AL '97

1997 Induced Polarization Survey Report Covering the

AL & Mets Properties

Toodoggone River Area, B.C.

Omineca Mining District

October 28, 1998.

This report covers the 7500 hectares (18,532 acres) in one mining lease and 19 mineral claims held by Cheni Resources Ltd. under option to AGC Americas Gold Corporation Corp. / Antares Mining and Exploration Corp. and the Mets-1 mineral claim centred on 57°20' N 127° 11' W in NTS Map Sheet 94E/06.

Mining Lease #473	306619	Ernie	222124
AL 1	221814	Bert	222125
AL 5	221994	Tinkle Fraction	238472
AL 6	221995	Wankle	238473
AL 7	222088	Gerome	238475
AL 8	222089	Surprise	238476
AL 42	302923	Winkle	360389
New-2	357276	J.O. Fraction	238512
Hyuk 3 Fraction	222362	R. J. Fraction	238513
Bull	222123	Mets -1	360359

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Report #98-072-1-IP

1997 Induced Polarization Survey Report Covering the

AL & Mets Properties

Toodoggone River Area, B.C.

Executive Summary

AGC Americas Gold Corporation and JV partner Antares Mining and Exploration Corporation hold an option to acquire the AL claims located in the Toodoggone Gold Camp. The property hosts a large epithermal gold-silver system now recognized as the upper portion of a large porphyry system. The property has been a small scale past producer which is now viewed as an epithermal bonanza type deposit (high grade - low tonnage near surface deposits). The nearby Lawyers Mine produced between 1989 and 1992 a total of 171,177 oz. of gold and 3,548,459 oz. silver. Approximately 10,000 oz. of the gold was produced from the AL property.

This report covers the 18.5 km of IP surveys conducted on the AL and Mets properties in late fall to early winter of 1997. The wide spaced lines were laid out to test known showings and the wider property. A number of possible drill targets were outlined and further ground geophysics is recommended.

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Induced Polarization Survey Line "B"	21+25W to 5+00W	97417-9b
Induced Polarization Survey Line "B"	34+50W to 20+00W	97417-9c
Induced Polarization Survey Line "C"	6+25W to 10+00E	97417-10a
Induced Polarization Survey Line "C"	21+25W to 5+00W	97417-10b
Induced Polarization Survey Line "D"	0+00 to 16+25S	97417-11a
Induced Polarization Survey Line "D"	15+00S to 31+25S	97417-11b
Induced Polarization Survey Line "D"	30+00S to 39+50S	97417-11c
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Induced Polarization Survey Line "F"	5+25W to 10+00E	97417-13b
Induced Polarization Survey Line "G"	7+50W to 2+00E	97417-14

1.0 Introduction

In December 1997, Cynthia Dean Vice-President of Antares Mining and Exploration Corporation (ANZ) requested Paul A. Hawkins & Associates Ltd. (PAH) to prepare an report on the AL property covering 1997 Exploration. Previous to this, PAH had been retained by AGC Americas Gold Corporation to manage exploration on AGC's properties in the area and had prepared several summary reports on these properties.

AGC Americas Gold Corporation and Antares Mining and Exploration signed a Farm-in Agreement on July 7, 1997 covering all of AGC holdings in the area. The agreement called for the formation of the Toodoggone Joint Venture (JV) to explore the properties. In November 1997 Antares Mining and Exploration Corporation exercised its right under the Joint Venture agreement and assumed operatorship of the Toodoggone JV and requested PAH to continue to act as Project Manager. In 1989 PAH had completed a due diligence review on the Cheni Gold Mine in support of an IPO and is thus familiar with the property area and economic geology.

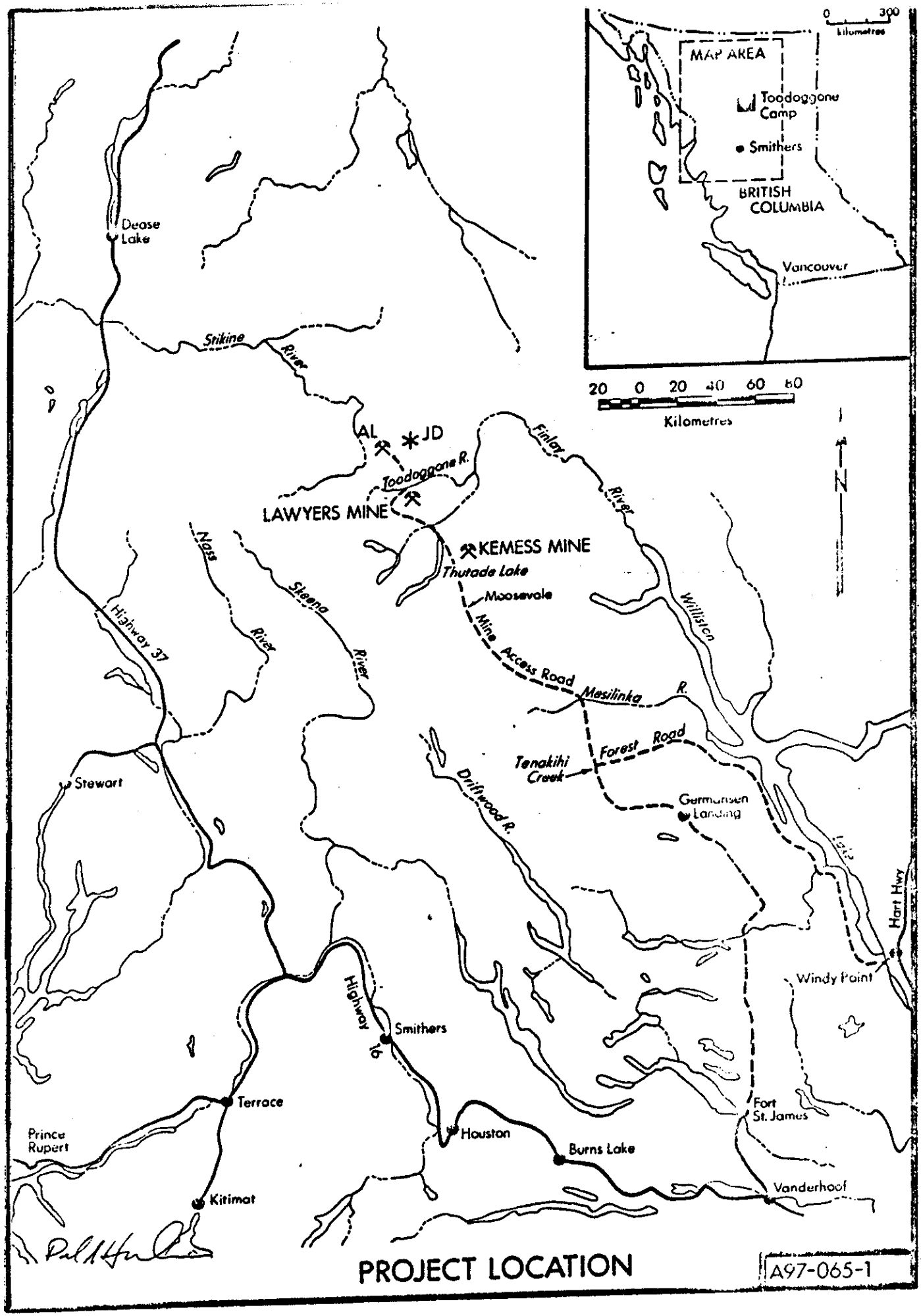
This report summarizes ground geophysical program work carried out on the AL property by AGC / ANZ in 1997 under the supervision of PAH and covers work conducted by other contractors or sub-contractors to AGC.. Three modest bulk samples were mined from the AL property by Cheni Gold Mines just before its closure in 1991. The mill site on the nearby Lawyers Mine site has now been fully decommissioned with all milling and mining equipment removed from the property. The AL property still hosts potential for bulk tonnage type gold deposits.

1.1 Acknowledgements

The able assistance of John Pukas and Ivan Young who logged the 1997 drill core and Mike Alexander, Neil McCaskill, Brain Untereiner and Roman Diduck who split all the core is also gratefully acknowledged. The exploration effort on the AL property was a team effort by all field staff. The exploration effort was not possible without the wealth of valuable exploration information collected by previous AGC staff and prior operators such as Energex Minerals and Kidd Creek Mines. The assistance of Ministry of Employment & Investment geologists Tom Schroeter, Larry Diakow and Bob Lane is also acknowledged.

1.2 Location and Access

The AL property consists of a single claim group of 220 units and one Mining Lease covering 16,123 acres. The Mets-1 claim adjoins the Al property to the south. Both are located in the Toodoggone area of the Omineca Mining District of north-central British Columbia, approximately 180 miles north of the town of Smithers as shown on Drawing A97-065-01. The property lies within the Omineca Mountains in N.T.S. 94E/06 and is centred on 57°20' N 127° 11' W. AGC controls an additional 30,146 acres in the adjacent J.D., Mets and Moose claim blocks as shown on Drawing A97-065-02.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Highway 37
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Mesilinka R.
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Tenakihi Creek
Driftwood R.
Germansen Landing
Stewart
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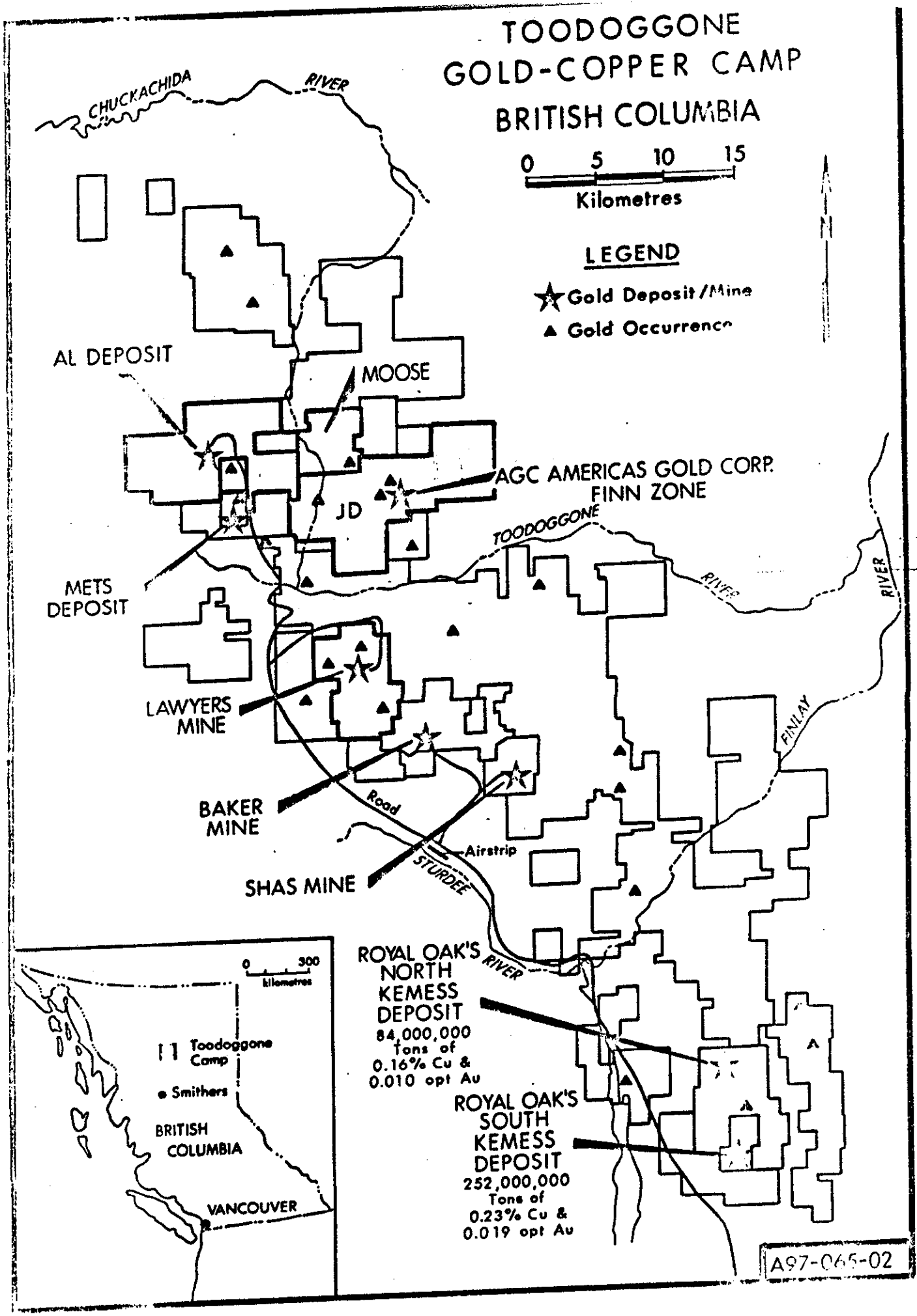
Windy Point
Highway 16
Smithers
Terrace
Prince Rupert
Houston
Burns Lake
Fort St. James
Vanderhoof
Kitimat
PROJECT LOCATION
A97-065-1


TOODOGGONE
GOLD-COPPER CAMP
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0 5 10 15
Kilometres
LEGEND
Gold Deposit / Mine
Gold Occurrence
CHUCKACHIDA RIVER
AL DEPOSIT
MOOSE
JD
AGC AMERICAS GOLD CORP.
FINN ZONE
METS DEPOSIT
TOODOGGONE RIVER
LAWYERS MINE
FINLAY RIVER
BAKER MINE
Road
Airstrip
SHAS MINE
STURDEE
ROYAL OAK'S NORTH KEMESS DEPOSIT
84,000,000 Tons of 0.16% Cu & 0.010 opt Au
ROYAL OAK'S SOUTH KEMESS DEPOSIT
252,000,000 Tons of 0.23% Cu & 0.019 opt Au
0 300 kilometres
Toodoggone Camp
Smithers
BRITISH COLUMBIA
VANCOUVER
A97-065-02

Both properties are accessible off the northern end of the Omineca Resource Access Road (ORAR). The ORAR terminates at the Lawyers Mine site while the AL claims are accessible off a spur (Metsantan Extension) off the ORAR just before the Mine. The property area during the summer of 1997 was serviced by twice weekly fixed wing aircraft out of Smithers or Prince George using the nearby 5,300 ft. Sturdee gravel strip which is capable of handling aircraft up to the size of a Hercules. The Kemess Mine site located 40 miles to the south is serviced by several daily scheduled flights out of Prince George and Smithers. Typically fuel and heavy equipment are trucked in from Fort St. James to the end of the road, while weekly supplies were flown in from Smithers.

The AL and Mets properties are located in previously disturbed areas at an elevation of 4300 - 6500 ft. which is largely above tree line. The area consists of rounded hills with steep talus and overburden covered slopes. Some permanent ice is present on the property. The use of Helicopters and ATV limits terrain disturbance in areas outside of the past disturbances. AGC operations in the area were based out of a 16 men camp on the J.D. property which is located in an alpine meadow just at tree line and is equipped with a satellite telephone and Fax modem. A second camp was set-up in September 1997 on the Mets-1 claim to service the AL property.

The Toodoggone area has over the last two decades been one of the most actively explored areas of B.C. for Gold-Silver Deposits. Deposits present in the area range from gold-rich porphyry-style deposits, to deep-seated precious and base metal bearing stockwork and veins, to near-surface replacement type gold mineralization. The district contains several past producers including the Lawyers Mine as well as smaller scale Shasta and Baker mines. Several other gold deposits have drill-indicated resources and await further exploration and production decisions. Another major development in the area is Royal Oak's Kemess Deposit which is located 40 miles to the south. Kemess is now in commercial production.

1.3 Land Status and Environmental Concerns

The AL property consists of one claim blocks held by Cheni Resources Ltd. et al under the terms of the Mineral Tenure Act Regulations. AGC has an option to acquire a 100% interest in the properties subject to: for the Lawyers a 2% NSR to Cheni et al and for the AL to the original vendor a 7% initial production royalty and 0.50% NSR in respect of tons milled in excess of 250,000 tons; to Kinross Gold Corporation et al an aggregate 15% NPR; a 1.5% NSR to Cheni.

In June 1997 AGC entered into an agreement with Toronto based Antares Mining and Exploration Corporation (ANZ) to farm into all of AGC's properties in the area including the Lawyers and AL. The joint venture agreement calls for ANZ to spend $5,000,000 on the AGC property to earn a 55% interest. A further 5% may be purchased for $4,500,000. The Mets-1 claim was acquired by staking in 1997.

Most of the claims appear in good standing into the of fall 1998 or beyond. Annual rentals on the mining Leases are also due yearly. Exact details of claim status is beyond the scope of this report but we believe they are in good order. The claims covered by this report are listed in Table 1 & 2 and shown on Drawing A97-071-04.

Much of the project area and current camp site is located in alpine areas which are Environmentally Sensitive. Access to the properties is from the Sturdee Airstrip on the Omineca Resource Access Road. The Omineca Resource Access Road originally called the Omineca Mining Access Road was built by Cheni Gold Mines with the assistance of the Province of B.C. The close proximity of the property to Spatsizi Wilderness Park and the Alpine Environment in which the property is located will require careful concern for the environment.

1.4 History of the Property Area

The Toodoggone is a well recognized major precious metal mining camp with a poorly deserved bad reputation. Prior to 1966, the camp had a limited history of small scale placer and lode operations with the usual romance of big discoveries and failed dreams. In the late 1960's porphyry copper exploration in the area utilizing modern techniques of geochemical exploration (stream sediments) led to the discovery of several precious metal prospects including the Chappelle (Baker Mine), Shas and Lawyers (Cheni). Several other porphyry prospects were discovered including what was to become Royal Oak's Kemess Deposit which is now in commercial production

Gold was discovered in quartz veins on the Chappelle prospect in 1969. The property which is located 4 miles south-east of the old Cheni Mill site was placed into production by Du Pont as a 120 ton per day high grade underground operation between 1981-83 producing 34,000 oz. Au and 673,000 oz. Ag from 85,000 tons. Exploration had failed to prove up additional reserves to extend the life of the mine. Operations ceased in 1983 as reserves were exhausted. Further later drilling resulted in the definition of two zones:

"A" zone with 10,000 tons @ 0.247 oz. Au / ton
"B" zone with 50,000 tons @ 0.570 oz. Au / ton

These new zones although interesting were not significant to re-open the mine in the mid 1980's. Some further exploration has been undertaken recently, and a small amount of carbonate ore was run through the mill during late summer 1996 to cap the tailing pond. Overburden removal in the area to be mined revealed additional ore and further work is planned for 1997. The Baker Mill is now controlled by Sable Resources.

Table 1
AGC Americas Gold Corp. / Antares Mining and Exploration Corp.
August 6, 1998

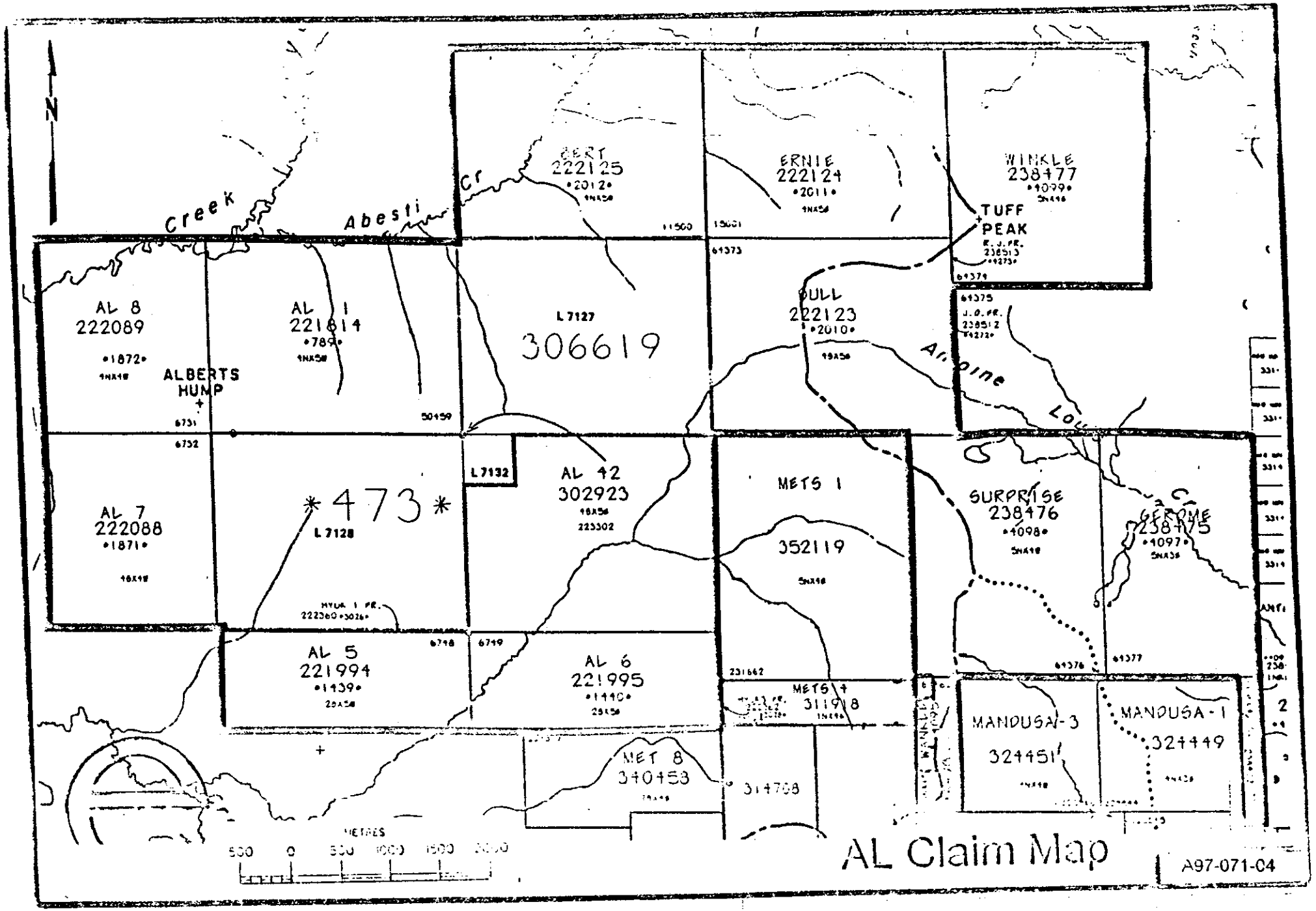
AL Property Claims

Claim Name	Record #	Units	Staking Year	Expiry Date	Area	
Mining Lease #473	306619			June 1, 1999	1025	
AL 1	221814	20	1979	June 12, 2000	500	*
AL 5	221994	10	1979	July 18, 2000	250	*
AL 6	221995	10	1980	July 18, 2000	250	*
AL 7	222088	16	1981	Apr 21, 2000	400	*
AL 8	222089	16	1981	Apr 21, 2000	400	*
AL 42	302923	20	1991	Aug 1, 2004	500	*
New-2	357276	6	1997	July 2, 2000	150	*
Hyuk 1 Fraction	222360	1	1983	July 11, 2000	25	*
Hyuk 3 Fraction	222362	1	1983	July 11, 2000	25	*
Bull	222123	20	1981	Aug 13, 2000	500	*
Ernie	222124	20	1981	Aug 13. 2000	500	*
Bert	222125	20	1981	Aug 13. 2000	500	*
Tinkle Fraction	238472	1	1981	Aug 13, 2002	25	*
Wankle	238473	31	1981	Aug 13, 2002	75	*
Gerome	238475	15	1981	Aug 13, 2001	375	*
Surprise	238476	20	1981	Aug 13, 2001	500	*
Winkle	360389	20	1997	Oct 21, 2001	500	*
J.O. Fraction	238512	1	1981	Sept 8, 2005	25	*
R. J. Fraction	238513	1	1981	Sept 8, 2005	25	*
Chute	357275	18	1997	June 24, 2001	450	*
		239 units		Total Area =	7,000hectares	
				=	17,297 acres	

Table 2

Mets Property Claims

Claim Name	Record #	Units	Staking Year	Expiry Date	Area	
Mets-1	360359	20	1997	Oct 28, 2001.	500	*


N
Creek
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ERNIE
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WINKLE
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BULL
222123
•2010•
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AL 7
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473
L7128
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AL 42
302923
METS 1
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SURPRISE
238476
•4098•
GEROME
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•4097•
AL 5
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AL 6
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•1440•
METS 4
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MANDUSA-3
324451
MANDUSA-1
324449
MET 8
340453
314708
METRES
500 0 500 1000 1500 2000
AL Claim Map
A97-071-04

The Shas property located 8 miles south-east of the old Cheni mill site was explored between 1973-1988 and hosts 2,500,000 tons @ 0.055 oz. Au/ ton (GCNL, 1988b) in a quartz stockwork. Between 1989 and 1991 108,000 tons at a calculated average grade of 0.143 oz. Au / ton and 7.9 oz. Ag / ton were mined returning 15,500 oz. Au and 854,424 oz. Ag. The nearby Baker Mill was used to mill this material. Mineralization consisting of native gold and silver, electrum and argentite occur with sparse fine disseminated pyrite, sphalerite, galena and trace amounts of chalcopyrite which is hosted in anastomosing quartz-calcite breccia systems that pinch and swell (Diakow et al, 1993). Both the Chappelle and Shas properties are now controlled by Sable Resources.

In 1969, Gold was discovered on the Lawyers prospect by Kennecott while exploring the area for porphyry copper deposits. Serem acquired an option on the property in 1978. Later that year a joint venture was formed between Serem, Kennecott and Agnico-Eagle. In 1979 Kennecott dropped out of the joint venture exploring the Lawyers prospect. In 1982 Agnico-Eagle's interest was bought out giving Serem a 100% interest. Serem changed its name to Cheni and went public in May 1987.

Three zones were defined on the Lawyers property by 1989 when the property was put into production as a 550 ton per day underground operation with a projected life of ten years. Proven and probable reserves at opening were 1,037,600 tons @ 0.209 oz. Au / ton and 7.57 oz. Ag / ton. Mineralization is hosted in a quartz vein stockwork and breccia zones. Between 1989 and 1992 The Cheni mine produced 171,177 oz. Au and 3,548,459 oz. Ag as shown in Table 2 . Capital costs for the project were $C57.4 million.

The Lawyers Mine was accessed by horizontal adits on five levels. The main haulage was on the lowest level by rail using a battery locomotive with diesel back-up. Mining methods were blasthole and shrinkage stoping. After crushing and grinding ore was processed through a thickener in four vat leach tanks to a filter before the pregnant solution is introduced to the Merril-Crowe zinc precipitation circuit. Overall recoveries for Au were 93.5% and 73.5% for Ag.

Table 3
Cheni Gold Mine Production

Year	Gold (Au oz.)	Silver (Ag oz.)	Operating Cost ($US) per oz. gold equivalent
1989	48,500	918,000	215
1990	52,630	1,160,426	230
1991	38,530	720,706	348
1992	31,517	749,327	393
Total	171,177	3,548,459	

In 1991, metal prices were at historical lows and a strong Canadian dollar forced the increase of the then cut off grade to 0.20 oz. per ton of gold equivalent. This change resulted in over a 50% reduction in Ore Reserves. The zones were still there but were considered uneconomic. Cash operating costs in 1991 were $US98 per ton with a production cost of $US348 per oz. Au. High operating costs forced the closure of the mine in 1992 with the exhaustion of economic underground reserves. Exhaustion of reserves is believed to be partly due to the increase in the cut off grade which resulted in the elimination of the bulk of the contained gold in the deposits. The Cheni Mill Site was decommissioned in 1996 and mill equipment moved to South America. Royal Oak acquired the camp and moved it to Kemess.

Royal Oak's Kemess Project located 25 miles to the south of the old Cheni mill site is currently under construction. The property hosts several porphyry copper-gold mineralized zones, the best of which is the Kemess South with mineable reserves of 221,000,000 tons @ 0.018 oz. Au / ton and 0.224 % Cu which translates into 4.1 million oz. of gold and 990 million pounds of copper. The mine is planned as a large open pit operation at a rate of 40,000 tons per day with a 15 year life. The project has a projected capital cost of $350 million. A further $50 million is expected from the Province of B.C. for infrastructure improvements. Royal Oak acquired the property from El Condor Resources Ltd. and St. Phillips Resources Inc. for $67.6 million plus 20.9 million shares of Royal Oak in mid 1995. The property reached commercial production in the summer of 1998.

The Mets deposit located 9 miles north-west of the old Cheni mill site property was found by Golden Rule Resources Ltd. in 1980. The property hosts several quartz barite breccia zones characteristic of epithermal systems. Golden Rule defined between 1985-88 a geological resource of 158,500 tons @ 0.330 oz. Au / ton. Cheni Gold Mines optioned the property in 1992, and in the closing months of its operation mined 53, 518 tons @ 0.339 oz. Au / ton from the property. Ore was trucked to the Cheni mill. The property was subsequently returned to Golden Rule.

The AL property is located 10 miles north-west of the old Cheni mill site and was once part of Energex's large holdings in the Toodoggone which included the J.D. Energex had acquired the AL property in 1979 as a result of increased exploration activity in the area due to developments by Du Pont at the Baker Mine. By 1986, Energex exploration work had defined 19 surface gold showing by trenching and stripping. Mineralization appeared to be localized along three main structural features associated with volcanic resurgent domes and collapsed calderas. In 1986 Energex conducted 40,000 ft. of diamond drilling with an additional 25,000 ft. completed in 1987 principally on the Bonanza structure. In 1988 a further 22,300 ft, was completed on the Bingo, Bonanza west, Thesis and Ridge zones. The Bingo zone returned low grade Cu-Au mineralization

In August, 1986 Energex conducted pilot plant operations on high grade ore from the Thesis III deposit at a rate of about 6 tons per day. Energex had defined a geological resource on the property of 1,900,000 tons at 0.16 oz. Au / ton including 374, 680 tons @ 0.28 oz. Au / ton (uncut, undiluted, 0.12 oz. Au / ton cut-off). In 1987-88 the company carried out feasibility and heap leach tests funded largely by flow through shares with the aim of self-financing development. With the end of the tax driven nature of flow through shares in 1988 the company fell on hard times. By 1989 Energex had spent a total of $C11.0 million on exploration in the Toodoggone.

In 1990 Cheni Gold Mines Inc. optioned the property and competed the Metsantan Road as an extension to the Omineca Mining Access Road providing road access onto the property. In 1991 Cheni mined high grade from two small open pits of about 38,000 tons @ 0.300 oz. Au / ton during the closing months of its operations as underground reserves were exhausted at the Lawyers Mine. Cheni trucked the ore about 40 km. to the Cheni mill. Cheni mined only high grade material that was very close to surface and left behind significant low grade tonnage likely in excess of several million tons at depth.

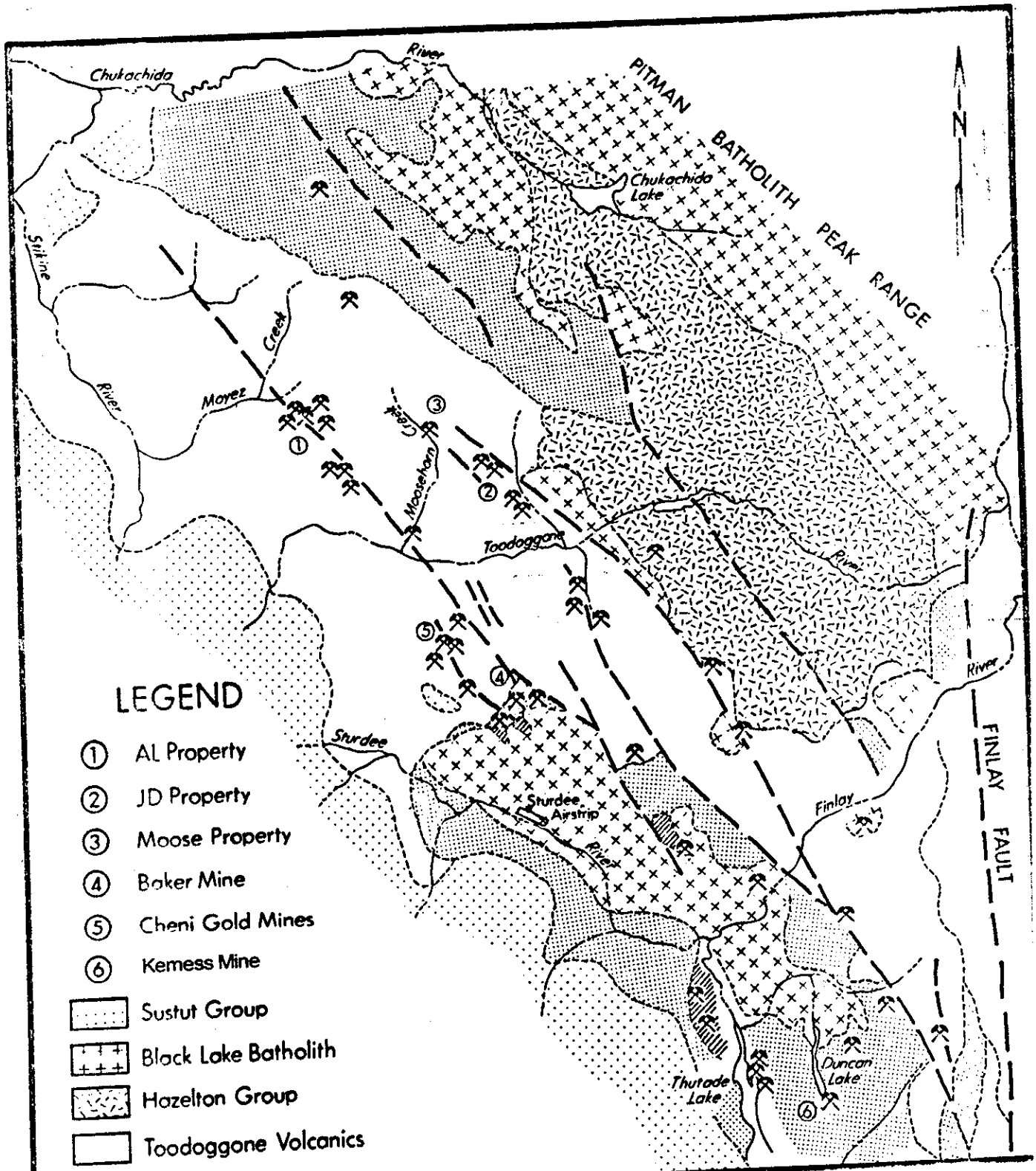
The J.D. property located 8 miles north of the old Cheni mill site was previously explored by Energex Minerals and Kidd Creek Mines Ltd. under option between 1974-1988. Kidd Creek returned the property back to Energex, after a corporate restructuring relating to the take-over of Texasgulf by a Crown Corporation. The J.D. property was one of three claim groups held by Energex and received only modest exploration consisting of prospecting, geological mapping, soil and rock sampling, trenching and 16 diamond drill holes totalling 6,000 ft. Results although interesting, were not sufficient to enable project funding given the end of the tax driven nature Flow Through Shares in 1988. With the closing of the nearby Cheni Mine in 1992 and other factors, Energex sold the J.D. property to AGC Americas Gold Corporation in 1993.

In 1994 AGC carried out detailed geological mapping, soil and rock sampling, Induced Polarization surveys and 32 diamond drill holes totalling 6,800 ft. (Krause, 1994). This program resulted in the discovery of the Epithermal Gold-Silver Finn zone. Seventeen holes partially outlined a tabular, shallow-dipping body with an average width of 45 ft. Markedly higher grades were present in both the hangingwall and footwall of the zone.

In 1995 AGC carried out a program of geological mapping, Induced Polarization surveys and 104 diamond drill holes totalling 27,000 ft. (Krause, 1996) The program principally focused on defining the Finn Zone, with additional exploration work on the EOS, Wolf and Creek zones. This program led to the definition of a geological resource of 369,000 oz. Au. Four holes were drilled on the Wolf zone with limited success. In 1996 AGC conducted a further 20,000 ft. of diamond drilling on the property focusing on delineation drilling of the Finn Zone (Hawkins, 1997). In 1997 AGC / ANZ conducted an aggressive exploration program on the JD and AL properties completing 34, 884 ft of diamond drilling in 76 holes. Drilling was principally focussed on the Bonanza and Thesis zones on the Al property and the Finn and Creek zones on the JD property.

1.5 Regional Geology

The Lawyers and AL properties are located in the central part of a northwest-trending, 50 x 20 mile belt of early Jurassic volcanic rocks known as the Toodoggone Formation (Carter, 1972) . The regional geology is best described in B.C. Geological Survey Branch Bulletin #86 (Diakow et al, 1993). Regional geology is compiled on Drawing A97-071-05. The Toodoggone Formation is a sub-aerial pyroclastic assemblage of andesitic to dacite composition which hosts a number of gold-silver deposits. These deposits occur as fissure veins, quartz stockwork, breccia zones and zones of silicification. Principal ore minerals include argentite, electrum, native gold and silver and lesser chalcopyrite, galena and sphalerite.



AGC Americas Gold Corp.

TOODOGGONE AREA REGIONAL GEOLOGY

MARCH, 1997	1:500,000		A97-071-05

1.6 Property Geology

The Lawyers and AL claim groups lies within the Omineca Mountain Range, and are comprised of a series of northwest southeast trending lower to middle Jurassic rocks; the older Black Lake Batholith to the east, and the overlying Toodoggone Formation (in particular the Metsantan Member) to the west. Two distinct mappable sequences of the Toodoggone volcanics, consisting of an older pyroclastic quartz andesite crystal tuff sequence (Adoogacho Member) and a younger trachyandesite sequence (Metsantan Member), are present both at the Lawyers mine and on the AL property.

The property is dominantly underlain by rocks from the Metsantan Member, which consist mainly of massive porphyritic andesitic flows and tuff breccias, with minor interbeds of ash to lapilli tuffs, and locally important metre thick beds of reworked volcaniclastics and pyroclastics.

To the east and south of the properties along a north northwest to south southeast trending fault contact is the Black Lake Stock, a medium to coarse grained granodiorite to quartz monzonite. The Black Lake Stock is part of the Black Lake Batholith.

2.0 Toodoggone Gold / Silver Camp Mineral Deposits

Historically several styles of mineralization have been identified in the Toodoggone River Area (Carter, 1972) of which the most important are epithermal precious and base metal deposits related to volcanic processes associated with the eruption of Toodoggone formation volcanic rocks. Known deposits occur as fissure veins, quartz stockwork, breccia zones and areas of silicification in which principal ore minerals include argentite, electrum, native gold, silver and lesser chalcopyrite, galena and sphalerite. Alteration suites are typical of epithermal environments with an inner zone of intense silicification, clay minerals and locally alunite, grading outward to sericite and clay minerals, chlorite, epidote and pyrite.

Diakow (Diakow et al, 1991) classify the epithermal deposits on the basis of ore and alteration mineralogy into two types. Most of the known Toodoggone deposits are of the adularia-sericite type. The Baker Mine (Chappelle Property) includes at least six fissure vein systems developed in late Triassic Stuhini Group volcanic rocks although the known veins are spatially related to dikes believed to be feeders for nearby Toodoggone formation volcanic rocks. Virtually all of the other known adularia-sericite type epithermal deposits are hosted by various volcanic members of the Toodoggone formation including the Lawyers (Cheni mine) deposits in which gold-silver mineralization occurs in banded quartz-chalcedony stockwork and breccia zones.

Epithermal deposits of the adularia-sericite type in the Toodoggone area exhibit a wide range of depths and temperatures of formation based on silver:gold ratios, gangue and alteration mineralogy and the presence or absence of base metals mineralization. Baker Mine and the J.D. mineralized zones, with similar silver:gold ratio and base metals content, are examples of deeper level mineralization.

2.1 Mineral Deposits

AGC now recognizes that the epithermal deposits are actually high level mineralization related to deep seated porphyry intrusives from the Black Lake Batholith. Some of the epithermal deposits of the Toodoggone Camp appear to be bonanza style deposits with high grade mineralization restricted to near surface with no depth persistence. AGC's view is now that with a bulk tonnage porphyry model mineralization does persist to depth and has more tonnage potential. The J.D. deposits represent a transition from a shallow epithermal type deposit to a deeper porphyry style mineralization. AGC has recently acquired several other deposits in the camp which fit into this model.

J.D. Property

On the J.D. property, past work resulted in the discovery of a number of mineralized zones within or proximal to a porous volcaniclastic unit in the central part of the property. These zones are characterized by the presence of galena, sphalerite, chalcopyrite, gold and silver. Some of these zones are marked by clearly visible gossan zones while others are not.

Several styles of mineralization are present on the J.D. property and include: steeply dipping quartz carbonate sulfide veins (Gasp, MVT, EOS); breccia zones developed at intersections between high angle faults and the porous volcaniclastic unit (Schmitt, AG-Carbonate, Woof); and the structurally controlled silicified zones (Finn). The most important of these to date is the Finn which was discovered by drilling in 1994. The Finn is a structurally controlled silicified zone which is tabular in form and has an apparent east-northeast strike and dips gently to moderately north. The three principal lithologic units within the Finn zone consist of a flow breccia with hematitized pink feldspars (Hanging Wall), a massive flow unit with white feldspars (Footwall), and minor flow breccias, and finally a maroon massive flow unit.

The first two rock units host most of the gold mineralization encountered to date in the zone. Gold values have been obtained from silicified and clay rich sections in all flow units. These sections feature narrow quartz veinlets and pervasive silicification which contain fine-grained pyrite and other sulfide minerals including galena, sphalerite, chalcopyrite and possibly argentite.

The Central Finn Zone which is the most distinctive mineralized unit is a quartz breccia zone which is essentially a product of intense silicification. Multiple stages of silicification are evident and pyrite and other sulfides are widespread. In the central and western sections of the zone, this unit is locally intensely sheared and contains clay mineral gouge zones.

Visible gold, mainly in the form of fine flakes, has been noted in late stage quartz veinlets in at least seven holes. Visible gold has created some problems with assaying but further metallic gold assaying procedures should partially resolve some of these issues in time. Processing of the material will likely present no serious metallurgical problems and recoveries of 95% for gold and 70% for silver values should be possible, but will require testing to confirm. The presence of sulfides raises environmental concerns regarding acid mine drainage which will have to be addressed.

The J. D. property hosts a number of significant showings besides the Finn, Creek, Gumbo and Schmitt which have received only limited testing. The Tarn and Crown zones because they are off the WNW mineralized trend have only received minor work. Both have shown some encouragement from past surface samples and may be related to the units the Finn is located within. Like other areas of the property insufficient work has been done on these zones. Additional potential exists to the north beyond the limit of current drilling towards the EOS and Ag-Carbonate Zones.

Moose Property

The Moose property is located 9 miles north of the old Cheni Mill site and hosts porphyry style Au-Cu mineralization. Although still in the exploration stage this property offers significant bulk tonnage potential and is similar in nature to Royal Oak's Kemess Mine. The property also hosts indications of Finn zone type gold mineralization. On the Moose the upper part of the porphyry system appears exposed as compared to the Finn zone where porphyry style mineralization is only seen in drill core.

2.2 Lawyers Deposits

This epithermal gold silver deposit has been classified as an adularia-sericite type occurrence. Gold and silver bearing quartz veins are bounded by wall rocks enriched in adularia and sericite. These centres of intense acid-sulphate alteration prove difficult targets to evaluate for precious metals, this because erratic internal zoning is superimposed on complex fracture systems.

Three main zones are recognized; Amethyst Gold Breccia (AGB), Duke's Ridge, and Cliff Creek. The host rocks consist of a basal quartz-bearing dacitic tuff with variably welded ash-tuff lenses (part of the Adoogacho Member), and overlying latite flows and interspersed volcaniclastic deposits (the Metsantan Member). The gold silver quartz veins, stockwork and breccia, were emplaced along prominent northwest-trending, steeply west-southwest dipping fractures that conformably cut stratigraphic contacts. These fractures are related to a graben margin, in which block faults step down incrementally toward the west. Younger faults with northwest trends and left lateral movements offset stratigraphy and metal concentrations.

The principal ore minerals include fine grained electrum, argentite, native gold, native silver, and minor chalcopyrite, sphalerite, and galena. The principal gangue minerals are chalcedony, crystalline quartz, amethyst, calcite, hematite, and minor barite. There is pronounced potash enrichment and soda depletion evident near the ore zones. This passes outwards to an assemblage of epidote-carbonate-chlorite-pyrite (propylitic) in the peripheral volcanic rocks. Individual veins exhibit multistage depositional textures, with calcite (with or without barite) at the centre, then commonly quartz. Unlike the other two zones, Cliff Creek appears to have only minor silicified breccia ore. Argillic (kaolinite and illite) alteration is extensive, with associated pyrite and chlorite, as well as limonite and manganese oxide stain. Propylitic alteration dominates outward.

2.3 AL Deposits

The Al property shown on Drawing A97-065-7 is 12 miles north-west of the old Cheni mill site and hosts similar epithermal bonanza type deposits, had in 1989 a geological resource on the property of 1,900,000 tons at 0.16 oz. Au / ton including 374, 680 tons @ 0.28 oz. Au / ton (uncut, undiluted, 0.12 oz. Au / ton cut-off). In 1991 Cheni Gold Mines Inc. optioned the property and in 1991 high graded from two small open pits about 38,000 tons @ 0.300 oz. Au / ton during the closing months of its operations as underground reserves were exhausted at the Lawyers Mine. Cheni mined only high grade material that was very close to surface and left behind significant tonnage likely in excess of several million tons at depth. If one applies the bulk tonnage model developed for the J.D. even more tonnage may exist using a lower cut-off grade. Several zones exist within close proximity which offer potential for a series of large open pits. The property is road accessible off the Omineca Mining Access Road. The major mineral deposits on the AL property are shown on Drawing A97-071-08.

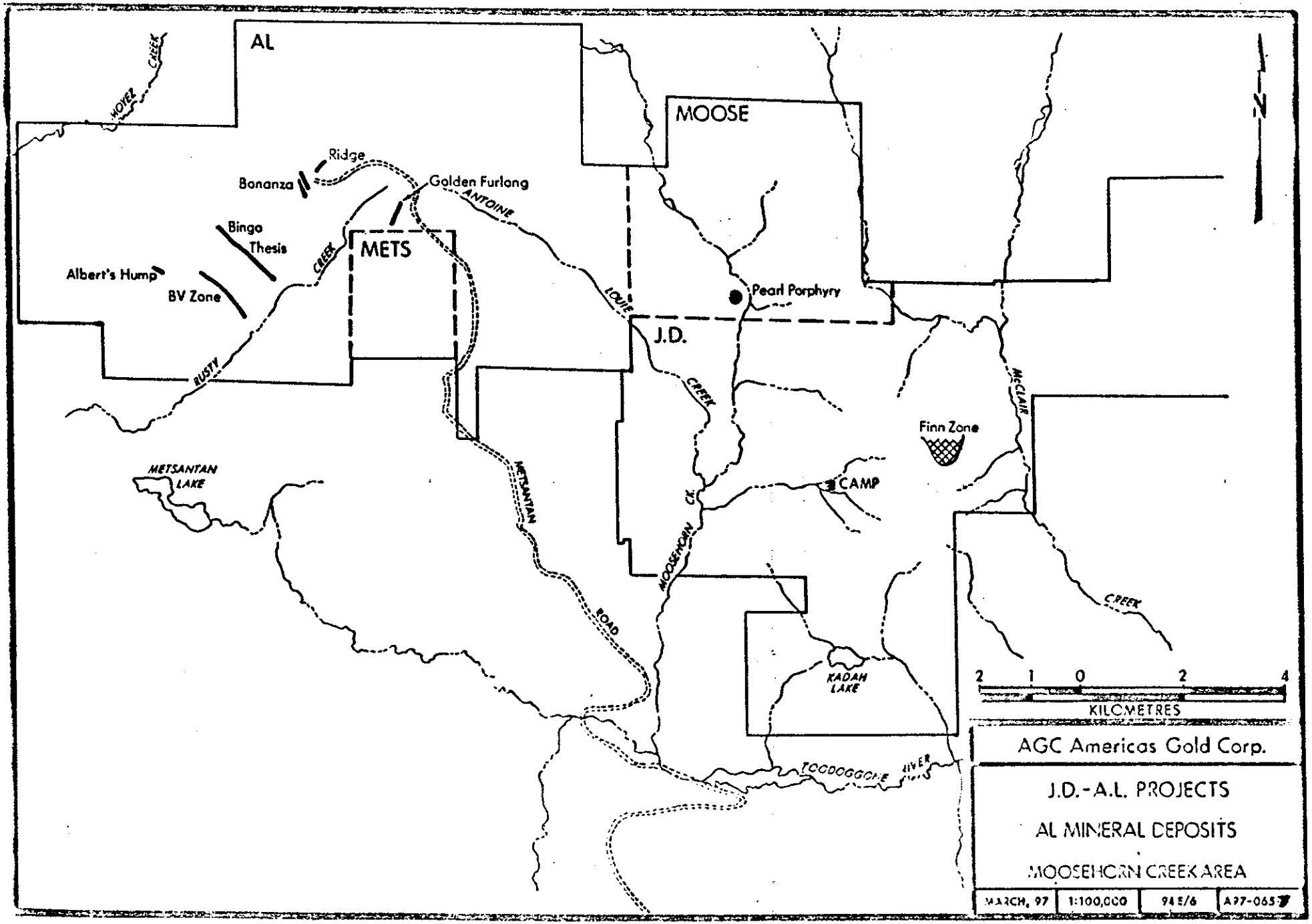
The AL deposits are classified as an acid-sulphate (alunite-kaolinite) type. At least six distinct zones of strong alteration are recognized. All have a highly sulphidized mineral assemblage associated with advanced argillic alteration zones containing kaolinite and alunite that formed contemporaneously with the deposit. The host rocks are a gently south to southwest dipping sequence of dacitic ash flows and interspersed volcanogenic epiclastic beds (the Adoogacho Member). They are transected by three northerly trending sub-vertical fault systems, with little evident movement.

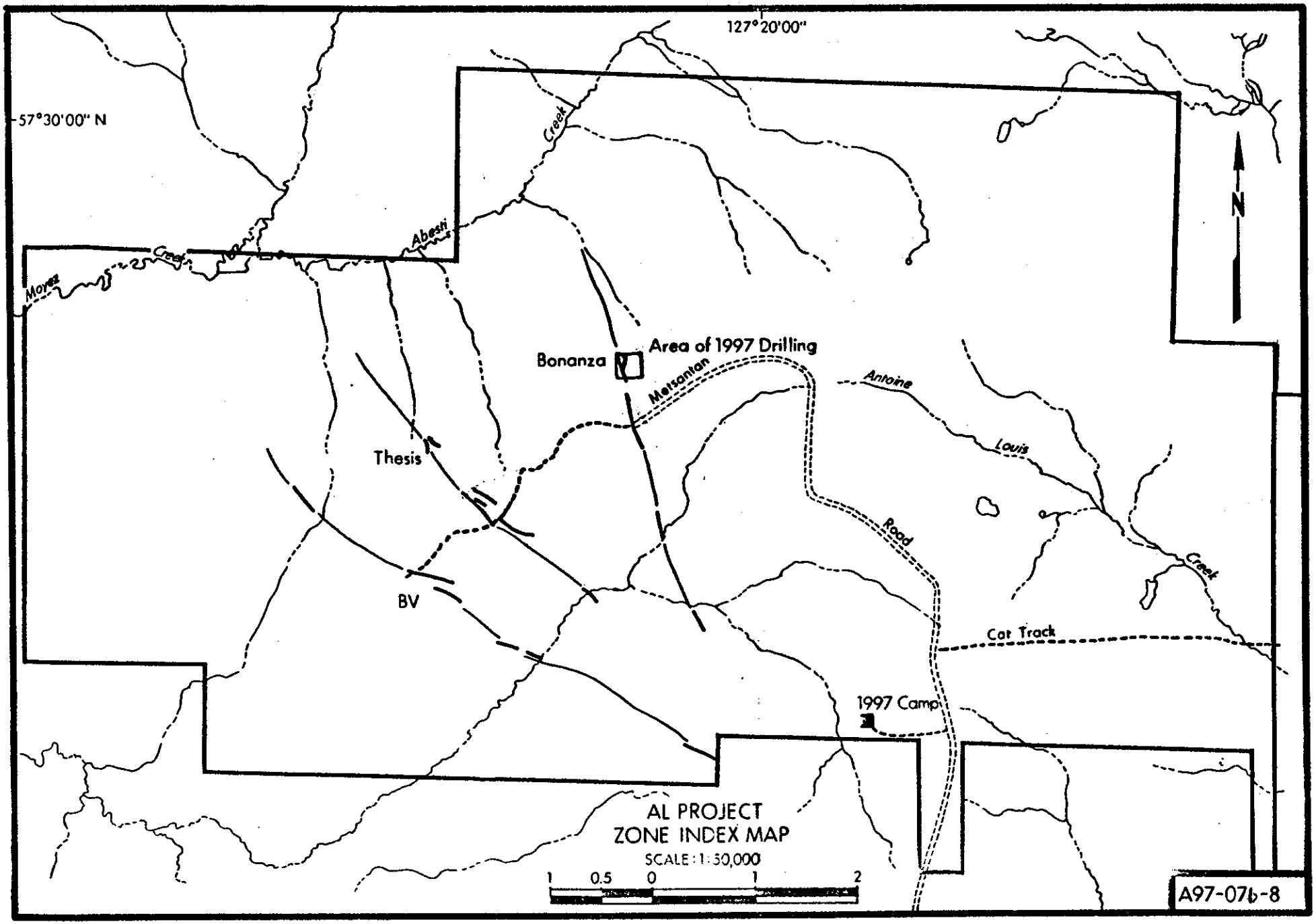
Mineralization is limited to within this complex fracture-fault system, with the higher gold values typically within brecciated zones with silicified clasts in a barite and crushed silica matrix. Ore minerals consist of native gold, with minor amounts of pyrite, electrum, tetrahedrite, argentite, chalcopyrite, galena, and sphalerite. These are usually associated with barite in open space cavities within a silica-clay core, flanked by advanced argillic alteration, -this porosity being created from weathered and leached feldspars.

2.4 Phase I Drilling Results on the Bonanza Zone in 1997

In July and August of 1997 AGC / ANZ completed a total of 5616 ft. of diamond drilling in 13 holes on the Bonanza Zone. The zone was selected for early drilling in 1997 because of its superior bulk tonnage mineral potential and logistical close proximity to the end of the Metsantan Extension to the OMAR. This drilling was targeted to test the bulk tonnage potential of the zone which had previously returned inconsistent high grade values. It was suggested that the surrounding low grade envelope might show better grade consistency (Hawkins, 1997b).

The Bonanza deposit is characterized by a sequence of porphyritic andesitic crystal to lapilli tuffs locally interbedded with minor flows and flow breccias of similar composition. These sequences are massive and are at minimum several hundred metres thick. Individual flow and tuff intervals vary in thickness from several metres to several tens of metres. They appear to be relatively flat-lying to having a shallow 10-30° dip to the north.


AL
MOOSE
METS
J.D.
HOYEZ CREEK
Ridge
Bonanza
Golden Furlong
ANTOINE
Bingo
Thesis
Albert's Hump
BV Zone
CREEK
LOUISE
Pearl Porphyry
RUSTY
CREEK
McCLAIR
Finn Zone
METSANTAN LAKE
METSANTAN
CAMP
MOOSEHORN CK.
ROAD
CREEK
KADAH LAKE
TOODOGGONE RIVER
2 1 0 2 4
KILOMETRES
AGC Americas Gold Corp.
J.D.-A.L. PROJECTS
AL MINERAL DEPOSITS
MOOSEHORN CREEK AREA
MARCH, 97
1:100,000
94 E/6
A97-065


127°20'00"
57°30'00" N
Creek
Abesti
Moyes
Creek
N
Area of 1997 Drilling
Bonanza
Metsantan
Antoine
Louis
Thesis
Road
Creek
BV
Cat Track
1997 Camp
AL PROJECT
ZONE INDEX MAP
SCALE: 1:50,000
1 0.5 0 1 2
A97-07b-8

The crystal and lapilli tuffs consist of poorly sorted <1-5mm feldspar phenocrysts (mostly plagioclase, but locally orthoclase is common) variably altered to clay minerals and stained by hematite or chlorite. The finer grained matrix can be altered to a green chlorite, or locally dominantly stained by epidote to a pale yellow green, or by hematite to a dark reddish maroon. These units often grade into explosive volcaniclastic breccias, with <1-10cm subrounded to subangular clasts usually in a coarser grained matrix, all of homogeneous composition. They were formed and deposited while still relatively hot; most clasts show pronounced alteration rims or are altered straight through.

The tuffs contain only minor sulfide concentrations, limited to mostly very fine grained pyrite. Rare copper blooms have been locally noted, but are generally restricted to fractures. The flows and flow breccias are typically finer grained, with <1-3mm feldspars also variably altered to clay minerals and stained a pale red with hematite, or a pale green with epidote or chlorite. The finer grained matrix can be altered to a green chlorite, or alternately stained light green with disseminated epidote, or dark red maroon with disseminated hematite. These units contain only minor sulfide concentrations, limited to very fine grained pyrite.

The sequence is intruded by a series of porphyritic felsic dykes and sills of probable rhyodacitic composition. They appear to have intruded parallel to bedding in the volcanics or along pre-existing cross cutting fault corridors. Individual intrusives vary in thickness from under a metre to almost 50 metres. Irregardless of thickness, texture is homogeneous throughout, with 2-3mm feldspar phenocrysts in a very fine grained felsic matrix. The majority of feldspars are dominantly altered to montmorillonite (often a pale light green, or stained by hematite a pale reddish beige). The matrix is commonly stained a pale reddish beige due to finely disseminated hematite, but locally it remains a light chloritic green.

The intrusives to date have shown only trace to no sulfide content, and limited to secondary very fine grained pyrite. No chilled margins have been observed along preserved contacts, and only cm wide alteration (mainly weak bleaching) has been noted in the adjacent wall rock.

A minimum of three fault sets have been determined within the Bonanza zone. The first trends north south and is near subvertical; the second trends northwest southeast, is near subvertical with a dip to the west; the third trends east northeast to west southwest, with a shallower dip to the southwest. The first and earliest fault set is associated with mineralization, pre-existing and contemporaneous to. The second set is post ore, and also served as a plane of weakness for the felsic intrusives. The third and latest set appears to have displaced both the ore and felsic intrusives.

To date the high grade mineralization appears confined within a strongly silicified zone that is also enriched in barite. The style and degree of alteration associated with the mineralization, and adjacent to it, is variable, and largely dependent on the extent of fracturing and faulting that served as conduit for the hydrothermal fluids. The silicified zone itself can be under a metre wide to over 50 m, wide. The alteration is gradual with a steady increase in remnant silica, all other minerals being leached away. Barite mineralization is secondary and associated with the ore bearing fluids. The core is 100% silicified and is characterized by a frothy texture (usually a box like lattice left

from leached feldspar phenocrysts), with an overall porosity of 5-10%. This core hosts the bulk of the mineralization dominated by pyrite (1-20%), barite (1-20%), and locally copper sulfides (1-5%). Enveloping the silicified zone is a broad argillic halo. It is variable in its extent, from under a metre to several tens of metres, with clay content usually from 1-10%. It can be more extensive when associated with fracturing, and occur as massive clay seams. Locally it can host a trace to 2% fine grained pyrite and contain geochemically anomalous values in Ag, Cu, Pb and Zn. These mineralized silicified corridors can be made up of one or many closely spaced zones, all are similarly mineralized, and often alternate with the argillic zones.

The Bonanza Zone is located in the central part of the AL Claims. The high grade central core of the zone has been trenched and extensively drilled by past operators. Cheni Gold Mines removed a 5,000 ton bulk sample at an average grade of 0.30 oz. Au / ton from the Ghost pit in 1991 during the closing days of the Lawyers Mine. Past exploration focused solely on the near surface high grade potential of the zone. The mineralized trend has been traced over 3600 m., with only a small 350 m. x 100 m. area tested for high grade without assessing the bulk tonnage potential of the complete alteration envelope. As the first phase of a two phase drilling program ANZ/AGC completed 13 holes of HQ and NQ drilling on the zone examining the overall potential of the zone. Drill collars are located on Drawing A97-071-09. Results indicate the erratic nature of the gold values within the high grade core. The improved core recovery obtained in 1997 demonstrates the complexity of the mineralization. Gold values appear to be restricted to areas of silicification. These areas of silicification appear to be somewhat wider than previously known. The increase in width may also be due to the reduction in the cut-off grade resulting in a larger intersection of interest. Although the argillic halo contains geochemically anomalous values in Ag, Cu, Pb and Zn it contains low values in gold. Intersections are summarized in Table 4 and a complete list is provided in Appendix IV.

Holes were drilled on pairs of perpendicular sections at the centre of the Bonanza Zone to replicate and define the bulk tonnage potential of the zone previously drilled by Energex in 1984-88. The drill program was by no means a full test or examination of the zone.

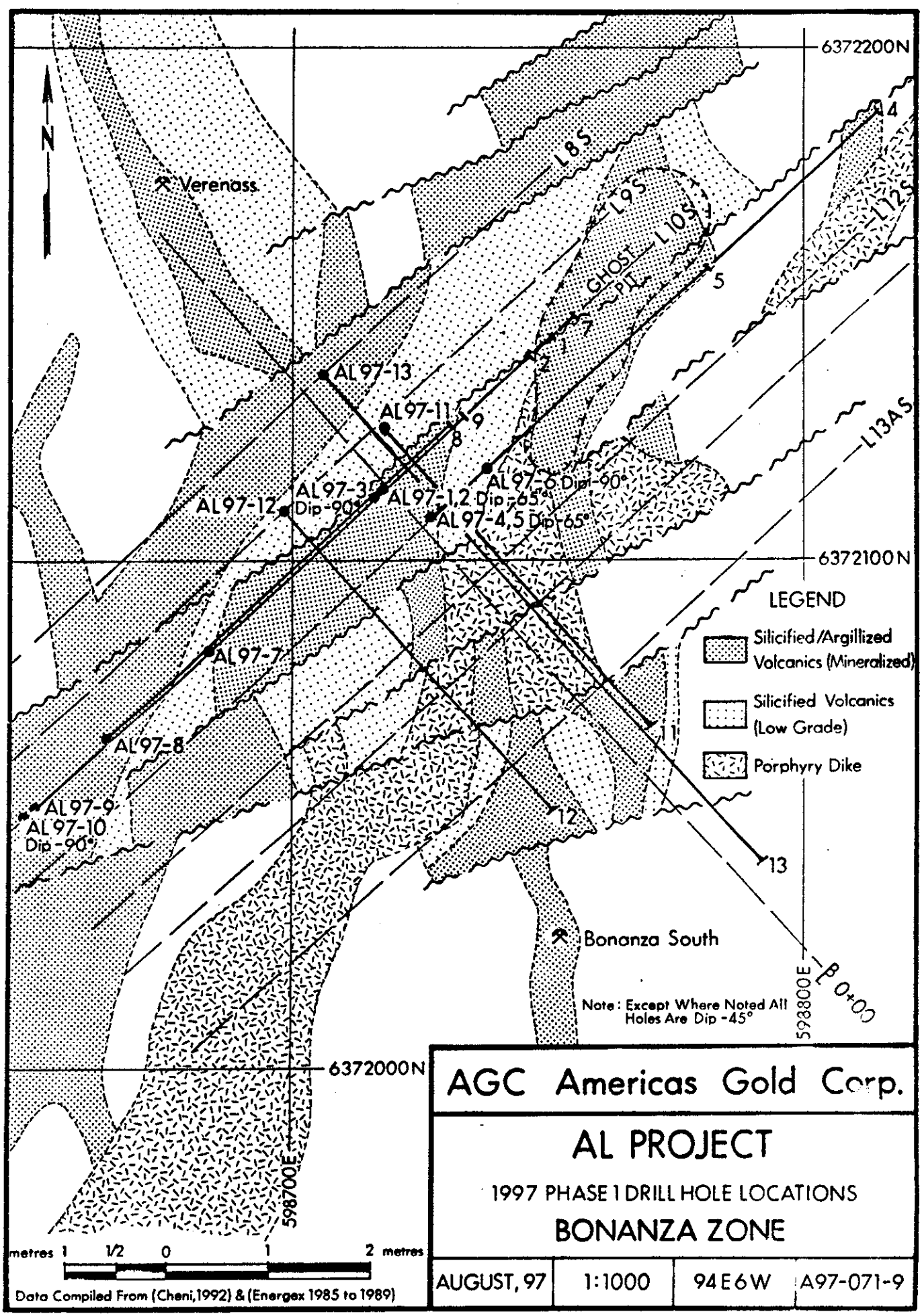

6372200N
6372100N
6372000N
598700E
598800E
N
Verenass
L8S
L9S
L10S
L12S
L13AS
GHOST PIT
AL97-13
AL97-11
AL97-12
AL97-3 Dip -90°
AL97-1,2 Dip -65°
AL97-6 Dip -90°
AL97-4,5 Dip -65°
AL97-7
AL97-8
AL97-9
AL97-10 Dip -90°
Bonanza South
1
2
3
4
5
6
7
8
9
10
11
12
13
LEGEND
Silicified/Argillized Volcanics (Mineralized)
Silicified Volcanics (Low Grade)
Porphyry Dike
Note: Except Where Noted All Holes Are Dip -45°
metres 1 1/2 0 1 2 metres
Data Compiled From (Cheni,1992) & (Energex 1985 to 1989)
AGC Americas Gold Corp.
AL PROJECT
1997 PHASE 1 DRILL HOLE LOCATIONS
BONANZA ZONE
AUGUST, 97
1:1000
94 E 6 W
A97-071-9

Table 4.
Summary of Bonanza Intersections

Hole #	Bearing & Dip	Interval (m.)	Gold (oz. Au / ton)	Thickness (m.)	T.D. (m.)
AL97-1	048° -45°	20.0 - 61.0	0.058	41.0	66.4
AL97-2	048° -65°	21.0 - 61.0	0.095	40.0	95.1
AL97-3	048° -90°	26.0 - 43.0	0.078	17.0	89.3
AL97-4	048° -45°	27.0 - 34.0	0.860	7.0	166.4
AL97-5	048° -65°	23.0 - 43.0	0.121	20.0	174.3
AL97-6	048° -90°	19.0 - 38.0	0.202	19.0	119.5
AL97-7	048° -45°	51.0 - 63.0 72.0 - 82.0	0.047 0.063	12.0 10.0	140.8
AL97-8	048° -45°	45.0 - 55.0	0.057	10.0	131.9
AL97-10	048° -45°	4.0 - 23.0 34.0 - 60.0	0.062 0.037	19.0 26.0	163.9
AL97-11	048° -45°	32.0 - 43.0 52.0 - 84.0	0.145 0.063	11.0 32.0	110.6
AL97-12	048° -90°	54.0 - 67.0	0.191	12.0	110.2
AL97-13	138° -45°	37.0 - 47.0 74.0 - 79.0	0.088 0.140	10.0 5.0	182.6

Holes AL 97-01 to 3 were planned to replicate intersections on line 10S near collar of A87-30 (old Energex hole) which produced very wide high grade intersection (0.74 oz. Au / ton over 27.3 m.). The holes failed to replicate the very high grade intervals of the intersection but confirmed the overall mineralized width. These holes in hindsight were two metres below collar elevation of A87-30 due to stripping completed on the site in 1988 which cut the elevation down by two to three metres. Site reclamation in 1997 revealed a near parallel structure along which the holes may have been drilled. Mineralization is also such that high grade gold values are subject to severe nugget effect at structure intersections which is apparent from detailed mapping conducted during stripping in 1988 (Caira et al, 1989).

Hole AL 97-04 was drilled on line L11S (5 metres SE of L10S) to test the next section south and compare results between different adjacent sections. L10S shows a relatively flat lying wide mineralization zone, while L11S shows relative steep narrower mineralization. Hole AL97-04 indicated narrower widths with a cross cutting barren porphyry dike. Hole AL97-06 was drilled

as a vertical hole to determine the contact relation of the porphyry dike and possible sub-parallel mineralization. The dike appears to be post ore and late. All three holes on this section produced good grade values over modest widths

AL97-07 to AL97-10 were drilled to extend section L10S further to the west across to the Bonanza West Zone. The Bonanza Zone as a whole is made up a number of high grade intersecting / cross-cutting zones which present in detail a complex high grade mineralizing system with a simpler bulk tonnage envelope around them. AL97-10 intersected a further previous unknown zone west of the Bonanza West.

Two perpendicular sections were also drilled at L0+05E and L0+20W to test for cross cutting controlling structures with holes AL97-11, AL97-12 and AL97-13. All three holes produced good grade mineralization over modest widths. It is apparent that cross cutting structures likely control the high grade mineralization. Further drilling will be required to define these structures.

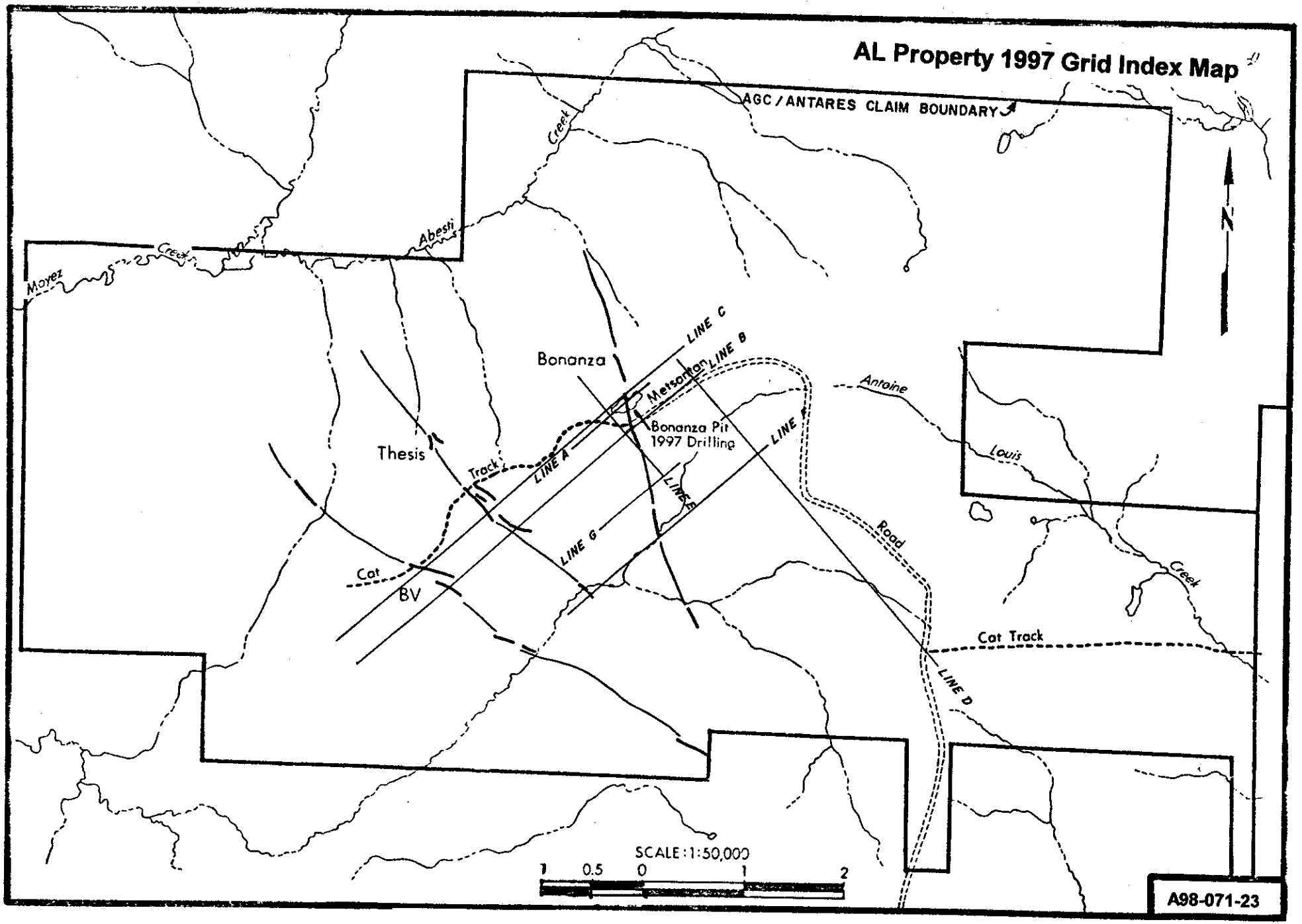
3.0 1997 Induced Polarization Program

A program of 18.5 km. of Induced Polarization survey were conducted in late fall early winter (October 6 - 22) of 1997 by Lloyd Geophysics Inc. on AL and Mets properties as shown on Drawing X97-065-10C and A98-071-23. IP surveys were also conducted on the adjoining JD property just before the completion of the work on this property. The IP crew was based in the reactivated Mets-1 campsite. Access for the IP crew and equipment to the grid was largely by helicopter with minor support by 4X4 truck. Heavy snow in October prevented use of the 4X4. The IP crew did mob and demob by truck along the ORAR.

The survey was conducted using a time domain IP system with a 7.5 kw transmitter. A pole-dipole array was used with a=25m and data collected at n=1 to n=6. Survey specifications are similar to those used in 1995 on the JD property (Lloyd, 1996 & Krause, 1996) reproduced in Appemdix III.

Line "A"

Line "A" is a short line centred on the Ghost Pit of the Bonanza Zone. The origin of this grid and the 0+00 for this line is the Collar for AL97-1. Line "A" also corresponds to old Energex L10S. The line is also located on the section which AL97-1, 2, 3, 6, 7, 8, and 9 were drilled on during the 1997 Phase Drill program. Data for this line is shown on Drawing 97417-8.


AL Property 1997 Grid Index Map
AGC / ANTARES CLAIM BOUNDARY
Creek
Abesti
Moyez
Creek
Bonanza
LINE C
LINE B
Metsantan
Bonanza Pit
1997 Drilling
Thesis
Track
LINE A
LINE
LINE E
LINE G
Cat
BV
Antoine
Louis
Road
Creek
Cat Track
LINE D
N
SCALE: 1:50,000
1 0.5 0 1 2
A98-071-23

The Bonanza Zone is enclosed with a wide chargeability high between 3+00W to 1+00E. Maximum chargeability in the area of the drilling appears to occur at or near surface. Although chargeabilities raise above 6.0 msec. over a wide interval at n=6, the highest value of 14.0 msec. occurs at n=1. Resistivities which range from 131 to 1156 ohm-m have no definite pattern. The currently defined shallow mineralization of the Bonanza Zone and disseminated sulfides are associated with a near surface chargeability high.

Several flanking chargeability highs also occur at 2+75W (West Zone of Bonanza) and 3+50E (Bonanza Ridge). Both appear as buried sources.

Line "B"

Line "B" is located 230 m south of Line "A" and runs NE-SW. It was located to cross-cut the Bonanza, Thesis and BV zones. The continuous coverage provided an excellent comparison of the zones and provided fill in data between the zones. Data is shown on three overlapping sections shown on Drawings 97417-9a, 97417-9b and 97417-9c.

At the eastern end of the line between 8+75E and 10+00E a chargeability high of up to 9.5 msec at n=6 occurs in association with a resistivity high of up to 1153 ohm-m. The source is unknown and is not fully defined by the line.

A narrow IP chargeability anomaly of up to 6.4 msec occurs at between 0+25E to 0+50E. The anomaly occurs adjacent to a resistivity contrast break of between 120 to 350 ohm-m. The source is likely a fault with minor disseminated sulfides.

A broad weak chargeability high of 4.0 to 5.0 msec occurs between 0+50 W to 3+00W. At the western edge of this feature at 3+25W a modest narrow chargeability high of 7.0 msec occurs at a resistivity contrast break of 230 to 530 ohm-m.

A very broad interval of slightly high chargeability occurs just over 4.0 msec. between 11+25W and 15+25W with relatively low resistivity. The interval may represent a lithologic unit with minor disseminated sulfides.

Data collection was not possible between 26+25W to 27+75W due to the BV pit which was filled with water.

A chargeability high is apparent around the margins of the pit especially to the west, where chargeabilities reach 9.1 msec. at n=6. The highest chargeability occurs with n=6 level. The chargeability may indicate the presence of more sulfides at depth in association with a possible buried porphyry system.

A further chargeability anomaly occurs at 33+50W to 33+75W where chargeabilities reach 8.8 msec. and resistivities 932 ohm-m. This suggests a further zone to the west of the BV pit as of yet unexplored.

Line "C"

Line "C" is located 75 m. north of Line "A" and was designed to test the Bonanza, Thesis and BV areas. It tests the north extension to the Bonanza Zone a 75m distance to the north and cuts right across the Thesis III Zone area. It also cuts to the north of the BV Zone avoiding the still open BV pit. The data for this section is shown on three overlapping sections shown on Drawing 97417-10a, 97417-10b and 97417-10c.

A chargeability high of up to 7.1 msec. occurs at the eastern end of the line with resistivities of up to 863 ohm-m. The line does not completely cross this anomaly and it occurs in a relatively unexplored eastern area of the property.

An irregular chargeability anomaly with strong resistivity high occurs between 4+00E and 6+00E. Chargeability are between 5.0 and 6.4 msec. in a well defined area of elevated resistivity from 400 up to 1659 ohm-m. This may a reflection of the Bonanza Ridge Zone.

A further series of irregular chargeability highs above 6.0 msec occur between 4+00E and 2+75W. The highest chargeability occurs between 0+25E and 0+75E where a chargeability high of 9.1 msec occurs. No consistent resistivities response occurs over the area where the Bonanza Zone structure extends to the north.

Between 7+00W and 10+50W elevated chargeability values are apparent up to 8.0 msec with the widest anomaly at n=6 indicating a possible buried source for the anomaly. The anomaly appears to be at surface at 8+00W which corresponds to the centre of the much smaller resistivity high. Resistivities reach a maximum of 768 ohm-m. here. A second resistivity feature occurs at 9+75W near the western margin of the anomaly. This area occurs midway between the Bonanza and Thesis Zones. It is also 400m north of the JK zone defined by Energex in the past.

In the Thesis III Zone area between 17+75W and 18+75 several narrow chargeability highs occur reaching up to 9.1 msec. Resistivities are fairly low, usually below 100 ohm-m. Some increased resistivity is associated with the flanks of the zone where resistivity raises to 250 to 500 ohm-m. The complexity of the IP response likely reflects the complexity of the zone and the structural control on it. A number of diamond drill holes were drilled in this area late in 1997 and are covered in a separate report.

North of the BV a broad chargeability high appears at n=3 to n=6 between 27+00W to 32+50W. Chargeability reaches up to 10.1 msec. The source of the IP effect appears buried. A resistivity response is only apparent at the edges of the zone at 28+00W and 32+00W. The depth of the source again appears to support the concept of a buried porphyry system.

Line "D"

Line "D" runs NW - SE and was designed to test for cross-cutting structures to the main NW-SE mineralized trend for the area. The line also crosses near the Golden Furlong Zone and possible extension for the Rod Zone. The start of the line is located 850 m. NE of the collar of AL97-1. Line data is shown on three overlapping sections on Drawing 97417-11a. 97417-11b and 97417-11c.

A broad modest chargeability high occurs between 0+00 and 3+25S associated with a variable resistivity high. Highest chargeability of 7.5 m/sec occurs at n=6 indicating perhaps a buried source. Resistivities in the zone vary between 300 to 1299 ohm-m. This anomaly may represent alteration zone with silicification and sulfides at depth.

A weak narrow anomaly occurs at 21+50S where chargeabilities reach 5.9 m/sec with a coincidental increase in resistivity to 1037 ohm-m above background range of half that. The source could be a silicified fault zone with disseminated sulfides.

An apparent shallow anomaly occurs between 31+75W and 32+00W with chargeabilities to 6.0 msec. and resistivities to 1950 ohm-m near the valley bottom on the Mets-1 claim block. The significance of this anomaly is unclear and could represent some surface weathering.

Line "E"

Line "E" which runs NW-SE is located just west of the Ghost Pit of the Bonanza Zone. It was planned to test for any cross-cutting features to the Bonanza Zone structure. Zero on the line co-responds to the collar for AL97-01 and the intersection of this line with Line "A". The line cuts obliquely down the centre of part of the Bonanza Zone.

The IP results shown on Drawing 97417-12 shows a modest chargeability high on the flank of the Bonanza Zone between 2+25S and 1+25N. Increased resistivity up to 570 ohm-m occur at 0+50N which corresponds to the centre of the chargeability high. The highest chargeability of 12.6 msec. occurs at 0+25S near surface. The Bonanza Zone appears associated with chargeability high of greater than 6.0 msec. There is no clear association or signature of the zone within the resistivity range of 150 to 579 ohm-m on this line

Line "F"

Line "F" is located 1325 m. SE of the collar for AL97-1 and was designed to test the Gosselin Zone and the Rod Zone area. The line runs SW to NE and cuts from high alpine areas into valley bottoms with dense undergrowth . Data from this line is presented in two overlapping segments on Drawing 97417-13a for the western end and 97417-13b for the eastern end.

Two targets with modest chargeability anomalies occur associated with weak coincidental resistivity highs at 1+50W and 4+25W. Also present is a target with flanking chargeability highs within a resistivity low at 14+50W.

The anomaly at 1+50W also shows some resistivity contrast and may be a geological lithologic or alteration boundary. Chargeability reaches 7.1 msec with resistivities between 234 to 446 ohm-m. The anomaly appears relatively narrow and may be a vertical feature.

The anomaly at 4+25W appears to be somewhat stronger with chargeabilities of up to 8.0 msec and resistivities of 314 to 578 ohm-m. The resistivities show some flanking increases to the west. The source may be an alteration gradational boundary with some disseminated sulfides present.

A wider flanking chargeability high also occurs between 13+75W and 15+00W with a coincidental broad resistivity low of under 150 ohm-m. On the western flank chargeability at 14+75W reaches 10.4 msec while on the eastern flank the chargeability at 14+00W reaches 8.9 msec. Both eastern and western edges of the anomaly show near surface chargeability highs perhaps related to a surface feature or weathering.

Also present on the line are two weaker less distinct and less well defined highs associated with resistivity increases at depth located at 8+50W and 11+75W.

Line "G"

IP line "G" is located 775 m. SE of the collar of AL97-1 and was designed to test the Eric Zone area. Four chargeability anomalies / features are present on the line as shown on Drawing 97417-14. At the western end of the line between 6+75W to 7+50W a broad chargeability high up to 7.3 msec. corresponds to a resistivity contrast feature between 110 to 280 ohm-m. The resistivity contrast suggests the feature is likely some sort of geological contact or fault. A NNW trending airphoto linear is also present in this overburdened covered area. The feature is not fully traversed as the line ends at 7+50W.

A wider chargeability anomaly occurs between 5+00W and 6+25W reaching a chargeability high of 9.9 msec. with only a slight increase of resistivity from 150 to 329 ohm-m. This zone appears not exposed on surface and may reflect alteration or sulfide source at depth.

A stronger coincidental chargeability / resistivity anomaly occurs between 4+00W and 4+50W. Chargeability reach 12.3 msec. and resistivity reach 839 ohm-m. The zone appears relatively narrow. Elevated chargeabilities of about 6.0 m/sec. continue to the east to about 2+00W. Near surface resistivities between 2+75W to 1+25W climb to 1119 ohm-m. A geological contact is likely present at 1+25W. Previous work by Energex indicated the Eric Zone structure should be present between 4+00W and 4+75W as shown on Drawing X97-076-10C. The zone was later tested in 1997 by drill hole AL97-25 located at 4+00W.

3.1 Summary

The properties are located in the relatively remote Toodoggone area of north central B.C. and are 250 miles by road from the south end of Williston Lake. The area has seen several exploration surges as the result of discoveries at Chappelle (Baker Mine) and Lawyers (Cheni). In the early 1990's exploration in northern British Columbia was shifted away from the Toodoggone with the closure of Cheni and new developments near Iskut River, Sulphurets and Eskay Creek. Market forces essentially made it too difficult to raise funds to finance further exploration in the Toodoggone. The JV now recognizes the area is one large porphyry belt where the epithermal deposits are high level deposits relating to a large porphyry system. This model puts the whole area into a different light where the deposits in the area are all related to the same mineralizing system.

The AL and Mets properties host epithermal gold-silver deposits now recognized as the upper portion of a large porphyry system with significant potential. The AL property has been a small scale past producer which is now viewed as epithermal bonanza type deposits (high grade - low tonnage near surface deposits).

Past production at Cheni, Al and Mets indicates that the nugget effect adversely inflates high grade reserves which tend to result in an unacceptable high degree of grade variation. Grade control in this situation is expensive to define and risky to depend on. This is the main reason for the Toodoggone's bad reputation. A bulk tonnage approach may better deal with these problems although full recovery of very high grade where present may still be a problem. The AL and Mets properties offer potential using a bulk tonnage approach. The properties could host several large tonnage type deposits.

Gold within the deposits of the area appears to occur in two overlapping distributions as high grade epithermal bonanza type and as low grade bulk tonnage deposits. The small high grade deposits suffer from significant grade variation due to the nugget effect. Their total gold content, although not insufficient, may represent only a portion of the gold present in the overall system. The low grade distribution, in which the gold occurs sub-microscopically sometimes in association with sulfides may represent the bulk of the gold. The lower grade style mineralization appears to show better consistency and tonnage potential. The properties could host several large tonnage deposits. High grade zones of sufficient tonnage may exist on the property but it appears likely that most tonnage of economic mineralization on the property will be in the order of 0.040 to 0.20 range. The economic cut-off grade is yet to be determined.

The deposits of the area clearly are associated with silicification and marked by the presence of disseminated sulfides. A large amount of valuable exploration data exists for the properties and should be re-evaluated using the new bulk tonnage type model. IP surveys have confirmed the association of chargeability highs with disseminated sulfides which can be associated with gold mineralization. Resistivity mapping using IP does not appear to have been completely successful in defining alteration on a local scale. VLF-EM surveys may offer similar data at a lower cost. IP results have define several new areas of interest which require further investigation. The large buried chargeability highs tend to indicate the presence of a buried porphyry system.

3.2 Conclusion

The AL and Mets properties still have significant mineral potential even with the mining of near surface high grade upper portions of the now recognized large porphyry style systems. Previous operators completed ore reserve calculations using cut-off grades of between 0.1 and 0.2 oz. Au / ton which were required for narrow low tonnage high grade operations. It is now clear that the principal amount of gold lies in the low grade material below these cut-off grades within low grade or porphyry style mineralization present within the alteration envelope and at depth.

Exploration data will have to be re-evaluated using lower bulk tonnage cut-off grades. Further exploration potential is clearly apparent on the AL property in the Bonanza, Thesis and BV deposits.

Only recently has the area been subjected to state of the art exploration. Past exploration was largely focussed solely on past discoveries on postage stamp map areas. Very limited effective use was made of geophysics in the area. The deposits of the area are associated with silicification and marked by the presence of disseminated sulfides which make them suitable for detection by Induced Polarization surveys. Recently completed airborne geophysical surveys should be integrated into the exploration data base to enable a larger scale examination of the area as a whole.

The JV's properties host several large porphyry systems with significant potential. Numerous undeveloped mineral showings occur over a strike length of 12 km. between the AL and J.D. properties. Further potential also exists on the Lawyers property. Multiple parallel and cross-cutting structures apparent from soil geochemistry and induced polarization surveys are relatively untested and will require diamond drilling. The properties may have the potential to host several ore bodies suitable for development by open pit or bulk mining methods. There is good potential on the properties for the development of sufficient ore reserves to make likely several viable bulk tonnage type operations.

Both the AL and Mets properties are of merit where bulk tonnage potential has been overlooked and offer significant potential for development of several large low grade gold deposits. Modest exploration expenditures are warranted to explore these properties.

3.3 Recommendations

A program of ongoing data compilation with future ground geophysics consisting of VLF-EM and magnetometer surveys is recommended to test the bulk tonnage potential of AL and Mets properties. VLF-EM and magnetometer surveys should be combined with geological mapping in order to compile an uniform data base for the properties in the area. Such a program would cost $50,000 assuming it was carried out in conjunction with other exploration by AGC/ANZ in the area.

Respectfully Submitted,

PERMIT TO PRACTICE
PAUL A. HAWKINS & ASSOCIATES LTD.
Signature
Date October 28, 1998.
PERMIT NUMBER: P 4521
The Association of Professional Engineers, Geologists and Geophysicists of Alberta

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
P. A. HAWKINS

Paul A. Hawkins, P.Eng.
Principal
Paul A. Hawkins & Associates Ltd.

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Certification

I, Paul A. Hawkins, of 72 Strathlorne Crescent S.W., in the City of Calgary, Province of Alberta, hereby certify:

1. That I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta and the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

2. That I am the Principal of the firm of Paul A. Hawkins & Associates Ltd. which holds Permit #P4521 to practice Engineering in Alberta and has a Business Address for service within the Province of British Columbia.

3. That I am a graduate of Queen's University with a $B.Sc_{(Eng)}$. in Geological Engineering.

4. That I have worked continually as a practicing geological engineer for the past 21 years.

5. That I have not received, nor do I expect to receive, any direct or indirect interest in the property of AGC Americas Gold Corporation or any of its associates or affiliates.

6. That I do not have any direct or indirect interest in, nor do I beneficially own directly or indirectly, any securities of AGC Americas Gold Corporation or any of its associates or affiliates.

7. That I have been granted employee stock option in Antares Mining and Exploration Corporation to purchase up to 60,000 shares at prices between $.28 and $.385.

8. That I have been retained by AGC Americas Gold / Antares Mining on a fee for service basis under our 1998 Fee Schedule and that I have conducted such Quality Assurance Programs as deemed required without restriction or limitation by the company.

9. That I have visited the subject property and supervised the 1996 and 1997 drill program on the J.D. property and have conducted other Due Diligence examinations on other properties (Cheni Mine in 1987) in the area and I am familiar with the Toodoggone Gold / Silver Camp and the area geology and mineral potential.

10. That I hereby consent to the publication of this report or parts thereof in a Statement of Material Facts or publication of this report in its entirely for the purpose of raising funds to finance my recommendations.

Dated at Calgary, Alberta this 28th day of October, 1998

Paul A. Hawkins, P.Eng.
Principal

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Appendix II

1997 IP Survey Cost Summary

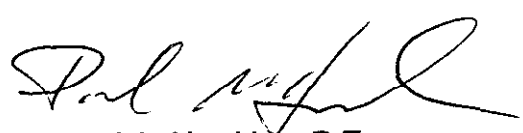
Claim	Event #	IP Survey (km.)	IP Survey Cost	Gridding (km.)	Gridding Cost	Claim Total
AL 42	3122280	3.8	$10,859	3.8	$5,816	**$16,675**
Bull	3122284	2.4	$6,633	2.4	$3,553	**$10,186**
Sub-Total	-					$26,861
Mining Lease	-	10.2	$28,547	10.2	$15,291	$43,838
Mets-1	-	2.0	$5,737	2.0	$3,073	$8,810
Total	-	18.5	$51.776	18.5	$27,733	$79,509

IP Unit Cost (Geophysics only) for both JD & AL survey = $2,798.75 per km.

Gridding / Linecutting on AL only
(including survey of line with EDM, helicopter, and additional winter operating conditions) = $1,499.19 per km.

Toodoggone JV
1997 IP Survey Costs
Antares Mining and Exploration / AGC Americas Gold Corp.

Survey Costs	
Lloyd Geophysics	
(Franz Dziuba, R. Wheater, G Smith, J. Struthers, S. Likins)	
Invoice #1253	$35,025.00
Invoice #1258	$1,663.42
Invoice #1268	$1,813.62
Camp & Support Costs	
Subsistence (5 men x 26 days X $50)	$6,500.00
Fixed Wing Support	$3,400.00
Helicopter Support (20 hours @ $675)	$13,500.00
Helicopter Fuel (20 hours @ $110)	$2,200.00
Fuel	$450.00
Report Preparation and Supervision	
Paul A. Hawkins (4 days @ $400)	$1,600.00
Reproduction	$250.00
Drafting	$450.00
Sub-Total Survey costs	$66,852.04
+10% Overhead	$6,685.20
Total Survey Cost	$73,537.24
Cost per Kilometer	$2,798.75



Paul A. Hawkins, P.Eng.
28-Jul-98
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Toodoggone JV
1997 IP Survey Linecutting Gridding Costs
Antares Mining and Exploration / AGC Americas Gold Corp.
AL Property

Minconsult (Tim Bissett & Craig Lynes)		
Mob Labour		$312.50
Travel expenses		$1,398.70
2 man crew for 11 days		$6,875.00
Demob Labour		$350.00
Survey Control and additional gridding		
Ken Gibson	5 days @ $300	$1,500.00
Neil MacCaskill	2 days @ $300	$600.00
Jodi Alexander	5 days @ $150	$750.00
Ruusell Tomah	2 days @$200	$400.00
Neil Tomah	2 days @$200	$400.00
Mark Poole	2 days @$200	$400.00
Camp & Support Costs		
Subsistence	(42 mandays X $50)	$2,100.00
Fixed Wing Support		$1,700.00
Helicopter Support (10 hours @ $675)		$6,750.00
Helicopter Fuel (10 hours @ $110)		$1,100.00
Fuel		$50.00
Report Preparation and Supervision		
Paul A. Hawkins (2 days @ $400)		$800.00

Sub-Total Survey Cost	$25,486.20
+10% Overhead	$2,548.62
Total Survey Cost	$28,034.82
Cost per Kilometer	$1,499.19

Paul A. Hawkins, P.Eng.
28-Jul-98

Appendix III

IP Survey Parameters

5.0 INSTRUMENT SPECIFICATIONS

The equipment used was a time domain measuring IP system consisting of a Wagner Leland/Onan motor generator set and a Mark II transmitter manufactured by Huntec Limited, Toronto, Canada and a 6 channel IP-6 receiver manufactured by BRGM Instruments, Orleans, France.

The Wagner Leland/Onan motor generator supplies in excess of 7.5 kilowatts of 3 phase power to the ground at 400 hertz via the Mark II transmitter.

The transmitter was operated with a cycle time of 8 seconds and the duty cycle ratio: [(time

on)/(time on + time off)] was 0.5 seconds. This means the cycling sequence of the transmitter was 2 seconds current "on" and 2 seconds current "off" with consecutive pulses reversed in polarity.

The IP-6 receiver can read up to 6 dipoles simultaneously. It is microprocessor controlled, featuring automatic calibration, gain setting, SP cancellation and fault diagnosis. To accommodate a wide range of geological conditions, the delay time, the window widths and hence the total integration time is programmable via the keypad. Measurements are calculated automatically every 2 to 4 seconds from the averaged waveform which is accumulated in memory.

The instrument parameters chosen for this survey were as follows:

Cycle Time (T_c) = 8 seconds

Ratio $\frac{\text{(Time On)}}{\text{(Time Off)}}$ = 1:1

Duty Cycle Ratio

$$\frac{\text{(Time On)}}{\text{(Time On) + (Time Off)}} = 0.5$$

Delay Time (T_D) = 120 milliseconds

Window Width (t_p) = 90 milliseconds

Total Integration Time = 900 milliseconds

The window widths of the IP-6 receiver can be programmed arithmetically or logarithmically. For this particular survey the instrument was programmed arithmetically into 10 equal window

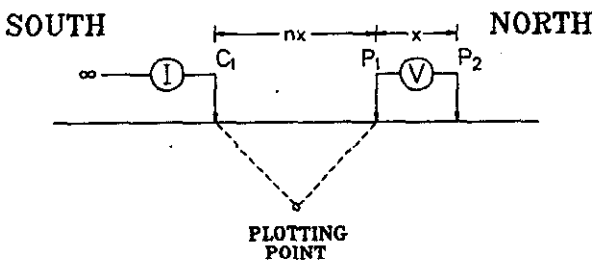
widths or channels, Ch_0, Ch_1, Ch_2, Ch_3, Ch_4, Ch_5, Ch_6, Ch_7, Ch_8, Ch_9 (Figure 3). These may be recorded individually and summed up automatically to obtain the total chargeability. Similarly, the resistivity (ρ_a) in ohm-metres is also calculated automatically.

6.0 SURVEY SPECIFICATIONS

The IP data was collected using the pole-dipole array. In this array the dipole length (x), the distance between P_1 and P_2 determines mainly the sensitivity of the array, whereas the electrode separation (nx), the distance between C_1 and P_1 determines mainly the depth of penetration of the array.

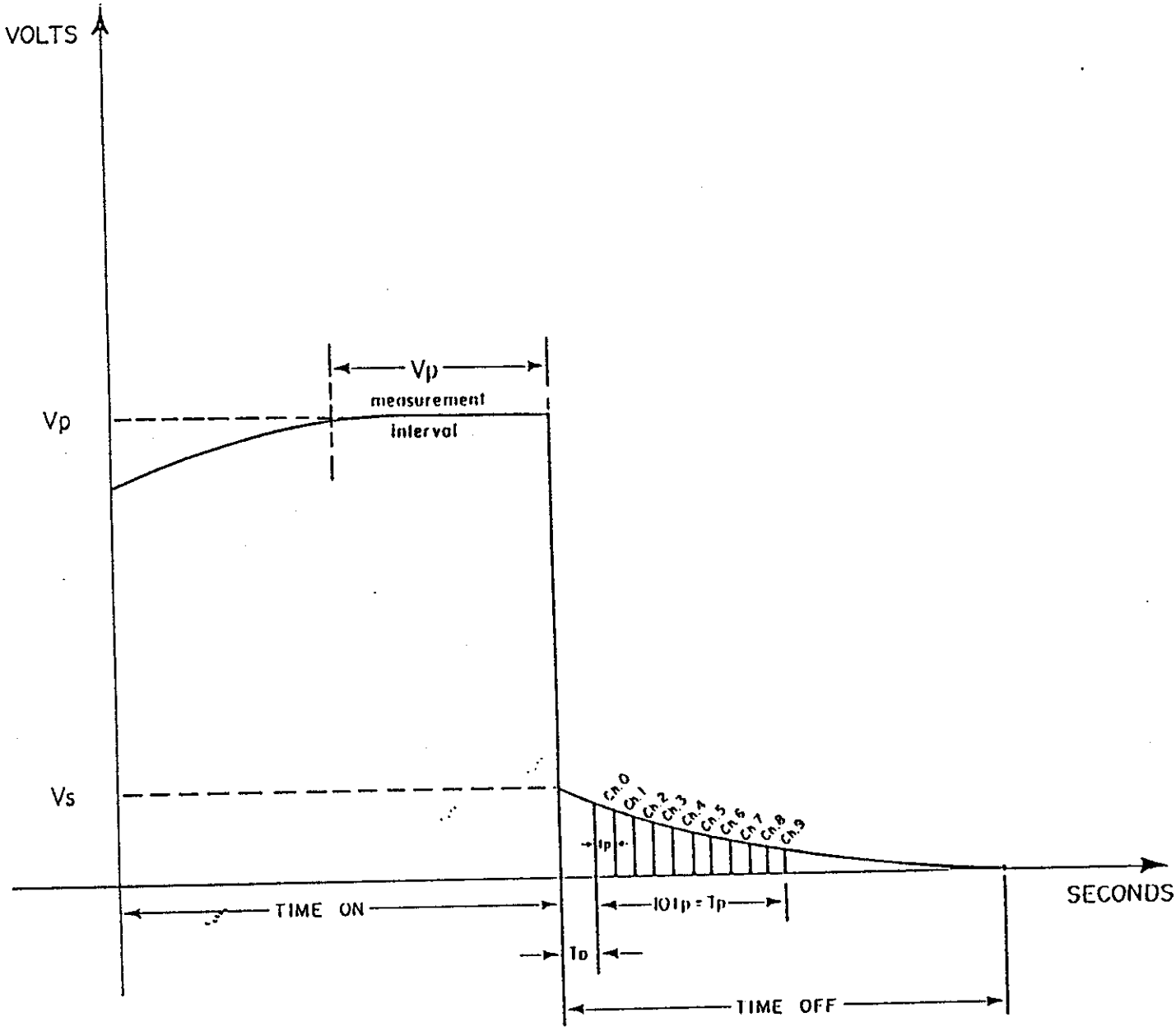
The array was configured as follows for all of the north-south lines:

POLE–DIPOLE ARRAY



x = 25m n = 1 - 6

Current electrode C_1 south of potential dipole P_1P_2

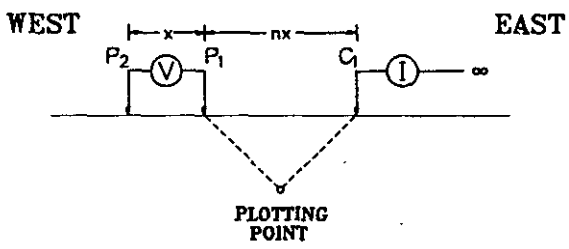


BRGM IP-6 RECEIVER PARAMETERS

Figure 3

The array was configured as follows for the one east-west tieline, 900N:

POLE–DIPOLE ARRAY



x = 25m n = 1 - 6

Current electrode C_1 east of potential dipole P_1P_2

The survey measurements were made with the current electrode C_1, to the south of the potential measuring dipole P_1P_2 for all of the north-south lines and to the east of P_1P_2 for the east-west tieline, 900N.

7.0 DATA PROCESSING

IP data collected in the field was processed using a portable 486 Compaq Notebook and a Fujitsu colour printer. Using this system IP pseudosections and contour plan maps were generated and plotted at the end of each survey day.

In the office, using appropriate software, final data processing was completed, and the field data was transferred to mylar or colour prints (not included in this report) using a Pentium 586 desktop computer coupled to either a Hewlett Packard Draftsmaster II Plotter or a Hewlett Packard Design Jet 650C Colour Plotter.

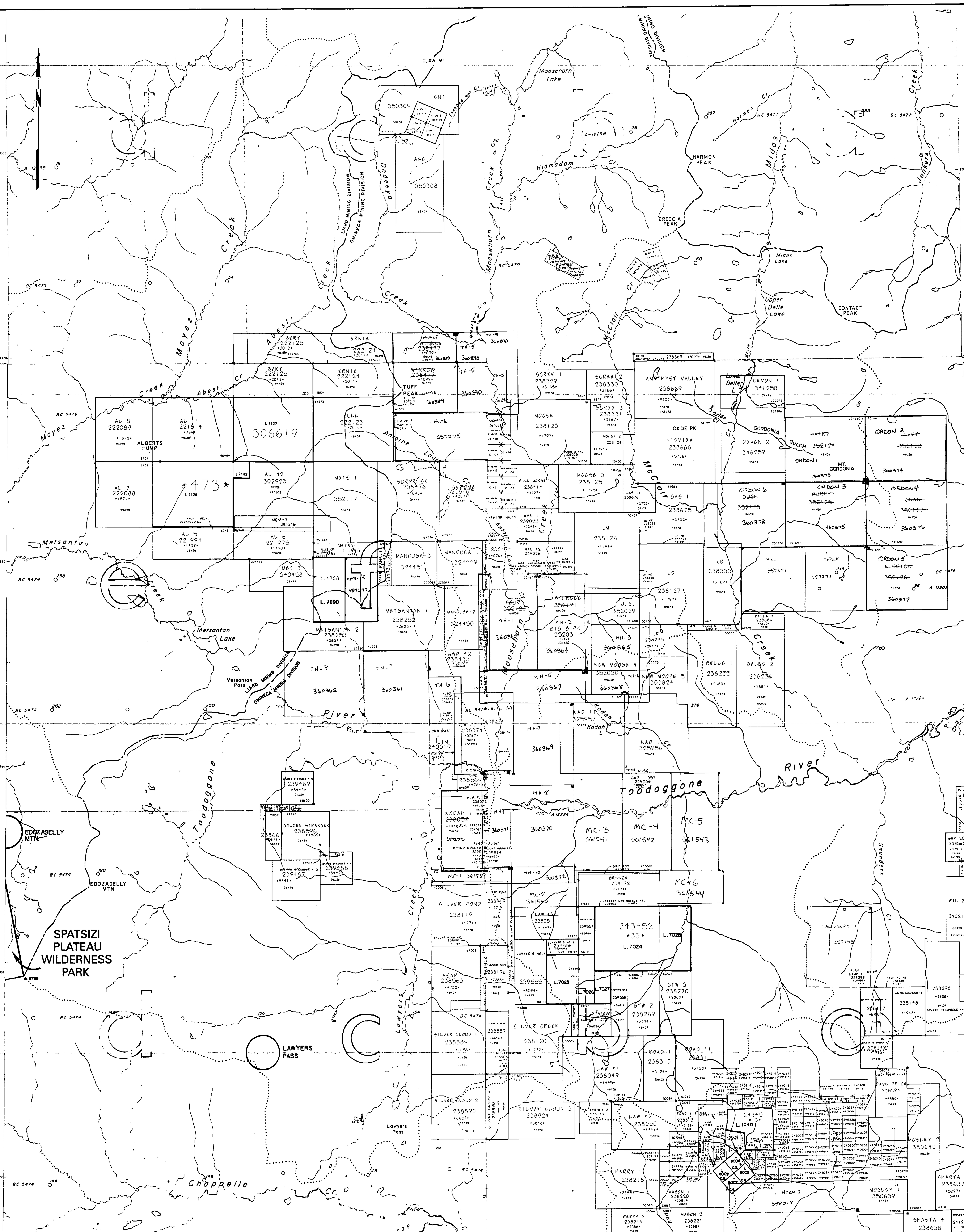
Appendix IV

Bonanza Drill Intersections - Phase I

Hole #	Interval (m.)	Gold (oz. Au/ton)	Thickness (m.)	Thickness (ft.)
AL97-1 -45°	20.0 - 61.0	0.058	41.0	134.5
	20.0 - 31.0	0.074	11.0	36.1
	34.0 - 40.0	0.096	6.0	19.7
	44.0 - 54.0	0.066	10.0	32.8
	59.0 - 61.0	0.087	2.0	6.6
AL97-2 -60°	21.0 - 61.0	0.095	40.0	131.2
	21.0 - 22.0	0.033	1.0	3.3
	22.0 - 50.0	0.122	28.0	91.9
	50.0 - 60.0	0.025	10.0	32.8
	60.0 - 61.0	0.101	1.0	3.3
	61.0 - 78.0	0.017	17.0	55.8
AL97-3 -90°	26.0 - 43.0	0.078	17.0	55.8
	26.0 - 33.0	0.017	7.0	23.0
	37.0 - 38.0	0.016	1.0	3.3
	38.0 - 43.0	0.236	5.0	16.4
AL97-4 -45°	27.0 -34.0	0.860	7.0	23.0
	32.0 -34.0	2.080	1.9	6.2
	34.0 - 35.0	0.033	1.0	3.3
	119.0 - 120.0	0.102	1.0	3.3
	128.0 - 131.0	0.014	3.0	9.8
	131.0 - 141.0	0.020	10.0	32.8
AL97-5 -65°	23.0 - 43.0	0.121	20.0	65.6
	23.0 - 38.0	0.154	15.0	49.2
	38.0 - 43.0	0.022	5.0	16.4
AL97-6 -90°	19.0 - 38.0	0.202	19.0	62.3

Hole #	Interval (m.)	Gold (oz. Au / ton)	Width (m.)	Width (ft.)
AL97-7	8.0 - 10.0	0.004	2.0	6.6
	43.0 - 44.0	0.014	1.0	3.3
	51.0 - 63.0	0.047	12.0	39.4
	52.0 - 62.0	0.051	10.0	32.8
	52.0 - 57.0	0.058	5.0	16.4
	61.0 - 62.0	0.101	1.0	3.3
	72.0 - 82.0	0.063	10.0	32.8
	72.0 - 75.0	0.094	3.0	9.8
	78.0 - 81.0	0.093	3.0	9.8
	94.0 - 106.0	0.006	12.0	39.4
AL97-8	45.0 - 55.0	0.057	10.0	32.8
	45.0 - 48.0	0.129	3.0	9.8
	63.0 - 70.0	0.016	7.0	23.0
	82.0 - 90.0	0.006	8.0	26.2
AL97-9	4.9 - 6.0	0.032	1.1	3.6
	10.0 - 11.0	0.009	1.0	3.3
	13.0 - 14.0	0.007	1.0	3.3
	45.0 - 48.0	0.016	3.0	9.8
	55.0 - 57.0	0.015	2.0	6.6
	61.0 - 86.0	0.019	25.0	82.0
	61.0 - 67.0	0.041	6.0	19.7
	61.0 - 65.0	0.049	4.0	13.1
	61.0 - 62.0	0.076	1.0	3.3
	64.0 - 65.0	0.065	1.0	3.3
	72.0 - 81.0	0.021	8.0	26.2
AL97-10	4.0 - 23.0	0.062	19.0	62.3
	4.0 - 15.0	0.102	11.0	36.1
	4.0 - 12.0	0.132	8.0	26.2
	4.0 - 11.0	0.139	7.0	23.0
	34.0 - 60.0	0.037	26.0	85.3
	34.0 - 52.0	0.046	18.0	59.0
	34.0 - 37.0	0.111	3.0	9.8
	43.0 -44.0	0.134	1.0	3.3
	44.0 - 48.0	0.053	4.0	13.1
	56.0 - 58.0	0.055	2.0	6.6
	73.0 - 74.0	0.011	1.0	3.3
	83.0 - 89.0	0.009	6.0	19.7

Hole #	Interval (m.)	Gold (oz. Au / ton)	Width (m.)	Width (ft.)
AL97-11	32.0 - 43.0	0.145	11.0	36.1
	34.0 - 41.0	0.213	7.0	23.0
	34.0 - 37.0	0.123	3.0	9.8
	39.0 - 41.0	0.514	2.0	6.6
	52.0 - 84.0	0.062	32.0	105.0
	52.0 - 54.0	0.024	2.0	6.6
	58.0 - 60.0	0.024	2.0	6.6
	61.0 - 62.0	0.059	1.0	3.3
	65.0 - 68.0	0.096	19.0	62.3
	66.0 - 69.0	0.281	3.0	9.8
	66.0 - 68.0	0.363	2.0	6.6
	69.0 - 76.0	0.035	7.0	23.0
	76.0 - 78.0	0.115	2.0	6.6
	78.0 - 83.0	0.039	5.0	16.4
	83.0 - 84.0	0.281	1.0	3.3
AL97-12	43.0 - 44.0	0.031	1.0	3.3
	54.0 - 67.0	0.191	12.0	39.4
	60.0 - 66.0	0.348	6.0	19.7
	61.0 - 65.0	0.470	4.0	13.1
	61.0- 63.0	0.710	2.0	6.6
	76.0 - 78.0	0.012	2.0	6.6
AL97-13	11.0 - 14.0	0.015	3.0	9.8
	14.0 - 23.0	0.033	9.0	29.5
	37.0- 47.0	0.088	10.0	32.8
	37.0 - 42.0	0.106	5.0	6.4
	45.0 - 47.0	0.178	2.0	6.6
	70.0 -71.0	0.036	1.0	3.3
	74.0 - 79.0	0.140	5.0	16.4
	77.0 - 79.0	0.304	2.0	6.6



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

Antares Mining and Exploration Corporation
AGC Americas Gold Corp.

TOODOGGONE JOINT VENTURE
CLAIM MAP

OMINECA MINING DIVISION B.C.

kilometres 1 0.5 0 1 2 kilometres

1:50,000 | 94E/6

15000 E
15500 E
16000 E
16500 E
17000 E
17500 E
18000 E
18500 E

32500 N.
32000 N.
31500 N.
31000 N.
30500 N.
30000 N.
29500 N.
29000 N.
28500 N.

N

AL

0 100 200 300 400 500 m.

Scale 1:5000

ALBERTS HUMP

BBX

BINGO

THESIS III

AL CAMP

AL 97-20
AL 97-16,17,18,19,21
AL 97-26

THESIS II

BV

RING

AL 8
AL 7

AL 1
L 7128

L 7128
HYUK 1 (fr)
AL 5

LINE 'C'
135-00W

LINE 'B'

130-00W

120-00W

110-00W

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

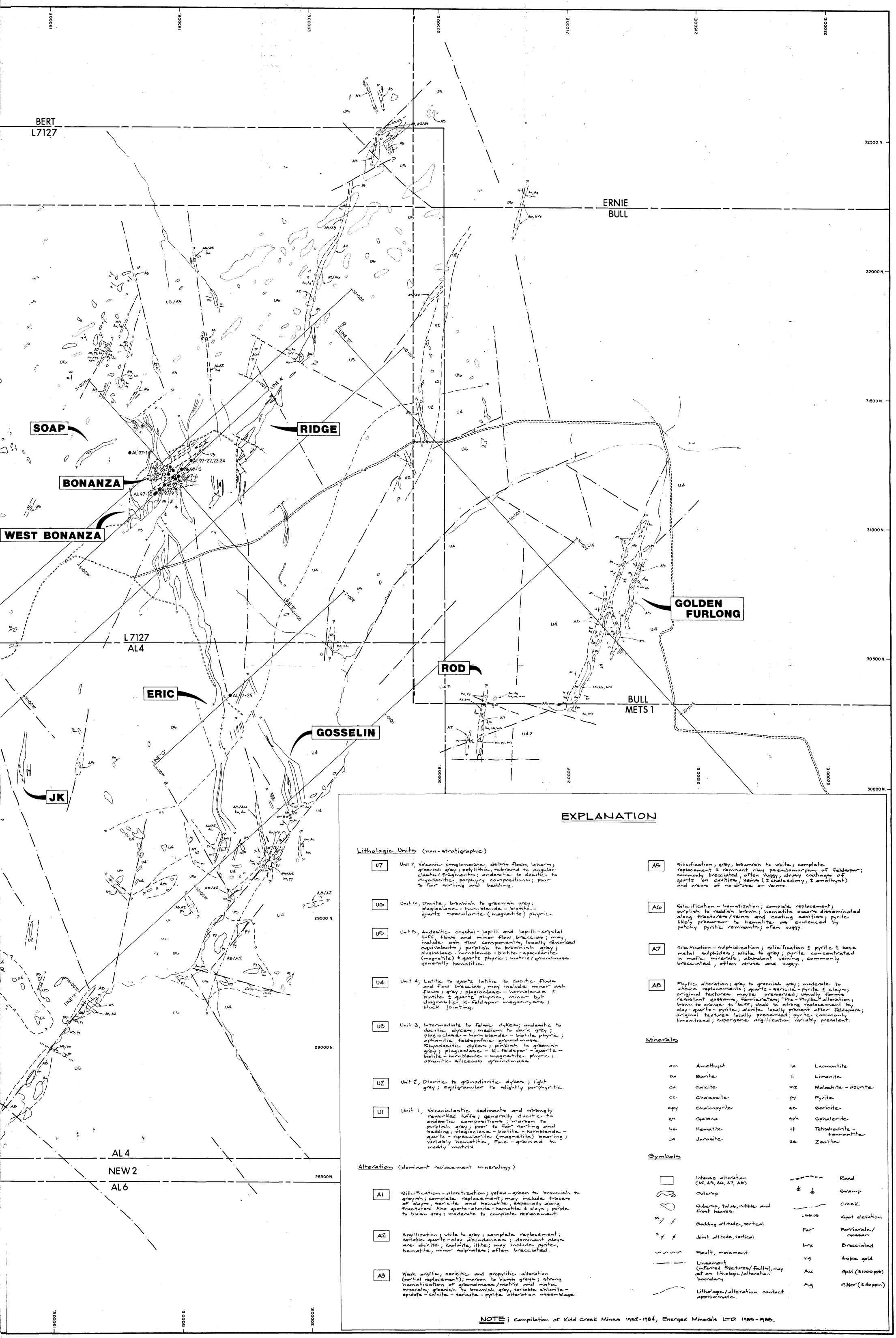
25,707

Updated by Paul A. Hawkins & Associates Ltd.

ANTARES MINING & EXPLORATION CORP.
AGC Americas Gold Corp.

TOODOGGONE JOINT VENTURE
AL PROPERTY
GEOLOGICAL COMPILATION MAP (1982 to 1988)
WITH 1997 DIAMOND DRILL HOLES

	1: 5,000	94E/06	X97-076-10C



EXPLANATION

Lithologic Units (non-stratigraphic)

U7 Unit 7, Volcanic conglomerate, debris flows, lahars; greenish grey; polylithic, subround to angular clasts/fragments; andesitic to dacitic to rhyodacitic, porphyry compositions; poor to fair sorting and bedding.

U6 Unit 6, Dacite; brownish to greenish grey; plagioclase - hornblende - biotite - quartz specularite (magnetite) phyric.

U5 Unit 5, Andesitic crystal - lapilli and lapilli - crystal tuff, flows and minor flow breccias; may include ash flow components, locally reworked equivalents; purplish to brownish grey; plagioclase - hornblende - biotite - specularite (magnetite) ± quartz phyric; matrix/groundmass generally hematitic.

U4 Unit 4, Latitic to quartz latitic to dacitic flows and flow breccias, may include minor ash flows; grey; plagioclase - hornblende ± biotite ± quartz phyric, minor but diagnostic K-feldspar megacrysts; block jointing.

U3 Unit 3, Intermediate to felsic dykes; andesitic to dacitic dykes; medium to dark grey; plagioclase - hornblende - biotite phyric; aphanitic feldspathic groundmass. Rhyodacitic dykes; pinkish to greenish grey; plagioclase - K-feldspar - quartz - biotite - hornblende - magnetite phyric; aphanitic siliceous groundmass.

U2 Unit 2, Dioritic to granodioritic dykes; light grey; equigranular to slightly porphyritic.

U1 Unit 1, Volcaniclastic sediments and strongly reworked tuffs; generally dacitic to andesitic compositions; maroon to purplish grey; poor to fair sorting and bedding; plagioclase - biotite - hornblende - quartz - specularite (magnetite) bearing; variably hematitic, fine-grained to muddy matrix.

Alteration (dominant replacement mineralogy)

A1 Silicification - alunitization; yellow - green to brownish to greyish; complete replacement; may include traces of clays, sericite and hematite, especially along fractures. Also quartz - alunite - hematite ± clays; purple to bluish grey; moderate to complete replacement.

AZ Argillization; white to grey; complete replacement; variable quartz - clay abundances; dominant clays are dickite, kaolinite, illite; may include pyrite, hematite, minor sulphates; often brecciated.

A3 Weak argillic, sericitic and propylitic alteration (partial replacement); maroon to bluish greys; strong hematization of groundmass/matrix and mafic minerals; greenish to brownish grey; variable chlorite - epidote - calcite - sericite - pyrite alteration assemblage.

A5 Silicification; grey, brownish to white; complete replacement ± remnant clay pseudomorphs of feldspar; commonly brecciated, often vuggy, druesy coatings of quartz on cavities, veins (± chalcedony, ± amethyst) and areas of no druse or veines.

A6 Silicification - hematization; complete replacement; purplish to reddish brown; hematite occurs disseminated along fractures/veins and coating cavities; pyrite likely precursor to hematite as evidenced by patchy pyritic remnants; often vuggy.

A7 Silicification - sulphidization; silicification ± pyrite ± base metal sulphides; white to grey; pyrite concentrated in mafic minerals, abundant veining, commonly brecciated, often druse and vuggy.

AB Phyllic alteration; grey to greenish grey; moderate to intence replacements; quartz - sericite - pyrite ± clays; original textures maybe preserved; usually forms resistant gossans, Ferricretes; "Pre-Phyllic" alteration; brown to orange to buff; weak to strong replacement by clay - quartz - pyrite; alunite locally present after feldspars; original textures locally preserved; pyrite commonly limonitized; supergene argillization variably prevalent.

Minerals

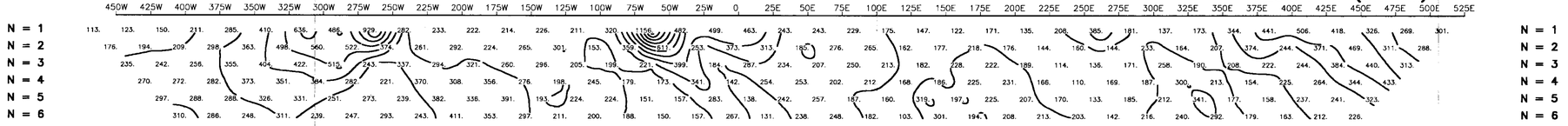
am	Amethyst	la	Laumontite
ba	Barite	li	Limonite
ca	Calcite	mz	Malachite - azurite
cc	Chalcocite	py	Pyrite
cpy	Chalcopyrite	se	Sericite
gn	Galena	sph	Sphalerite
he	Hematite	tt	Tetrahedrite - tennantite
ja	Jarosite	ze	Zeolite

Symbols

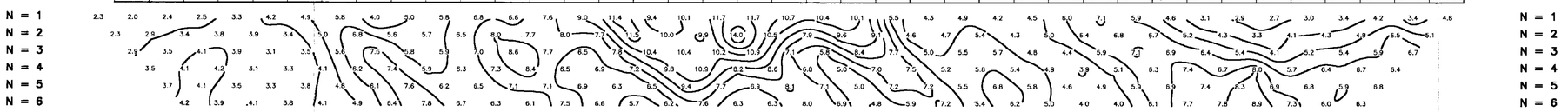
- Intense alteration (AZ, A5, A6, A7, AB)
- Outcrop
- Subcrop, talus, rubble and frost heaves.
- Bedding attitude, vertical
- Joint attitude, vertical
- Fault, movement
- Lineament (inferred fractures/faults), may act as lithologic/alteration boundary.
- Lithologic/alteration contact approximate.
- Road
- Swamp
- Creek
- Spot elevation
- Fer — Ferricrete/Gossan
- brx — Brecciated
- v.g. — Visible gold
- Au — Gold (≥1000 ppb)
- Ag — Silver (≥40 ppm)

NOTE; Compilation of Kidd Creek Mines 1982-1984, Energex Minerals LTD. 1985-1988.

RESISTIVITY (OHM-M)



CHARGEABILITY (MSEC)



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

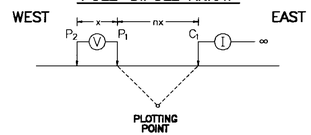
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: A

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

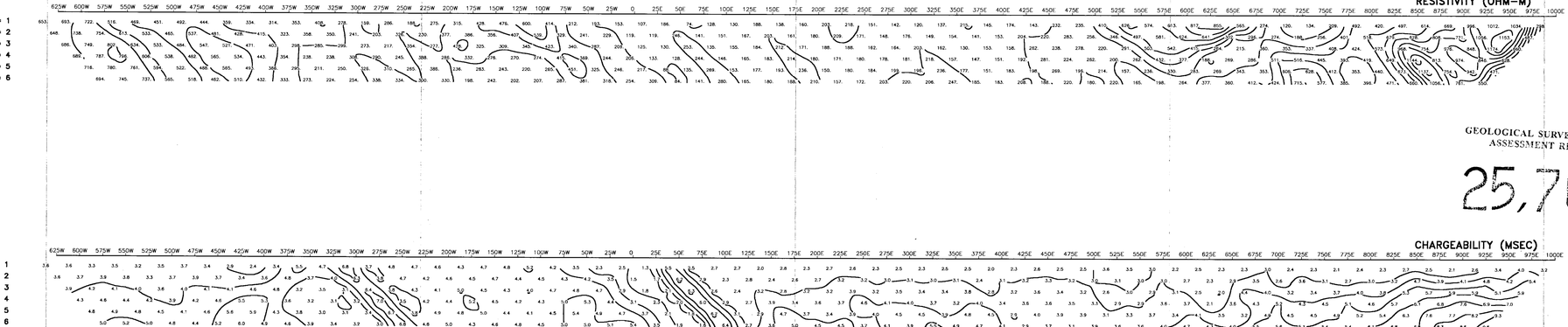
SCALE 1 : 2000

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 08



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

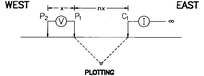
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: B

POLE-DIPOLE ARRAY



x = 25m n = 1 – 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

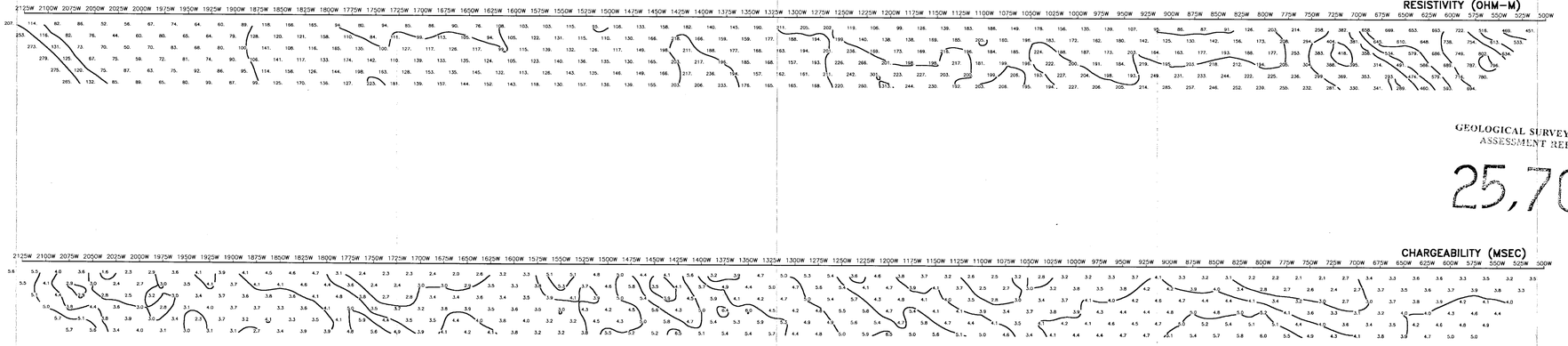
SCALE 1 : 2000

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 – 09a



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

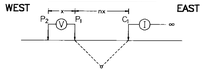
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: B

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

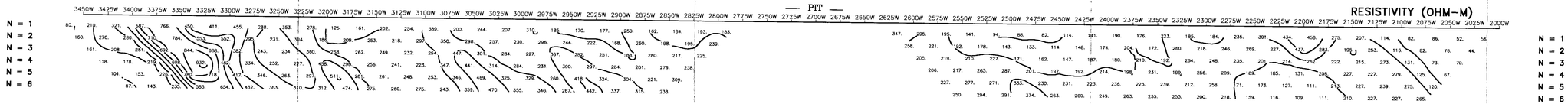
SCALE 1 : 2000

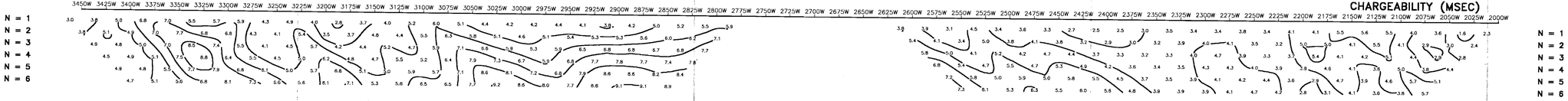
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 09b





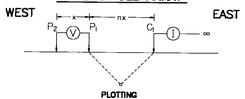
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: B

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

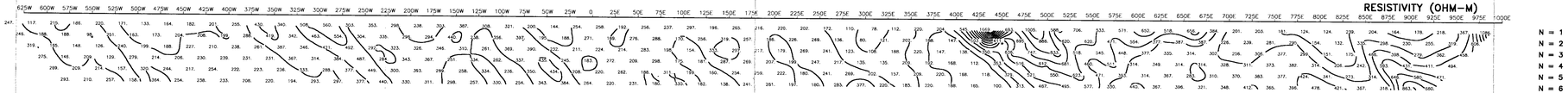
SCALE 1 : 2000

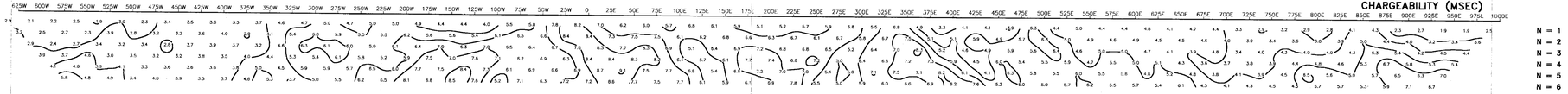
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 09c





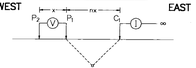
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: C

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2000

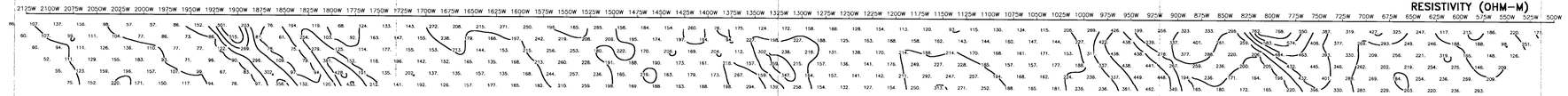
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

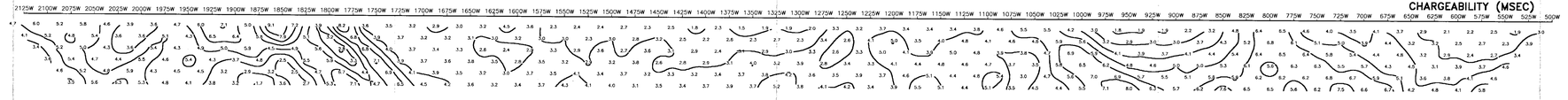
DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY

DRAWING NUMBER : 97417 - 10a





GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

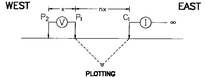
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: C

POLE-DIPOLE ARRAY



x = 25m n = 1 – 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

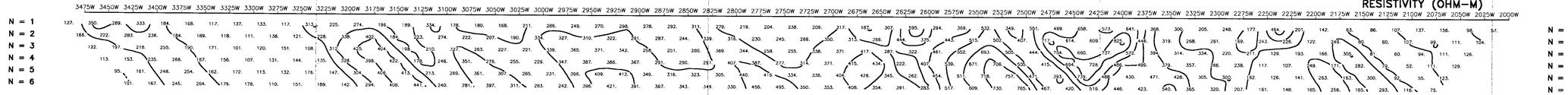
SCALE 1 : 2000

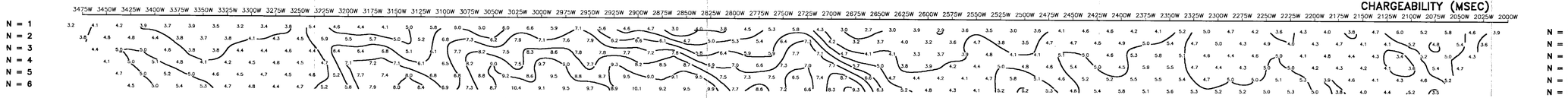
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 – 10b





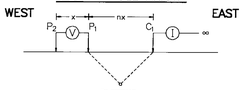
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: C

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

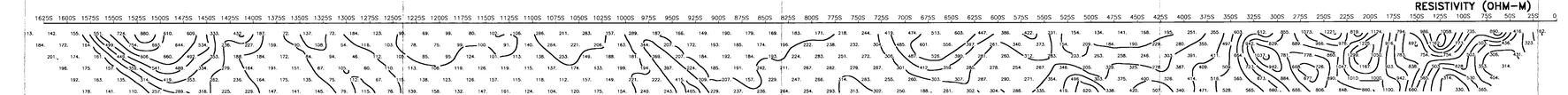
SCALE 1 : 2000

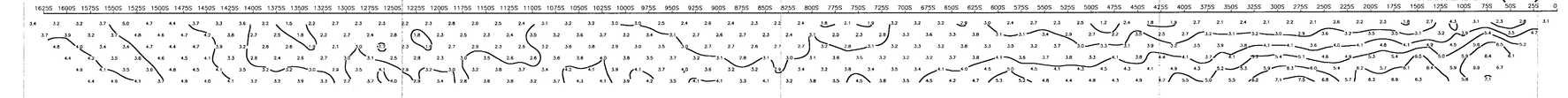
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 10c





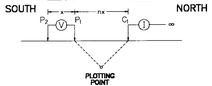
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: D

POLE-DIPOLE ARRAY



x = 25m n = 1 – 6

CURRENT ELECTRODE C, NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

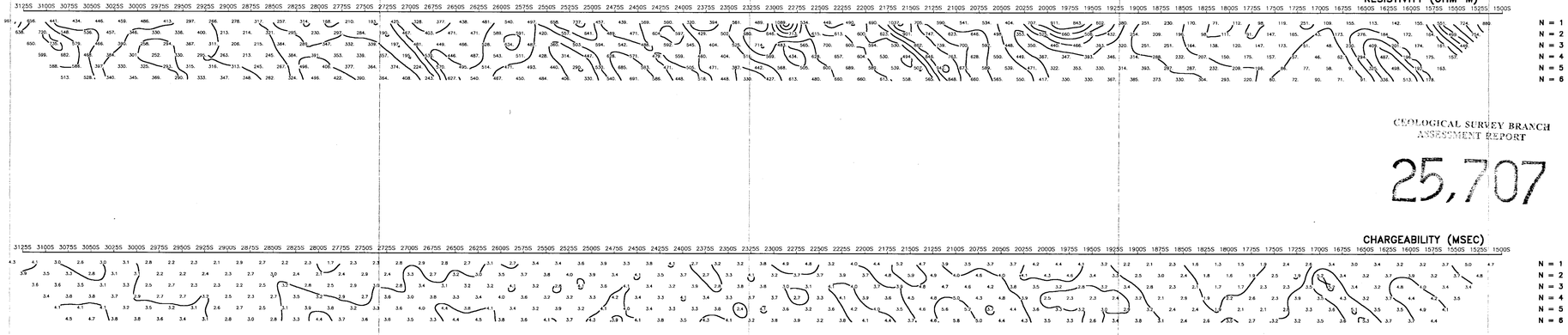
SCALE 1 : 2000

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 – 11a



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

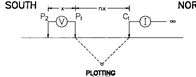
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: D

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2000

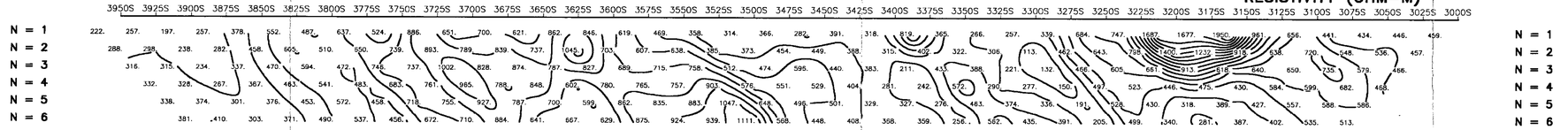
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

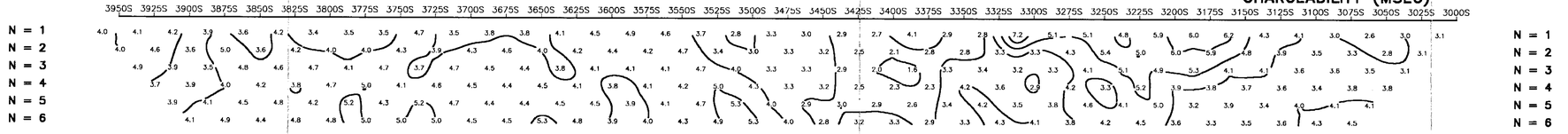
LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 11b

RESISTIVITY (OHM-M)



CHARGEABILITY (MSEC)



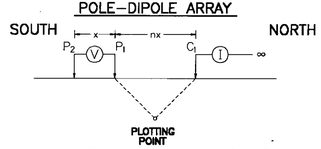
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: D

POLE-DIPOLE ARRAY



x = 25m n = 1 – 6

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2000

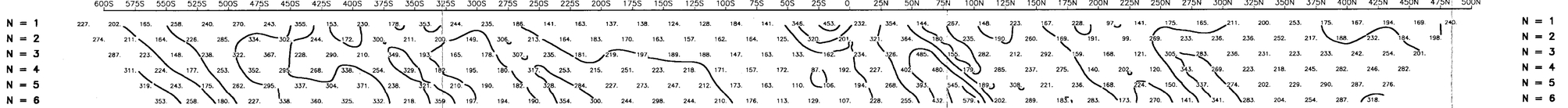
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

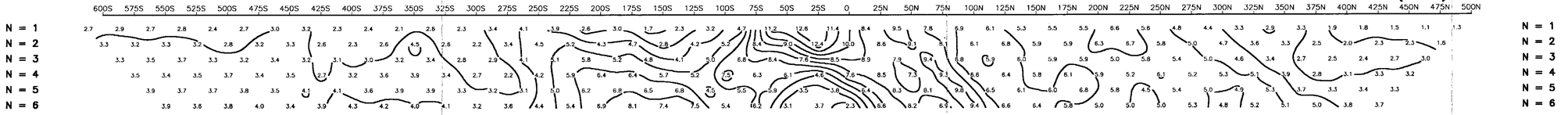
LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 – 11c

RESISTIVITY (OHM-M)



CHARGEABILITY (MSEC)



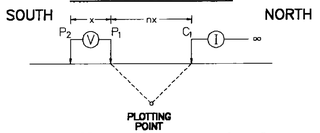
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: E

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 NORTH OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

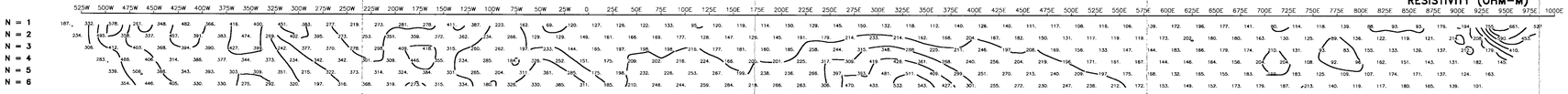
SCALE 1 : 2000

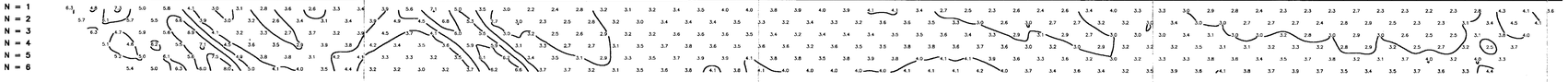
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 12





GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

AGC AMERICAS GOLD CORPORATION

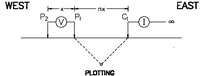
AL PROJECT

OMINECA MINING DIVISION

LINE: F

POLE-DIPOLE ARRAY

WEST EAST



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

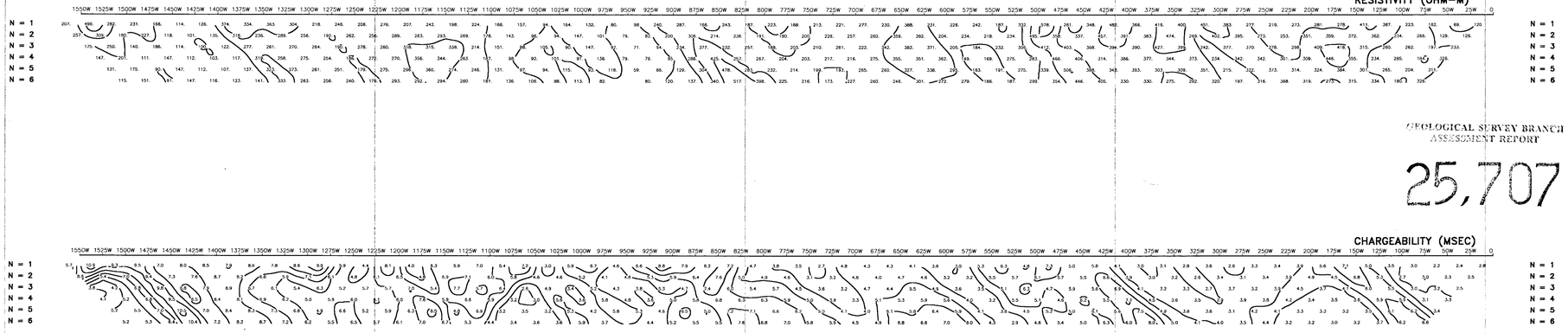
SCALE 1 : 2000

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-8

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 13a



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,707

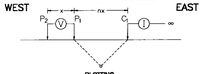
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: F

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

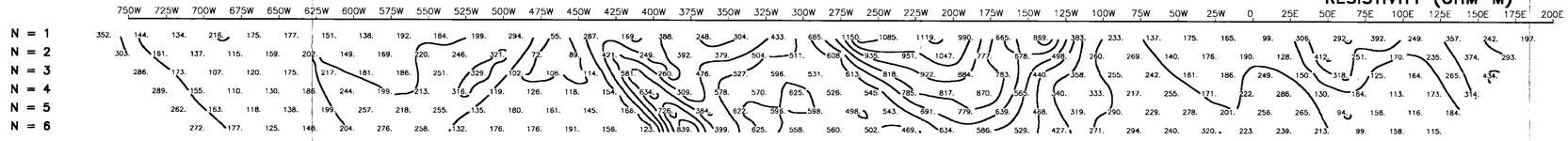
SCALE 1 : 2000

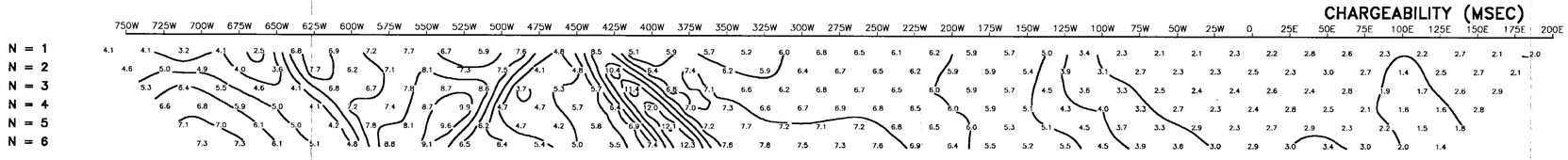
CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 13b





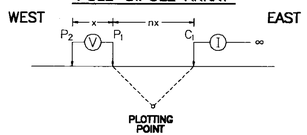
AGC AMERICAS GOLD CORPORATION

AL PROJECT

OMINECA MINING DIVISION

LINE: G

POLE-DIPOLE ARRAY



x = 25m n = 1 - 6

CURRENT ELECTRODE C_1 EAST OF POTENTIAL DIPOLE P_1P_2

SURFACE PROJECTION OF ANOMALOUS ZONES

DEFINITE
PROBABLE
POSSIBLE
AT DEPTH

SCALE 1 : 2000

CONTOUR INTERVALS
APP.CHARGEABILITY : 1.0 (msec)
APP.RESISTIVITY : 100 (ohm-m)

DATE SURVEYED: October 1997
Tx: Huntec Mk2 Model 7500
Rx: EDA IP-6

LLOYD GEOPHYSICS INC.

INDUCED POLARIZATION SURVEY
DRAWING NUMBER : 97417 - 14