Big Goat Creek near sample HM-1, the source of the gold might also be common. Additional work in this area must be undertaken before this source can be located.

Y-H TECHNICAL FILE # 85-3041

PAGE 2

SAMPLE#	Mo	Cu	Pb	Zn	Hg	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
AIM-85-01	2	25	6	68	.1	64	13	693	4.21	2	9	ND	6	99	1	2	2	107	1.15	.13	11	64	1.78	100	.19	5	1.75	.13	.09	1	2
AIM-85-02	1	29	7	67	.1	38	11	567	3.54	2	5	ND	6	71	1	2	2	86	.77	.11	14	39	.99	84	.15	2	1.43	.04	.12	1	3
AIM-85-03	1	38	2	88	.1	23	11	761	3.54	8	5	ND	6	40	1	2	2	81	.68	.09	7	30	1.02	120	.16	4	1.76	.04	.14	1	1
AIM-85-04	2	39	16	109	.2	18	11	1040	3.79	13	5	ND	7	52	1	4	2	72	.78	.11	9	26	1.07	123	.13	6	1.67	.03	.15	1	2
AIM-85-05	2	24	5	74	.1	16	8	768	2.88	5	5	ND	7	46	1	2	4	51	.53	.11	12	19	.66	84	.08	2	1.18	.03	.09	3	2
AIM-85-06	1	15	7	64	.1	41	10	733	2.72	2	5	ND	11	117	1	2	2	55	.78	.14	18	23	.93	118	.12	4	1.37	.06	.11	1	1
AIM-85-07	1	21	6	76	.2	16	8	669	2.73	2	5	ND	10	73	1	2	3	60	.78	.10	23	25	.84	225	.14	7	1.80	.06	.14	1	27



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

Phone: (604) 984-0221  
Telex: 043-52597

## CERTIFICATE OF ANALYSIS

TO : KD RESOURCES INC.

P.O. BOX 298  
VERNON, BC  
V1T 6M2

\*\* CERT. # : A8620C94-001-A  
INVOICE # : I8620094  
DATE : 4-NOV-86  
P.C. # : NCNE

Sample description	Prep code	Ag ppr Aqua R	Au ppb FA+AA				
SILT AIM #1-86	201	0.1	<10	--	--	--	--
SILT AIM #2-86	201	0.1	<10	--	--	--	--
SILT AIM #3-86	201	0.1	<10	--	--	--	--
SILT AIM #4-86	201	0.1	<10	--	--	--	--
SILT AIM #5-86	201	0.1	<10	--	--	--	--
SILT AIM #6-86	201	0.1	<10	--	--	--	--
HM AIM #1-86	202	0.1	1550	--	--	--	--
HM AIM #2-86	202	0.1	680	--	--	--	--
HM AIM #3-86	202	0.1	<5	--	--	--	--
HM AIM #4-86	202	0.1	<5	--	--	--	--
HM AIM #5-86	202	0.2	375	--	--	--	--
HM AIM #6-86	202	0.1	2900	--	--	--	--



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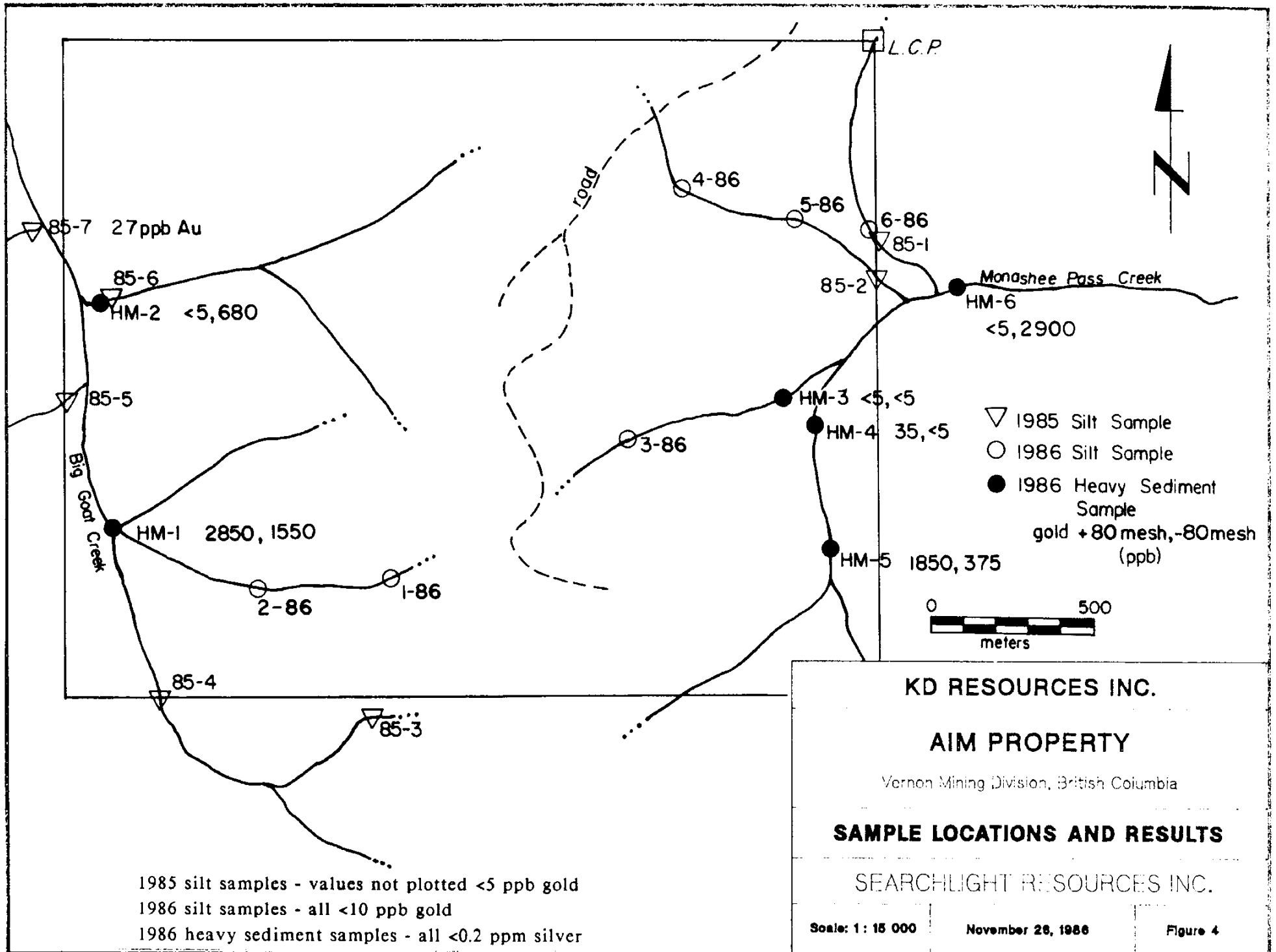
TO : KD RESOURCES INC.

\*\* CERT. # : A8620345-001-A  
INVOICE # : I8620345  
DATE : 17-NCV-86  
P.O. # : NONE

P.O. BOX 298  
VERNON, BC  
V1T 6M2

Sample description	Prep code	Au ppb FA+AA						
HM AIM #1-86+80	213	2850	--	--	--	--	--	--
HM AIM #2-86+80	213	<5	--	--	--	--	--	--
HM AIM #3-86+80	213	<5	--	--	--	--	--	--
HM AIM #4-86+80	213	35	--	--	--	--	--	--
HM AIM #5-86+80	213	1850	--	--	--	--	--	--
HM AIM #6-86+80	213	<5	--	--	--	--	--	--

Certified by .....



**KD RESOURCES INC.**

**AIM PROPERTY**

Vernon Mining Division, British Columbia

**SAMPLE LOCATIONS AND RESULTS**

SEARCHLIGHT RESOURCES INC.

Scale: 1: 15 000

November 26, 1986

Figure 4

1985 silt samples - values not plotted <5 ppb gold  
 1986 silt samples - all <10 ppb gold  
 1986 heavy sediment samples - all <0.2 ppm silver

**COST STATEMENT****October 23th 1985**

<b>WAGES</b>	
S. Arnold 1 day @ \$100	\$100.00
<b>BOARD</b>	\$21.01
<b>TRANSPORTATION</b>	
Truck rental - 1 day @ \$50.00	\$50.00
Fuel	\$32.80
<b>SAMPLE ANALYSIS</b>	
7 Silts for 30 element ICP @ \$6.00	\$42.00
7 Silts for Au @ \$4.00	\$28.00
<b>SUBTOTAL</b>	<b>\$273.81</b>

**October 18th to 19th 1986**

<b>WAGES</b>	
S. Arnold 2 days @ \$125	\$250.00
Assistant 2 days @ \$100	\$200.00
B. York-Hardy 1 day @ \$150	\$150.00
<b>BOARD</b>	\$43.60
<b>TRANSPORTATION</b>	
Truck rental - 2 days @ \$50.00	\$100.00
Fuel and oil	\$60.80
<b>EQUIPMENT RENTAL</b>	
Heavy mineral sampling equipment	\$200.00
<b>CONSUMABLES</b>	\$16.60
<b>SAMPLE ANALYSIS</b>	
6 Silts for Au, Ag @ \$9.45	\$56.70
6 +80 mesh H.M. @ \$20.50	\$123.00
6 -80 mesh H.M. @ \$10.10	\$60.60
<b>REPORT PREPARATION AND DRAFTING</b>	\$600.00
<b>SUBTOTAL</b>	<b>\$1,931.20</b>
<b>TOTAL</b>	<b>\$2,135.11</b>

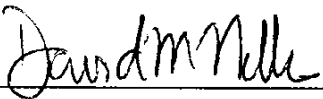


**CERTIFICATE OF QUALIFICATIONS**

I, David M. Nelles , do hereby certify that:

1. I am a geologist with business offices at 218-744 West Hastings Street, Vancouver, British Columbia, and am employed by Searchlight Resources Inc.
  
2. I am a graduate at the University of British Columbia with a Bachelor of Science degree in Geology.
  
3. This report is based on information generated during the 1985-6 assessment program supervised by Mr Bob York-Hardy. While never having visited the Aim property, the author is familiar with the geological setting of the Monashee Pass area and has worked on several projects in the immediate area.
  
4. I currently have no interest in KD Resources Inc. or its properties, nor do I expect to receive any.

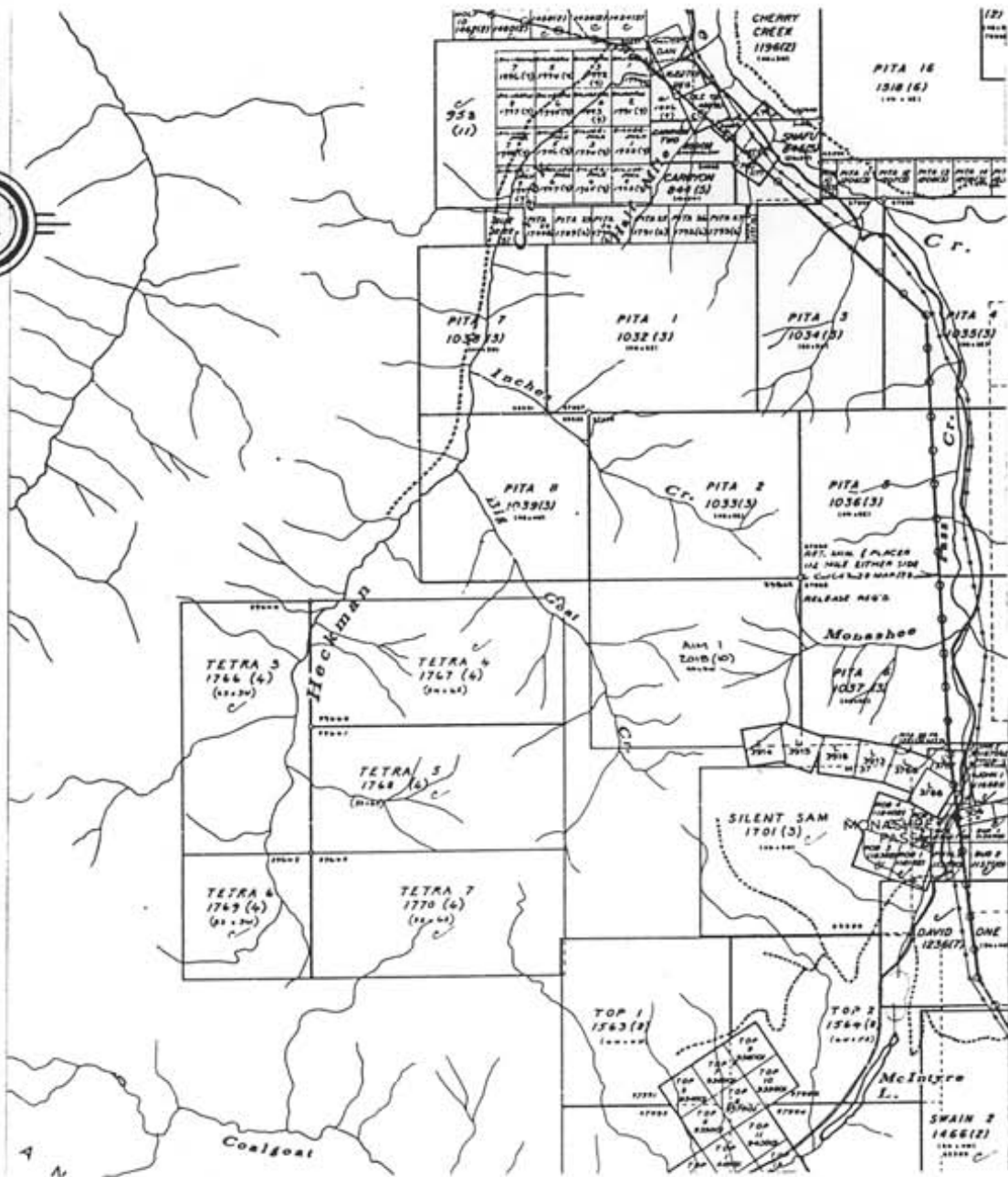
Dated this 28<sup>th</sup> day of November, 1986 at Vancouver, British Columbia



David M. Nelles B.Sc.

**APPENDIX A**

**ASSAY RESULTS**



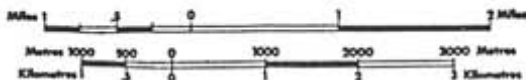
**KD RESOURCES INC.**

**AIM PROPERTY**

Vernon Mining Division, British Columbia

**CLAIM MAP**

**SEARCHLIGHT RESOURCES INC.**



Scale: as shown

Date: Nov. 26, 1986

Figure 2