



November 30, 1990

GEOQUEST CONSULTING LTD. RR#3, Site 11, Comp 180 Vernon, B.C. V1T 6L6

Minnova Inc. 3rd Floor, 311 Water Street Vancouver, B.C. V6B 1B8

Dear Ian:

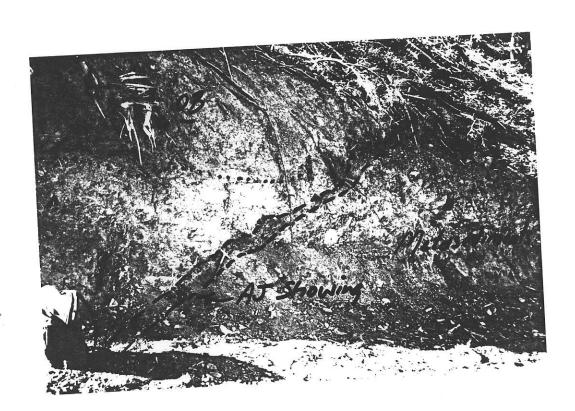
Pursuant to our telephone conversation, I am submitting an information package on a recently discovered showing near Cherryville, B.C. The work carried out thus far has been very preliminary. With the exception of minor hand trenching and reconnaissance geochemical work, very little has been done on the showing. If you have any questions with regard to this property do not hesitate to call me.

Yours truly,

GEOQUEST CONSULTING LTD.

Werner Gruenwald, B. Sc.

100 Small to bether about
-Sounds like a small Q3 vein
occumence. Good P.M. grades
no size potential



# AJ-1 PROPERTY

# OWNERS:

Allan Harvey (50%) - Box 67, Clinton, B.C. VOK 1V0

John Harvey (50%) - 1130 Sugar Lake Road, Cherryville, B.C.

# CLAIMS:

AJ-1 claim, 20 units (1,250 hectares).

# LOCATION:

The property is located 48 kilometres east southeast of Vernon, B.C. The nearest community is Cherryville, located 5.5 km to the north northeast. The property lies within the Vernon Mining Division on Map No. 82L/2E.

## ACCESS:

The property is accessible by a logging road that branches off the Creighton Valley Road. The junction of this road and Highway 6 is situated just 6 kilometres to the east. A major hydro transmission line transects the northernmost portion of the claim.

## PHYSIOGRAPHY AND VEGETATION:

The property is situated along the western flank of the Monashee Mountains. A prominent west-northwesterly trending ridge transects the southern half of the claim. Slopes are moderate to steep in both northerly and southwesterly directions. Total topographic relief is 1,800 ft (~550m) with the highest elevations reaching 4,200 ft. The current area of interest is situated at approximately the 3,000 ft (915m) elevation.

The majority of the property is well forested. Vegetation includes fir, cedar, pine and larch, interspersed with birch, poplar and maple. Underbrush is generally not thick, allowing for relatively easy traversing.

Selective logging has taken place in the north central portion of the claim. Recent clear cut logging has taken place on the ridgetop in the southeastern portion of the claim. The extreme northeastern corner of the claim covers private land (Lot 236). Since access is not through this land, no problems are anticipated.

The only drainage that transects the claim is Ferry Creek, found near the southwest corner.

## HISTORY:

The area first received attention with the discovery of placer gold in Cherry Creek during the early 1870's. By the turn of the century, over 5,000 oz of gold had been recovered. Minor amounts of placer gold have reportedly been recovered from tributaries such as Heckman and Ferry Creeks (east and west of the AJ-1 claim).

During the 1930's, a 7-8 metre shaft was reportedly sunk on a copper-silver(?) occurrence on what is now part of the AJ-1 claim. No values were reported, however some encouragement must have initiated such work. This shaft, located approximately 300 metres westerly of the AJ showing is still open.

No mineral occurrences are indicated for the AJ property area on any published data that has been reviewed.

# GEOLOGY:

According to the Geological Survey of Canada (Memoir 296) the AJ property is underlain by a west-northwest trending sequence of rocks belonging to the Palaeozoic Cache Creek Group. Andesitic lava and tuffs, along with minor argillite, quartzite and limestone, reportedly underlie the majority of the property. In the southwestern portion of the claim limestone predominates along with minor argillite, quartzites and andesitic volcanics. Bedding attitudes indicate a west-northwesterly strike and dips ranging from 50° to 75° to the south. A north-northeasterly trending fault west of Ferry Creek separates the Cache Creek assemblage from the much older (pre Cambrian) gneiss and schist of the Monashee Group, now referred to as part of the Shuswap Metamorphic Complex. Extensive granitic intrusions of Mesozoic age are indicated several kilometres to the south of the AJ-1 claim.

More recent detailed mapping by Okulitch and Campbell (Open File 637) has redefined the rocks underlying the AJ property as part of the Thompson Assemblage (includes Cache Creek Group et al). The northern portion of the claim is indicated as underlain by argillite, sandstone, quartzite and siltstone, with minor limestone, conglomerate, breccia and tuff. These rocks are bounded (overlain) to the south by a sequence comprised of massive limestone with minor conglomerate and chert. Northwesterly strikes and steep southerly dips are indicated for rocks in the property area. The intrusive rocks found south of the claim area are classified as part of the Valhalla and Nelson Plutonic rocks.

Field observations to date indicate that the above geologic descriptions are reasonably accurate.

### MINERALIZATION:

As mentioned previously, no mineral occurrences are documented for the AJ-1 claim area (see mineral inventory map). It was during the course of logging that Mr. John Harvey noticed malachite stain in a narrow quartz rich zone along a road cut. This zone has been exposed by hand trenching for approximately 4-5 metres along the road cut. The mineralized zone measures from 15 to 25 cm in width, strikes east-southeast and dips 70°± south-southwest (into the hill). This attitude is similar to the host phyllite/argillite sequence suggesting the zone may be in part stratigraphically controlled. The wall rock consists of a weathered, grey phyllite that locally contains conformable quartz lenses (boudins?). The contact with a thick sequence of andesitic rocks (tuffs and flows) is situated approximately 50 metres uphill and stratigraphically above the AJ showing.

Detailed examination of the zone reveals quartz gangue locally containing white to flesh coloured calcite. The quartz often contains patches of brightly coloured, porous limonite and is often malachite stained. Occurring within the quartz, are irregular patches of a dark brown to sooty grey, amorphous mineral thought to be tetrahedrite. Locally, this black mineral is associated with an amorphous, olive green, alteration mineral (pyromorphite?). In the brightly limonitic areas, remnant grains of chalcopyrite ± pyrite are locally present. Minor amounts of galena have been observed in a few instances.

## SAMPLING:

This zone was originally sampled (grab) by Mr. Allan Harvey with the samples being submitted to Ecotech Labs of Kamloops, The resultant assays indicated very high concentrations of gold (3.73 oz/t) and silver (70.6 oz/t) along with substantial amounts of copper, lead and zinc (see assay sheet). Check assays by Kamloops Research revealed similarly high gold/silver concen-Sampling of the zone by the writer returned gold/silver assays of 2.58 and 69.7 oz/ton respectively over a strike length of 1.5 metres (see assays). In view of the field observations, these assays suggest the presence of argentiferous tetrahedrite (Cu, Ag). Sampling of the wallrocks and quartz rich phyllite returned only background gold/silver values. concentration of the fines from the AJ showing revealed abundant visible native gold and possible electrum. ICP analysis of a rock chip sample taken by the writer also revealed anomalous levels of arsenic, cadmium and antimony (tetrahedrite).

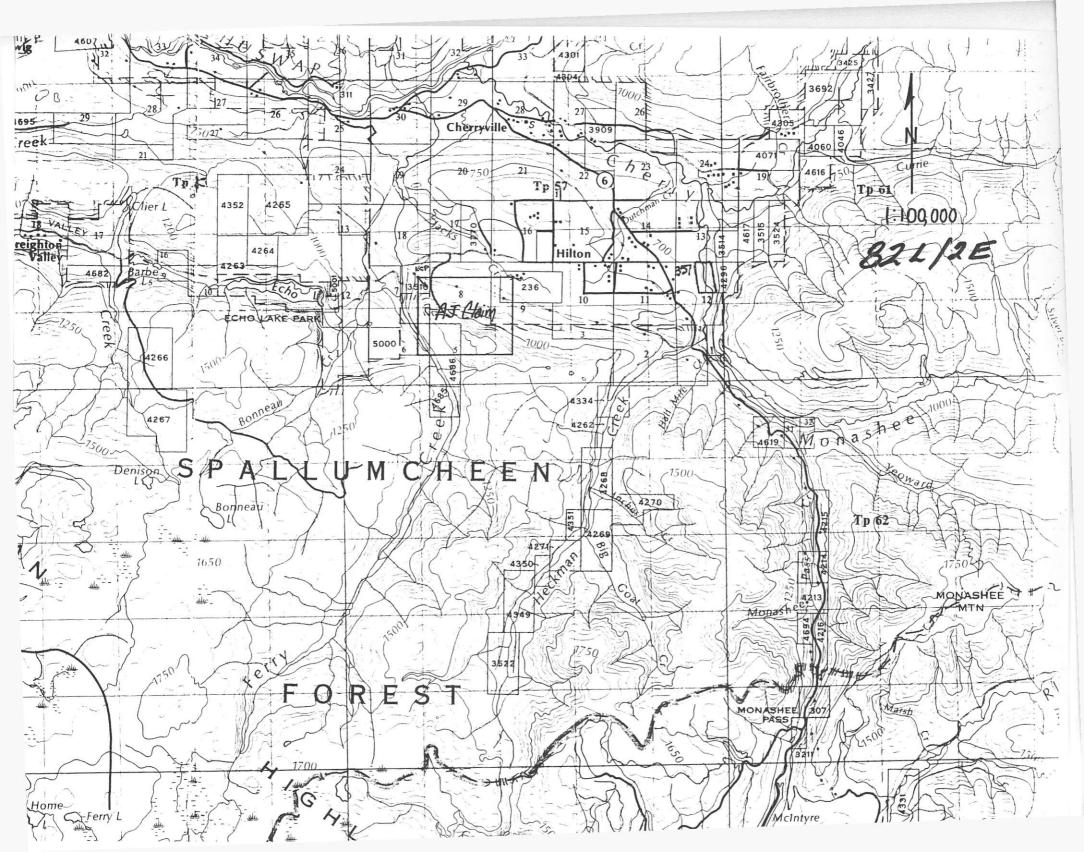
Situated west-northwesterly and 250-300 metres from the AJ showing is an old shaft that was put down on a quartz vein/breccia zone in argillitic rocks. With the exception of disseminations of pyrite, no other mineralization was observed. A grab sample of quartz rich material from the dump did not return any anomalous precious metal values.

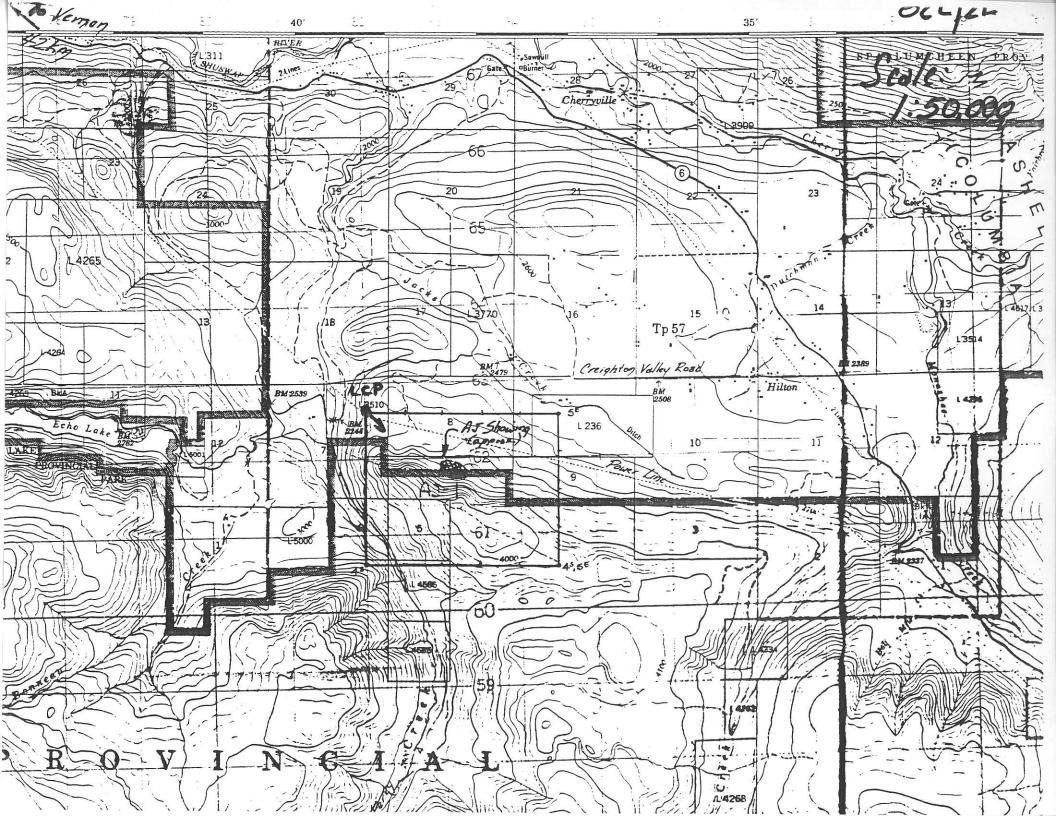
Sampling of soils along several short grid lines and road cuts failed to detect any anomalous gold values with the exception of sample AJ 0+00 which was taken from soil above the AJ zone. Insufficient sampling depth and downhill transport of abundant decomposed phyllite may have masked any precious metal signature. Copper, zinc, silver, arsenic, cadmium and calcium/strontium(?) may prove to be useful pathfinder elements (see ICP results).

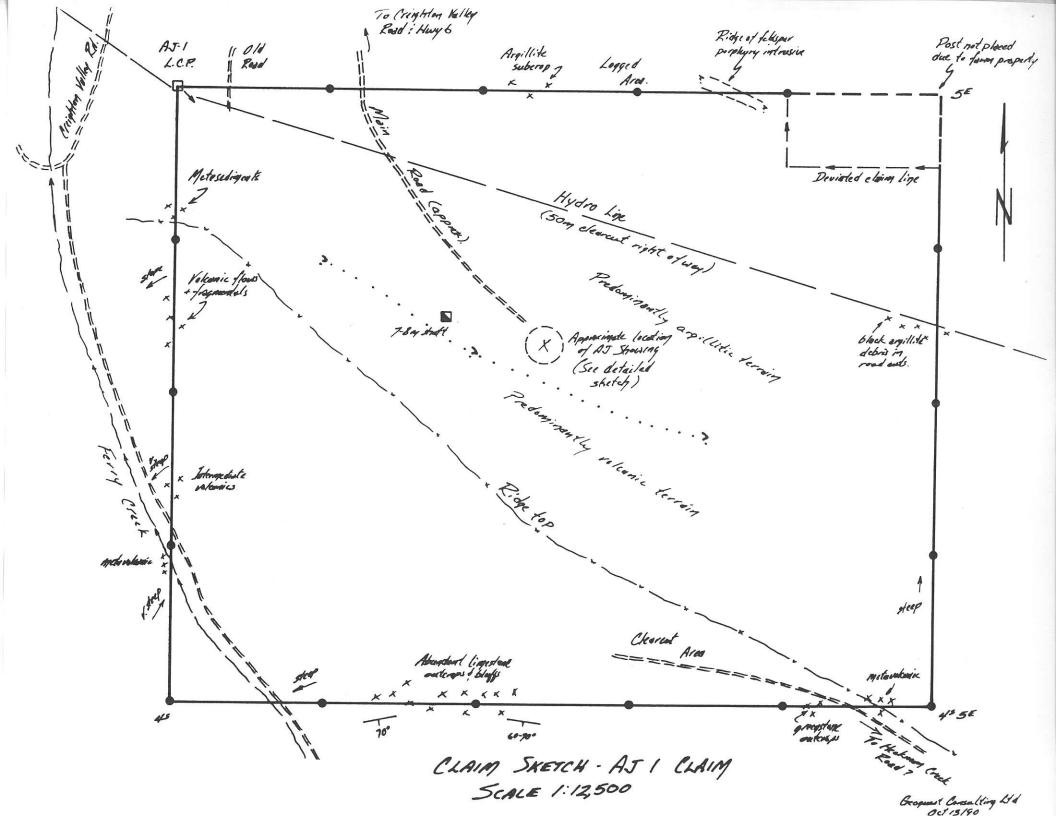
## CONCLUSIONS AND RECOMMENDATIONS:

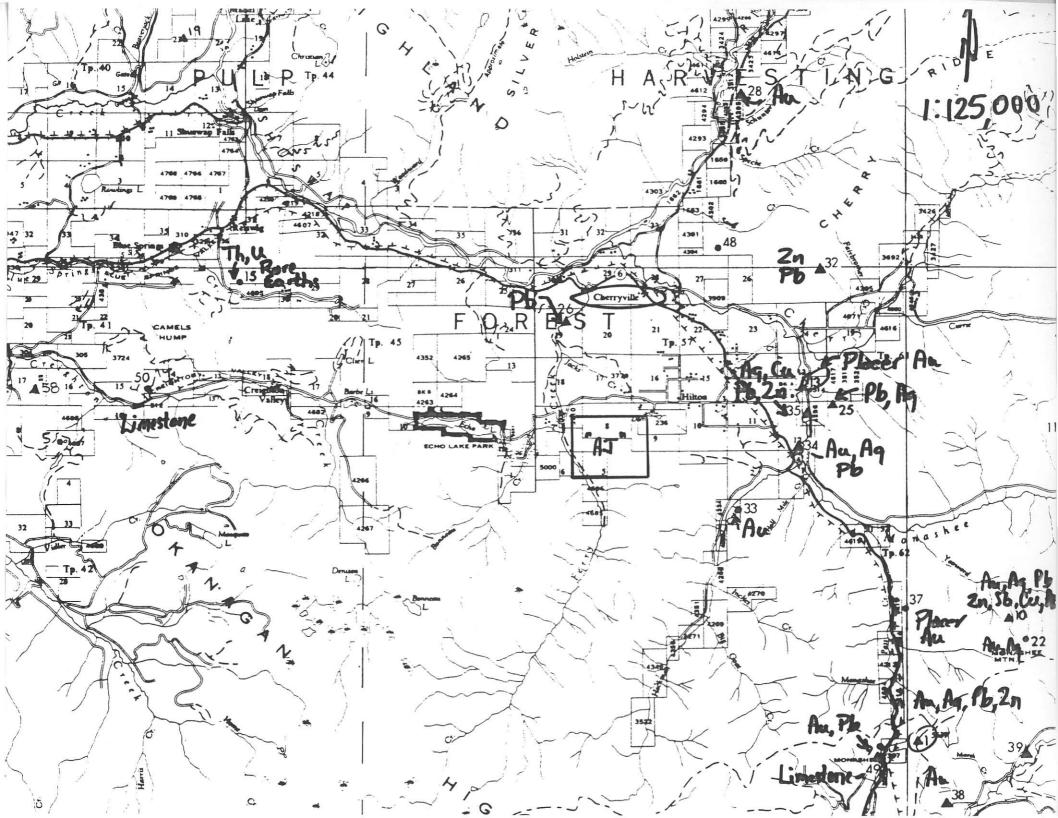
The AJ showing represents a newly discovered, high grade, polymetallic occurrence containing substantial concentrations of gold and silver along with copper, lead and zinc. Although the present exposure is relatively small, the "stratabound" nature, proximity to a volcanic - sedimentary contact within Cache Creek Group rocks and the high precious metal values are seen as positive factors. The location, access and proximity to power are very favourable. This occurrence should be viewed more as an indicator of the mineral potential within a favourable geologic setting rather than as an isolated anomaly. Exploration should be directed at detailed geochemical, geological and possible geophysical evaluation of the central portion of the claim. Trenching, by means of an excavator, should be used to further delineate the AJ showing as well as any anomalous areas.

- 4 -





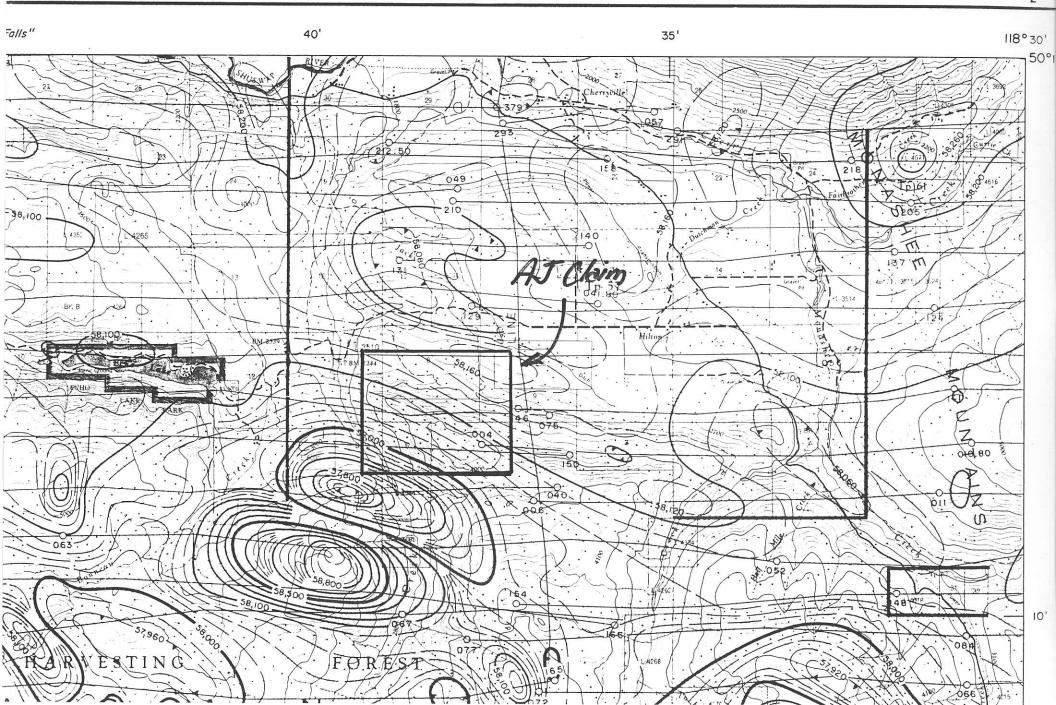


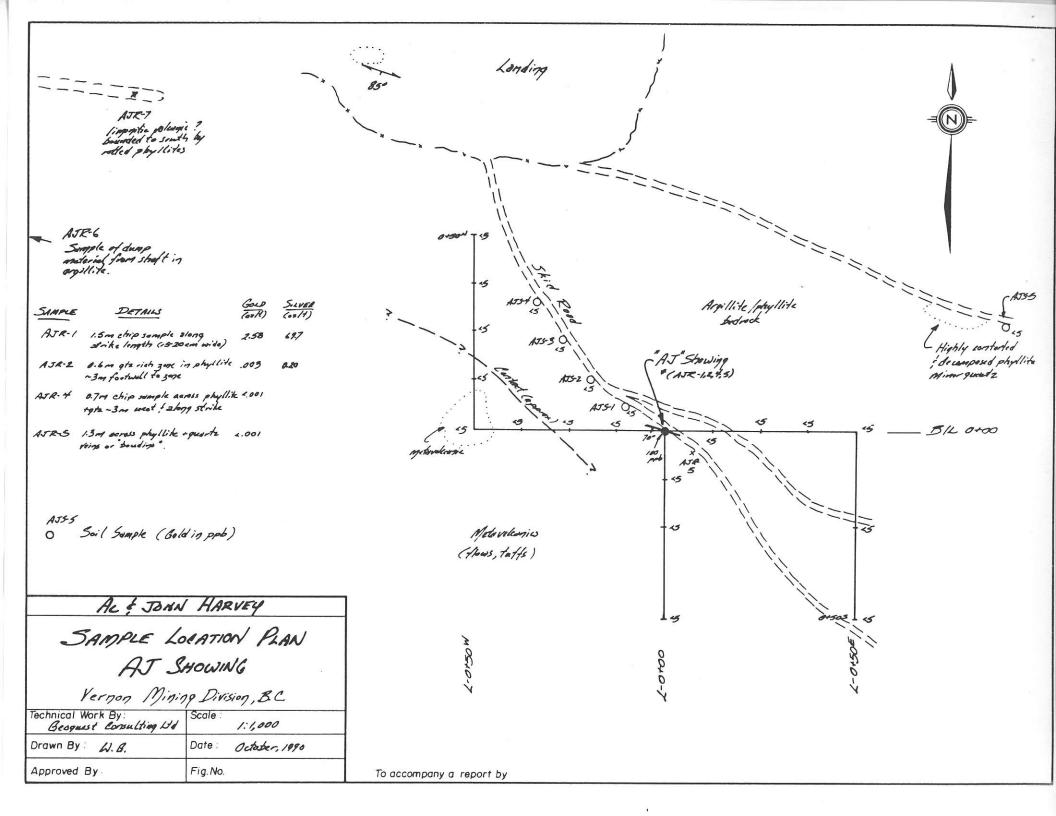


DEPARTMENT
OF
ENERGY, MINES AND RESOURCES
GEOLOGICAL SURVEY OF CANADA

Scale 11 = /mi

SHEET 82 L





# **KAMLOOPS** RESEARCH & ASSAY LABORATORY LTD.

#### **B.C. CERTIFIED ASSAYERS**

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

ASSAY CERTIFICATE



To: Geoquest Consulting Ltd. R.R. #3, Site 11, Comp. 180 Vernon, B.C.

V1T 6L6

Attn:

Number K 10264

Date October 5, 1990

Proj.;38

No.	Description	Au ozs/ton	Ag ozs/ton	
1 2 3	AJR 1 AJR 2 AJR 3	* 2.58 .003 <.001	69.7 .20 .01	Sample along 1.5m strike length (15-20cm wide). Chip sample across 0.6m of rich some NBM into fortwoll Limonitic breezia C 7+70° of LCP.

<sup>\*</sup> Sample has been screened & found to contain coarse gold. See below.

					Percent	Au	Combined Au
					Weight	ozs/ton	ozs/ton
1	AJR	1	-100	mesh	99.94	2.40	2.58
			+100	mesh	.06	318.6	

Certified Assayer

#### GEOCHEMICAL ANALYSIS CERTIFICATE

Kamloops Research & Assay Lab. PROJECT K10264 File # 90-4934

SAMPLE#	Mo ppm	Cu	Pb ppm	Zn ppm	Ag	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb	Bi ppm	ppm V	Ca P	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	ppm B	Al %	Na %	K ₩ % ppm
AJR1	4	5841	9024	12101	171.9	46	7	250	3.21	338	5	45	1	457	406.7	2439	10	11	5.60 .058	3	64	.68	103	.01	2	.36	.02	.12 1
AJR2	3	24	41	171	4.9	28	4	201	1.20	75	5	ND	1	720	1.3	6	4	9	9.60 .032	3	126	.19	162	.01	5	.24	.01	.08 1
AJR3	1	72	14	83	.3	1	13	626	5.52	2	5	ND	1	11	.4	9	11	104	.52 .056	3	12	1.72	20	.41	2 1	1.87	.05	.08 1

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: PULP

✓ ASSAY RECOMMENDED

#### 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

#### GEOCHEMICAL ANALYSIS CERTIFICATE

Kamloops Research & Assay Lab. PROJECT G2300 File # 90-4930 912 - 1 Laval Crescent, Kamloops BC V2C 5P5

SAMPLE#	Мо ррп	Cu	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Со	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	ppm Cd	Sb ppm	Bi ppm	V	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	ppm B	Al %	Na %	K %	ppm W
AJ LO+50W 0+50N	1	66	4	85	.4	33	12	307	2.41	44	5	ND	1	41	.2	2	2	48	.27	.021	4	23	.99	94	.11	3 3	2.61	.03	. 15	1
AJ LO+50W 0+37.5N	1	112	3	71	.1	63	20	362	3.80	28	5	ND	2	41	.2	2	6	64	.32	.008	6	158	1.69	97	.11	4	3.31	.02	.28	1
AJ L0+50W 0+25N	2	220	2	64	.1	82	28	439	5.09	200	5	ND	4	44	.2	7	2	77	.41	.014	14	226	2.28	48	. 09	4	2.59	.01	.24	1
AJ LO+50W 0+12.5N	1	56	2	111	.1	25	24	518	3.93	22	5	ND	1	36	.2	2	7	81	.38	.042	3	24	1.67	163	.13	4	4.01	.02	.10	1
AJ L0+50E 0+25S	3	88	8	170	.3	87	22	277	5.23	68	5	ND	3	82	.2	5	2	40	.39	.022	11	25	.61	154	.05	2 7	2.10	.01	.21	1
AJ B/L 0+37.5W	1	59	5	92	.1	24	20	298	3.12	23	5	ND	1	38	.2	4	2	58	.35	.034	4	24	1.09	152	.12	6 :	3.68	.03	. 13	1
AJ 0+25W	1	93	3	79	.1	114	33	425	5.12	39	5	ND	1	51	.4	3	6	109	.52	.011	3	432	3.54	66	.18	2 4	4.16	.01	.26	1
AJ 0+12.5W	4	124	9	170	.6	105	22	224	5.77	30	5	ND	1	64	.2	6	2	39	.54	.025	10	56	1.20	75	.01		2.06	.01	.09	1
AJ 0+00	5	117	47	225	48.5	<b>/</b> 130	20	193	6.52	651	5	ND	1	386	3.8	32	2	8	13.99	.084	2	10	.32	96	.01	2	.36	.01	.05	1
AJ 0+12.5E	2	65	2	140	.2	73	16	123	4.18	20	5	ND	2	43	.2	3	4	39	.25	.012	12	47	1.00	98	.03	2	1.90	.01	.08	1
AJ 0+25E	2	82	8	152	2.6	54	16	209	3.69	67	8	ND	1	668	1.8	4	2	24	14.80	.063	5	25	.91	121	.02	2	.95	.01	.05	1
AJ 0+37.5E	3	66	11	145	1.0	79	18	289	3.89	21	5	ND	2	73	.4	2	2	29	.62	.036	9	36	.55	147	.03	2	1.76	.02	.07	1
AJ 0+50E	3	54	15	114	.6	67	13	119	3.94	22	14	ND	2	63	.2	2	7	33	.38	.025	8	38	.95	102	.02	2 7	2.00	.01	.07	1
L0+00 0+12.5S	4	106	8	195	1.3	102	22	170	5.57	66	5	ND	2	89	.2	6	2	26	.67	.027	11	27	.48	116	.01	2	1.59	.01	.08	1
L0+00 0+25S	4	103	7	234	.5	85	26	254	6.93	72	5	ND	2	46	.7	5	2	16	.27	.042	15	12	.22	72	.02	2	1.16	.01	.08	1
L0+00 0+50s	1	66	2	126	.2	72	21	323	3.72	33	5	ND	2	30	.2	6	2	74	.26	.024	10	82	1.70	75	.13	2 :	2.76	.02	.10	1
L0+50E 0+50S	3	155	7	68	.2	33	33	250	5.23	24	5	ND	2	30	.2	7	2	40	.29	.009	13	23	1.58	45	.03	2 7	2.17	.01	.10	1
B/L 0+50W	1	26	9	39	.1	12	6	112	1.65	14	7	ND	1	29	.3	2	3	23	.27	.065	4	7	.39	61	.10	3 7	2.81	.04	.05	1
STANDARD C	20	62	42	135	7.0	71	32	1052	3.96	44	18	7	40	53	19.1	16	21	58	.46	.095	39	59	.89	191	.08	33	1.89	.06	.13	13

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: PULP

/ ASSAY RECOMMENDED

ACME ANALYTICAL LABORATORIES LTD.

## 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

## GEOCHEMICAL ANALYSIS CERTIFICATE

Kamloops Research & Assay Lab. PROJECT G2305 912 - 1 Laval Crescent, Kamloops BC V2C 5P5

File # 90-5332

SAMPLE#	Mo ppm	Cu	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th	Sr		Sb	Bi ppm	V	Ca %	P %		Cr	Mg %	Ba ppm	Ti %	B	Al %	Na %	K W
AJS-1	1	69	21	95	(2.3)	52	12	192 3	.49	54	5	ND	1	270	.2	2	2	15	14.47	.057	3	21	.46	33	.01	2	.58	.01	.04 1
AJS-2	3	(133)	20	136	(2.)	92	19	446 6	.13	58	5	ND	1	84	.4	2	2	48	1.66	.027	6	71	1.31	62	.03	2	1.71	.01	.12 1
AJS-3	3	(106)	30	152	3.0	121	22	419 6	.19	(108)	5	ND	1	146	.7	3	2	29	4.72	.065	6	71	.72	92	.01	2	1.12	.01	.09 1
AJS-4	2	71	7	135	1.5	113	15	182 4	.13	0110	7	ND	1	799	.2	2	2	9	12.43	.071	2	16	.91	117	.01	2	.27	.01	.06 1
AJS-5	2	100	15	188	1.0	73	16	499 4	.91	30	5	ND	1	57	.2	3	2	48	.60	.018	6	32	1.05	86	.04	2	1.62	.01	.15 2

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# **KAMLOOPS** RESEARCH & ASSAY LABORATORY LTD.

## **B.C. CERTIFIED ASSAYERS**

912 - 1 LAVAL CRESCENT, KAMLOOPS, B.C. V2C 5P5 PHONE (604) 372-2784 FAX 372-1112

ASSAY CERTIFICATE



To:

Attn:

Geoquest Consulting Ltd.

R.R. #3, Site 11, Comp. 180 Vernon, B.C.

V1T 6L6

Number:

K 10276

Date:

Oct. 15, 1990

Proj.:

38

No.	Description	Au ozs/ton
1	AJR 4	(.010) - Sample acress o.7m & 3m W of road showing
2	AJR 5	(.001 - order p along rond - 9m SSE of showing
3	AJR 6	<.001 - 9 mb sample of gtz ! gtz breezed from dump @ shoft.
4	AJR 7	<.001 - grat swaple bom west of stowers, ald tanch.
5	AJR 8	<.001 - 1 months and that becces along road north ofclaim.

B.C. Kertified Assayer

ACME ANALYTICAL LABORATORIES LTD.

## 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

#### GEOCHEMICAL ANALYSIS CERTIFICATE

Kamloops Research & Assay Lab. PROJECT K10276 912 - 1 Laval Crescent, Kamloops BC V2C 5P5

File # 90-5333

SAMPLE#	Mo	Cu	Pb	Zn ppm		Ni ppm	Co	Mn	Fe %	As ppm	U ppm	Au	Th ppm	Sr ppm	Cd	Sb	Bi ppm	V	Ca P		Cr	Mg %	Ba	Ti X	B	Al %	Na %	K 1
	PPIII	Phili	Phil	Ppiii	PP	Phil	PPIII	PPIII		PP	PPIII	PP	PP.III	PP	El.	P-P-III	PP	PP···		F F	PP		FF	300000000000000000000000000000000000000	11			
AJR-4	1	36	12	44	4.3	22	3	107	.97	51	5	ND	2	381	.2	3	2	2	6.19 .020	2	73	.29	150	.01	2	.07	.01	.04 2
AJR-5	i	47	9	011686	.5	50	8	360		4	5	ND	1	958	(1.5)	2	2	100000000000000000000000000000000000000	13.69 .047		65	.74		.01	2	.97	.01	.10 2
AJR-65277	1	47	8	46	1.1	47	8	498	2.14	74	5	ND	2	632	.2	2	2	11	3.81 .058	2	114	1.52	47	.01	2	.31	.03	.08 1
AJR-7	1	91	7	44	.7	114	23	1035	4.55	(119)	5	ND	1	454	.4	2	2	53	8.06 .057	2	245	3.99	19	.01	2	.94	.01	.03 2
AJR-8	1	18	11	26	.3	13	9	1179	5.52	25	5	ND	1	548	.4	3	2	18	8.60 .072	3	30	1.06	51	.01	6	.24	.01	.13
STANDARD C	18	62	36	170	7.5	73	72	1057	7 08	42	18	8	40	52	18.5	14	19	58	.46 .089	39	60	.90	183	.07	32	1.90	.06	.13 12

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Minnova Inc.

3rd. Floor 311 Water Street Vancouver, British Columb.a V6B 1B8 Telephone (604) 681-3771

Telecopier (604) 681-3360

February 28, 1991

Geoquest Consulting Ltd. R.R. #3, Site 11, Comp. 180 Vernon, B.C. V1T 6L6

Attention: W. Gruenwald

Dear Werner:

Thank you for submitting your Cherryville property to us for review. I apologize for having taken so long to respond.

Unfortunately the property does not fit with our current plans and we will not be able to become involved. I agree with your conclusions that it should be viewed more as an indication of the mineral potential within a favourable geologic setting rather than as an isolated anomaly, but I'm afraid that we have designs on more advanced projects at this time.

I wish you success with your efforts and look forward to reviewing more submittals from you in the future.

Yours truly,

Pe: I. D. Pirie

District Geologist

IDP/qh