BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1996/1997
REPORT #:	PAP 96-38
NAME:	LARRY LUTJEN

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations, section 15, 16 and 17.**
- *If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the* supporting data (*see* section 16) required with this TECHNICAL REPORT.

Name Larry D. Lutjen Reference Number PAP 30.96/97-P82

Golden Eagle 1-6 Project

LOCATION/COMMODITIES

Project Area (as listed in Part A) ~~Golden Eagle 82M/3W~~ MINFILE No. if applicable

Location of Project Area NTS 82M/3W Lat 51° 02' Long 119° 28'

Description of Location and Access ~~see enclosed assessment report~~

Main Commodities Searched For see report

Known Mineral Occurrences in Project Area see report

WORK PERFORMED

1. Conventional Prospecting (area) see enclosed assessment report
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. *Drilling (no. holes, size, depth in m, total m)*
7. Other (specify)

SIGNIFICANT RESULTS

Commodities 539 ppm zinc, 160 ppm lead, 96 ppm copper. Claim Name Golden Eagle 1-6

Location (~~show on~~ map) Lat Long Elevation 914-1372 meters

Best assay/sample type see report

Description of mineralization, host rocks, anomalies see report

Supporting data must be submitted with this TECHNICAL REPORT

ASSESSMENT REPORT
ON THE
GOLDEN EAGLE 1-6

PHYSICAL,GEOCHEMICAL, AND GEOPHYSICAL

SCOTCH CREEK AREA
LATITUDE 51 deg 02 min LONDGITUDE 119 deg 28 min
NTS 82M/3W

BY

LARRY D. LUTJEN
CERTIFIED FREE MINER No. 116217
RR1-B12-S11
CHASE, B.C. V0E-1M0
JANUARY 1997

TABLE OF CONTENTS

INTRODUCTION The Golden Eagle 1-2 claims were staked on the 1st of May 1995 by Larry D. Lutjen to cover a highly mineralized zone of sulfides occuring in a k-feldspar granodiorite intrusive believed to be related to the Scotch Creek fault (?). The Golden Eagle 1-6 claims were staked on the 24th of September 1996 by Larry D. Lutjen to cover the landing zone, a newly discovered area of mineralization also believed to be occuring in the same K-feldspar granodiorite. Samples taken from the discovery zone and the landing zone assayed up to 96 ppm copper, 539 ppm zinc, 160 ppm lead, 405 ppm barite, 1.4 ppm silver, 15 ppb gold, and 11 ppm moly. In the months of July, August, and September 1996 a series of surveys were conducted over the Golden Eagle 1-6 claims to determine the extent of the mineralization and it's economic potential. We did soil geocheming on topographical contour lines, stream sediment sampling, prospecting, baseline construction, gridline construction, geochemical sampling of gridlines, VLF surveys, magnetometer surveys, and mapping. Work todate has outlined two major zones of mineralization, the discovery zone in the south and a landing zone to the north. K-feldspar/quartz rich veins cut a granitic intrusive and are mineralized with pyrite, galena, copper, zinc, silver, and trace of gold.

PROPERTY The Golden Eagle 1-6 claims are six 2-post claims staked in the Kamloops Mining Division and recorded in Kamloops, B.C. on the 24th of September 1996. All six claims are 100% owned by Larry D. Lutjen; RR1-B12-S11; Chase, B.C.; V0E-1M0. The recorded dates of the Golden Eagles 1-6 are as follows:

Claim	No. of units	Tenure No.	Record date
Golden Eagle 1	1	350973	September 24, 1996
Golden Eagle 2	1	350974	September 24, 1996
Golden Eagle 3	1	350975	September 24, 1996
Golden Eagle 4	1	350976	September 24, 1996
Golden Eagle 5	1	350977	September 24, 1996
Golden Eagle 6	1	350978	September 24, 1996

ACCESS is via the Squilax/Anglemont highway to the Scotch Creek logging road 670, then 12 kilometers north to the junction of the 670 and 672 logging roads, then 2 kilometers up the 672 logging road to a logging landing on your immediate left, then 50 meters south of the logging landing to the IP of the Golden Eagle 1 & 2. The property is located at 51 degrees 02 minutes latitude and 119 degrees 28 minutes longitude in NTS 82M/3W mapsheet. The Squilax/Anglemont highway is an all weather road open 12 months of the year along with the 670 Scotch Creek logging road. Access would also be possible by helicopter 12 months of the year (see location map and claim map).

TOPOGRAPHY is steeply dipping and extends from 914 meters to 1,372 meter of elevation and is heavily forested with fir, birch, cedar, spruce, hemlock, and pine. The underbrush is vien alder, devils club, willow, and buck brush. There are limited outcrops but some nicely exposed slicken-sided down drop block faults are exposed striking northerly in the center of the claim group.

HISTORY goes back to the 1860's when placer development in the Scotch Creek area began. from 1886 to 1988 over $ 27,000.00 in gold was reported to have been recovered, with nuggets to 1/2 ounce of course gold with quartz. From 1889 to 1945 another 2,000 ounces of coarse gold plus quartz were reported to have been won from the same area. All reported recoveries of gold have been on Kwikoit Creek just north of the falls at the confluence of Scotch Creek and Kwikoit Creek, then down stream on Scotch Creek for another 8 - 12 kilometers. In 1989-1990 I gridded the old tertiary channels from above the falls on Kwikoit Creek to Gash Creek, but soil samples and pan concentrates produced no gold anomalies. I concluded from the surveys that the source of the gold, which was recorded in the MEMPR Annual Reports as being quite local, must have come from a mineralized structure on the west side of Kwikoit Creek. In 1994 I found the mineralized structure that I had been looking for and staked the Golden Eagle 1 & 2 to cover the discovery zone. To the immediate north west of the Golden Eagles 1-6 claims is the Mosquito King claims, a past producer of copper, silver, lead , and zinc in magnetite rich lenses of graphitic phyllites and limestones. In 1985 33,744 tonnes of ore were extracted and ran 12.13 grams silver, .83 % lead, and 2.09% zinc.

REGIONAL GEOLOGY consists of an area underlain by the lower cambrian part of the Eagle Bay formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by late cretaceous or early tertiary quartz-feldspar porphyry and mafic dykes with northerly trends. A K-feldspar granite to granodiorite intrusive is centered around the Gash Creek area and intrudes the Golden Eagle 1-6 claims. Mineralization comprises sulfides of silver, lead, and zinc within metasedimentary rocks on the north limb of the Nitwikwaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous graphitic phyllites, calcareous phyllites, banded calcsilicates, limestones, and quartzites. The metasediments are stratigraphically underlain by chloritic schists and greenstones. The mineralization occurs as layers, lenses, and pods of semimassive to massive sulfides, generally within a siliceous gange. The dominant sulfides are pyrite, galena, sphalerite, chalcopyrite, magnetite, and pyrrhotite. The sulfide horizons are generally well banded and comfortable to the schistosity and where observed, to the bedding. Intense deformation of the rocks has caused discontinuity and marked variability in the widths of the sulfide horizons which tend to thicken in the hinge zone of folds. The Misquito King deposit occurs as discontinous stringers, lenses, and disseminations over an area about 1000 by 500 meters. Mineralized widths vary from less than a meter to over 6 meters.

LOCAL GEOLOGY on the west and east sides of Adams Lake define two major faults in the Eagle Bay formation, one north of Johnson Lake and one south. They form major geological controls with the northern limbs being uplifted and forming the hanging walls of each thrust fault (?). On the east side of Adams Lake, and in between these two thrust faults, are two over-turned syncline/anticlines with their axial traces defining several lenses of EBGg + EBGs +EBG + EBGt (?). I believe the surface expression of these lenses to be glacial exposures of the over-turned syncline/anticlines (?) with mineralization forming between the axial trace of the over-turned syncline and the over-turned anticline (e.g. mineralization occuring north of the axial trace of the over-turned syncline). On the west side of Adams Lake is a series of massive deposits that exist in a sequence of EBGg + EBGs + EBG + EBGt (?) that makes up the Rea Gold deposit, the Samatosum deposit, and the Twin Mountain deposit. Mineralization in these deposits consists of silver, zinc, lead, gold, and copper, in sulfides of sphalerite, galena, tetrahedrite, arsenopyrite, chalcopyrite, and barite. On the east side of Adams Lake is another series of massive sulfides that exist in a similar sequence of EBGq + EBGs + EBG + EBGt (?) that makes up the Elsie deposit, the Lucky Coon deposit, and the King Tut deposit. Mineralization in these deposits include lead, zinc, silver, gold, and arsenic in sulfides of galena, sphalerite, tetrahedrite, arsenopyrite, and barite. Now as we continue to trace the mineralization east we see a major displacement by a right laterial strike-slip fault NNE along Nikwikwaia Creek and extending NNE south of Gold Creek Meadows. There is approximately 3 kilometers of displacement along this fault. We can see the same approximate displacement of the over-turned syncline (?). A new group of massive sulfide showings now form north of the displaced axial trace of the over-turned syncline that makes up the Pet deposit, the Mosquito King deposit, and the Golden Eagle showing. It is of special interest that younger volcanics (Kg) now intrude these mineralized sediments and I believe them to be the source of the remobilized mineralization and deposition of gold. I have found on the Golden Eagle 1 - 2 claims a massive sulfide zone up to 10 meters in width and possibly running for over 400 meters on strike, with the northern extension of the showing in a barite zone several meters in width. located stratographically up section by 100 meters. The sulfides are predominantly pyrite in an altered sequence of quartz sericite schist that grades into an altered K-feldspar quartz. The host rock is a K-feldspar granite to granodiorite intrusive (Kg) that is pervasive in the Scotch Creek and Gash Creek areas and is highly biotized in the sulfide zone. I believe this showing could be the source of the Scotch Creek placers and the sulfide zone is a mesothermal vein system related to the granitic intrusive.

EXPLORATIONAL PROGRAM on the Golden Eagle 1-6 claims started on the 20th of July 1996 and finished up on the 13th of September 1996. A description of the program was as follows:

1. Soil sampling of topographical contour lines.
2. Stream sediment sampling of local drainages.
3. Prospecting the discovery zone and landing zone.
4. Baseline and gridline construction.
5. Soil sampling the gridlines.
6. VLF/EM survey over gridlines.
7. Magnetometer survey over gridlines.

8. Expanded gridlines
9. Soil sampling over expanded gridlines.
10. VLF/EM survey over expanded gridlines.
11. Magnetometer survey over expanded gridlines.
12. Prospecting, sampling, and mapping.

SOIL SAMPLING OF TOPOGRAPHICAL CONTOUR LINES from the 20th of July until the 27th of July 1996. We sampled three topographical contour lines that intersect the Golden Eagle 1-6 claims (see fig.4). The sampling was done at 500 meter intervals on the 914 meter, 1067 meter, and 1219 meter topographical lines NTS mapsheet 82M/3W. The surveys were conducted from south to north. The object of the surveys was to locate any old works and determine the extent of mineralization. The first sample taken was on topo-line 1067 as follows: LL-1067-1-96 , LL = Larry Lutjen, 1067 = 1067 meter contour line on topomap 82M/3W, 1 = the first sample taken, and 96 = the year the sample was taken 1996. All samples were taken in the "B" horizon at a depth of 10 to 20 centimeters. The "B" horizon was well developed and most samples were taken from a reddish brown dirt. No old works were found and 24 samples were taken from the three contour lines and bagged in 4" x 6" Kraft sample bags. Each sample location was flagged as outlined in the Topo-contour Sample Map and each bag labled accordingly.

STREAM SEDIMENT SAMPLING OF LOCAL DRAINAGES from the 29th of July until the 31st of July and the 1st and 2nd of August 1996. We sampled four drainages in the Golden Eagle 1-6 claim area which generally run from west to east (see fig.5). The object of the surveys was to determine the extent of mineralization. Each survey started at the approximate headwaters ation. Each survey started at the approximate headwaters of the four drainages and sampled at 500 meter intervals as indicated on the Stream Sample Map. The first sample was taken on a nameless creek and the location flagged LL-SS-1-96 as follows; LL = Larry Lutjen, SS = stream sediment sample, 1 = the first sample taken, and 96 = the year of the survey 1996. We sampled the drainages from south to north LL-SS-1-96 thru LL-SS 6-96 the first drainage, LL-SS-7-96 thru LL-SS-8-96 the second drainage, LL-SS-9-96 thru LL-SS-11-96 the third drainage, and LL-SS-12-96 thru LL-SS-14-96 the final drainage. All four creeks were well established and believed to flow all year round on a good year. All samples were bagged in 4" x 6" Kraft sample bags and labeled with the corresponding sample locations.

PROSPECTING THE DISCOVERY ZONE AND LANDING ZONE from the 5th of August until the 7th of August 1996. We prospected the Discovery Zone (southern mineralization) and the Landing Zone (northern mineralization) in an attempt to determine the strike and dip of the mineralization. The object of the survey was to determine the azimuth of the baseline and gridlines to get the maximum information from the geochemical and geophysical surveys to follow. After a detailed study of the areas we determined the baseline should be set north to south at 340 degrees and 1 kilometer of baseline would encompass all of the known minerilazation. We flagged and picketted the baseline at 50 meter intervals and ran gridlines at 90 degrees to the baseline at 100 meter intervals.

BASELINE AND GRIDLINE CONSTRUCTION from the 8th of August until the 13th of August 1996. We put in a baseline at 340 degrees starting at 00N + 00E and picketted and flagged each station at 50 meter intervals to station 1000N + 00E (see fig.6). At each 100 meter station 00N, 100N, 200N, etc. we turned a 90 degree angle and flagged gridlines at 25 meter intervals. 21 stations were picketted on the baseline and the gridlines ran from 00N + 500W to 200E thru 1000N + 500W to 200E. We later expanded the east lines another 100 meters each to 300E see Grid Map. The baseline was brushed out and flagged with pink, blue, and yellow ribbon. No trees were cut and access was maintained by going around the trees. The baseline was slope corrected but the gridlines were not.

SOIL SAMPLING THE GRIDLINES from the 19th of August until the 22nd of August 1996. We sampled the "B" horizon at 25 meter intervals along the gridlines from 00N + 500W to 200E thru 1000N + 500W to 200E (see fig.6). The "B" horizon was well developed and most of the samples were taken from a reddish brown dirt at 10 to 20 centimeters deep. The samples were placed in a 4" x 6" Kraft sample bag and labled with the station designations as follows; 100N + 75E would be a sample taken on the 100 north gridline 75 meters east of the baseline. A total of 319 samples were taken on this survey and the labled bags were strung together by line, 00N, 100N, 200N, etc. and stored in cardboard boxes. Assay results of the samples were recorded on the certificates of analysis, Ecotech Laboratories, Kamloops, B.C. (see enclosed certificates of analysis).

VLF/EM SURVEY OVER GRIDLINES from the 23rd of August until the 26th of August 1996. The object of the survey was to look for possible conductors such as fault contacts, geological structures, and mineralized deposits. The survey was done by Larry D. Lutjen using a Sabre model 27 VLF/EM serial # 274 using Seattle, Washington at 18.6 KHz as the transmitting station (see fig.8). The VLF/EM method utilizes electromagnetic firlds transmitted from radio stations in the 15 - 25 KHz range. The signals are propagated with the magnetic component of the fields horizontal to the direction of propagation in undisturbed areas. Conductivity contrasts in the earth create secondary fields that produce a vertical component with changes in field strength, attitude, and amplitude. These conductive areas are then located with the aid of a very delicate instrument, the Sabre model # 27, and evaluated by measuring the various parameters see the VLF/EM Survey Map. A contourable analysis of the survey is then done with a Fraser Filter plot. The Fraser Filter plot takes the sum and difference of four consecutive dip-angles from west to east on a north-south baseline to plot and contour the secondary field dip-angle. The resultant positive plots are porportional to the conductor that has generated the secondary field. The results of the VLF/EM survey were good in the Landing Zone but were minimal in the Discovery Zone. An excellent conductor at 00E + 600N and 25E + 700N was calculated with positives of +23 and +22 corresponding with the mineralization. In the Discovery Zone there is a weak positive anomaly, but too low to contour with any degree of certainty.

A MAGNETOMETER SURVEY OVER THE GRIDLINES from the 27th of August until the 30th of August 1996. The object of the survey was to determine possible faults, structures, and mineralized conductors (see fig.9). The magnetometer survey was conducted by Larry D. Lutjen using a Geometrics G-816/826A total field proton magnetometer serial # 6424 capable of reading a 1 gamma difference in the earths magnetic field. A magnetometer base-station was maintained through out the survey and all readings were corrected for diurnal shifts, see Magnetometer Survey Map. The values were normalized by substracting 57,000 gammas from each corrected station reading. This facilitated the contouring and all values were positive. For example station 00N + 500W reads 106 but was calculated 57,106 gammas after corrections and 57,000 gammas was substracted. The Geometrics G-816/826A magnetometer is capable of measuring a 1 gamma difference and all readings were taken twice and recorded as per their location on the Grid Map. Changes in the total magnetic field at any one place in time can be generated by geological structures, metallic conductors, changes in the earths magnetic poles, and fault contacts, Metallic conductors that contain magnetic materials such as magnetite will generally give you a magnetic high while conductors that have remelted by volcanism will generally give you a magnetic low. The result of the magnetometer survey was quite good and corresponded to the VLF/EM survey by outlining a magnetic low over the Landing Zone (north zone) coincident over lines 500N, 600N, 700N, 800N, 900N, and 1000N. The Landing Zone appears to be open to the north and the geophysics coincident with the mineralized quartz/sericite barite. While the Discovery Zone (south zone) has surface mineralization, in place as much as 10%, the geophysics at best was weakly anomalous.

EXPANDED THE GRIDLINES from the 2nd of September until the 3rd of September 1996. Because the Landing Zone and the Discovery Zone were trending to the east we decided to extend the gridlines another 100 meters to the east to pickup possible anomalies related to the mineralization as outlined by the geophysics (see fig. 8 & 9). All stations were flagged at 25 meter intervals from 00N + 200E to 300E thru 1000N + 200E to 300E with station coordinates labeled on the flagging.

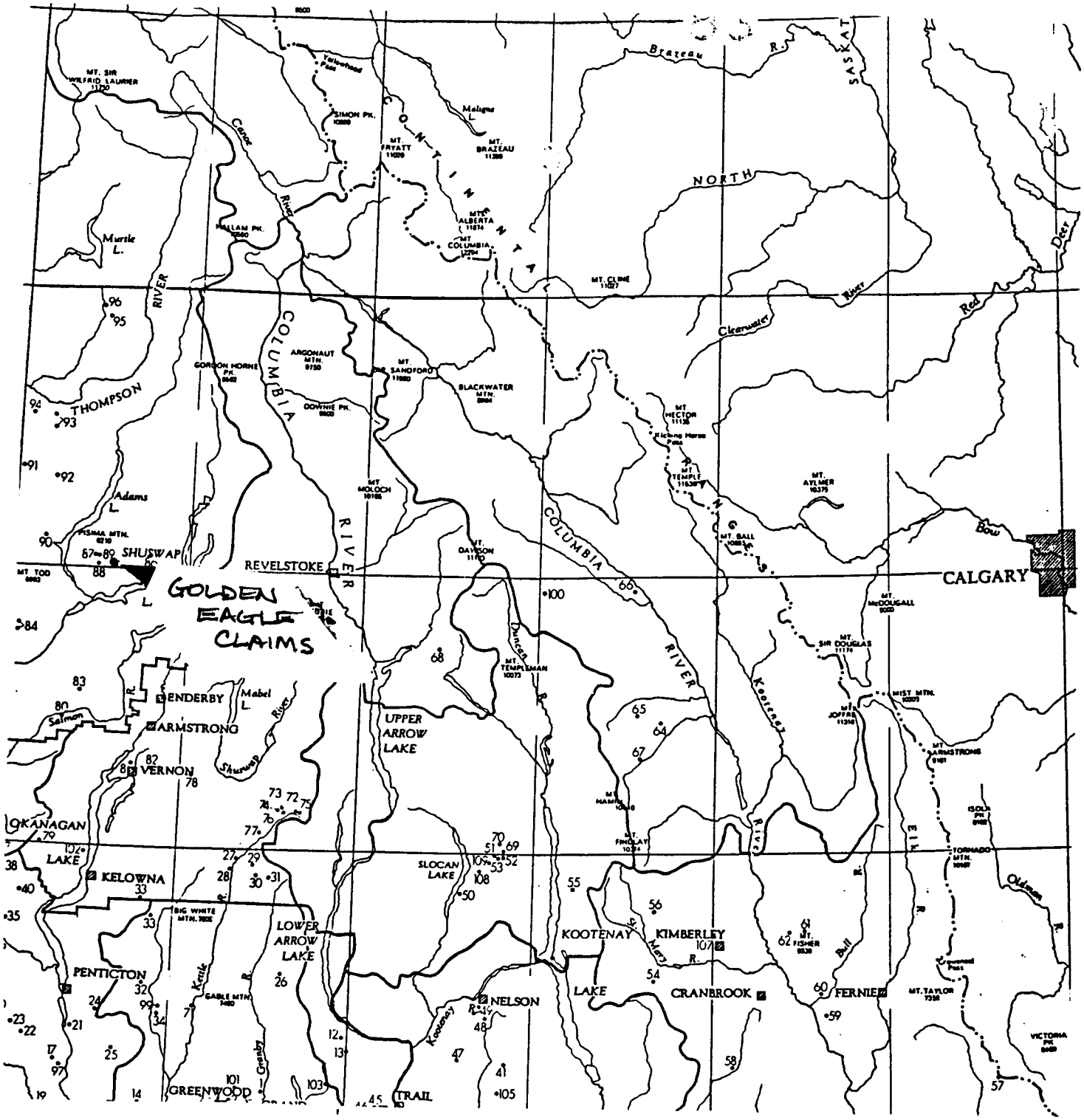
SOIL SAMPLING OVER EXPANDED GRIDLINES from the 4th of September until the 5th of September 1996. A total of 44 samples were taken from the expanded gridlines and Kraft bagged, labeled, and stored in cardboard boxes (see fig.6). All samples were taken from the "B" horizon at a depth of 10 to 20 centimeters. Mattoxes were used to obtain the samples and no trees were destroyed. Assay results were recorded on the certificates of analysis, Ecotech Laboratories, Kamloops, B.C. (see enclosed certificates of analysis).

VLF/EM SURVEY OVER EXPANDED GRIDLINES from the 6th of September until the 7th of September 1996. The extended VLF/EM survey was done by Larry D. Lutjen using the same Sabre model #27 VLF/EM serial #274. The data was also Fraser Filtered and recorded on VLF/EM Survey Map (see fig.8).

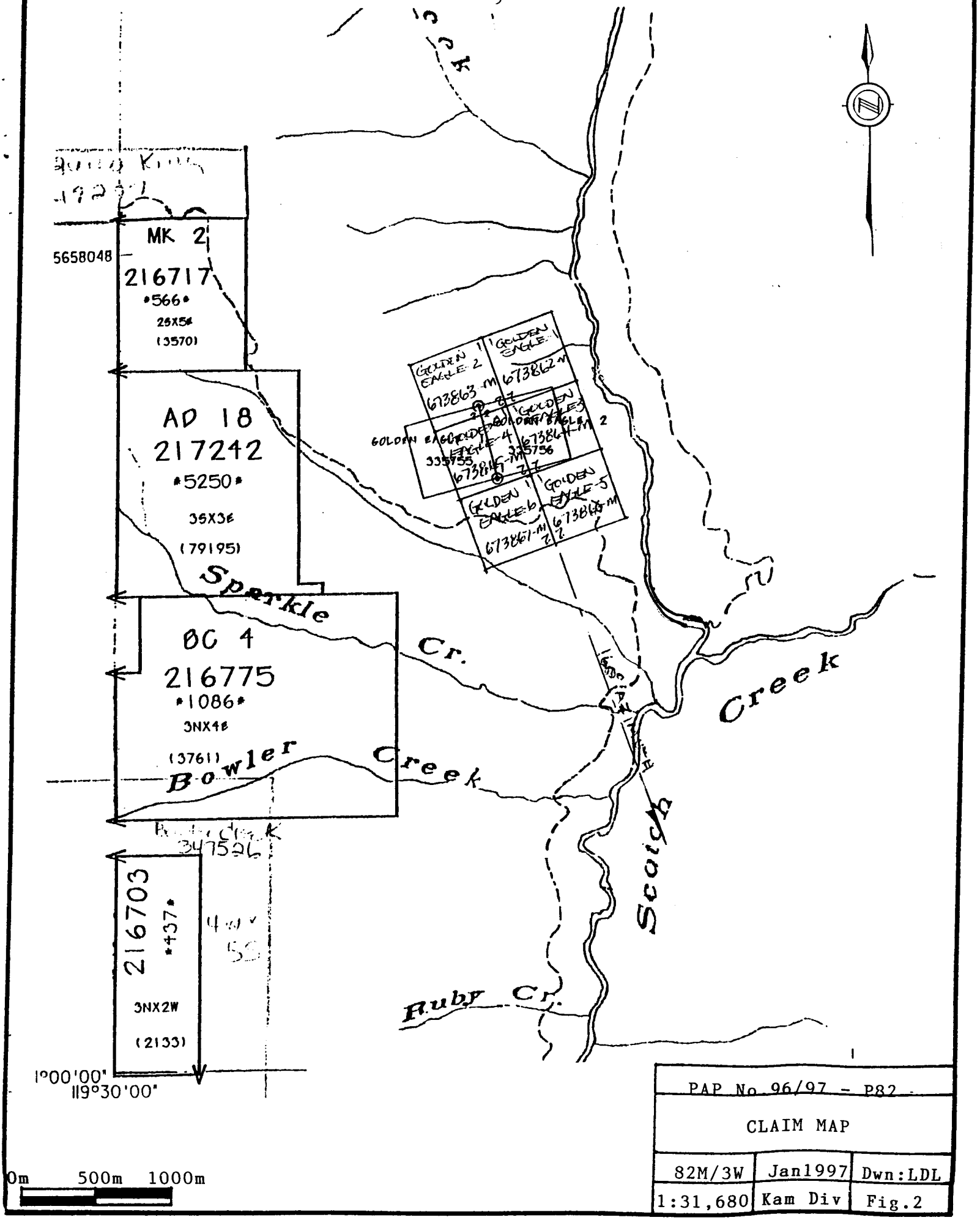
MAGNETOMETER SURVEY OVER EXPANDED GRIDLINES from the 8th of September until the 9th of September 1996. The extended magnetometer survey was done by Larry D. Lutjen using the same Geometrics G-816/826A proton magnetometer serial #6424. The data was also corrected for diurnal shifts and normalized by substracting 57,000 gammas from each reading and recorded on the Magnetometer Survey Map (see fig. 9).

PROSPECTING, SAMPLING, AND MAPPING THE MINERALIZED ZONES from the 10th of September until the 13th of September 1996 including the staking of the Golden Eagles 1-6 on the 24th of September 1996. Using the baseline and gridlines we tied in the lithogeochemical sample locations (see fig. 7). All samples were rock taken in place and flagged. Sample LL-1-96 as follows; LL = Larry D. Lutjen, 1 = sample #1, 96 = the year of the survey 1996. Assay results from the samples are recorded on the certificates of analysis, Ecotech Laboratories, Kamloops, B.C. (see certificates of analysis enclosed).

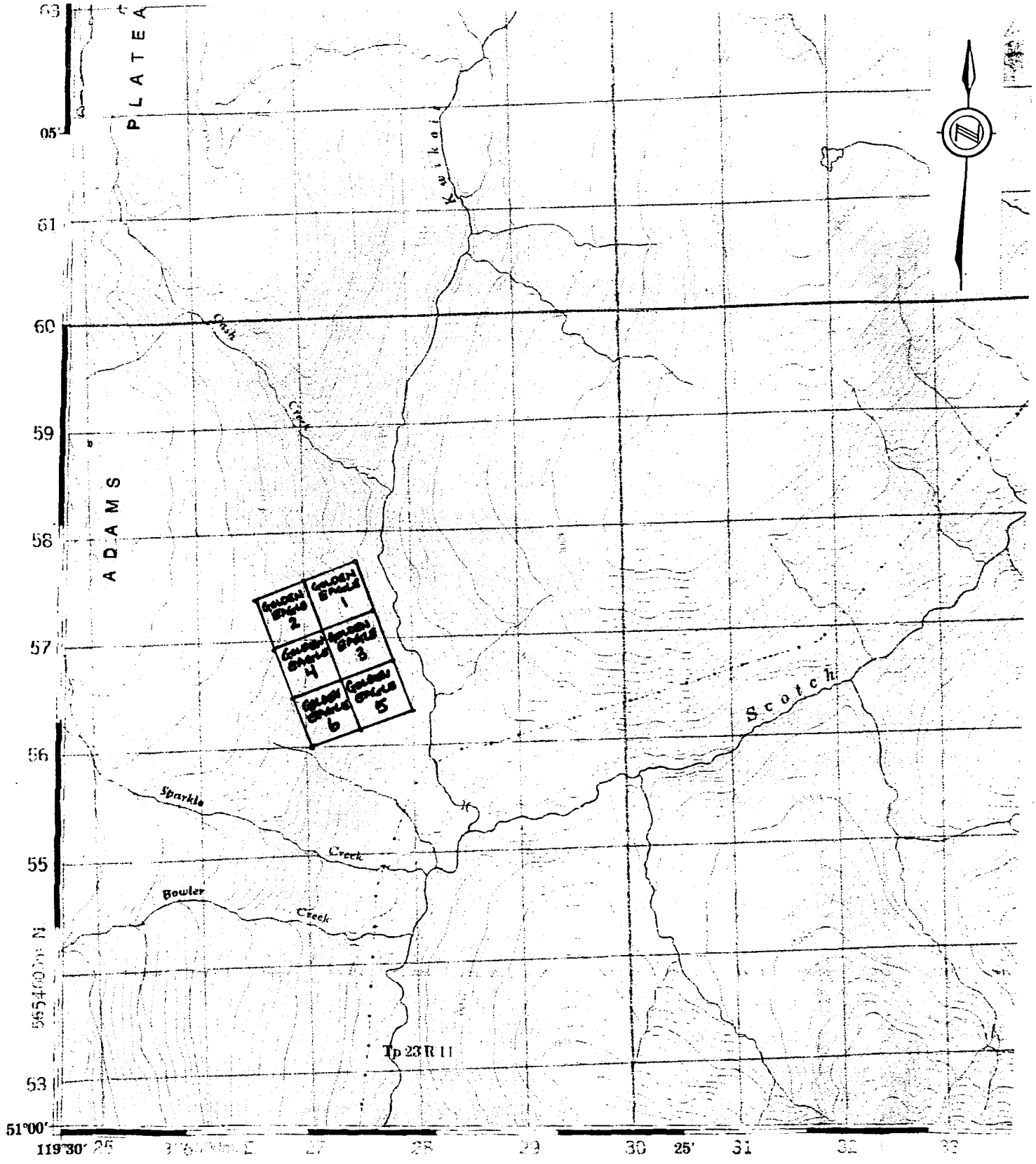
CONCLUSIONS are that the Golden Eagle 1-6 claims are a newly discovered mineralized structure in the Shuswap Metamorphic Complex and lithogeochemical samples taken from the Discovery Zone and Landing Zone assay up to 96 ppm copper, 539 ppm zinc, 160 ppm lead, 405 ppm barite, 1.4 ppm silver, 15ppb gold, and 11ppm moly. Geophysical anomalies in the Landing Zone (north zone) have outlined a large conductor trending with the outcropped mineralization within a magnetometer low. The potential for a mineralized deposit is extremely good and further geophysical work including self-potential and induced polarization surveys are recommended.



PAP No.96/97 - P82		
LOCATION MAP		
82M/3W	Jan1997	Dwn:LDL
BC Pro	Kam Div	Fig.1

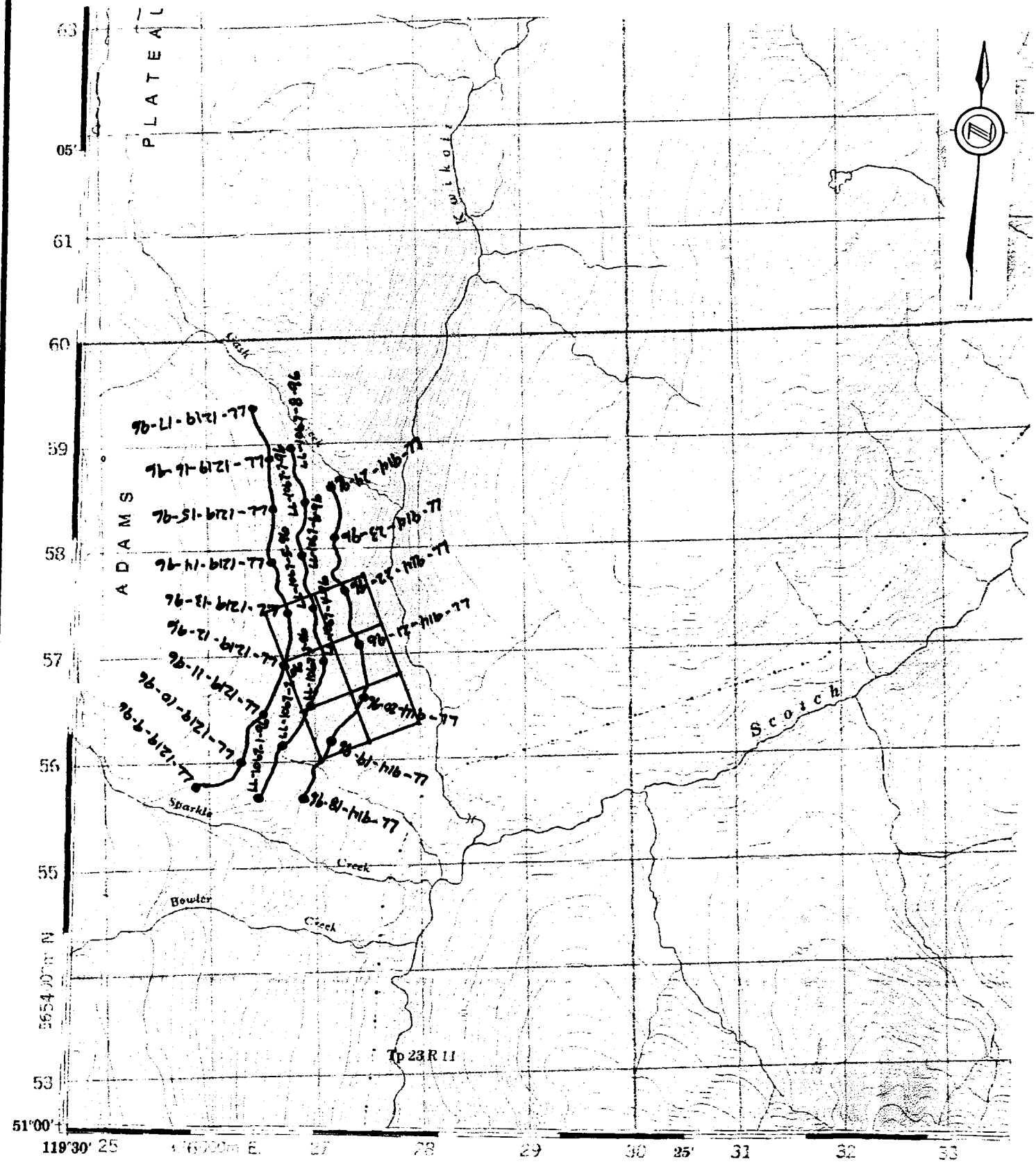


PAP No. 96/97 - P82		
CLAIM MAP		
82M/3W	Jan1997	Dwn:LDL
1:31,680	Kam Div	Fig.2



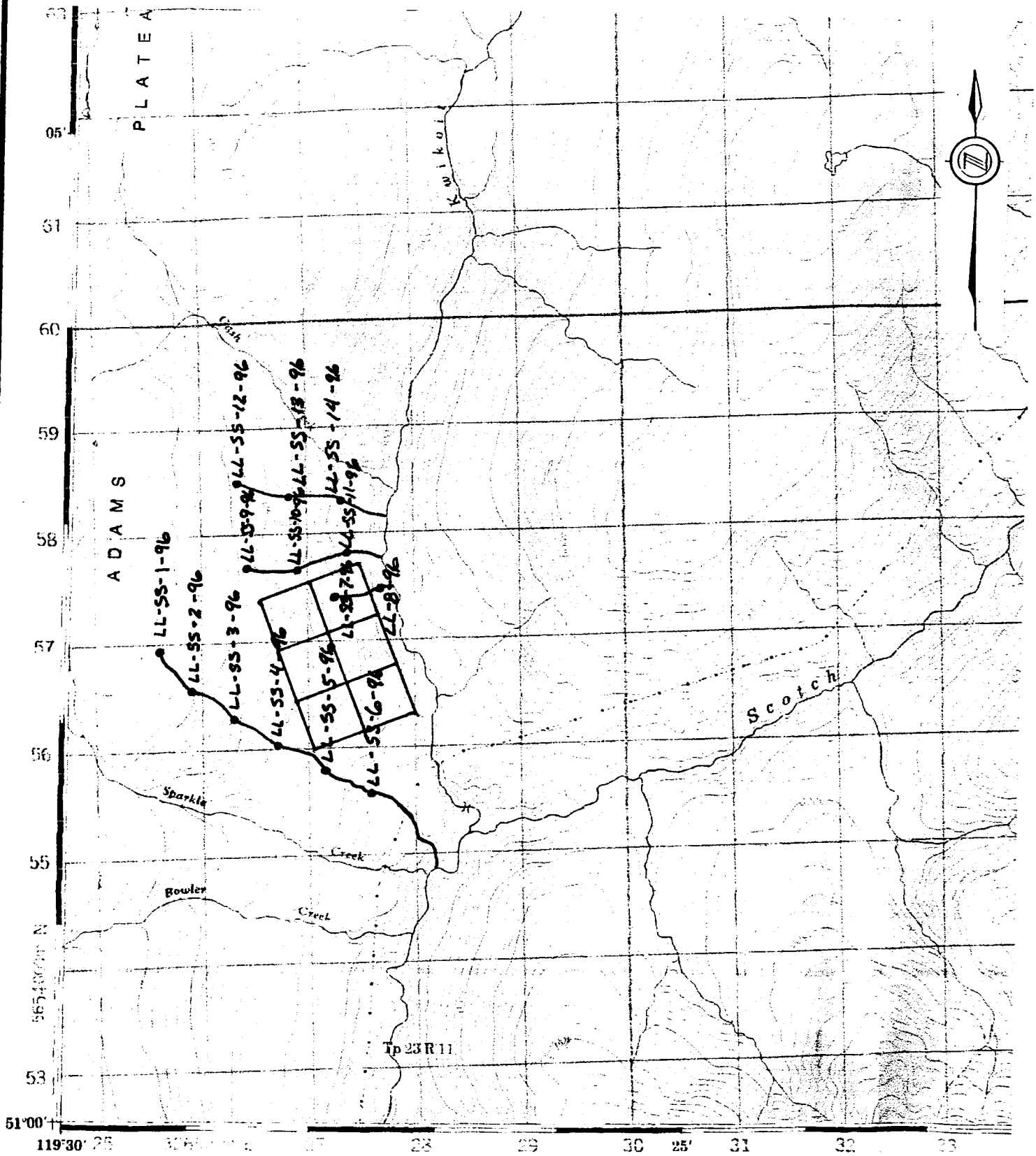
PAP No. 96/97 - P82		
TOPOGRAPHICAL MAP		
82M/3W	Jan1997	Dwn:LDL
1:50,000	Kam Div	Fig.3

0m 500m 1km

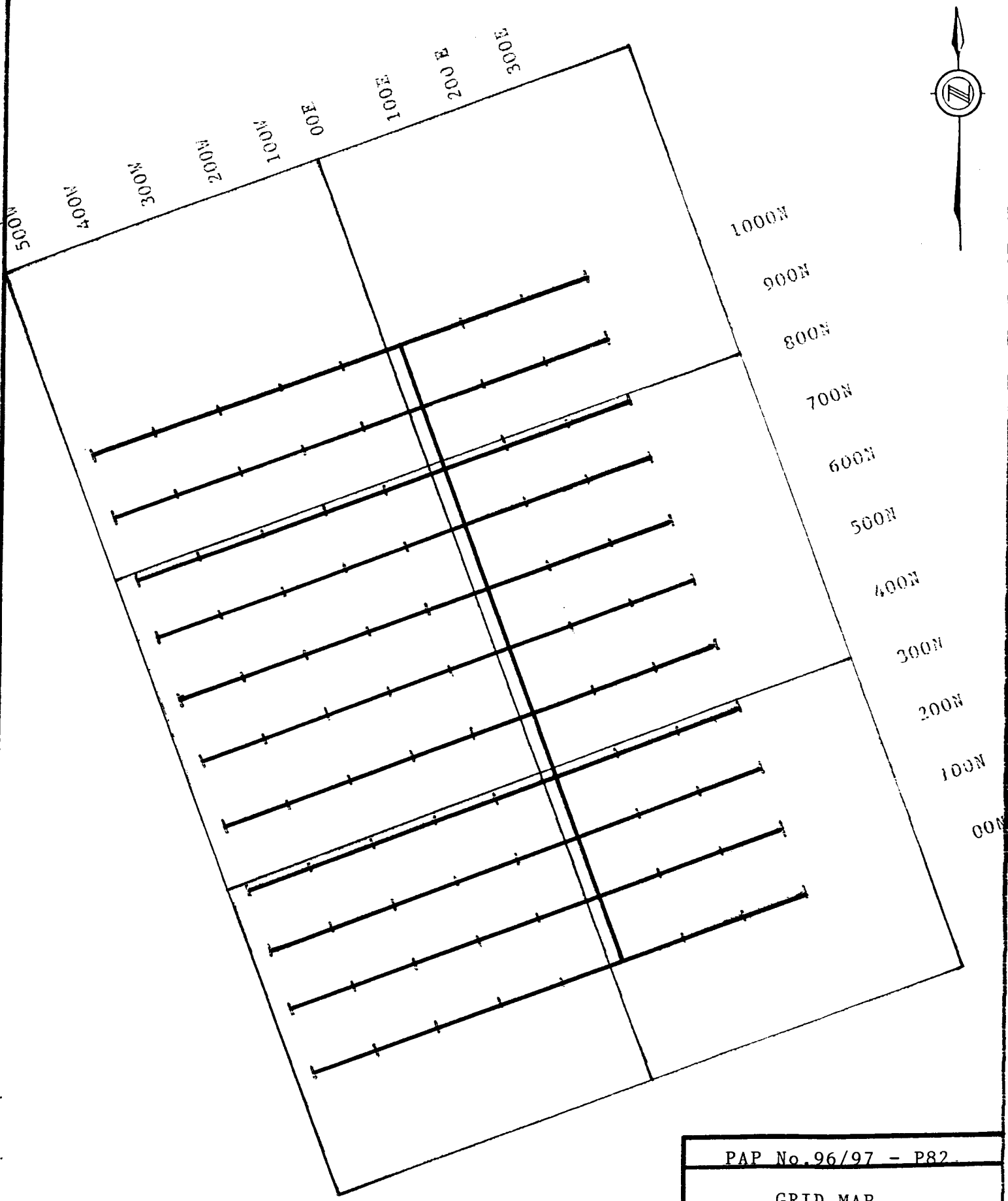


PAP No.96/97 - P82		
TOPO-CONTOUR SAMPLE MAP		
82M/3W	Jan1997	Dwn:LDL
1:50,000	Kam Div	Fig.4

0m 500m 1km

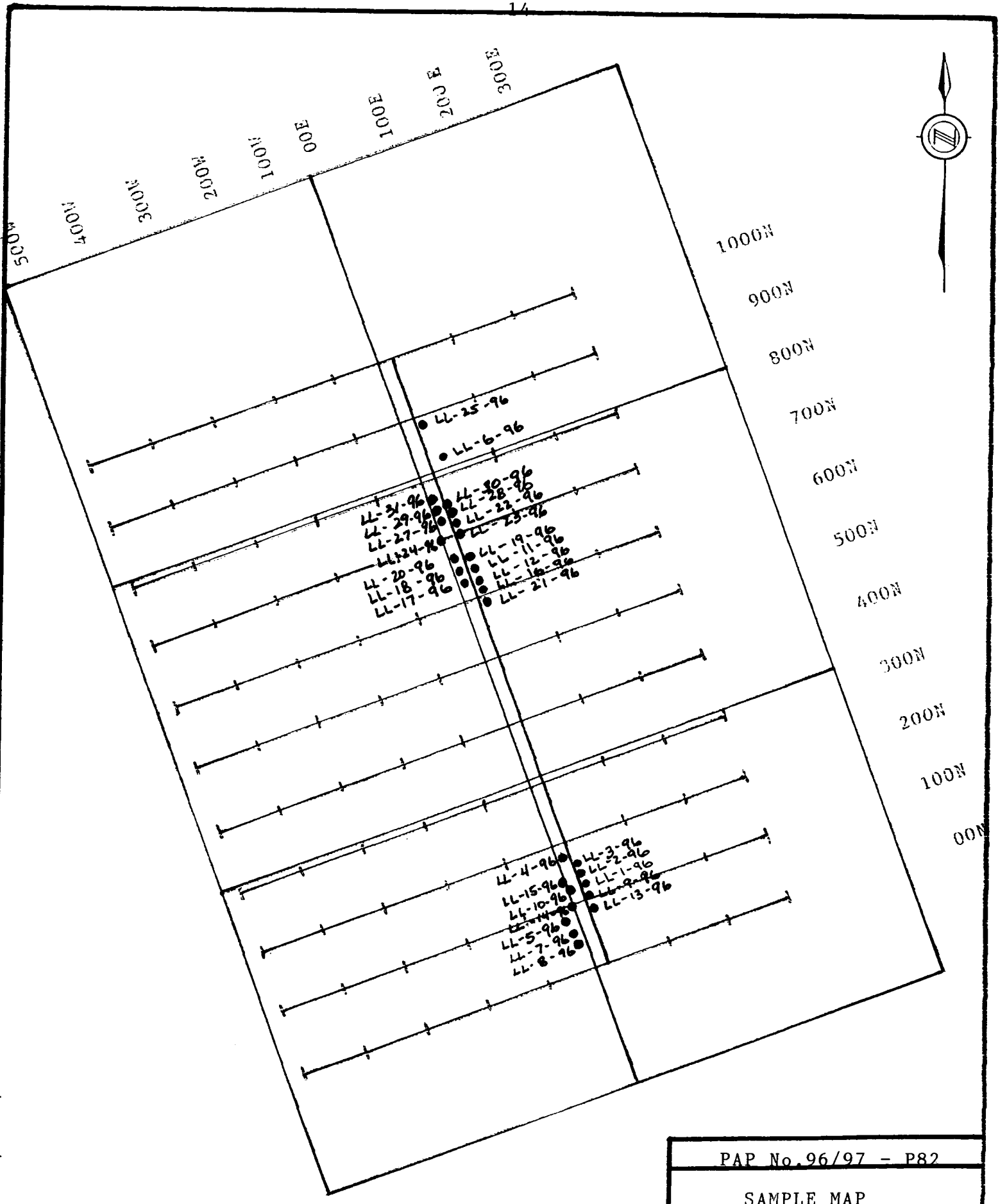


PAP No.96/97 - P82.		
STREAM SAMPLE MAP		
82M/3W	Jan1997	Dwn:LDL
1:50,000	Kam Div	Fig.5



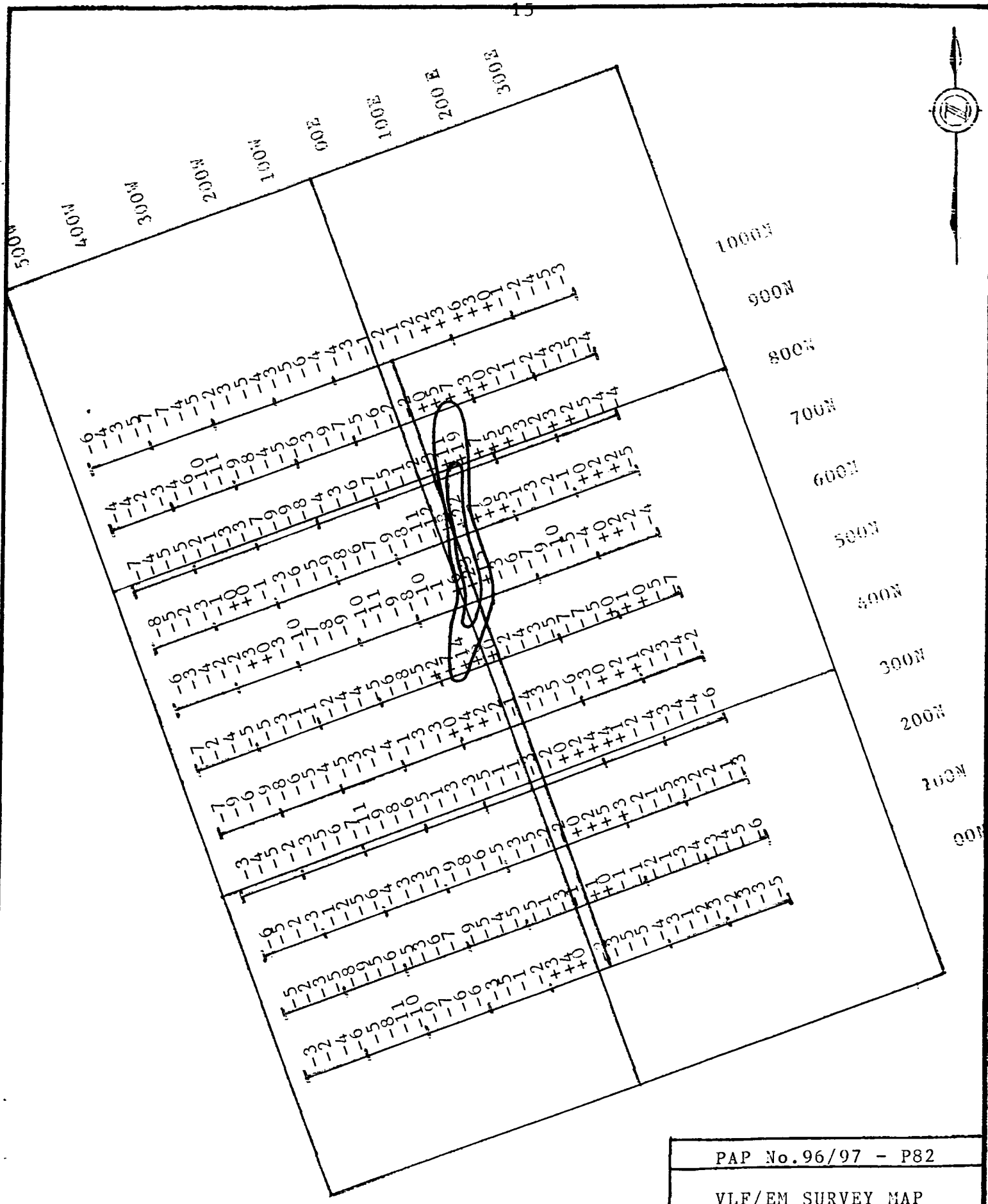
PAP No.96/97 - P82		
GRID MAP		
82M/3W	Jan1997	Dwn:LDL
1:7,692	Kam Div	Fig.6

0m 100m 200m 300m

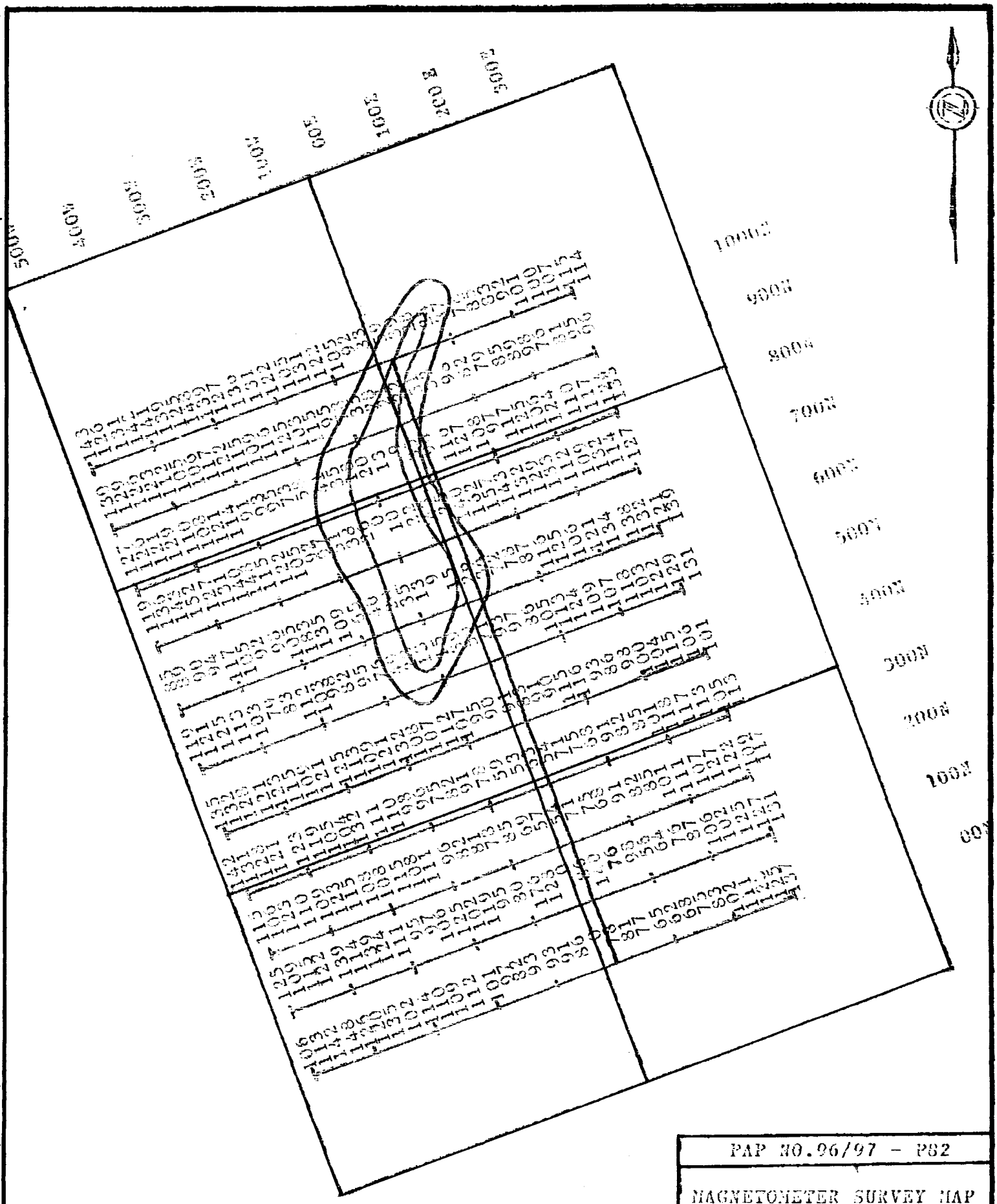


PAP No.96/97 - P82		
SAMPLE MAP		
82M/3W	Jan1997	Dwn:LDL
1:7,692	Kam Div	Fig.7

0m 100m 200m 300m



PAP No.96/97 - P82		
VLF/EM SURVEY MAP		
82M/3W	Jan1997	Dwn:LDL
1:7,692	Kam Div	Fig.8



PAP NO.96/97 - P82		
MAGNETOMETER SURVEY MAP		
82H/3W	Jan1997	Dwn:LDL
1:7,692	Kam Div	Fig.9

GEOLOGY OF THE ADAMS PLATEAU
MAP NO. 56
SCHIARIZZA & PRETO 1981

DEVONO–MISSISSIPPIAN AND OLDER
PARAUTOCHTHONOUS ROCKS (EBP TO SDQ)

EAGLE BAY FORMATION (EBP TO EBG)

MISSISSIPPIAN

EBP — DARK GREY PHYLLITE AND SLATE WITH INTERBEDDED SILTSTONE, SANDSTONE, AND GRIT; MINOR AMOUNTS OF CONGLOMERATE, LIMESTONE, AND METATUFF; EBPl–LIMESTONE; EBPv–METAVOLCANIC BRECCIA AND TUFF

DEVONIAN AND/OR MISSISSIPPIAN

EBF — LIGHT TO MEDIUM GREY, RUSTY WEATHERING FELDSPATHIC PHYLLITE AND FRAGMENTAL PHYLLITE DERIVED FROM INTERMEDIATE TO FELSIC TUFF AND VOLCANIC BRECCIA; MINOR AMOUNTS OF DARK GREY PHYLLITE AND SILTSTONE; EBFq–LIGHT GREY MASSIVE "CHERTY QUARTZITE" (SILICEOUS EXHALITE ?)

DEVONIAN

EBA — LIGHT SILVERY GREY TO MEDIUM GREENISH GREY SERICITE–QUARTZ PHYLLITE AND SERICITE–CHLORITE–QUARTZ PHYLLITE DERIVED FROM FELSIC TO INTERMEDIATE VOLCANIC AND VOLCANICLASTIC ROCKS INCLUDING PYRITIC, FELDSPATHIC, AND COARSELY FRAGMENTAL VARIETIES; LESSER AMOUNTS OF DARK GREY PHYLLITE, SILTSTONE, AND GREEN CHLORITIC PHYLLITE; INCLUDES BIOTITE–FELDSPAR–QUARTZ SCHIST AND GNEISS, BIOTITE–QUARTZ HORNFELS AND AMPHIBOLITE ADJACENT TO BALDY BATHOLITH; EBAf–FELDSPAR PORPHYRY, FELDSPATHIC PHYLLITE, PYRITIC SERICITE–FELDSPAR–QUARTZ PHYLLITE, METAVOLCANIC BRECCIA; EBAi–SERICITIC QUARTZO–FELDSPATHIC SCHIST AND GNEISS DERIVED FROM FELSIC INTRUSIVE ROCKS; EBAu–UNDIVIDED EBA and EBAi

DEVONIAN (?) AND/OR OLDER (?) (UNITS EBU TO EBG)

EBU — LIGHT TO DARK GREEN CHLORITIC PHYLLITE, DARK GREY PHYLLITE AND SILTSTONE, LIMESTONE, QUARTZITE

EBM — GREY AND GREEN VESICULAR AND PILLOWED METABASALT, GREENSTONE, CHLORITE SCHIST; MINOR AMOUNTS OF BEDDED CHERT, SILICEOUS PHYLLITE AND FINE–GRAINED QUARTZITE

EBK — BANDED LIGHT GREY AND GREEN ACTINOLITE–QUARTZ SCHIST AND EPIDOTE–ACTINOLITE–QUARTZ ROCK; LESSER AMOUNTS OF GARNET–EPIDOTE SKARN, CHLORITIC SCHIST, AND SERICITE–QUARTZ SCHIST

DEVONIAN (?) AND/OR OLDER (?) (UNITS EBU TO EBG) (CONTINUED)

EBL — CALCAREOUS BLACK PHYLLITE, DARK GREY LIMESTONE AND ARGILLACEOUS LIMESTONE

EBS — GREY AND GREEN PHYLLITIC SANDSTONE AND GRIT, PHYLLITE, AND QUARTZITE; LESSER AMOUNTS OF LIMESTONE, DOLOSTONE, GREEN CHLORITIC PHYLLITE, SERICITE–QUARTZ PHYLLITE, AND FELDSPATHIC SERICITE–QUARTZ PHYLLITE; EBSq–LIGHT GREY TO WHITE QUARTZITE; EBSc–LIMESTONE, DOLOSTONE, MARBLE; EBSb–GREENSTONE, PILLOWED METABASALT, CHLORITIC PHYLLITE; EBScg–CONGLOMERATE; EBSp–GREY PHYLLITE AND SILTSTONE; EBSt–SIDERITE–SERICITE–QUARTZ PHYLLITE AND FELDSPATHIC PHYLLITE (METATUFF); EBSa–PYRITIC SERICITE–QUARTZ PHYLLITE AND CHLORITOID–SERICITE–QUARTZ PHYLLITE

EBG — MEDIUM TO DARK GREEN CALCAREOUS CHLORITE SCHIST AND FRAGMENTAL SCHIST DERIVED LARGELY FROM MAFIC TO INTERMEDIATE VOLCANIC AND VOLCANICLASTIC ROCKS; LESSER AMOUNTS OF LIMESTONE AND DOLOSTONE; MINOR AMOUNTS OF QUARTZITE, GREY PHYLLITE, AND SERICITE–QUARTZ PHYLLITE; EBGc–LIMESTONE, DOLOSTONE, MARBLE; EBGt–TSHINAKIN LIMESTONE MEMBER–MASSIVE, LIGHT GREY FINELY CRYSTALLINE LIMESTONE AND DOLOSTONE; EBGs–DARK TO LIGHT GREY SILICEOUS AND/OR GRAPHITIC PHYLLITE, CALCAREOUS PHYLLITE, LIMESTONE, CALC–SILICATE, CHERTY QUARTZITE; MINOR AMOUNTS OF GREEN CHLORITIC PHYLLITE AND SERICITE–QUARTZ PHYLLITE; EBGq–LIGHT TO MEDIUM GREY QUARTZITE; EBGp–DARK GREY PHYLLITE, CALCAREOUS PHYLLITE AND LIMESTONE; MINOR AMOUNTS OF RUSTY WEATHERING CARBONATE–SERICITE–QUARTZ PHYLLITE (METATUFF ?); EBGcg–POLYMICTIC CONGLOMERATE

BALDY BATHOLITH, RAFT BATHOLITH, AND RELATED *ROCKS*

Kg — GRANITE AND GRANODIORITE

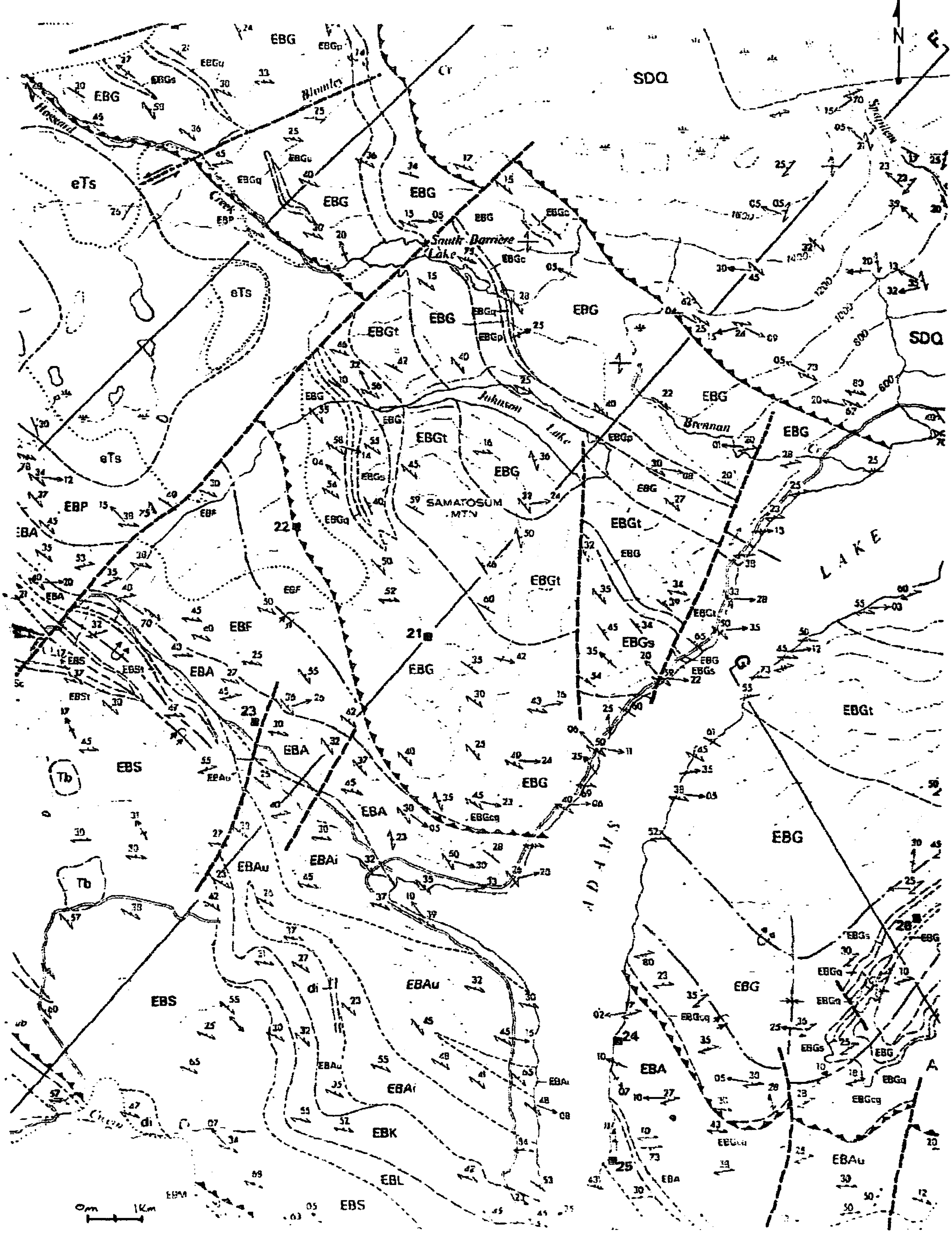
AGE UNKNOWN

di — FOLIATED DIORITE, QUARTZ DIORITE, AND GABBRO

ub — SERPENTINITE

LATE DEVONIAN

Dgn — GRANITE AND GRANODIORITE ORTHOGNEISS; Dgnp INCLUDES SILLIMANITE–BEARING PARAGNEISS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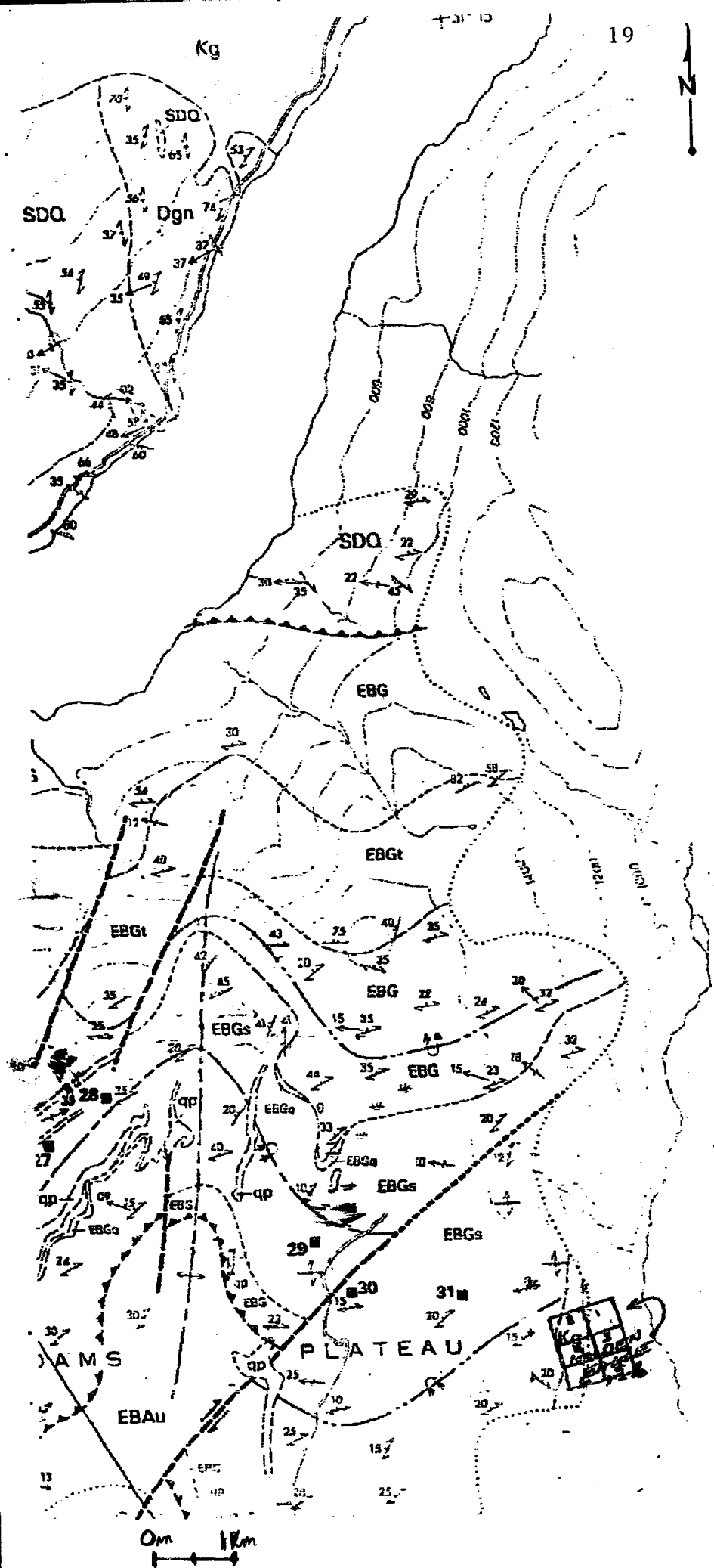

1	REXSPAR	U, F	87M-21
2	FOGHORN (CHIOGRIN)	Ag, Pb, Zn, Cu	82M-40
3	LYDIA	Pb, Ag, Cu	82M-8
4	JUDY	Mo, Cu	92P-36
5	WINDPASS	Au, Cu, Bi, Ag	92P-39
6	SWEET HOME	Au, Cu, Bi	92P-40
7	GOLD HILL	Au, Pb, Cu, Zn, Ag	92P-41
8	QUEEN BESS	Pb, Zn, Ag	92P-42
9	CC (CHU CHUA)	Cu, Zn	92P-140
10	ENARGITE	Pb, Zn	82M-65
11	FORTUNA 1	Pb	82M-72
12	FORTUNA 2	Pb	82M-70
13	COPPER CLIFF	Pb, Zn, Cu	82M-67
14	RAINBOW	Cu, Pb, Zn	82M-67
15	C–C	Cu, Pb, Zn	82M-67
16	MAY	Cu, Zn	82M-131
17	BROKEN RIDGE	Pb, Zn, Cu	82M-130
18	HARPER	Cu, Pb, Zn	82M-60
19	EBL	Cu	82M-51
20	KAJUN (JUNE)	Ag, Pb, Zn, Cu	82M-58
21	TWIN MOUNTAIN	Pb, Zn, Cu, Ag, Au, barite	82M-20
22	REA	Au, Ag, Pb, Zn, Cu	82M-191
23	HOMESTAKE	Ag, Pb, Zn, Au, Cu, barite	82M-25
24	BECA (TOM)	Cu, Pb, Zn, Au, Ag	82M-56
25	JOE (GLEN)	Cu, Pb, Zn	82M-54
26	ELSIE	Pb, Zn, Ag, Au	82M-12
27	LUCKY COON	Pb, Zn, Ag, Au, As	82M-12
28	KING TUT	Ag, Pb, Zn, Au	82M-13
29	SPAR	Pb, Au, Ag, Cu	82M-17
30	PET	Pb, Zn	82M-143
31	MOSQUITO KING	Pb, Zn, Ag	82M-16
32	BC (CUS)	Cu, Pb, Zn	82M-139
33	FORTUNA	Cu, Pb, Ag, Au	92P-44

I **LARRY D. LUTJEN** of Rural Route No. 1, Post Office Box 12; Chase, British Columbia; having graduated from the College of San Mateo (U.S.) in 1965 with a degree in Electronics, did my post graduate work at the University of California (Berkley) in 1966, and received my teaching credentials from Merrit College in 1967. I taught Electronics for the United States Navy at the Naval Air Station in Alameda California from 1962 to 1969. The following is a synopsis of my work experience in the mining industry:

1958-1962 Surface and subsurface mining on the Hard Quartz claim, Adin Mountain, California including drilling, blasting, timbering, and highgrading.

1963-1969 Prospecting with John Harden on the Warner Range (Calif), Lovelock plateau (Nevada), and Shieffer Mountain (Calif) for gold, silver, mercury, tungsten, copper, lead, and zinc. We staked several claims in California and Nevada.

1972-1976 Geophysical prospecting in the Scotch Creek area using a Sharpe SE 600 horizontal and vertical loop on VLF and self potential surveys. We staked several claims including the Silver King and the Silver Queen.

1977-1980 Geophysical and geochemical surveys in the Shuswap Lake and Adams Plateau with a McPhar 800 vertical field magnetometer and B horizon sampling. Geophysically surveyed the Lost Cabin Mine on Shieffer Mountian California resulting in an option to Lorcan Resources Ltd.

1982-1983 Received my geophysical certification from the British Columbia Ministry of Mines and Malasapina College. Geophysical survey for Aurun Minerals Ltd. on Ground Hog Basin using a Geonics 816-G Proton Magnetometer and an EM-16 VLF/EM, including geochemical sampling of the B horizon, geophysical mapping, and grid layout. Geochemical sampling of the B horizon and geological surveying for Tylox Resources Ltd. on the Au-1 and Au-2 claims in the Monashee Pass area British Columbia.

1983-1984 Geophysical survey for MacKenzie Range Gold Inc. on the Golden Eagle Project using a Sabre Model 27 VLF/EM, Scintrex MF-2, and S.P. potential difference surveying. Geophysical and geochemical survey for MacKenzie Range Gold Inc. on the Golden Quartz Project Adin Pass California using a Scintrex Fluxgate Magnetometer MF-2, Sabre Model 27, and S.P. potential difference evaluations.

1984-1985 80km of geophysical and geochemical surveys for Barnes Creek Minerals Corporation on the Golden Eagle Project including mapping, profiles, contours and interpretation. Geophysical assessment report for Mr. M. Riley on the Otto claims on the Adams Plateau, British Columbia. 30km of geophysical and geochemical surveys for Noranda Exploration Ltd. on the Birk Creek Project. 10km of geochemical and geophysical surveys for Noranda Exploration Ltd. on the London Ridge Project. All projects sampled the B horizon and used a Scintrex MF-2, Sabre Mod. 27, and potential difference sampling.

1985-1986 Assessment report, geochemical, and geophysical surveys (30km) for Barnes Creek Minerals Corporation on the Golden Loon Project Little Fort, B.C. 30km of geophysical and geochemical

surveys for Lacana Mining Corporation on the Comstock Project (optioned to Lacana by L.Lutjen) Adams Plateau, B.C.. Assessment reports on the Golden Eagles I & II (40 units), Silver Weasel 1 & 2 (40 units),and Golden Loons 1-9 (176 units) for Barnes Creek Minerals Corporation. All projects sampled the B & C horizons and used a Scintrex MF-2, Geonics 816-G, Sabre Mod. 27, and S.P. potential difference surveying.

1986-1987 50km of geophysical and geochemical surveys for Mineta Resources Ltd. on the Golden Loon Project (optioned to Mineta) Little Fort, B.C.. 10km of geophysical surveys for Barnes Creek Minerals Corporation on the Platinum Giant Project, Salmon Arms British Columbia. 20km of geochemical and geophysical surveys for Westwego Resources Ltd. on the Lost Cabin Project (optioned to Westwego Resources Ltd.) Shieffer Mountain California. Assessment reports for Barnes Creek Minerals Corporation on the Golden Eagles I & II (40 units), Golden Popes (80 units), and Golden Skarns 1 & 2 (40 units). All projects sampled the B & C horizons and used a Scintrex MF-2, Geonics 816-G, Sabre Mod. 27, and S.P. potential difference surveying.

1987-1988 10km of geophysical and geochemical surveys for Souix City Resources Ltd. on the King George Claims, Kettle River British Columbia. 10km of geophysical surveys for Westwego Resources Ltd. on the Lost Cabin Project, Shieffer Mountain California. Assessment reports for Barnes Creek Minerals Corporation on the Golden Skarns (40 units), Lost Lightning Peak Mine (20 units), Golden Popes (40 units), Platinum Giant Project (40 units), and Golden Eagles (40 units). 40km of geochemical and geophysical surveys for Mineta Resources Ltd. on the Golden Loon Project (optioned to Mineta). All projects sampled the B & C horizons and used a Scintrex MF-2, Geonics 816-G, Sabre Mod. 27, and S.P. potential differences.

1988-1989 10km of geochemical and geophysical surveys for Westwego Resources Ltd. on the Lost Cabin Group (optioned to Westwego). 7.5km of geophysical surveys with Corona Corporation on the Platinum Giant Project. Assessment reports on the Golden Eagles I & II (40 units), Golden Pope 1 & 2 (40 units), Lost Lightning Peak Mine (20 units), and Golden Skarn 1 & 2 (40 units). 10km of geophysical and geochemical surveys for Souix City Resources on the King George Project (76 units). 200 meters of diamond drilling (A-core) for Barnes Creek Minerals Corporation on the Golden Fiddler Project, Harris Creek British Columbia. All projects sampled the B & C horizons and used a Scintrex BGS-1SL, Scintrex MF-2, Geonics 816-G, S.P. potential diferences, Sabre Mod. 27, and Boyles BBS-1 diamond drill.

1989-1990 100 meters of diamond drilling for Barnes Creek Minerals Corporation on the Golden Fiddler Project (20 units). 10km of geophysical and geochemical surveys on the Golden Eagles 1 & 2 (40 units) for Barnes Creek Minerals Corporation. 10km of geochemical surveys on the Golden Skarns 1 & 2 (40 units) for Barnes Creek Minerals Corporation. Assessment reports on the Platinum Giants 1 & 2 (40 units), Golden Popes 1 & 2 (40 units), Golden Stake 1 & 2 (40 units), Golden Fiddler (20 units), and King George Mine (76 units). All projects sampled the B & C horizons and used a Scintrex BGS-1SL, sabre Mod. 27, S.P. potential differences, Geonics 816-G, and Scintrex MF-2.

1990-1991 350 meters of diamond drilling (A-core) for Westwego Resources Ltd. on the Lost Cabin Project. 100 meters of diamond drilling (A-core) for Barnes Creek Minerals Corporation on the Golden Eagle 1 & 2 (40 units). 10km of geophysical and geochemical surveys for Barnes Creek Minerals Corporation on the King George Mine Project (76 units). Assessment reports on the Golden Eagles 1 & 2 (40 units), Lost Lightning Peak Mine (20 units), Golden Skarns (40 units), Golden Popes 1 & 2 (40 units), and Platinum Giants 1 & 2 (40 units). 5km of geochemical surveys for Barnes Creek Minerals Corporation on the Dixie Queen Project (33 claims), Adin Pass California. All projects sampled the B & C horizons and used a Scintrex BGS-1SL, Sabre Mod. 27, Boyles BBS-1, Geonics 816-G, S.P. potential differences, and Scintrex MF-2.

1991-1992 Assessment work surveys for Barnes Creek Minerals on the Golden Popes 1&2, King George Mine, Platinum Giants, BJ 1-4, Lost Cabin Mine, Dixie Queens and Golden Quartzs. Assessment work surveys for Pharlap Resources Ltd. on the Why 1&2, GM 2 and GM 3, Sweep and Duffer. The surveys included geochemical sampling of the B and/or C horizons, VLF/EM surveys with a Sabre Mod.27, Mag surveys with a Geonics 816-G and a Scintrix MF-2 and SP potential differences.

1992-1993 Grassroots Prospecting on the Bennett Range Project (NTS 105D/2), staked the Goldfinger 1-10 on finger Mountain Bennett Range, assessment work surveys for Barnes Creek Minerals Corp. on their California Project Dixie Queen, Lost Cabin Mine, Golden Quartz and Hess Gold Mine. Assessment work survey on the Lone Coyote Project NTS 82M/3. Assessment work survey on the Frank Hall Mine. The geophysical surveys were done with a Geonics 816G proton magnetometer, Scintrix MF-2 flux-gate magnetometer, a Sabre Mod. 27 VLF/EM and SP potential differences.

1993-1994 Prospecting on the L-331 Group (104M/8&9), staked the Engineer North (104M/9), assessment work survey on the Goldfinger 1-10 (105D/2), assessment work surveys on Barnes Creek Minerals Corporation California Project the Lost Cabin Mine and the Daddy Hess Mine, Assessment work surveys on the Goldfields 1-10 (92I/15W), assessment work surveys on the King George Mine (82E/15E), and staking the Mariko 1 & 2 (82L/14W). The geophysical surveys were done with a geonics 816G proton magnetometer, Scintrix MF-2 flux-gate magnetometer, a Sabre model 27 VLF/EM and SP potential differences.

1994-1995 Grassroots Prospecting on the Judas Mountain Project (NTS 105D/08), assessment work survey on the Goldfields 1-10 (92I/15W), assessmenrt work survey the King George Mine (82E/15E), assessment work survey on the Mariko 1 & 2 (82L/14W), assessment work survey on the Goldfinger 1-10 (105D/02) and staked the L & L claims (92I/10) and Win claims (92I/10). The geophysical surveys were done with a Geonics 816G proton magnetometer, Scintrex MF-2 flux-gate magnetometer, a Sabre model 27 VLF/EM and SP potential differences.

MALASPINA COLLEGE

Statement of Course Completion

LARRY D. LUTJEN

has

Successfully Completed 180 Hours of Instruction

in

MINERAL EXPLORATION FOR PROSPECTORS

PRESENTED BY B.C. MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
B.C. MINISTRY OF EDUCATION

APRIL 16 to 30, 1983 - MESACHIE LAKE, B.C.

MAY 2, 1983

Dated at Nanaimo,
British Columbia, Canada

Director / Dean

Registrar

Instructor

Malaspina College

23

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

THIS IS TO CERTIFY THAT

LARRY D. LUTJEN

HAS SUCCESSFULLY COMPLETED

PETROLOGY FOR PROSPECTORS COURSE

AND IS HEREBY GRANTED

THIS CERTIFICATE OF ACHIEVEMENT

DIRECTOR OF
PROSPECTORS' ASSISTANCE

TOM RICHARDS
COURSE INSTRUCTOR

April 1st - 9th, 1991
DATE

24

MARY A. LUTJEN
RR1-B12-S11
CHASE, B.C.
V0E-1M0
604-679-8022

****** WORK EXPERIENCE IN THE MINING INDUSTRY ******

1983-1984... *Field Technician on the Golden Eagle Project, Scotch Creek, B.C., for Barnes Creek Minerals Corporation, including construction of baseline, gridlines and geochemical survey; and, similar survey in Modoc County, Golden Quartz Project, Adin Pass, California.*

1984-1985... *Field Technician on the Golden Eagle Project, Scotch Creek, B.C., for Barnes Creek Minerals Corporation, including gridline construction, lithogeochemical sampling, and geophysical data collection. Completed the MEMPR Rock and Mineral Course and worked as Field Technician on the Otto Claims. Adams Plateau, B.C. for Barnes Creek Minerals Corporation.*

1985-1986... *Field Technician on the Golden Loon Project, Little Fort, B.C. including geophysical and geochemical surveys; and, assessment work survey on the Lost Cabin Mine and Golden Quartz Project, Adin Pass, California.*

1986-1987... *Field Technician on the Golden Loon Project, Little Fort, B.C., including soil sampling, grid construction, and geophysical data collection; and, assessment work on the Platinum Giant Project, Salmon Arms, B.C. including explorational grids and soil sampling.*

1987-1988... *Field Technician for Soulx City Resources Ltd. on the King George Project, Kettle River, B.C. including gridlines and soil sampling; and, soil sampling and geophysical data collection on the Golden Loon Project, Little Fort, B.C.*

1988-1989... *Field Technician for Barnes Creek Minerals Corporation on Lost Cabin Project, Adin Pass, California; including sample collection and geophysical survey; and, grids, soil sampling, and geophysical survey on the Golden Fiddler Project, Harris Creek, B.C.*

1989-1990... *Field Technician for Barnes Creek Minerals Corporation on the Lost Cabin Project, Adin Pass, California; and, Golden Fiddler Project Harris Creek, B. C. including geochemical and geophysical surveys and grid reconstruction.*

1990-1991... *Field Technician and diamond drilling assistant on the Lost Cabin Project, Adin Pass, California; and, explorational survey on the Golden Eagle Project, Scotch Creek, B.C. for Barnes Creek Minerals Corporation.*

1991-1992... Field Technician on the Dixie Queen Project in the Lost Cabin Gold Camp, Adin Pass, California; and, geochemical and geophysical surveys on the BJ 1-4 claims, Lightning Peak, B.C.

1992-1993... Field Technician on the Goldfinger 1-10 claims, Bennett Range, Yukon, including lithogeochemical sampling and exploratational grids; and, baseline, gridlines, and soil sampling on the Hess Gold Mine Project, Stone Coal Canyon, California.

1993-1994... Field Technician on the Goldfinger Project, Bennett Range, Yukon, for Barnes Creek Minerals Corporation, including geochemical and geophysical surveys; and, assessment work surveys on the Lost Cabin Project, Adin Pass, California.

1994-1995... Field Technician on the Goldfinger Project for Barnes Creek Minerals Corporation on the Bennett Range, Yukon; and, assessment work on the Hess Gold Mine, Stone Coal Canyon, California, and the Lost Cabin Gold Mine, Adin Pass, California.

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ECO-TECH LABORATORIES LTD.

GEOCHEMISTR
ANALYTICAL CHEMISTR
ASSAYIN

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (504) 573-57
Telex: 048-83

GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION

1. Soil or sediment samples are dried at 60°C, the lumps of soil are broken up on a bucking board and the entire sample is seived through an 80 mesh screen.

2. Rock samples are crushed and pulverized to -100 mesh.

GEOCHEMICAL ANALYSIS FOR Cu, Pb, Zn, Ag, Sb, Ni, Co, Cd

1.0 gram of sample is leached in 3 ml HNO_3 overnight at room temperature. The sample is brought up to 90°C in a water bath, 1.5 ml HCl is added, and the leaching is continued for a further 90 minutes. The sample is then cooled, diluted to 10 ml with distilled water and the above elements are determined by Atomic Absorption.

Minimum Reportable Concentrations

Element	ppm
Cu	1.
Pb	2.
Zn	1.
Ag	0.2
Sb	1.
Ni	2.
Co	2.
Cd	0.02

GEOCHEMICAL ANALYSIS FOR Au

The gold is collected in a silver bead through inquartation and conventional fire assaying of 10 grams of material. The bead is digested in aqua regia in a water bath at 90°C, the gold is then extracted into MIBK and determined by Atomic Absorption.

Minimum Reportable Concentration 5 ppb

SAMPLE PREPARATION

A. RECEIVING AND SORTING

1. Each lot shipment of samples received will be assigned a unique job number by the Chief Assayer. This number together with the following information is to be entered in pen (not pencil) into the sample log book:

   - Job number
   - Client name and address
   - Date and time received
   - Names of individuals to receive results
   - Name of person receiving samples
   - Analyses required
   - Type of sample (ie. Core, Soil, Chip - Assay or Geochem)

2. Organize sample bags on a sorting table, so that sample tags or bag markings are in a logical alphanumerical sequence as indicated on sample shipment form submitted by client.

3. Enter the sample description into the log book and assign a lab number to each sample. Each lab number that has been assigned must also be marked on the sample bag using a felt pen.

4. Using the numbering stamp, mark the sample pulp bags with the lab number preceeded by the assigned number.

5-Dec-96

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada Highway
KAMLOOPS, B.C.
V2C 6T4

Phone: 604-573-5700
Fax : 604-573-4557

ICP CERTIFICATE OF ANALYSIS AK 96-1352

LARRY LUTJEN
RR#1, BOX 12, SITE 11
CHASE, BC
V0E 1M0

ATTENTION: LARRY LUTJEN

No. of samples received:30
Sample type: SOIL
PROJECT #: GE 1-6
SHIPMENT #: NONE GIVEN

Values in ppm unless otherwise reported

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	GE 00N + 25	<0.2	2.57	<5	285	<5	0.62	<1	14	43	20	3.58	40	0.60	1044	<1	0.01	29	1870	30	<5	<20	72	0.12	<10	54	<10	36	105
2	GE 00N + 50	<0.2	3.65	<5	175	<5	0.35	<1	15	37	29	3.68	70	0.60	452	<1	0.01	24	2160	36	<5	<20	38	0.17	<10	50	<10	56	108
3	GE 00N + 75	<0.2	1.63	<5	105	<5	0.38	<1	15	39	15	3.27	20	0.54	590	<1	<0.01	22	850	22	<5	<20	38	0.11	<10	55	<10	12	78
4	GE 100N + 25	<0.2	1.11	<5	215	<5	0.59	<1	16	40	26	4.03	50	0.76	834	3	0.01	23	1160	24	<5	<20	63	0.13	<10	62	<10	39	76
5	GE 100N + 50	<0.2	3.06	<5	150	<5	0.27	<1	17	41	20	3.64	20	0.62	543	<1	0.01	26	2130	30	<5	<20	33	0.14	<10	56	<10	16	93
6	GE 100N + 75	<0.2	2.37	<5	195	<5	0.29	<1	19	55	25	3.86	60	0.69	743	<1	0.01	33	1210	28	<5	<20	32	0.14	<10	61	<10	48	81
7	GE 200N + 25	<0.2	2.02	<5	165	<5	0.32	<1	17	58	15	3.36	10	0.73	485	<1	<0.01	33	1600	18	<5	<20	24	0.12	<10	58	<10	8	79
8	GE 200N + 50	<0.2	1.36	<5	130	<5	0.43	<1	20	65	21	3.50	20	0.85	375	<1	<0.01	35	770	16	5	<20	29	0.13	<10	63	<10	25	44
9	GE 200N + 75	<0.2	1.70	<5	255	<5	0.68	<1	18	55	28	3.81	50	0.81	1137	2	0.01	32	1010	30	<5	<20	100	0.13	<10	58	<10	47	93
10	GE 300N + 25	<0.2	1.46	<5	145	<5	0.34	<1	19	67	12	3.79	10	0.92	599	<1	<0.01	35	1400	20	<5	<20	21	0.12	<10	67	<10	9	71
11	GE 300N + 50	<0.2	1.52	<5	165	<5	0.33	<1	19	68	11	3.78	10	0.95	596	<1	<0.01	34	1610	18	<5	<20	23	0.12	<10	67	<10	9	73
12	GE 300N + 75	<0.2	1.13	<5	120	<5	0.27	<1	13	48	13	3.27	20	0.66	330	2	<0.01	24	860	20	<5	<20	17	0.09	<10	50	<10	10	53
13	GE 400N + 25	<0.2	1.39	<5	145	<5	0.19	<1	11	28	5	2.61	<10	0.32	431	<1	<0.01	15	1920	20	<5	<20	13	0.10	<10	43	<10	6	64
14	GE 400N + 50	<0.2	0.98	<5	50	<5	0.17	<1	10	38	9	2.84	<10	0.43	126	<1	<0.01	18	1020	16	<5	<20	9	0.08	<10	48	<10	5	30
15	GE 400N + 75	<0.2	1.35	<5	100	<5	0.30	<1	14	44	11	2.93	10	0.53	261	<1	<0.01	25	730	18	<5	<20	15	0.12	<10	52	<10	9	49
16	GE 500N + 25	<0.2	2.02	<5	115	<5	0.25	<1	15	40	12	3.00	<10	0.48	326	<1	0.01	26	1360	22	<5	<20	14	0.12	<10	48	<10	7	96
17	GE 500N + 50	<0.2	1.68	<5	190	<5	0.25	<1	13	25	7	3.13	<10	0.34	1004	<1	0.01	19	1770	24	<5	<20	16	0.12	<10	52	<10	8	124
18	GE 500N + 75	<0.2	2.82	<5	230	<5	0.39	<1	16	47	32	3.50	80	0.62	685	2	0.01	36	550	32	<5	<20	73	0.13	<10	53	<10	57	98
19	GE 600N + 25	<0.2	0.86	<5	170	<5	0.84	<1	13	27	67	3.21	80	0.58	666	3	0.01	17	1240	24	<5	<20	37	0.07	<10	44	<10	37	71
20	GE 600N + 50	<0.2	1.91	<5	250	<5	0.28	<1	14	37	9	3.79	10	0.56	543	<1	<0.01	24	2550	30	<5	<20	14	0.13	<10	56	<10	8	151

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Tl %	U	V	W	Y	Zn
21	GE 600N + 75	<0.2	1.10	<5	120	<5	0.35	<1	15	59	11	3.23	10	0.75	417	<1	<0.01	29	550	16	<5	<20	13	0.14	<10	60	<10	10	41
22	GE 700N + 25	<0.2	1.74	<5	115	<5	0.39	<1	18	59	13	3.30	10	0.79	686	<1	<0.01	33	1170	20	<5	<20	16	0.12	<10	57	<10	14	79
23	GE 700N + 50	<0.2	1.46	<5	100	<5	0.22	<1	12	37	6	2.83	10	0.49	498	<1	<0.01	21	1290	20	<5	<20	12	0.10	<10	49	<10	8	69
24	GE 700N + 75	<0.2	1.29	<5	75	<5	0.29	<1	16	61	8	3.09	10	0.77	387	<1	<0.01	29	880	16	<5	<20	15	0.13	<10	59	<10	11	56
25	GE 800N + 25	<0.2	1.35	<5	100	<5	0.52	<1	16	53	16	3.26	10	0.84	371	<1	<0.01	30	1070	20	<5	<20	24	0.10	<10	57	<10	9	44
26	GE 800N + 50	<0.2	1.40	<5	85	<5	0.35	<1	17	56	20	3.44	20	0.87	318	<1	<0.01	32	680	16	<5	<20	13	0.12	<10	61	<10	11	39
27	GE 800N + 75	<0.2	2.75	<5	285	<5	0.73	<1	19	66	33	4.00	110	0.91	1183	2	0.01	43	460	30	<5	<20	106	0.13	<10	83	<10	85	61
28	GE 900N + 25	<0.2	2.50	<5	95	<5	0.19	<1	10	22	7	2.34	<10	0.25	420	<1	0.01	13	1170	24	<5	<20	13	0.12	<10	38	<10	9	56
29	GE 900N + 50	<0.2	0.56	<5	140	<5	0.38	<1	9	21	38	3.75	50	0.47	427	2	<0.01	7	890	12	<5	<20	11	0.10	<10	68	<10	36	54
30	GE 900N + 75	<0.2	0.70	<5	150	<5	0.74	<1	8	19	34	3.05	60	0.48	437	2	<0.01	8	540	12	<5	<20	40	0.11	<10	53	<10	140	47
QC DATA:																													
Repeat:																													
1	GE 00N + 25	<0.2	2.61	<5	295	<5	0.64	<1	14	43	20	3.52	40	0.61	1091	<1	0.01	29	1890	30	<5	<20	78	0.12	<10	52	<10	39	107
10	GE 300N + 25	<0.2	1.48	<5	145	<5	0.34	<1	19	67	13	3.84	10	0.93	601	<1	<0.01	34	1390	20	<5	<20	21	0.12	<10	68	<10	9	72
19	GE 600N + 25	<0.2	0.82	<5	165	<5	0.81	<1	12	26	45	3.07	60	0.56	637	4	0.01	15	1150	22	<5	<20	38	0.07	<10	43	<10	34	69
28	GE 900N + 25	<0.2	2.52	<5	100	<5	0.19	<1	10	22	7	2.39	<10	0.25	416	<1	0.01	13	1180	24	<5	<20	13	0.12	<10	39	<10	9	56
Standard:																													
GEO'96		0.8	1.76	45	160	<5	1.76	<1	19	60	81	4.05	<10	1.06	689	<1	0.02	25	640	24	10	<20	57	0.11	<10	76	<10	15	71

33

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Frank J. Pezzotti, A.Sc.T.
B.C. Certified Assayer

dt/1352
XLS/96

4-Dec-96

ECO-TECH LABORATORIES LTD.
10041 East Trans Canada Highway
KAMLOOPS, B.C.
V2C 6T4

Phone: 604-573-5700
Fax : 604-573-4557

ICP CERTIFICATE OF ANALYSIS AK 96-1354

LARRY LUTJEN
RR#1, BOX 12, SITE 11
CHASE, BC
V0E 1M0

ATTENTION: LARRY LUTJEN

No. of samples received:31
Sample type: ROCK
PROJECT #: GE 1-6
SHIPMENT #: NONE GIVEN

Values in ppm unless otherwise reported

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	GE 1-6 LL 1 96	5	0.4	0.22	<5	30	<5	2.97	<1	7	76	6	3.13	60	0.88	572	7	0.09	5	810	22	5	<20	105	<0.01	<10	8	<10	34	31
2	GE 1-6 LL 2 96	5	0.4	0.20	<5	25	10	1.68	<1	10	104	5	2.73	30	0.45	335	6	0.09	6	890	18	<5	<20	84	<0.01	<10	11	<10	10	21
3	GE 1-6 LL 3 96	5	0.2	0.25	<5	65	<5	2.32	<1	4	69	9	2.13	20	0.70	512	6	0.11	4	620	14	10	<20	102	<0.01	<10	21	<10	13	24
4	GE 1-6 LL 4 96	5	0.6	0.23	<5	35	<5	0.86	<1	5	138	3	2.11	40	0.25	334	6	0.15	5	480	22	<5	<20	47	<0.01	<10	10	<10	12	10
5	GE 1-6 LL 5 96	15	0.8	0.21	<5	85	<5	0.55	<1	5	67	30	2.05	60	0.02	740	5	0.08	4	480	32	<5	<20	14	0.02	<10	23	<10	12	39
6	GE 1-6 LL 6 96	10	0.2	0.61	<5	185	<5	0.25	<1	5	135	3	2.22	40	0.04	904	9	0.05	6	810	24	<5	<20	18	<0.01	<10	23	<10	21	55
7	GE 1-6 LL 7 96	5	1.4	0.31	<5	405	<5	0.20	<1	6	137	18	1.77	60	0.01	799	9	0.09	7	680	160	<5	<20	31	<0.01	<10	18	<10	15	137
8	GE 1-6 LL 8 96	5	0.8	0.24	<5	110	<5	0.18	<1	6	83	4	2.58	30	0.01	838	6	0.10	4	740	22	<5	<20	47	<0.01	<10	10	<10	11	65
9	GE 1-6 LL 9 96	5	0.4	0.18	<5	30	<5	2.71	<1	7	62	2	3.05	80	1.00	489	7	0.08	5	940	16	5	<20	86	<0.01	<10	5	<10	23	23
10	GE 1-6 LL 10 96	5	0.4	0.38	<5	30	<5	1.64	<1	7	67	6	2.52	10	0.58	461	7	0.01	5	370	20	<5	<20	58	<0.01	<10	5	<10	6	35
11	GE 1-6 LL 11 96	5	1.2	0.24	<5	80	<5	1.35	2	4	173	9	1.00	20	0.14	360	9	0.08	5	590	128	<5	<20	93	<0.01	<10	5	<10	11	539
12	GE 1-6 LL 12 96	5	0.6	0.35	<5	55	<5	0.13	<1	4	307	2	1.52	20	0.03	48	15	0.01	8	390	16	<5	<20	7	<0.01	<10	5	<10	2	3
13	GE 1-6 LL 13 96	10	0.4	0.39	<5	45	<5	1.15	<1	4	168	2	1.73	30	0.36	448	10	<0.01	5	600	16	<5	<20	40	<0.01	<10	11	<10	7	25
14	GE 1-6 LL 14 96	5	<0.2	0.42	<5	70	<5	0.31	<1	4	231	4	1.95	70	0.04	162	11	0.02	7	950	12	<5	<20	13	<0.01	<10	32	<10	18	25
15	GE 1-6 LL 15 96	5	0.4	0.37	<5	95	<5	0.28	<1	6	89	4	2.58	50	0.02	1013	10	0.05	5	950	20	<5	<20	16	<0.01	<10	25	<10	23	82
16	GE 1-6 LL 16 96	10	0.2	0.48	<5	85	<5	1.58	<1	6	247	4	1.97	50	0.60	506	12	0.05	8	760	8	<5	<20	113	<0.01	<10	21	<10	15	35
17	GE 1-6 LL 17 96	10	1.0	0.51	<5	65	<5	0.99	<1	9	177	5	3.20	50	0.47	589	10	0.06	7	900	16	<5	<20	65	<0.01	<10	34	<10	17	52
18	GE 1-6 LL 18 96	10	0.4	0.21	<5	70	<5	2.31	<1	3	249	11	1.19	10	0.06	569	11	0.02	6	570	28	<5	<20	159	<0.01	<10	4	<10	8	16
19	GE 1-6 LL 19 96	5	0.4	0.41	<5	65	<5	1.46	<1	5	162	2	1.64	10	0.44	448	10	<0.01	4	320	18	<5	<20	55	<0.01	<10	8	<10	4	15
20	GE 1-6 LL 20 96	5	<0.2	0.30	<5	65	<5	1.76	<1	5	181	1	2.14	20	0.75	549	9	0.05	7	620	10	5	<20	71	<0.01	<10	27	<10	8	52

Et #.	Tag #	Au(ppb)	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
21	GE 1-6 LL 21 96	5	0.2	0.33	<5	80	<5	1.11	<1	5	148	3	1.98	60	0.56	417	8	0.05	5	650	10	<5	<20	59	<0.01	<10	26	<10	20	39
22	GE 1-6 LL 22 96	5	0.4	0.41	<5	45	<5	0.13	<1	4	221	1	1.62	30	0.03	29	11	0.03	6	460	10	<5	<20	6	<0.01	<10	5	<10	2	3
23	GE 1-6 LL 23 96	10	0.4	0.51	<5	100	<5	1.12	<1	7	43	4	3.05	40	0.35	1191	7	0.04	5	940	10	<5	<20	52	<0.01	<10	28	<10	17	82
24	GE 1-6 LL 24 96	10	0.4	0.34	<5	45	<5	0.58	<1	3	206	2	1.33	30	0.17	98	11	<0.01	6	330	14	<5	<20	17	<0.01	<10	8	<10	5	10
25	GE 1-6 LL 25 96	15	<0.2	7.45	<5	115	10	4.89	<1	45	129	96	5.04	<10	1.70	187	<1	0.19	79	560	50	10	<20	491	0.18	<10	282	<10	9	18
26	GE 1-6 LL 26 96	5	<0.2	0.83	20	55	15	>10	19	30	54	51	9.78	<10	6.03	254	2	0.01	16	510	2	30	<20	131	<0.01	<10	183	<10	10	67
27	GE 1-6 LL 27 96	5	<0.2	1.15	5	45	10	9.18	7	50	119	28	6.25	<10	3.85	676	3	0.01	32	430	6	25	<20	184	<0.01	<10	120	<10	<1	39
28	GE 1-6 LL 28 96	10	<0.2	1.13	20	70	<5	3.88	2	48	69	53	4.74	<10	0.35	877	7	0.01	34	310	10	<5	<20	75	<0.01	<10	96	<10	18	34
29	GE 1-6 LL 29 96	5	0.4	0.56	15	50	<5	2.99	<1	4	149	15	1.86	10	0.75	423	9	0.05	7	650	10	10	<20	146	<0.01	<10	6	<10	7	34
30	GE 1-6 LL 30 96	10	<0.2	0.64	40	80	5	4.98	<1	9	151	6	2.72	<10	1.44	834	9	0.09	13	760	10	15	<20	177	<0.01	<10	12	<10	6	33
31	GE 1-6 LL 31 96	5	<0.2	7.20	<5	135	<5	4.67	<1	49	159	29	5.77	<10	1.92	181	<1	0.14	88	540	50	10	<20	473	0.19	<10	305	<10	7	23
QC DATA:																														
Repeat:																														
1	GE 1-6 LL 1 96	5	0.4	0.22	<5	35	<5	2.98	<1	7	76	6	3.16	60	0.86	575	7	0.08	5	810	22	5	<20	103	<0.01	<10	8	<10	34	32
10	GE 1-6 LL 10 96	5	0.4	0.39	<5	30	<5	1.66	<1	6	64	6	2.53	10	0.59	488	6	0.01	6	360	18	5	<20	59	<0.01	<10	5	<10	6	36
19	GE 1-6 LL 19 96	5	0.4	0.40	<5	65	<5	1.46	<1	5	161	2	1.64	10	0.44	447	10	<0.01	4	320	20	<5	<20	54	<0.01	<10	8	<10	4	14
28	GE 1-6 LL 28 96	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard:																														
GEO'96		145	1.2	1.77	50	170	<5	1.80	1	20	61	80	4.11	<10	1.09	699	<1	0.02	26	680	26	15	<20	60	0.12	<10	78	<10	13	79

36

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XLS/96