# GEOLOGICAL AND GEOCHEMICAL REPORT

- ON THE -

CAR CLAIM Lillooet Mining Division, British Columbia

- FOR -

DUPONT OF CANADA EXPLORATION LTD., #102 - 1550 Alberni St., Vancouver, B. C. V6G 1A5

COVERING: CAR CLAIM (20 UNITS)

WORK PERFORMED:

July 1 - November 20, 1981

LOCATED:

- (1). 50°44'N, 122°49'W
  - (2). N.T.S. MAP 92J/10W
  - (3). 3 KM SOUTH OF BRALORNE, B. C.



PREPARED BY

# KERR, DAWSON & ASSOCIATES LTD.

#6 Nicola Place, 310 Nicola Street Kamloops, B.C. J. M. DAWSON, P. ENG.

November 20, 1981

Geological and Geochemical Report

.

.

- on the -

CAR CLAIM

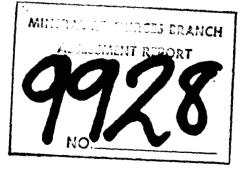
Lillooet Mining Division, British Columbia

,

- for -

DUPONT OF CANADA EXPLORATION LTD., #102 - 1550 Alberni St., Vancouver, B. C. V6G 1A5

COVERING:	Car Claim (20 Units)					
WORK PERFORMED:	July 1 - November 20, 1981					
LOCATED:	(1). 50°44'N, 122°49'W					
	(2). N.T.S. Map 92J/10W					
	(3). 3 km south of Bralorne, B.C.					



### Prepared by;

Kerr, Dawson & Associates Ltd., #206 - 310 Nicola St., Kamloops, B. C.

> J. M. Dawson, P. Eng. November 20, 1981

# TABLE OF CONTENTS

.

-

																				Page No.
INTRODUCT	ION	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1.
SUMMARY &	CO	NCLU	s10	NS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1.
PROPERTY	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2.
LOCATION	AND	ACC	ESS	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2.
PHYSIOGRA	РНҮ	AND	VE	GET	ATI	ON	•	•	•	•	•	•	•	•	•	•	•	•	•	3.
HISTORY .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3.
GEOLOGY .	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	4.
MINERALIZ	ATI	ON	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	5.
GEOCHEMIS	TRY	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	5.
EXPLORATI	ON I	POTE	NTI	AL	•	•	•	•	•	•	•	• -	•	•	•	•	•	•	•	7.

# APPENDICES

•

۰.

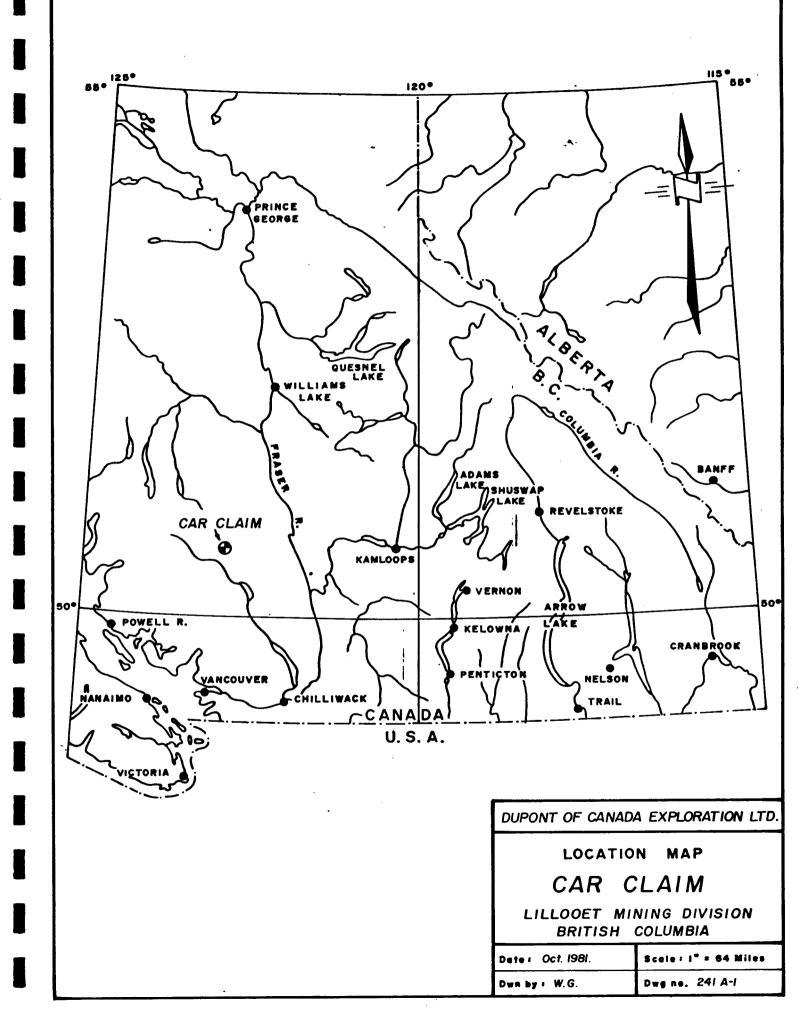
•

۹.

APPENDIX A:	Description of Rock Geochemical Samples
APPENDIX B:	Personnel
APPENDIX C:	Statement of Expenditures
APPENDIX D:	Writer's Certificate
APPENDIX E:	Maps
	-Figure 241A-1 - Location Map

,

-Figure	241A-1	-	Location Map
-Figure	241A-2	-	Claim Map
-Figure	241A-3	-	Geology Map
-Figure	241A-4	-	Geochemical Plan - Gold
-Figure	241A-5	-	Geochemical Plan - Silver



### INTRODUCTION

This report describes a preliminary exploration programme on the Car claim, Lillooet mining Division, British Columbia.

The property was acquired as a result of regional prospecting by Dupont during the 1970's.

Geological and geochemical surveys were performed during the 1981 field season and the results were interpreted and are detailed on a series of maps accompanying this report.

### SUMMARY AND CONCLUSIONS

- (1). The Car property consists of one 20 unit metric claim located in relatively steep terrain in the Bralorne district of southern British Columbia. Access is presently by helicopter, however a now unusable road connects the property with Bralorne, some 3 km to the north.
- (2). Previous work probably dates back to the 30's when extensive prospecting was done around the Bralorne and Pioneer mines. More recently (in the 60's and 70's) an occurrence of jade with some visible gold was worked by local prospectors. Dupont acquired the property by staking in 1980 and did follow-up work in 1980 and 1981.
- (3). The claims are underlain by metasediments and metavolcanics of the Bridge River Group, cut by lenses of alpine-type serpentinites and a few minor acid dikes.

- (4). Soil geochemistry has outlined two areas of anomalous gold values which trend east-northeasterly, could be related to the same major structure and are oriented parallel to one of the major directions of mineralized structures in the nearby Bralorne camp.
- (5). Known gold mineralization on the Car claim is associated with quartz stringers in low grade jade or silicified greenstone presumably related to an east-northeasterly zone of faulting or shearing. The extent and tenor of such mineralization is presently unknown and further exploration is necessary to evaluate this.

### PROPERTY

The property consists of one 20 unit metric claim as follows:

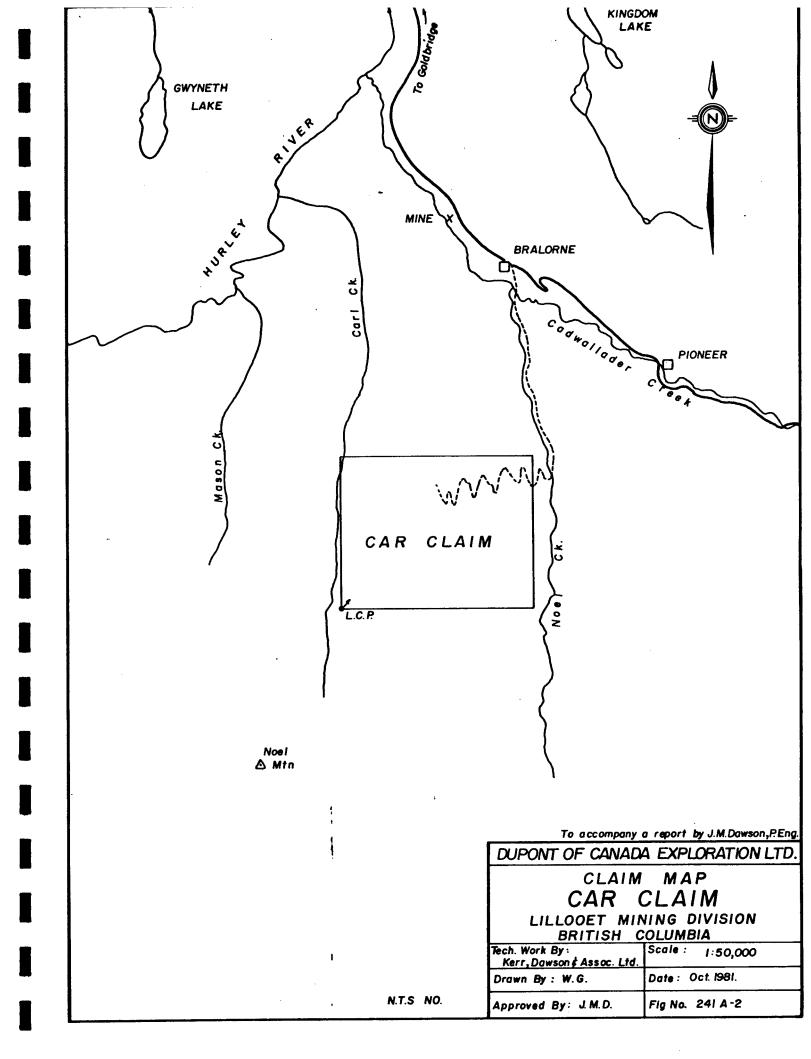
<u>Claim Ñame</u>	Record No.	Tag No.	Expiry Date
Car	1370	62594	June 11, 1982

The registered owner of this property is Dupont of Canada Exploration Ltd.

### LOCATION AND ACCESS

The claim is located in southwestern British Columbia, approximately 60 kilometers west of Lillooet and about 3 kilometers south of the village of Bralorne. Approximate geographic center of the property is at  $50^{0}44'$  north latitude and  $122^{0}49'$  west longitude.

Access is gained by helicopter from either Goldbridge or Bralorne. A four wheel drive road was constructed to the property from Bralorne some years ago but is now unusable.



### PHYSIOGRAPHY AND VEGETATION

The claim straddles a north-trending ridge and is bounded on the west by Carl Creek and on the east by Noel Creek. Slopes are steep but not precipitous except for the uppermost 200 to 300 meters where the east facing slope is primarily cliff-forming.

Elevations vary from about 4000 feet a.s.l. along the valley of Noel Creek, rising to about 7000 feet a.s.l. along the main ridgetop and down to about 5500 feet a.s.l. in the valley of Carl Creek.

The west facing slope is lightly forested with scattered spruce and pine below tree line (approximately 6500 feet a.s.l.). However the east facing slope is densely forested with mature spruce and hemlock especially in its lower reaches. In addition dense deciduous underground makes travel, particularly along creeks, very difficult.

### HISTORY

There was undoubtedly some exploration for gold on this property in the 1930's and 40's when the Bralorne and Pioneer mines were in their heyday. The presence of old cabins and claim posts attests to this activity.

Sometime during the late 1960's or early 1970's the presence of jade boulders in Noel Creek and (?) on the east-facing slope of the present claim prompted the road building and trenching now present in the northeast corner of the Car claim. In fact during the late 1970's the writer examined a gold occurrence in the area of old trenching (see figure 241A-3).

In 1979 Dupont carried out regional geochemical prospecting in the Bralorne - Taseko district and the Car claim was staked in June, 1980. A limited follow-up programme was done in the summer of 1980 and recommendations for further work were then made.

The present programme consisted of reconnaissance geological mapping and prospecting, the collection of 8 rock geochem samples, 435 soil samples and 22 silt samples. Control was established by means of chaining, compass and altimeter and data was plotted on 1:5000 scale base maps.

#### GEOLOGY

The property is underlain by detrital metasediments and lesser metavolcanics of the Bridge River Group intruded by a number of lenses of serpentine and serpentinized peridotite. Minor dikes of granodiorite and feldspar porphyry also intrude this succession.

The Bridge River metasediments consist primarily of dark grey to brownish foliated fragmental rocks intercalated with areas of phyllite and micaceous quartzite. Minor lenses of recrystallized limestone are occasionally present. The fragmental rocks consist of chert or argillite breccias or microbreccias with some areas of foliated graywacke.

Smaller areas of greenstone consist of foliated andesitic tuffs and ? flows, sometimes calcareous in part.

These older rocks are cut by irregular, linear bodies of serpentine, serpentinized peridotite and talc-serpentine rock. These ultrabasics are typically dark green in outcrop with "fish-scale" type foliations. There are minor areas of talc carbonate rock and calcitemagnesite veinlets. In some local areas where serpentine and greenstone are in contact, small lenses of low grade jade (nephrite ?) have been produced.

A number of narrow, fine to medium grained granodiorite dikes were noted primarily on the ridge top near the south boundary of the claim. Several narrow feldspar porphyry dikes are more widely distributed.

There seem to be two separate structural orientations present on this property: (1) the regional north-northwesterly grain of the district and (2) a subsidiary east-northeasterly trend. Foliations and most lithological contacts follow the regional trend, however a number of the serpentine lenses, some of the dikes and possibly the source of the anomalous gold mineralization trend east-northeast.

### MINERALIZATION

Minor fine grained pyrite is present in some of the foliated fragmentals and phyllites. A number of narrow veinlets of white quartz were noted and sampled, however results indicate only background values in gold.

During a previous examination of this property the writer observed free gold in narrow quartz stringers in impure jade or silicified greenstone near the upper west limit of the old trenching (see figure 241A-3). An assay of the material returned a high gold value. Unfortunately the location of this sample could not be found during the present examination.

### GEOCHEMISTRY

A programme of contour soil and talus fines sampling was conducted on the Car claim in an attempt to outline the source of the anomalous silt values.

Initially soil or talus fines samples were taken at 100 meter intervals along contour traverses situated at every 500 foot elevation level (see figures 241A-4 and 241A-5). Later fill-in traverses were run with samples collected at 50 meter intervals on lines located at 200 & 300 foot elevation levels.

Sample stations were marked with flagging and the appropriate ) sample number. After collection samples were stored and shipped in waterproof, kraft envelopes.

Samples were collected from between 6500 feet (a.s.l.) and 4000 feet (a.s.l.). At the higher elevations there are no well defined soil horizons but rather "talus fines" material. At the lower elevations, while horizons, if present, are poorly defined, most material gathered looked to be typical red-brown "B" horizon material.

All soil and silt samples were analysed for gold and silver in the Vancouver laboratories of Acme Analytical Ltd. For gold, laboratory methodology involved fire assay extraction with analysis by atomic absorption. For silver, extraction was by hot dilute aqua regia with analysis by atomic absorption.

Statistical analyses for both metals were performed similarly by calculating the mean and standard deviation and classifying the data into the following categories:

Background0-MeanPossibly AnomalousMean-(Mean + 1 Std. Dev.)Probably Anomalous(Mean + 1 Std. Dev.)-(Mean + 2 Std. Dev.)Definitely Anomalous>(Mean + 2 Std. Dev.).

The values were plotted on 1:5000 scale basemaps of the property and definitely anomalous, probably anomalous and possibly anomalous areas were outlined.

Two discrete clusters of anomalous gold values occur on the property, both seemingly aligned with the east-northeasterly trend of some of the geological features - eg. serpentine bands, some greenstone bands and granodiorite dikes. The area of anomalous gold values located in the northeast corner of the claim seems to be the larger of the two and is located downslope from the area where visible gold was seen in quartz stringers in jade and/or silicified greenstone.

The area of anomalous gold values located in the southwest corner of the claim is a narrow, more linear feature. It is presumably related to similar gold-bearing, quartz stringers associated with an east-northeasterly trending fault or shear zone.

Anomalous silver values show more of a scatter with some coincidence with the gold anomaly located in the northeast corner of the claim. However most anomalous silver values seem to occur upslope from the two areas of high gold values.

#### EXPLORATION POTENTIAL

Two areas of anomalous gold values in soils have been outlined on the subject property. Both have an east-northeasterly trend and could be related to the same major geological structure. This east-northeasterly trend is the major orientation of mineralized vein systems in the nearby Bralorne camp.

The northeast gold anomaly lies downslope from a known gold occurrence in quartz stringers in jade or silicified greenstone.

Therefore there is good potential for the location of additional mineralized veins or shear zones in both anomalous areas and further work is warranted to delineate the size and grade of this mineralization.

> Respectfully submitted; KERR, DAWSON AND ASSOCIATES Ltd.

7.

J. M. Dawson, P. Eng. – Geologist

### APPENDIX A

# DESCRIPTION OF ROCK GEOCHEMICAL SAMPLES

a.

۰.

#### DESCRIPTION OF ROCK GEOCHEMICAL SAMPLES

----

- JDA 4 Chips from two narrow quartz veins at the margin of a granodiorite dike and foliated, fragmental metasediments.
- JDA 5 Grab of white, bull quartz from a number of "sweats" in clastic metasediments.
- JDA 6 Chips of white quartz from short tension veins in metasediments.
- JDA 11 Chips of orange brown, limonite stained feldspar porphyry dike with scattered quartz stringers.
- JDA 12 Chips of dark foliated fragmental metasediments with thin quartz stringers.
- JDA 13 Grab of limonite stained, blue gray metasediments.

۰.

JDA - 14 Grab from quartz vein in silicified greenstone or low grade jade - possibly some mariposite.

## APPENDIX B

,

# PERSONNEL

· · · ·

# PERSONNEL

J. M. Dawson, P. Eng.	Geologist	July 4, 10, 1981 Sept. 23, 1981 Oct. 14, 1981 Nov. 16, 1981 5 days
Rick Henderson	Prospector	July 2, 3, 4, 12, 1981 August 17, 18, 1981 6 days
Mike Dawson	Prospector	July 2, 3, 1981 2 days
Pat Murphy	Prospector	July 2, 3, 4, 1981 August 17, 18, 1981 5 days
R. Robinson	Jr. Asst.	August 17, 18, 1981 2 days
D. Adamson	Jr. Asst.	August 17, 1981 1 day
B. Dawson	Jr. Asst.	July 2, 3, 1981 August 18, 1981 3 days
B. Woodruff	Jr. Asst.	July 12, 1981 1 day
A. Garrard	Jr. Asst.	Sept. 23, 1981 1 day

### APPENDIX C

- -

### STATEMENT OF EXPENDITURES

### COST STATEMENT

•

#### 1. PERSONNEL

•

۰.

.

	J. M. Dawson, P. Eng. 5 days @ \$250.00/day	\$1,250.00	
	R. Henderson, 6 days @ \$130.00/day	780.00	
	M. Dawson, 2 days @ \$145.00/day	290.00	
	P. Murphy, 5 days @ \$115.00/day	575.00	
	R. Robinson, 2 days @ \$115.00/day	230.00	
	D. Adamson, 1 day @ \$115.00/day	115.00	
	B. Dawson, 3 days @ \$115.00/day	345.00	
	B. Woodruff, 1 day @ \$115.00/dya	115.00	
	A. Garrard, 1 day @ \$115.00/day	115.00	\$3,815.00
2.	EXPENSES AND DISBURSEMENTS		
	(a). Room and board, -26 man days @ \$35.00/man,	/day-910.00	
	(b). Helicopter Charter -4.8 hrs @ \$412.00/hr.	1,977.60	
	(c). Geochemical Analyses	2,433.20	
	(d). Field Equip't & Supplies	124.65	
	(e). Truck Rental	320.50	
	(f). Drafting	180.00	
		- <b>4</b> -	

(g). Telephone, Xerox, blueprints, Secretarial, stationery, etc 385.90

6,338.85

TOTAL COSTS \$10,146.85

# APPENDIX D

### WRITER'S CERTIFICATE

.

# JAMES M. DAWSON, P. ENG.

**Geological Engineer** 

#1-219 VICTORIA STREET • KAMLOOPS, B.C. V2C 2A1 • TELEPHONE (604) 374-0544

### CERTIFICATE

I, James M. Dawson, of kamloops, BRITISH Columbia, do hereby certify that:

- I am a geologist employed by Kerr, Dawson and Associates
  Ltd., of Suite 206, 310 Nicola St., Kamloops, B. C.
- (2). I am a graduate of the Memorial University of Newfoundland B. Sc. (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a member of the Association of Profession Engineers of British Columbia. I have practised my profession for 18 years.
- (3).

I am the author of this report which is based on an exploration programme carried out on the Car claim under my direct



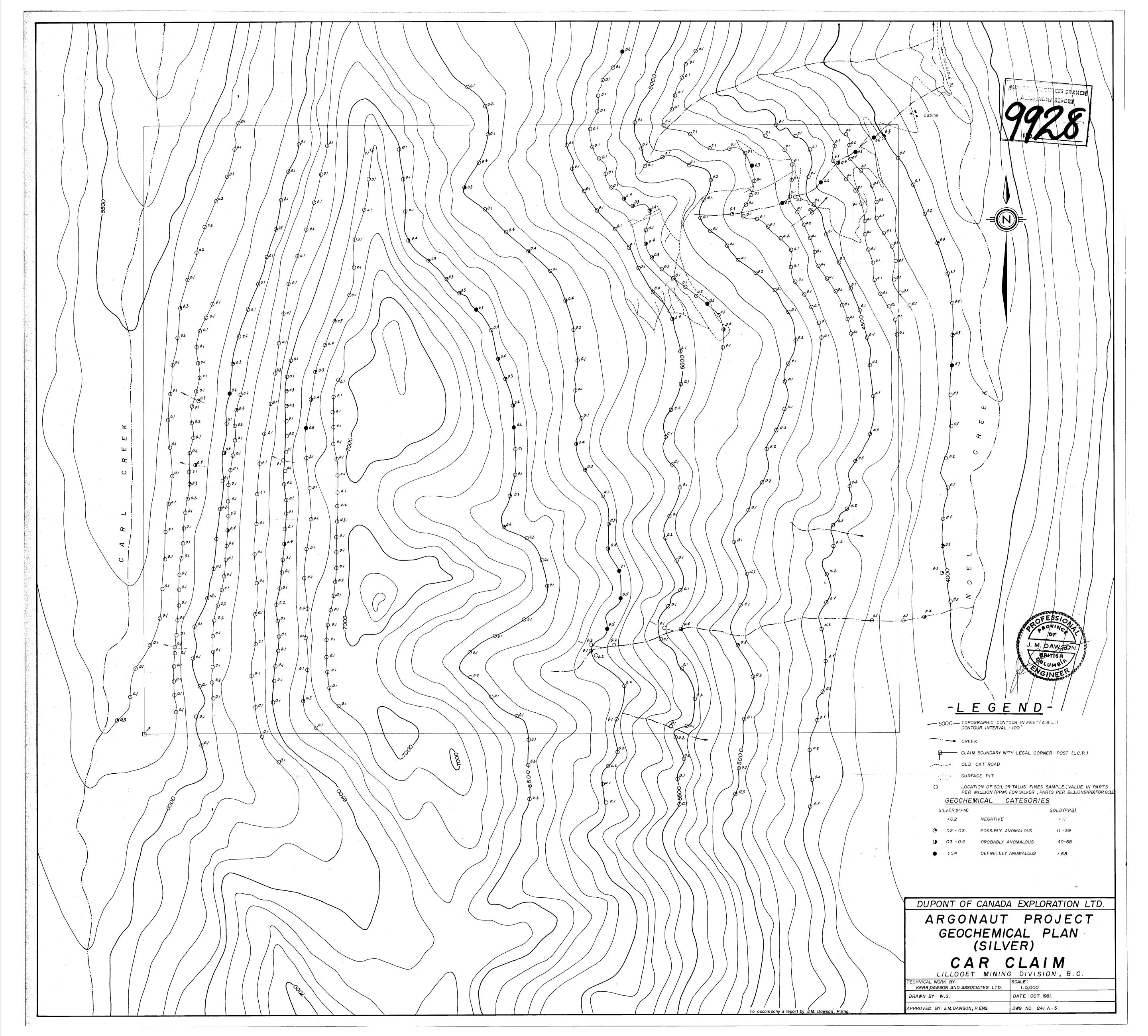
Kerr, Dawson & Associates Ltd.,

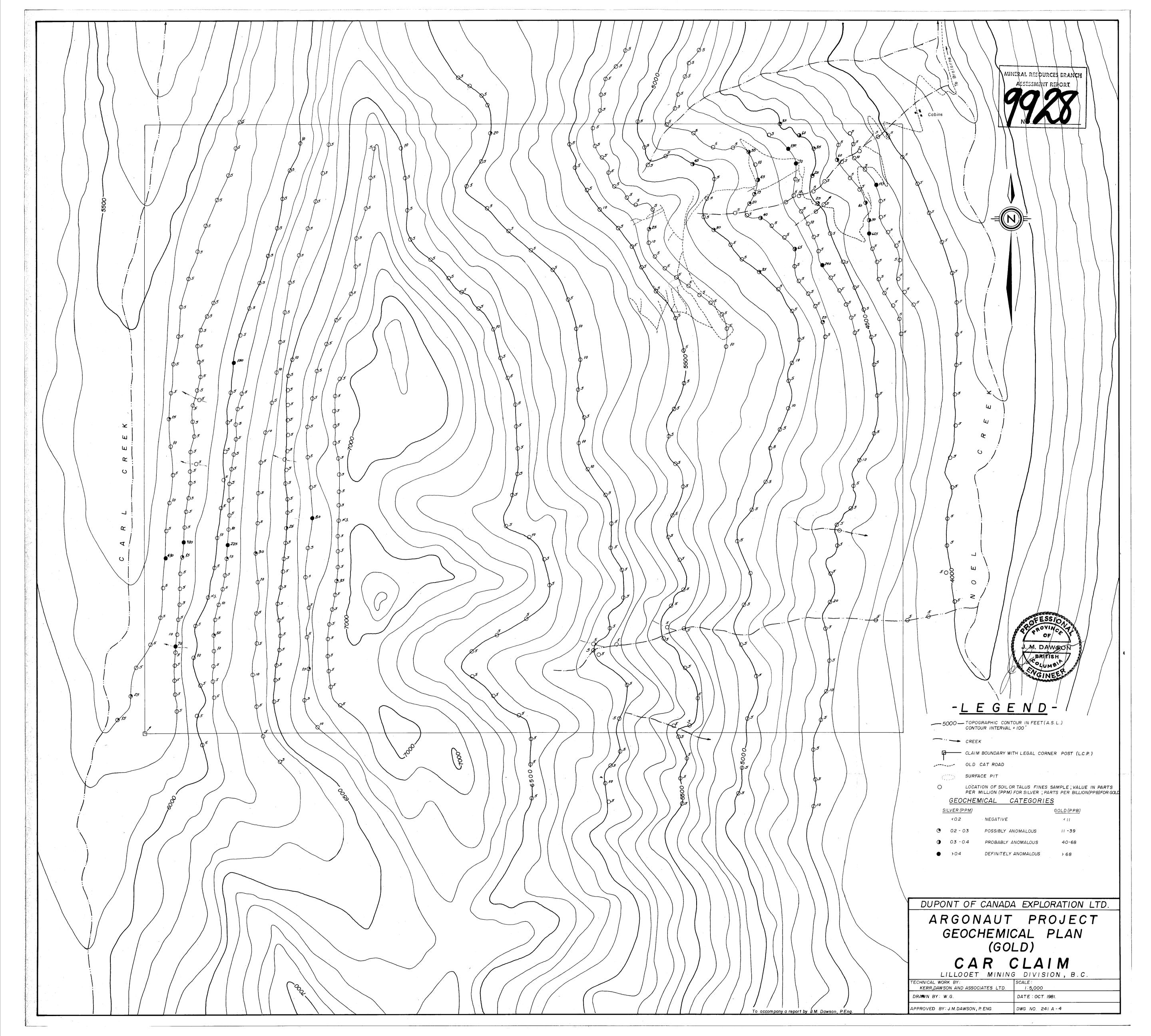
James M. Dawson, P. Eng. GEOLOGIST

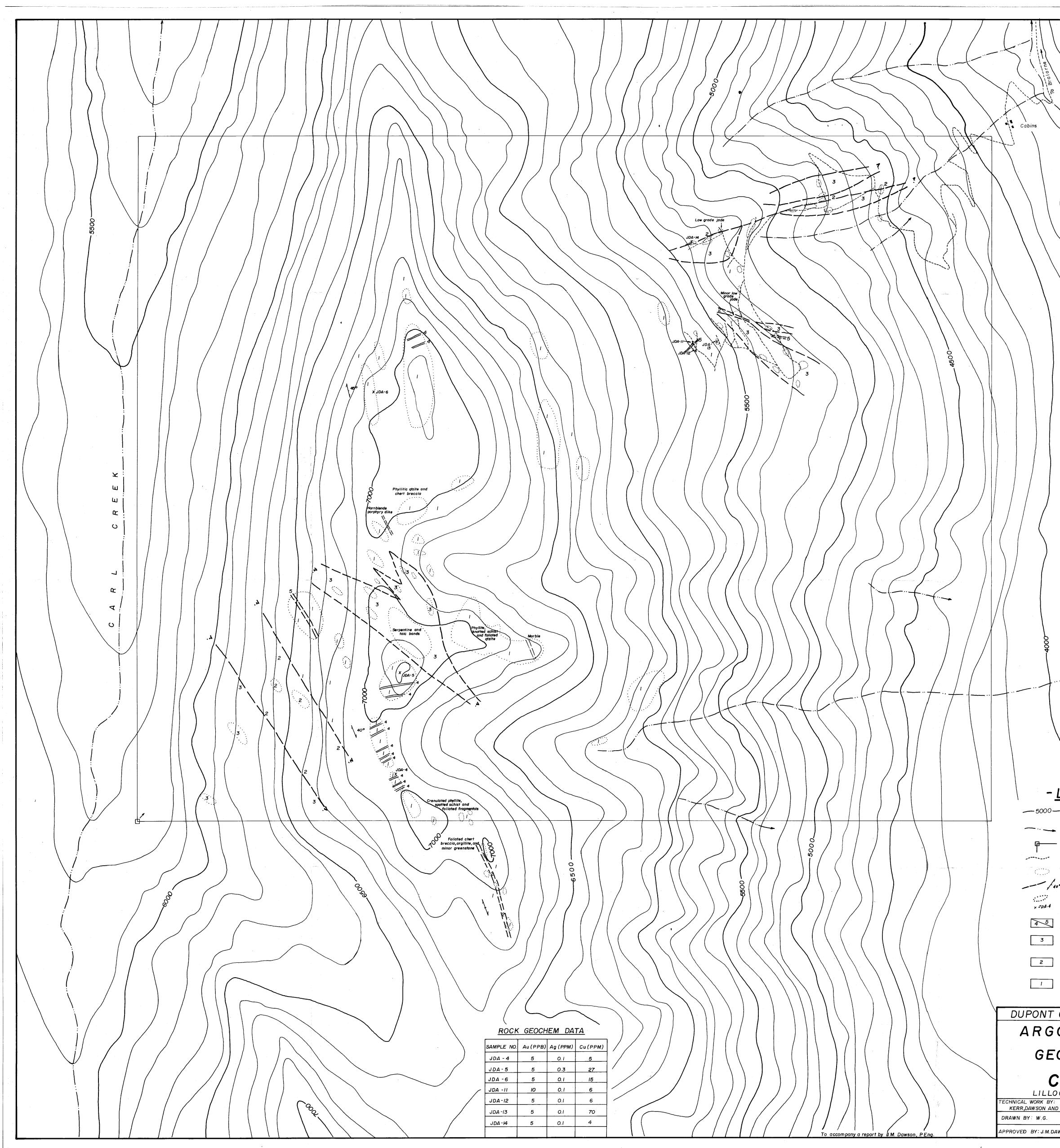
November 20, 1981

Kamloops, B. C.

KERR, DAWSON AND ASSOCIATES LTD. Consulting Geologists and Engineers







	L RESOURCES BRANCH SESSMENT REPORT
	728
ш Ч	
0	
ш )	
Z /	OFESSION CENTER
J.	M. DAVESON
LEGEN' - TOPOGRAPHIC CONTOUR IN FE CONTOUR INTERVAL = 100'	<u>D</u> - / / /
CLAIM BOUNDARY WITH LEGAL OLD CAT ROAD SURFACE PIT	CORNER POST (L.C.P.)
GEOLOGICAL CONTACT ; FOLIATI OUTCROP AREA ROCK GEOCHEM SAMPLE LOCAT	
(BENDOR TYPE) PORPHYRY DIK	SERPENTINITE, LOCAL BODIES OF
FOLIATED GREENSTONE; OCCA DARK GRAY FOLIATED FRAGME CONGLOMERATE & TUFF(); CRU SLATE; MINOR MARBLE.	NTAL ROCKS , CHERT BRECCIA
OF CANADA EXF	
OLOGICAL	PLAN
	ISION, B.C.
AWSON, P. ENG. DWG NO.	241 A - 3