2.0	1991	RD.
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GEOLOGICAL ASSESSMENT REPORT REPE GROUP OF CLAIMS

SKEENA MINING DIVISION, BRITISH COLUMBIA NTS 103F/8E LATITUDE 53 28' : LONGITUDE 132 11'

PREPARED FOR

EL NINO MINERALS CORP. VANCOUVER, BC

	SUB-RECORDER RECEIVED	
	1.37 - 7 1991	
M.R.	# \$ VANCOUVER, B.C.	

PREPARED BY

ADAM TRAVIS BSc KELOWNA, BC

NOVEMBER 6, 1991

GEOLOGICAL BRANCH ASSESSMENT REPORT

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1.0 SUMMARY

The objective of the 1990 work program was to evaluate the two new alteration and quartz vein showings. These showings appear to be along strike of previously evaluated areas. Samples taken from the showings returned anomalous base metal and elevated gold values. This metal bearing alteration system has similarities to the Cinola epithermal gold deposit 5Km to the North. Further work consisting of geochemical sampling, geological mapping, and possibly geophysical surveys is warranted in the next phase.

2.0 INTRODUCTION

2.1 LOCATION AND ACCESS

The REPE Group of claims are located approximately 26Km Northwest of Sandspit, Queen Charlotte Islands, B.C., (see Figure 1). The claims are centred at approximately 53 28'; 132 11', in the Skeena Mining Division, NTS 103F/8E.

Well maintained logging roads provide access to the within 2 kilometres west of the REPE Group. Bulldozer trails then provide further access by foot or all terrain vehicle to the claims. Swampy areas occur near the center of the El Ninio claim, providing helicopter access.

2.2 PHYSIOGRAPHY AND CLIMATE

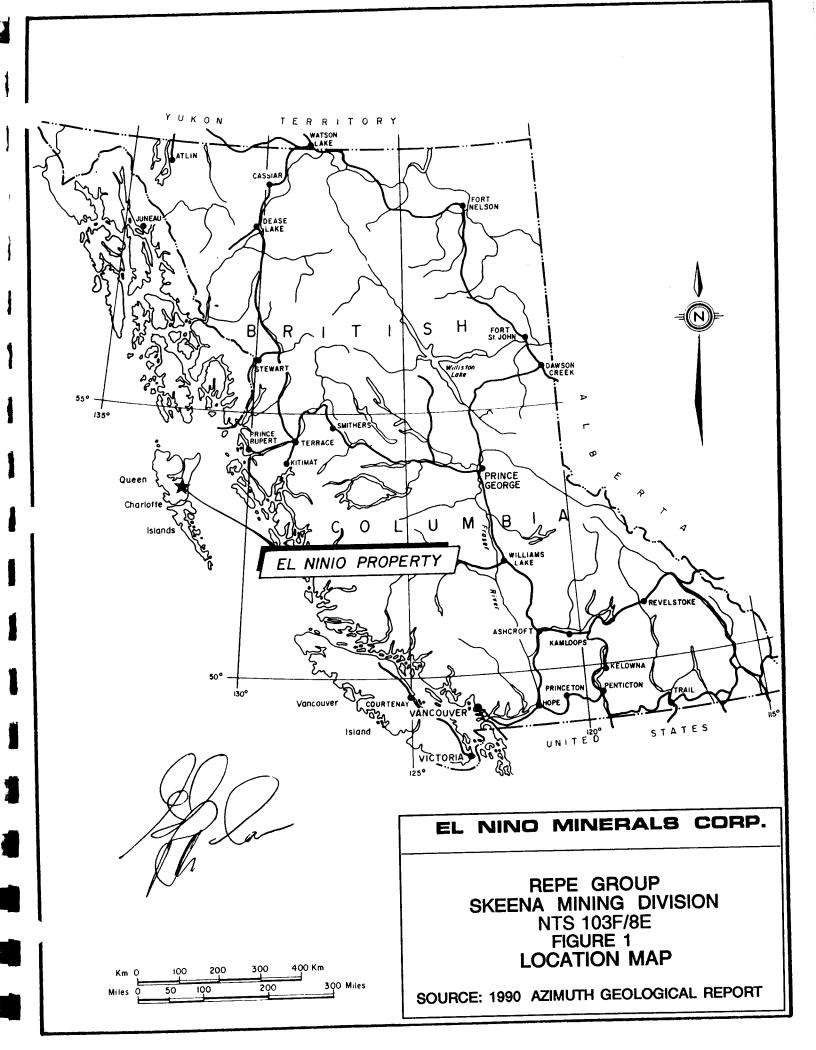
The property lies within the Skidegate plateau region of Graham Island. Topographic relief varies from 400 feet at the Northeast corner of the property, to 1000 feet towards the south end. Vegetation cnsists primarily of mature stands of cedar and spruce. Winters are cool and wet with warm wet summers.

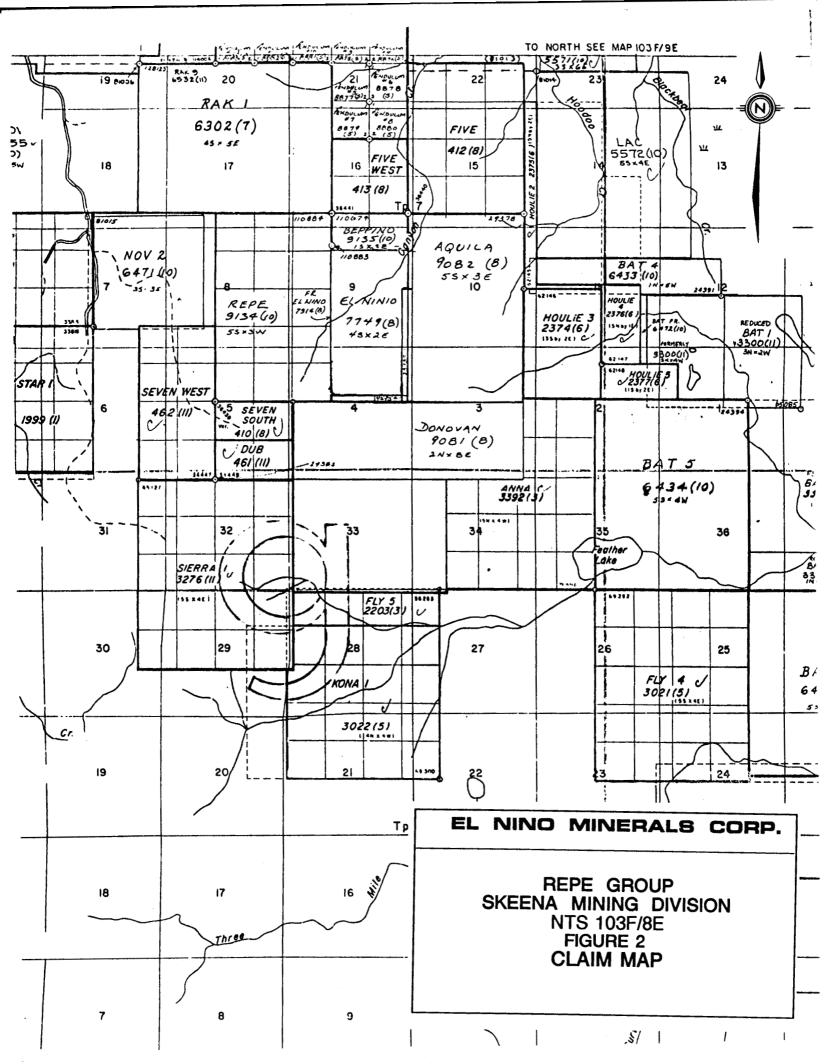
2.3 PROPERTY STATUS AND OWNERSHIP

The registered owner of the REPE claim Group is El Nino Minerals Corp., of Vancouver, B.C.. It is understood that El Nino Minerals Corp. has the right to earn a 51% interest in the El Ninio claims, which form a part of the REPE Group, pursuant to an option/joint venture agreement with Doromin Resources Ltd. dated March 1, 1991.

Figure 2 shows the location of the REPE Group which is comprised of the following:

Claim Name	Units	Record No	D. Record Date	Expiry Date
AQUILA	15	9082	August 15, 1990	1992
DONOVAN	16	9081	August 10, 1990	1992
EL NINIO	8	7749	August 21, 1989	1994
REPE	15	9134	October 30, 1990	1991
BEPPINO	2	9135	October 30, 1990	1991





2.4 HISTORY OF EXPLORATION

Exploration in the area dates from 1969 when E. Specogna and J. Trinco discovered mineralized showings on what is now the Cinola epithermal gold deposit which is approximately 5 kilometres Northwest of the REPE Group.

The Aquila, Donovan, El Ninio, Repe and Beppino claims partly cover the "Seven" claim group which was worked by Umex and Procan Exploration Ltd. from 1978 to 1984 (see table below). Work included geological, geochemical and geophysical (VLFEM, resistivity, ground magnetometer) surveys along with 1268m of diamond drilling in 10 holes, and 2051.2m of percussion drilling in 45 holes.

TABLE 1: Company	Dates	Work Program
Doromin Resources Ltd.	1990	<pre>magnetometer,VLFEM, soil&silt sampling.</pre>
Procan Exploration Ltd.	1984	45 holes percussion drilling, 2051.2m.
Umex	1982	4 diamond drill holes, EM16 survey Westward.
	1981	EM16 suvey selected areas.
	1978	6 diamond drill holes, geophysics, geochem.

2.5 OBJECTIVE OF 1990 WORK PROGRAM

The objectives of the fall 1990 work program was to evaluate the two new showings in Canyon Creek and their relationship to previously worked exploration targets. The brief property examination was also done to provide a basis for future work proposals.

3.0 GEOLOGY

3.1 REGIONAL GEOLOGY

The claims are underlain primarily by Jurassic Yakoun Formation pyroclastic and sedimentary rocks, see Figur 3. The pyroclastic rocks are largely formed of feldspar porphyritic andesite, the formation also includes volcanic sandstone, some conglomerate, shale, siltstone, and minor coal (Sutherland-Brown 1968).

In the Northeast corner of the property the Lower Cretaceous Haida Formation (Queen Charlotte Group) uncomformably overlies the Yakoun Formation. The Haida Formation is composed of marine sandstones and silty shales.

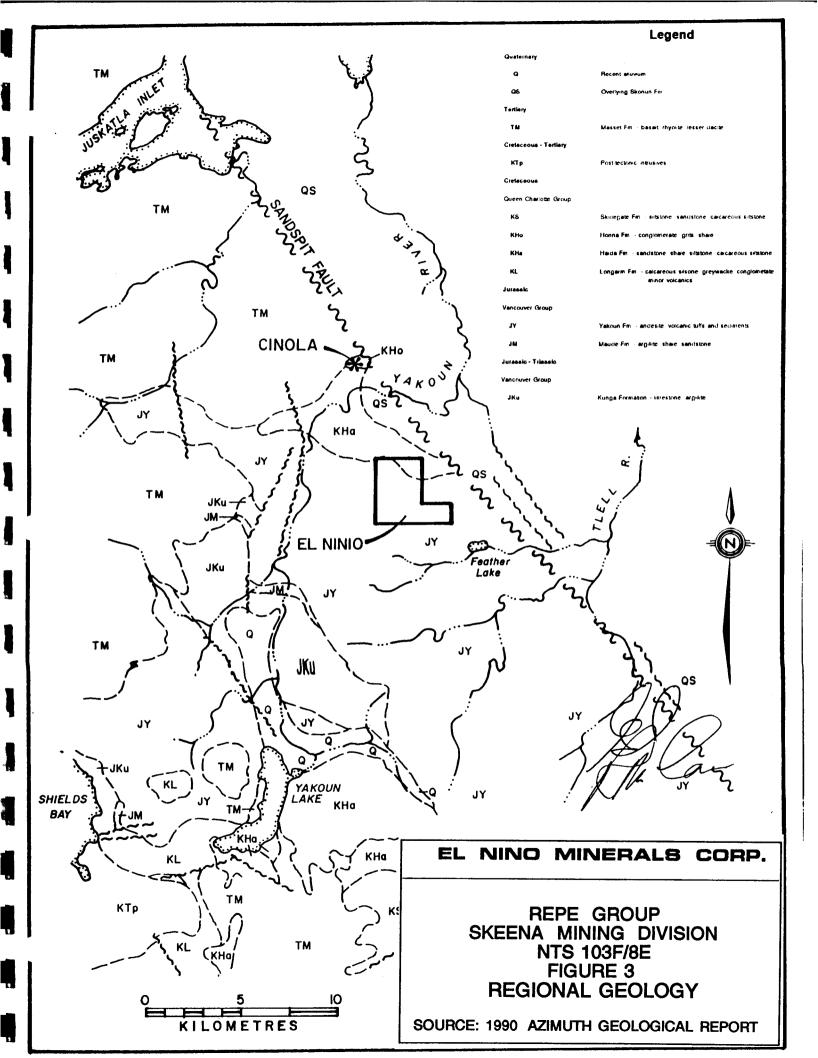
Approximately 5 kilometres Northeast of the property the Upper Cretaceous Honna Formation (Queen Charlotte Group) occurs at the Cinola deposit. The Honna Formation is composed of conglomerate and coarse arkosic sandstone with minor shale or siltstone (Sutherland-Brown 1968).

To the West of the property Tertiary volcanic flows and pyroclastic rocks of the Masset Formation unconformably overlie the Yakoun, Haida and Honna Formations.

Approximately 1 kilometre to the Northeast of the property the Sandspit Fault system occurs separating the above mentioned units from the Late Tertiary Skonum Formation. The Skonum rocks are generally friable sediments and hence have limited exposure. The mineralization at Cinola is largely hosted by Skonum sediments formin the hanging wall to the Specogna Fault (a splay off the Sandspit Fault) (Crowe, Caan 1990).

3.2 PROPERTY GEOLOGY

Observations of limited outcrop exposure by previous workers and Crowe in 1990 show that the property is underlain by tuffs, breccias, agglomerates and porphyritic flows or dykes. These rock types probably belong to the Yakoun Formation which agrees with the regional mapping by Sutherland-Brown 1968.



3.2.1 ROCK DESCRIPTIONS

Predominately silicified volcanics and quartz veins have been described in samples by Crowe 1990, see Table 2. Massive to crystalline barite was also noted in Canyon Creek near the more northerly El Ninio showing, see Figure 4.

3.2.2 METAMORPHISM AND ALTERATION

An apparent Northwest trending zone of shearing with silica and chlorite-carbonate alteration occurs on the Repe claim. This zone has been drill tested by Procan and Umex over an area of 750m X 1000m, see Figure 4.

Another zone with similar alteration appears to trend East-West and occurs near the Repe/Donovan claim boundary. This zone has been drill tested by Umex over an area of 250m X 1000M.

The two new showings in Canyon Creek quartz veins cut silicified and propylitized volcanics and volcaniclastics.

Silicified and argillically altered volcanics with minor Kspar alteration were noted in two hand samples near the El Ninio claim LCP.

These alteration assemblages are similar to the silica with peripheral argillic, phyllic and chloritic alteration found at the Cinola deposit.

These zones of alteration may also be spatially related to structures. The alteration in Canyon Creek may lie along the same structure as the alteration at the zone on the Repe claim approximately 750m Northwest. The extent and control of alteration however are not well understood.

3.2.3 STRUCTURE

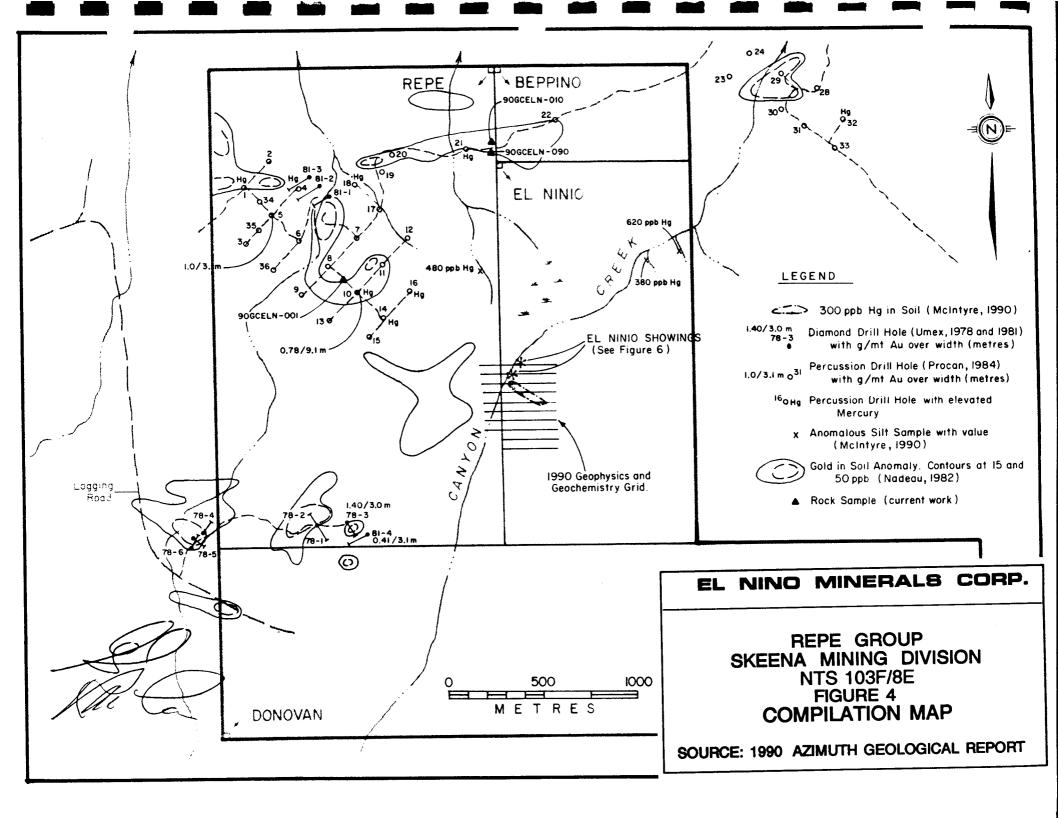
No major structures have been mapped on the claims. However, Crowe, 1990, suggests that a linear series of magnetic lows which trends from the Cinola Deposit and passes through the centre of the claims may reflect the economically important Specogna Fault, see Figure 5. This proposed structure would help explain the NW trending alteration zone on the Repe claim.

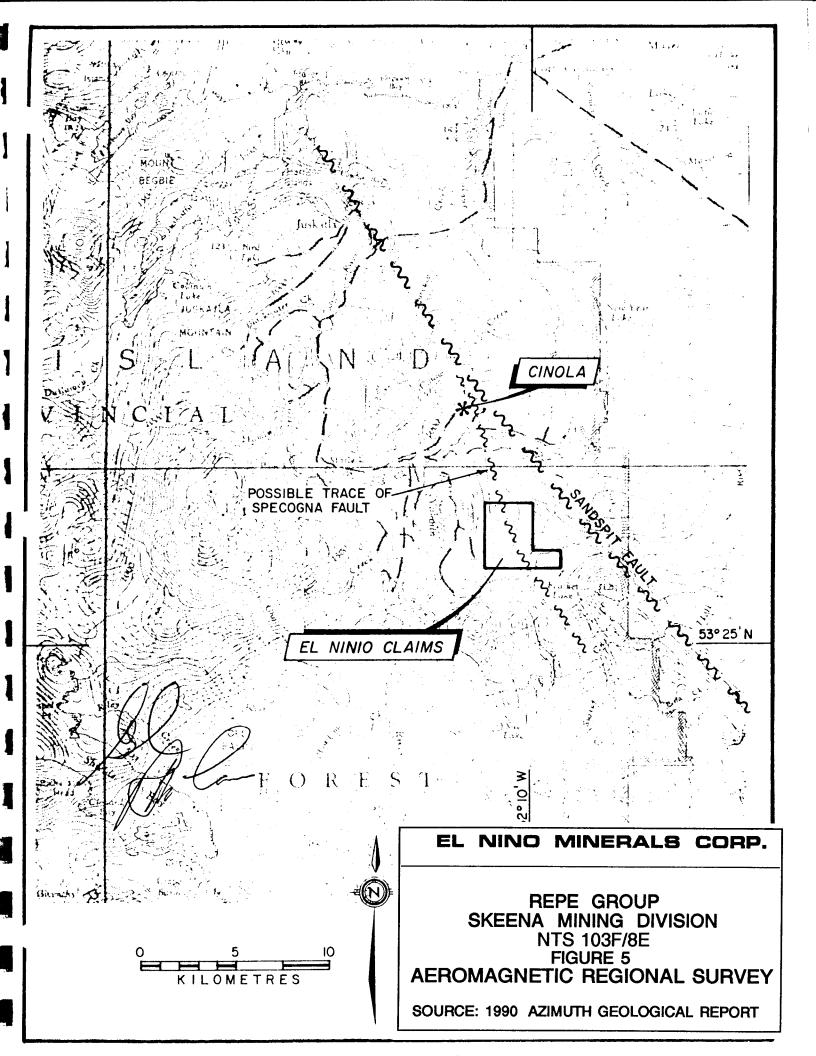
Table 2 Rock Descriptions

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Sample #	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
90GCELN-001	Along road to west of Canyon Creek	Silicified and chloritized volcaniclastic, fine grained disseminations and patches of pyrite to 1-3%. Cut by thin (to 3cm) quartz-epidote veins - grab	110	2.3	73	107	92
90GCELN-002	Canyon Creek - El Ninio Cl aim	1.0m discontinuous chip across quartz quartz veining cutting silicified volcanics, patches and disseminations of pyrite to 3-4% with minor sphalerite	10	0.4	24	29 1	2187
90GCELN-003	as 002	0.8m discontinuous chip across quartz veining cutting silicified volcanics with patches and disseminations of pyrite. Note minor sphalerite and galena	20	0.5	12	1 79 2	10974
90GCELN-004	as 002	1.5m + discontinuous chip across silicified and propylitized zone with lenses of quartz and quartz veining. Note fine grained disseminated pyrite with local patches to 10-12%	nd	0.5	44	30	187
90GCELN-005	150m to south of 002-004 along Canyon Creek	Grab, lower exposure of silicified volcanic (?), ghost breccia texture (?), fine grained pyrite as patches and disseminations to 3-5%, minor quartz veining	20	0.1	110	29	99
90GCELN-006	as 005	Grab, middle exposure, bull white quartz veining cutting silicified volcanics (?), patches and disseminations of pyrite to 1-2%	110	<0.1	70	18	57
90GCELN-007	as 005	Silicified and pyritized volcanic(?) cut by vuggy quartz veining, pyrite as patches and disseminations in silicified volcanic but none observed in quartz veining - grab	10	0.6	59	21	48
90GCELN-008	as 005, 10m to north	Grab, sub-crop in bank, silicified porphyritic (?) volcanic with patches of fine to medium grained disseminated pyrite to 2-5%, minor vuggy quartz veining.	20	0.5	59	31	88
90GCELN-009	along road to north of El Ninio LCP	Intensely silicified volcanic, argillic patches, minor K alteration along some pyrite veinlets, quartz veinlets to 1-2mm, pyrite as disseminations, fracture coatings, patches and veinlets to 3-5%, quartz veining is locally vuggy - grab	nd	0.2	19	35	7
90GCELN-010	10m to NNE of 90GCELN-009	Silicified breccia with pinkish coloured patches (K alteration (?)), patches of argillic alteration, vuggy quartz veinlets to 1mm, disseminations, patches, veinlets and fracture coatings of pyrite to 3-5% - grab	10	0.1	26	18	9





3.3 MINERALIZATION

The property was initially evaluated by Umex and Procan Exploration for its potential to host an epithermal gold deposit like Cinola.

Previous drill programs generally returned spotty results. The best intersection by Umex in 1978 was 0.041oz/ton gold over 3.0 metres in DDH78-3. The 1981 drilling by Umex encountered minor lead, zinc, copper and gold mineralization associated with quartz veining and silicified andesite breccia. The 1984 percussion drilling program by Procan Exploration returned anomalous gold and mercury values.

From the current work two new alteration and quartz vein showings hosting anomalous base metal and elevated gold values have been found to the Southeast of previously evaluated areas, see Figure 6. These showings are described by Crowe and Cann:

"The more Northerly of the showings is a 5m X 15m cut in the East bank of Canyon Creek. ...Earlier massive to vuggy white crystalline quartz host dessiminations and patches of pyrite with lesser sphalerite and galena. ...Three chip samples were collected from this showing. Samples were highly anomalous in lead and zinc, but returned low gold values, 90GCELN-003 returned 1792ppm lead, and 10974 zinc."

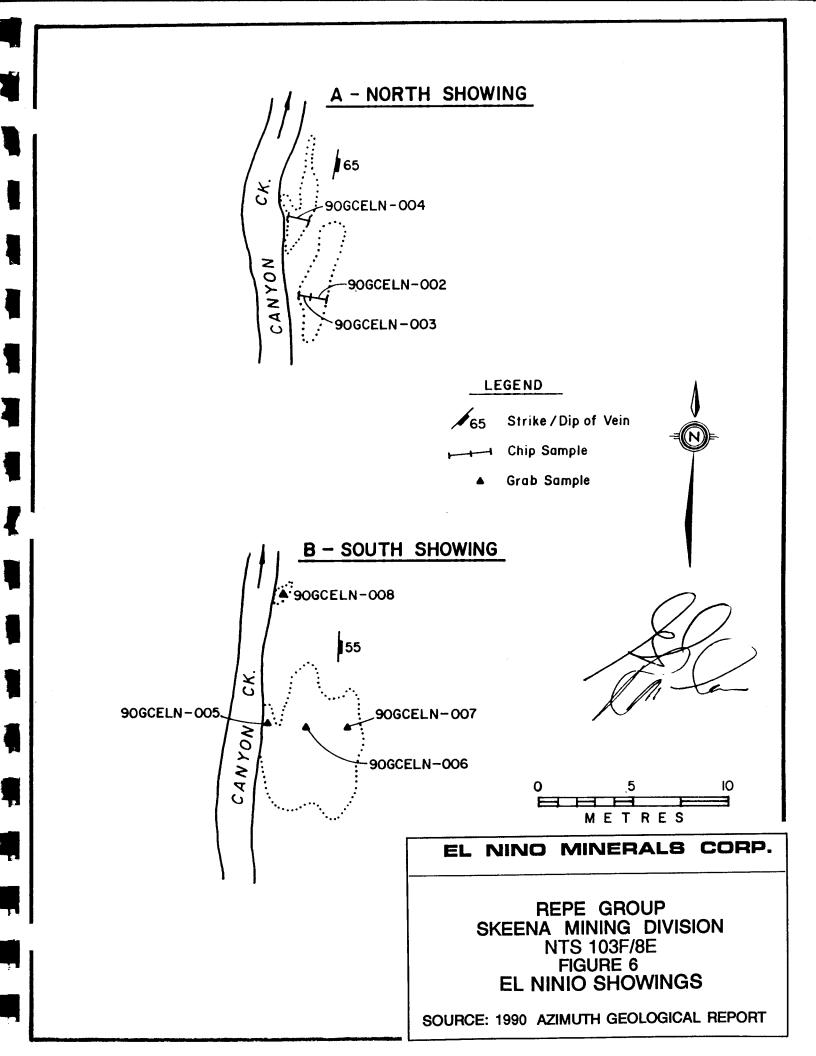
The second showing approximately 150m to the south of the northerly showing also in Canyon Creek. As described by Crowe and Cann:

"Here a 7m X 15m area exposes silicified volcanics cut by north trending moderate to steep east dipping quartz veining, Figure 6b. Pyrite was the only sulphide observed and osccurs as patches and disseminations to 2-5%. One sample, 90GCELN-006, returned moderately elevated gold, 110ppb. All other analyses were low."

4.0 **EXPLORATION AND DEVELOPMENT**

4.1 RESEARCH

In October of 1990 Azimuth Geological was commissioned to compile and review past exploration data in both private and public reports. A property examination on October 31, 1990 was made by G. Crowe accompanied by E. Specogna.



4.2 PROSPECTING/GEOLOGICAL MAPPING

The two new showings in Canyon Creek were briefly mapped and sampled by G. Crowe in October 1990, see Figure 6. The area of previous drilling in the North central portion of the Repe claim was also examined.

4.3 GEOCHEMICAL WORK 4.3.1 PROGRAM

A total of 10 rock samples were taken by G. Crowe in October 1990, see Table 2. The samples were taken from the folowing areas, one sample North central Repe claim, 2 samples near the El Ninio claim LCP, see Figure 4., and 7 samples at the two showings in Canyon Creek, see Figure 6.

4.3.2 RESULTS AND INTERPRETATION

Samples 90GCELN-002, and 90GCELN-003, from the northerly showing in Canyon Creek, returned highly anomalous values in lead and zinc, but returned low gold values, see Table 2. At the southerly showing one sample, 90GCELN-006, returned moderately elevated gold, 110ppb. One sample, 90GCELN-001, taken on the north central Repe claim also returned moderately elevated gold, 110ppb.

These values, although sporadic show that the property is host to a precious and base metal bearing alteration system(s) not unlike the Cinola deposit 5 kilometres to the north.

5.0 CONCLUSIONS

The Repe claim group is host to anomalous precious and base metal values. The poorly defined alteration system has similarities to the Cinola deposit 5 kilometres to the northwest. An interpretation by Crowe and Cann, 1990, suggests that a linear series of magnetic lows which trends from the Cinola deposit and passes through the centre of the claims may reflect the economically important Specogna Fault. Two new showings discovered in Canyon Creek lie outside previously evaluated areas, approximately 750 metres of drilling, and host highly anomalous base metal and elevated gold values in silicified and altered volcanics. Massive barite float was also found in Canyon Creek near the showings.

In future geochemical studies Crowe and Cann, 1990, suggest that silver is the best lithogeochemical indicator with gold, mercury, antimony and tungsten being restricted to the ore zone, based on studies at the Cinola deposit. Mercury can also be useful in soils and peat as it shows a pronounced crescent shaped secondary dispersion pattern east of the Cinola ore body.

The property is interpreted to lie along the Specogna Fault, this along with anomalous precious and base metal values associated with an alteration system suggest that further work is clearly warranted. Appendix I

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Analytical Data

VANGEOCHEM LAB LIMITED

MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717 BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

GEOCHEMICAL ANALYTICAL REPORT

CLIENT: AZIMUTH GEOLOGICAL ADDRESS: 205 - 470 Granville St. : Vancouver, BC : V6C 1T2

PROJECT#: NONE GIVEN SAMPLES ARRIVED: NOV 05 1990 REPORT COMPLETED: NOV 07 1990 ANALYSED FOR: Au (FA/AAS) ICP DATE: NOV 07 1990

REPORT#: 900730 GA JOB#: 900730

INVOICE#: 900730 NA TOTAL SAMPLES: 10 SAMPLE TYPE: 10 ROCK REJECTS: SAVED

SAMPLES FROM: MR. GREG CROWE COPY SENT TO: AZIMUTH GEOLOGICAL

PREPARED FOR: MR. GREG CROWE

ANALYSED BY: VGC Staff

SIGNED:

Kgrd L

GENERAL REMARK: None

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MAIN OFFICE 1630 PANDORA STREET VANCOUVER, B.C. V5L 1L6 TEL (604) 251-5656 FAX (604) 254-5717

BRANCH OFFICES BATHURST, N.B. RENO, NEVADA, U.S.A.

R	BPORT NUNBER:	900730 GA	JOB NUMBER	900730	ATIMUTE	GBOLOGICAL	PAGE	1	OP	1
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		1	opb							
9	OGCELN-001		110							
9	OGCBLN-002		10							
9	OGCELN-003		20							
9	OGCELN-004		nd							
9	OGCELN-005		20							
9	OGCELN-006	1	10							
9	OGCBLN-007		10							
9	OGCELN-008		20							
9	OGCBLN-009		nd							
	OGCELN-010		10							

DETECTION LINIT 5 nd = none detected -- = not analysed is = insufficient sample

VANGEDCHEM LAB LIMITED

1630 Pandora Street, Vancouver, B.C. V5L 1L6 Ph:(604)251-5656 Fax:(604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCl to HNO5 to H2O at 95 °C for 90 minutes and is diluted to 10 ml with water. This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: Andh

REPORT #: 900730 PA	AZIMUTH GE	OLOGICAL				PROJE	CT: NONE	GIVEN		DAT	E IN: NO	/ 5 1990	DA	TE OUT: N	IOV 13 19	190 4	TTENTIO	N: MR. 61	REG CROWE			PAG	E 1 DF	1	
Sample Name	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	ĸ	Ħg	Ħn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	ป	¥	Zn
	pp e	ĩ	ppe	ope.	poe	X	ppm	pp e	pps	0pm	7	1	7	₽ ₽#	ppe	z	ppm	ĩ	0p∎	pp∎	ppe	ppe	ppe	pps	ppm
906CELN-001	2.3	2.27	91	111	<3	0.61	2.1	16	54	73	4.70	0.12	0.62	847	14	0.07	25	0.01	107	< 2	<2	26	<5	<3	92
906CELN-002	0.4	0.72	<3	134	<3	0.02	11.2	5	158	24	2.96	<0.01	0.28	359	14	0.25	42	(0.01	291	<2	<2	3	<5	(3	2187
906CELN-003	0.5	0.25	<3	134	<3	<0.01	60.0	2	130	12	1.76	<0.01	0.11	188	4	0.03	6	<0.01	1792	<2	<2	2	<5	<3	10974
906CELN-004	0.5	1.44	(3	31	(3	0.15	2.6	17	106	44	4,20	0.05	1.06	1429	12	0.06	10	<0.01	30	<2	(2	5	(5	<3	187
906CELN-005	0.1	3.82	<3	67	<3	0.11	3.1	24	66	110	5.67	0.07	3.03	3107	11	0.08	18	0.02	29	<2	<2	9	<5	3\	ʻ 99
906CELN-006	<0.1	2.45	(3	59	<3	0.07	2.3	16	84	70	4.41	0.04	1.91	2030	9	0.05	11	0.01	18	٤2	<2	8	<5	(3	57
906CELN-007	0.5	1.65	<3	74	<3	0.09	1.5	18	98	59	3.48	0.04	1.32	1338	11	0.05	9	<0.01	21	<2	<2	9	<5	<3	48
906CELN-008	0.5	3.25	(3	18	<3	0.64	2.3	38	58	59	6.12	0.14	2.04	2542	12	0.12	19	0.02	31	(2	<2	29	<5	<3	88
906CELN-009	0.2	0.57	(3	19	<3	<0.01	<0.1	14	94	19	2.27	<0.01	0.03	42	8	0.01	11	<0.01	35	(2	<2	68	<5	(3	7
90GCELN-010	0.1	1.03	<3	16	<3	<0.01	(0.1	18	61	26	2.91	<0.01	0.02	36	13	0.02	16	<0.01	18	<2	<2	13	<5	(3	9
Minimum Detection		A A1	2		2	A A1					A A1	A A1	A A1			0.01		0.01	•	2	'n		c	•	•
Haximum Detection	0.1 50.0	0.01	2000	1000	1000	0.01	0.1	20000	1000	20000	0.01 10.00	0.01	0.01 10.00	20000	1000	0.01 10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000
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APPENDIX 2

STATEMENT OF QUALIFICATION

I Adam Travis, of 153- 1999 South Highway 97, Kelowna, B.C., do hereby certify that:

1. I am a graduate of the University of British Columbia with a Bachelor of Science Degree (Major Geology).

2. I completed my formal studies at the University of British Columbia in December 1988 and have practised my profession since then.

3. I have only briefly visited the showings in Canyon Creek with E. Specogna in 1989 before the present claims were staked.

4. This report is based chiefly on a private report by Crowe and Caan (1990) of Azimuth Geological on the El Ninio property summarizing their work completed in late 1990, and with personal communications with M. Specogna.

Dated on this 6th day of November 1991, at Vancouver, B.C.

don Travis

Respectfully Submitted, ADAM TRAVIS BSc.

APPENDIX 3

STATEMENT OF COSTS

Azimuth Geological: mapping, sampling, assaying, drafting maps, air-travel. 1 geologist property visit Oct. 31, 1990.	\$3,150.00
Travel: vehicle 1750 Km @ \$0.55/Km, ferry from Port Hardy-Prince Rupert-Skidegate, return	\$1,100.00
Report	\$500.00
Total Expenditure	\$4,750.00