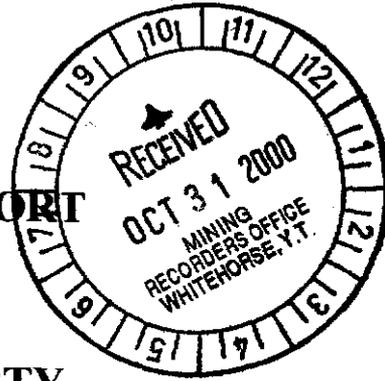


SUMMARY REPORT

ON THE

TORO PROPERTY



(TORO 5-8 YA82453-456, TORO 17 YA82465, TAD 3-4 YB66796-797, TAD 9-10 YB66798-799, TAD 13-16 YB66743-746, TAD 18-20 YB66747-749, TAD 23-30 YB66768-775, TAD 33-40 YB66778-785,)

DAWSON RANGE

NTS 115 I-12

Lat. 62° 38' N, Long. 138° 35' W

Whitehorse Mining District

YUKON TERRITORY

For: **PAN OCEAN EXPLORATIONS INC.**

1450-409 Granville Street.

Vancouver, B.C.

V6C 1T2

Prepared by: G. S. Davidson, P. Geol.

October 15, 2000

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 6400.00

for MB
Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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1.0 SUMMARY

The TORO property consists of 32 claims (600 hectares) located at Hayes Creek, 105 km west of Carmacks and 260 km northwest of Whitehorse in the central Yukon Territory. The property is held by owners Mr. G. Davidson & Mr. B. Harris. The report is prepared at the request of Rob McIntosh of Pan Ocean to compile and interpret all the exploration and government data, and to identify drill sites for a proposed drill program. Access to the area is by helicopter, plane or winter road. The Casino Trail passes through the property but the section accessible to four-wheel drive vehicles ends 15 km to the east. The winter road is well established and has often been used for haulage of equipment and supplies by placer miners and exploration companies. The property lies in the Dawson Range along a regional trend that hosts a series of Cu-Au porphyry deposits associated with Mesozoic intrusive rocks. Hayes Creek is in an area of moderate relief featuring rounded hills and ridges and fairly wide swampy valley floors. The ridges are incised by narrow, steep-sided valleys, which drain into the low-lying Hayes Creek. Placer gold mines have operated periodically on several tributaries of Hayes Creek including, Apex Creek (located upstream of the property) and Klines & Sonora Gulches (located downstream of the property).

Plutonic rocks of the Minto Plutonic Suite, the Dawson Range Batholith and the Prospector Mountain Plutonic Suite intrude the Wolverine Creek Metamorphic Suite in the Hayes Creek area. The property is underlain by plagioclase-quartz-biotite porphyry ("Tad Porphyry") intruding mid Cretaceous Dawson Range granitic rocks. Younger Carmacks Group volcanic rocks cover the intrusives northeast of the claims. The Big Creek Fault, a regional structure follows the Hayes Creek and Big Creek valleys in a northwest-southeast orientation and cuts through the claim block. Mineralization is closely associated with both NW and secondary NE trending structures evident on the magnetic maps. The Big Creek Fault and intrusions of the Prospector Mountain Plutonic Suite are spatially related with porphyry style mineralization and/or gold bearing oxide breccia bodies at the Casino, Mt. Caulfield, Cash, Revenue, Freegold Mountain and TORO properties.

Exploration in the area of the Tad and Toro claims started in 1969 after the discovery of a mineralized quartz monzonite porphyry outcrop along Hayes Creek by employees of International Mine Services Ltd.(IMS). A deeply weathered lead-zinc-moly-copper porphyry, expressed by anomalous lead-zinc soil values and three induced polarization chargeability zones was outlined. Diamond drilling in 1969-70 of 2,708 meters (8,880 feet) in 18 holes intersected quartz monzonite porphyry and breccia exhibiting intense argillic, phyllic and propylitic alteration zones with up to 10% pyrite. In drill hole T-2, a 8.2 m (27 ft) section of oxide mineralization contained limonite and hematite stained breccia, sphalerite, galena and pyrite that assayed 1.03 gpt (0.04 opt) gold, 12.3 gpt silver, 1.83% zinc, 0.36% lead and 0.04% copper. IMS concluded that a porphyry deposit may be present at depth however they never tested this possibility.

In 1986-87 Noranda Exploration Company Ltd. (Noranda) acquired the prospect and performed soil sampling, trenching, diamond drilling (4 holes, 371 meters) and resampled the IMS core. Noranda targeted potential gold mineralization in the oxide zone, found in weathered Tad porphyry to an average depth of 80 meters. The best gold and silver values were obtained from split samples of the IMS core from holes T-2, T-12 & T-14. Gold and silver enrichment was greatest in brecciated and altered porphyry about 20 meters above the base of the oxide zone. Other areas of precious metal enrichment were found in soil samples and in overburden trenches. The four Noranda drill holes intersected weak gold and silver mineralization and the Noranda option lapsed in 1987.

International Kodiak Resources Ltd. acquired the prospect in 1996 and initiated exploration on the Toro and Tad claims in July 1996, establishing a 10 km flag line grid, collecting 398 soil samples and completing VLF-EM and magnetometer surveys. Strong Au-Ag-Zn-As soil geochemical anomalies were outlined. The response for gold was strong but patchy with a peak value of 623 ppb. In 1998 Kodiak sold its interest in the property to Cascade Pacific Resources Ltd. and then the property was subsequently sold to Pan Ocean in January 1999.

For this report, geophysical and geochemical data from four different grids was entered into a computer database and compiled to generate anomalies. Airborne geophysical data, previous drill sites and geology was also overlain. The compilation work outlined an NW-SE trending Au-As anomaly (Anomaly A) that has not been adequately tested by previous drilling. The magnetometer shade plot shows linear trends that may represent structures that parallel anomaly A.

The plagioclase-quartz-biotite porphyry is the youngest intrusive phase. Magnetite-rich less altered phases of the porphyry are indicated by magnetic highs on the airborne and surface magnetic surveys. Magnetic lows outline intensely altered and brecciated porphyry, and linear magnetic lows overlie structures. IP maps show pyrite rich alteration zones within the Tad Porphyry. Deep weathering of the top 80-100 m of bedrock has produced an auriferous oxide zone consisting of manganese-limonite cemented breccia in the more altered and structurally prepared sections of the Tad Porphyry. Gold values are strongest at 20-50 m of depth in sections of core with abundant limonite or manganese staining.

Two primary target areas are outlined by the compilation work. The multi-element geochemical Anomaly A features a 750 m long arsenic-gold zone with coincidental magnetic lows and variable chargeability response. This is the most important target where previous drill holes have cut oxide mineralization. The first nine drill sites are proposed for this area. Anomaly B is a linear arsenic-lead-zinc anomaly with coincidental magnetic low and a chargeability high. Two drill sites are proposed on this target. A secondary target of magnetic low and anomalous lead-zinc geochemistry is suggested for one drill site. The potential for outlining oxide gold mineralization is considered favorable and an exploration program consisting of diamond drilling is recommended at a budget of \$250,000.

2.0 PROPERTY

2.1 Introduction

The TORO property is located in the Central Yukon at Hayes Creek, a tributary of the Selwyn River in the Whitehorse Mining District, Yukon Territory (Map Sheet NTS 115 I-12). Access to the camp is by helicopter, alternately a gravel airstrip, located 4 km upstream is usable by small aircraft. Heavy equipment, supplies, and fuel can be hauled in on the Casino Trail, a winter road that connects to an all-weather road located 15 km east of the claims. The road distance from Whitehorse is 330 km.

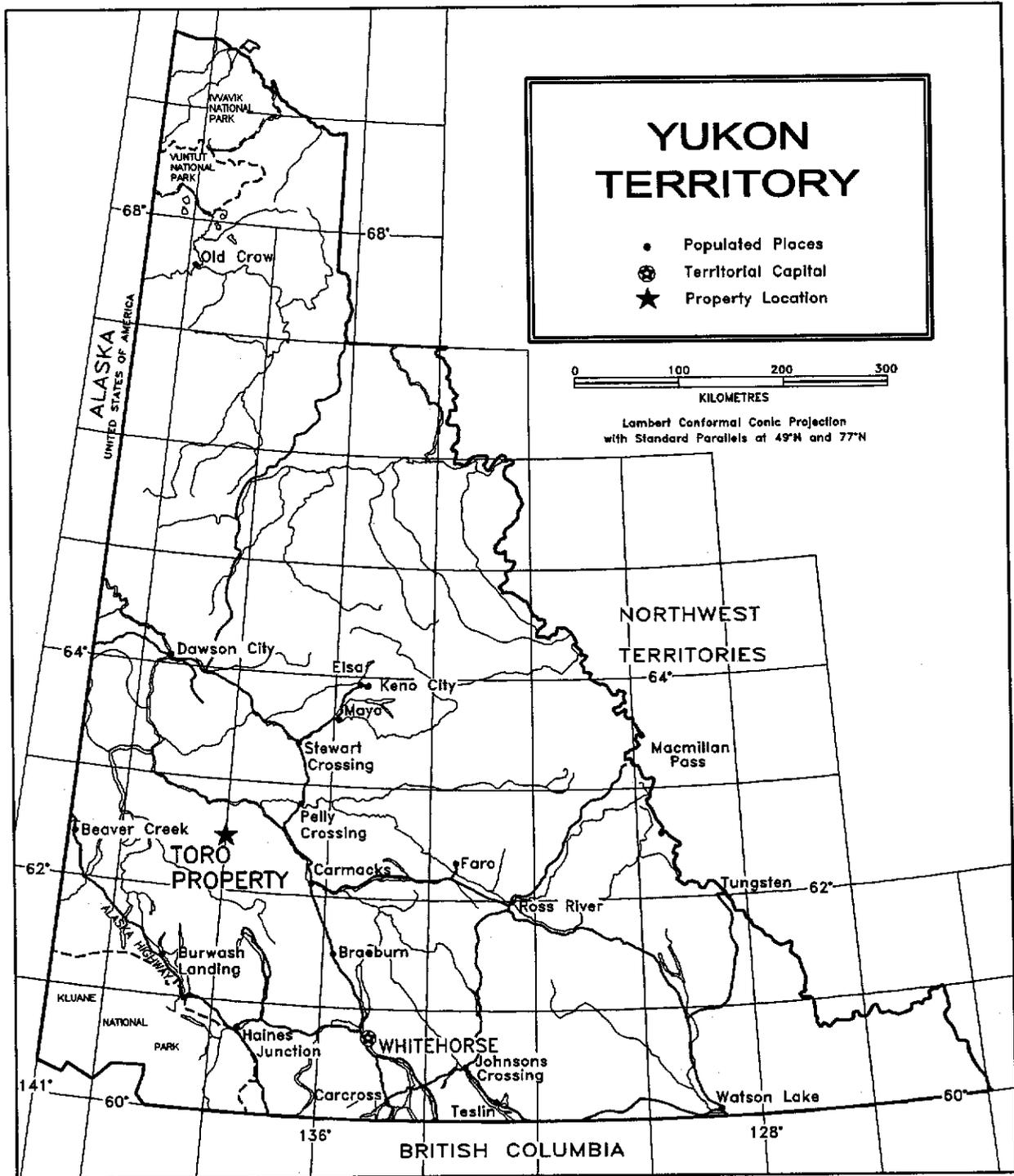
This report was prepared at the request of Robert McIntosh of Pan Ocean. Data and documents provided by Nicholson & Associates Natural Exploration Resource Development Ltd. detailing a 1996 exploration program and assessment data from earlier exploration by Noranda and International Mines Services were reviewed and compiled. Previous grids were digitized, and geochemical and geophysical data was entered into a database to generate colour shade plots. Recent government geological mapping and radiometric-magnetic airborne geophysical surveys provided new information on the property geology. The writer first worked in the area in 1985 on behalf of Shawkwak Exploration Co. Ltd. and has returned periodically to explore properties around Hayes Creek, Freegold Mountain, Prospector Mountain, Mt. Caulfield and Casino. The most recent visit to the property was by B. Harris in October, 1999.

2.2 Location and Access

The TORO property is located on Hayes Creek in the Dawson Range on NTS Map Sheet 115 I-12 at geographical co-ordinates 62° 38' N and 138° 35' W. The TORO property is accessed by charter helicopter from Carmacks or Whitehorse. An airstrip located 4 km upstream of the camp is connected by a network of cat roads to the TORO. The camp consists of four framed plywood buildings situated beside Hayes Creek along the winter road. Figures 1 and 2 show the property location. The Casino Trail connecting the Freegold Road to the Casino Property provides four wheel drive access to within 15 km of the TORO. A winter trail connecting the all-weather road to the property is passable to ATV's and nodwell type vehicles in summer, however heavy equipment, supplies and fuel are moved in February and March. Carmacks and Whitehorse provide charter aircraft, supplies and services to the district.

2.3 Physiography

This section of the Dawson Range features moderate topography of long sinuous ridges incised by narrow valleys that descend to the swampy flat-bottomed valleys of the larger creeks and rivers. Outcrop is sparse, except on steeper slopes and knolls. Bulldozer trenching by Noranda and IMS failed to penetrate the overburden that averages 6 meters deep on hillsides and 10 meters in the Hayes Creek valley. Permafrost is limited to north facing slopes and valley bottoms. Elevations in the property area range from 760 - 1280 m (2500' - 4200').



YUKON TERRITORY

- Populated Places
- ⊙ Territorial Capital
- ★ Property Location



Lambert Conformal Conic Projection
with Standard Parallels at 49°N and 77°N



Pan Ocean Explorations Inc.		
TORO PROPERTY Location Map		
<i>Graham Davidson, Consulting Geologist</i>		
SCALE: 1 : 6,000,000		DATE: 09.02.09
NTS: 115 V2	DRAWN:	FIGURE 1

Vegetation consists of swamp hummocks and sparse stunted spruce in the Hayes Creek valley and on north facing slopes, to birch, poplar, and spruce forest on south and westerly facing slopes. Alder and buck brush are thick along creek banks. A forest fire in 1996 burned about 75% of the claim area; dead standing trees and little undergrowth remain. The Dawson Range district has a northern interior climate marked by long cold winters and low annual precipitation. Exploration on the property can be performed on a year round basis but is most practical from March to October.

2.4 Title

The TORO property consists of 32 mineral claims, as shown in Figure 3 and listed in Table 1. Requirements for the upkeep of mineral claims in the Yukon are detailed in the Yukon Quartz Mining Act regulations. Exploration or mining expenditures of \$100 per claim per year or payment of an equal amount in lieu of work are necessary for the maintenance of claims. Payments and documents are submitted to the mining recorder at the Whitehorse District office.

TABLE 1
CLAIM DATA

CLAIM NAME	RECORD NUMBER	EXPIRY DATE (applied for)	REGISTERED OWNER
TORO 5-8	YA82453-56	Sept. 18, 2002	G. Davidson
TORO 17	YA82465	Sept. 18, 2002	G. Davidson
TAD 3-4	YB66796-97	May 7, 2002	B. Harris
TAD 9-10	YB66798-99	May 7, 2002	B. Harris
TAD 13-16	YB66743-46	May 7, 2002	B. Harris
TAD 18-20	YB66747-49	May 7, 2002	B. Harris
TAD 23-30	YB66768-75	May 7, 2002	G. Davidson
TAD 33-40	YB66778-85	May 7, 2002	G. Davidson

2.5 Environment

No special environmental concerns are known for this area. The Department of Indian and Northern Affairs has implemented mining land use regulations in the Yukon Quartz Mining Act. Under these regulations more advanced exploration programs will require a mining land use permit prior to commencing exploration. It is recommended that Land Use Applications for applicable work programs be submitted at least 60 days prior to mobilization.

A separate land use permit for utilization of the Casino winter trail is also required. This permit is obtained from the land use department of DIAND and a period of 21 days is required to review the application. March 31 is the normal deadline for use of the winter trail.

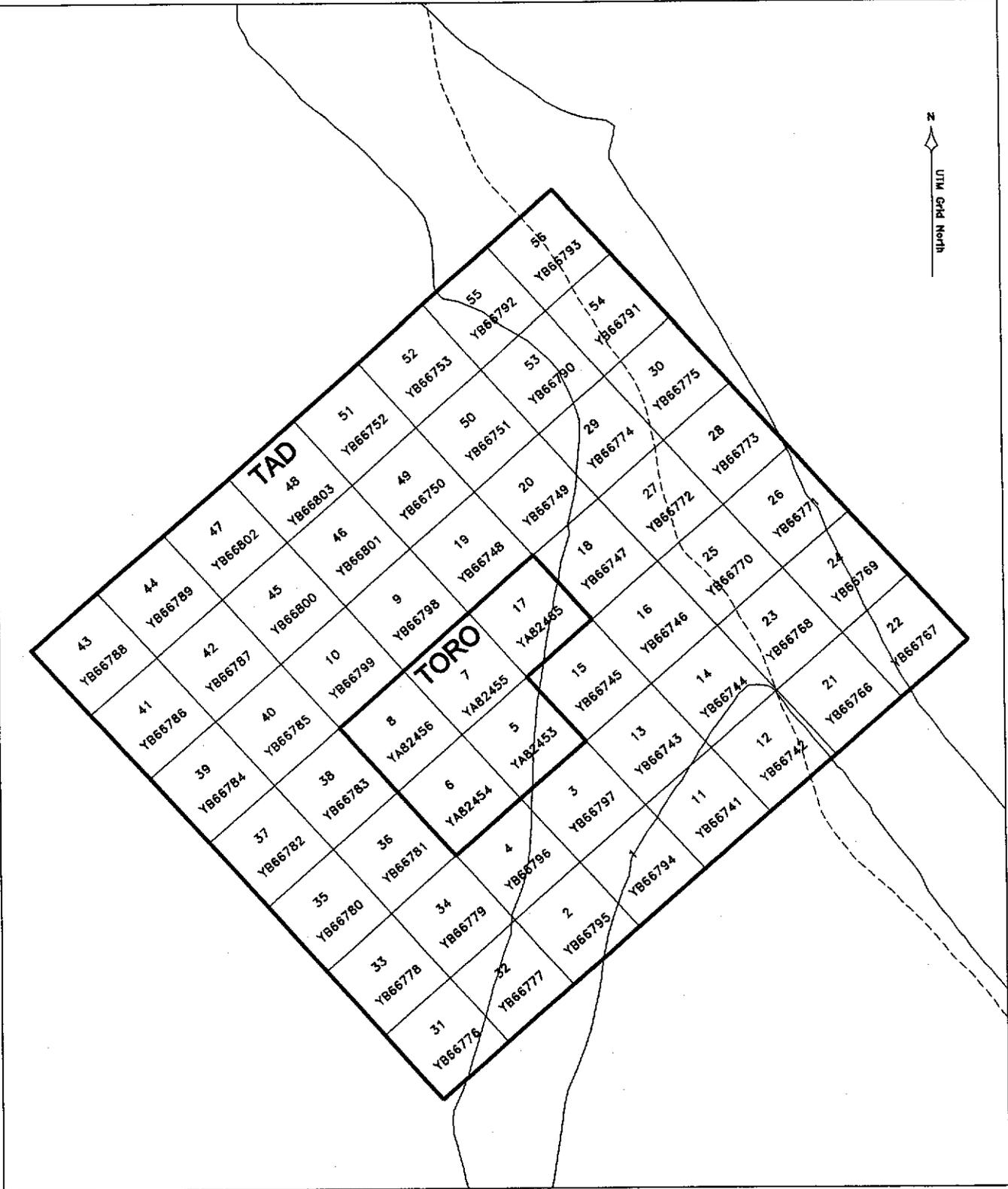
3.0 REGIONAL GEOLOGY

The Dawson Range is a northwesterly trending range of mountains extending from Mount Freegold into Alaska and is part of the Yukon Tanana Terrane (YTT) of the Canadian Cordillera. The YTT lies between the Tintina Fault to the north and the Denali Fault to the south (see Figure 4). Plutonic rocks of the Early Jurassic Minto suite and the mid-Cretaceous Dawson Range Batholith cover most of the district. The plutonic rocks intrude Devonian-Mississippian metasedimentary units consisting of quartz-mica schist, gneiss and diorite. A series of Late Cretaceous plugs, sills and dikes known as the Prospector Mountain Plutonic Suite intrude the older granitic and metamorphic rocks. The youngest rocks in the district are Carmack's Group volcanics, primarily mafic flows and pyroclastic units. Copper porphyry and structurally hosted gold deposits are found along major northwest-southeast bearing faults and fracture zones associated with the younger intrusive events of the Prospector Mountain Plutonic Suite. The Big Creek Fault, a northwest-southeast trending fault that in part follows the Hayes Creek valley is a regional structure associated with mineralization at Mount Freegold, Revenue Creek, Prospector Mountain and the TORO.

Placer gold has been mined periodically from Hayes Creek and its tributaries. Gold morphology varies widely with dendritic, crystalline, wiry, angular and rounded gold found in nearly all the drainages. Some dendritic, crystalline and wire gold may have been the result of supergene migration and precipitation. Gold on quartz clasts has been recovered from Apex Creek and appears to be from a bedrock source. The placer concentrate from lower Hayes Creek is rich in galena, sphalerite and other sulphide minerals.

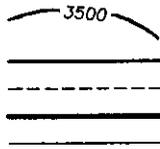
The most recent geological map of the area was compiled by S.T. Johnston of the Yukon Geoscience Office, available in Open File 1995-2(G). Figure 5 shows the regional geology and the Table of Formations is presented in Table III.

N
UTM GRID North



LEGEND

- elevation contour
- interval, (500 feet)
- stream, creek
- road, trail
- claim group boundary
- claim line



Pan Ocean Explorations Inc.		
TORO PROPERTY Claim Location Map		
<i>Graham Davidson, Consulting Geologist</i>		
SCALE: 1 : 30 000		DATE: 99.02.09
NTS: 116 I/12	DRAWN:	FIGURE 3

4.0 HISTORY

Exploration in the Dawson Range began in 1930's when gold bearing quartz veins and skarns were discovered and developed on Freegold Mountain. Interest in porphyry deposits started in the early 1960's with the discovery of the Casino copper deposit. A staking rush followed and a wide belt of claims covered the district. The Hayes Creek area shows evidence of placer testing from the early 1900's and lode claims were first located in the 1950's at Klines Gulch (10 km downstream of the TORO). The potential for bulk tonnage gold deposits in the oxide zones of porphyry deposits and in breccia bodies formed by the younger intrusive rocks was investigated in Dawson Range rocks starting in 1985. Recent work at Casino has outlined reserves of 125 million tones grading 0.3% copper and 0.5 gpt gold.

At Hayes Creek, IMS staked 267 claims in 1969-1970 and performed extensive surface exploration including 18 drill holes (2,708 m of core) and expenditures totaled \$551,500. The surface work consisted of 6,000 soil samples (Cu-Pb-Zn-Mo), and magnetometer and IP surveys. Fourteen holes were drilled southwest of Hayes Creek on geochemical and geophysical anomalies. Four other drill holes targeted potential molybdenum mineralization east of Hayes Creek.

In 1986 Noranda acquired the prospect and performed grid geochemistry, trenching and diamond drilling (372 meters). Drill core from the IMS program was resplit and assayed for gold. Noranda collected 384 soil samples that were analyzed for Au-Ag-As-Cu-Pb-Zn. Noranda also collected 64 overburden samples from trenches and 130 drill core and rock samples. The Noranda work focused on the potential for gold bearing oxide mineralization and identified promising gold-silver-arsenic geochemical anomalies in brecciated rocks associated with the Tad Porphyry. Resampling of the IMS core by Noranda identified three significant sections of gold and silver mineralization in IMS drill holes T-2, T-12 and T-14 (Table II).

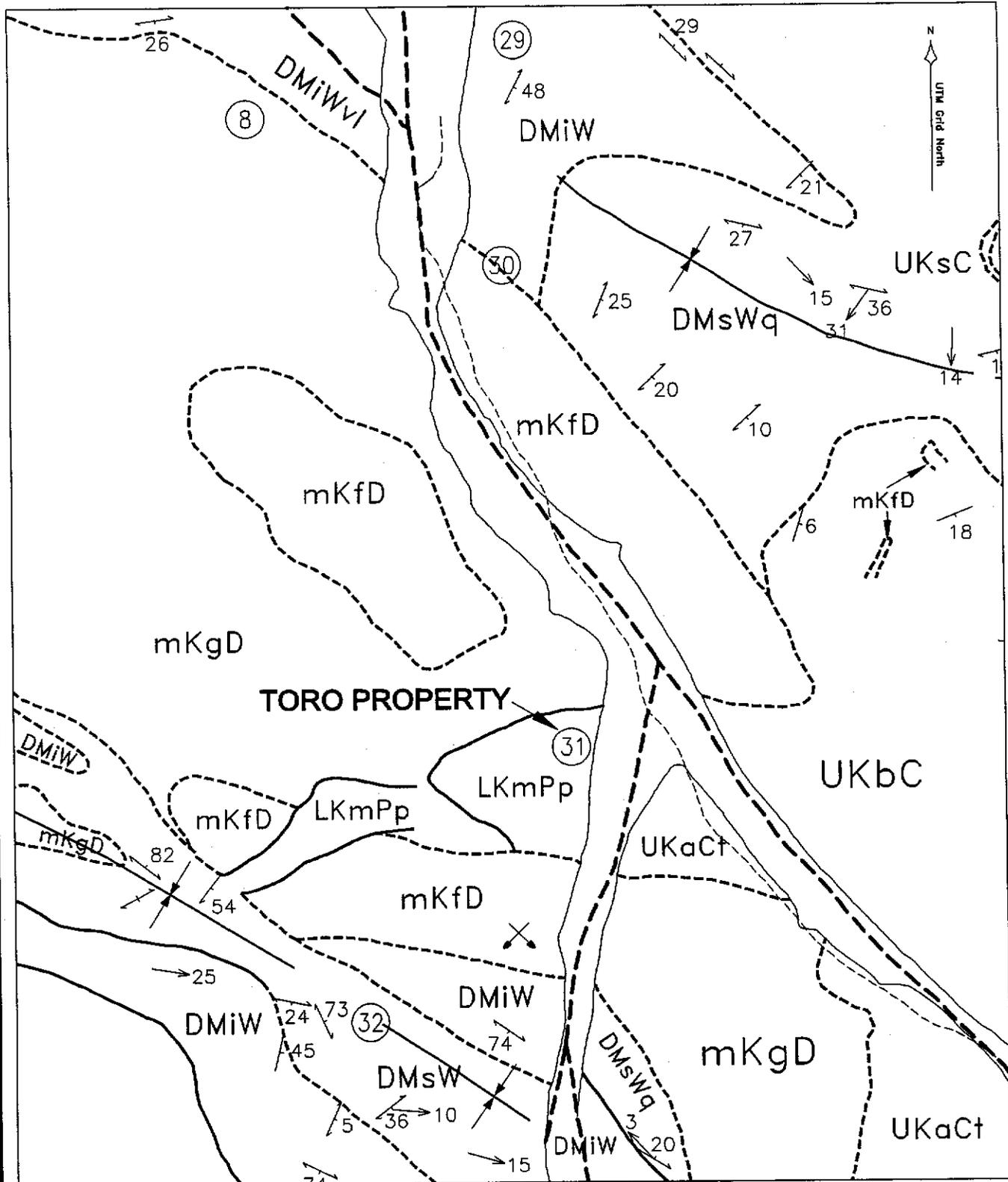
Four widely spaced drill holes in 1987 on geochemical and geophysical targets intersected variably altered felsic porphyry and breccia. Gold values were anomalous but not economic and Noranda geologists concluded that their drill sites were downslope of the potential mineralization.

TABLE II-SIGNIFICANT DRILL RESULTS

Drill Hole	Depth (Ft)	Width (Ft(M))	Au (gpt)	Ag (gpt)
T-2	163-190	27(8.2)	1.03	12.3
T-12	146-162	16(4.9)	1.23	7.5
T-14	63-86	23(7.0)	1.75	12.0

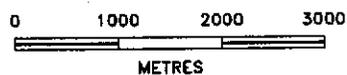


Fig 4 TECTONIC MAP



LEGEND

- elevation contour interval, (500 feet) 3500
- stream, creek
- road, trail
- Geological contact (defined)
- Geological contact (approx.)
- Fault (approx.)



Pan Ocean Explorations Inc.		
TORO PROPERTY Geology Map		
<i>Graham Davidson, Consulting Geologist</i>		
SCALE: 1 : 75 000		DATE: 99.02.09
NTS: 116 J/9, 1/12	DRAWN:	FIGURE 5

4.1 Exploration Program-1996

In 1996, Nicholson & Associates performed a geochemical and geophysical exploration program from July 12 to Sept. 1996. A 2-3 man crew based at the old TORO camp on Hayes Creek established 10 kilometers of flag-line grid and performed magnetometer and VLF-EM geophysical surveys, soil geochemistry and geological mapping (see Figure 5). Grid lines were established from 50 m centers along an east-west baseline 900 meters long. Soil samples were collected at 25 m intervals from the B horizon using hand augurs. The geophysical surveys were performed with EDA field and base station instruments.

5.0 TARGET MODEL

The target model for the TORO is structurally controlled oxide gold mineralization occurring in the periphery of a small intrusive body with similarities to both porphyry and plutonic gold deposits (see Table III). The presence of intense argillic and propylitic alteration zones is indicative of a porphyry style intrusion however the copper and molybdenum content is low. Enrichment in base metal sulphides, arsenic and gold may occur in the margins of a porphyry system. The plutonic rocks at Casino have been dated at an average of 72 Ma but the age of the Tad Porphyry is unknown.

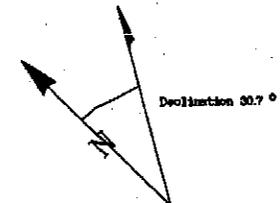
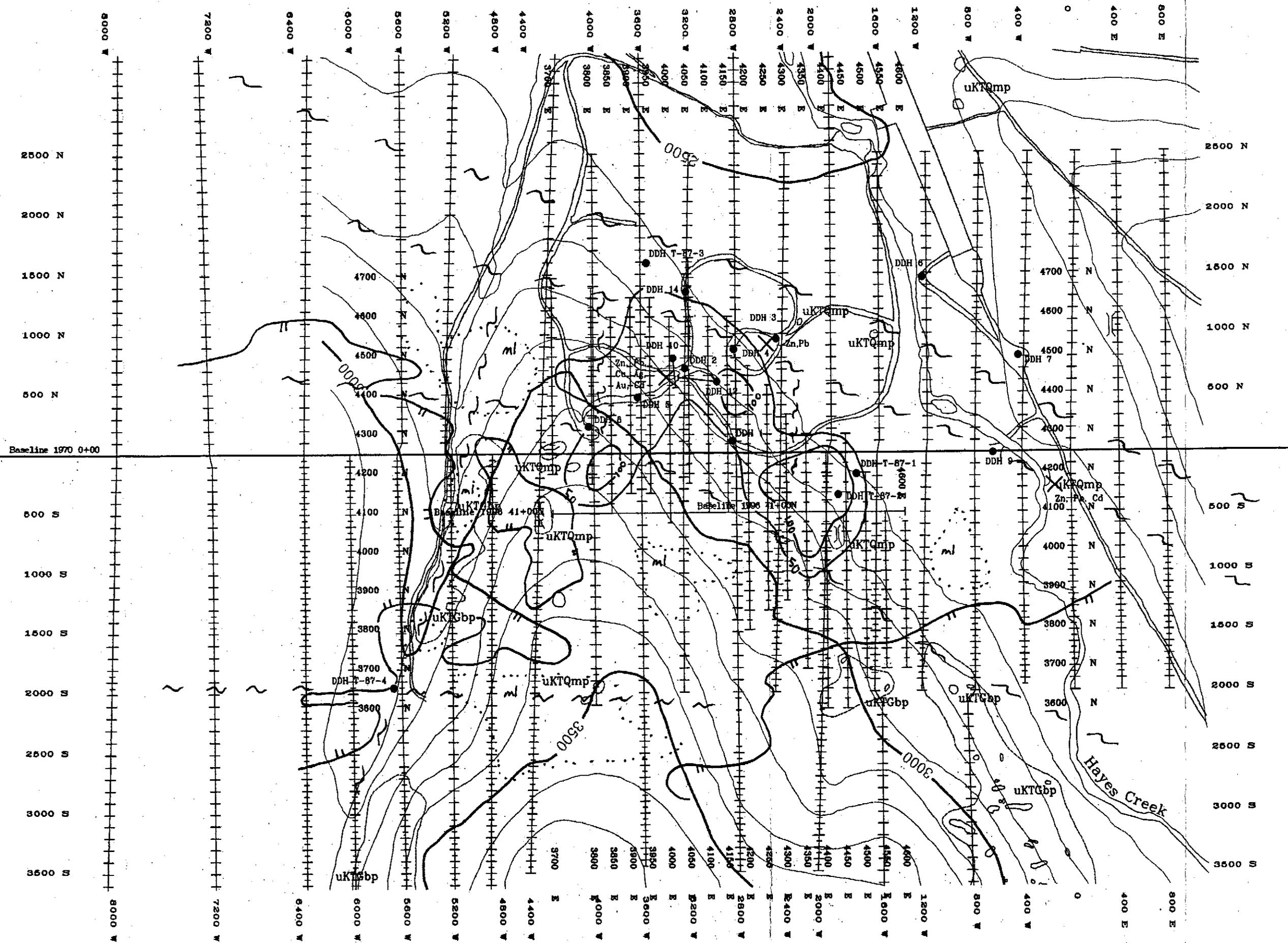
Plutonic-Au deposits in central Alaska and in the Yukon are effectively classified on the basis of comparison with the Fort Knox gold deposit near Fairbanks, Alaska. Most plutonic-Au deposits are hosted within, or are genetically related to, Mid-Cretaceous age I-type plutonic rocks that fall within the age range of 110-86 Ma. On the basis of association with gold and the narrow age range, this group of plutonic rocks has been termed the Tombstone suite. This is only one of several plutonic suites that have been defined, primarily in the Yukon, by Mortensen et al through systematic U-Pb dating. Contrary to the accepted fact that Tombstone Suite is essentially the only gold-bearing plutonic suite, Mortensen and others favour a much less rigid definition and conclude that a number of these Cretaceous suites possess gold potential. The Dawson Range Batholith is dated at an average of 100 Ma in the Hayes Creek area. In west-central Alaska the age range of plutonic gold deposits has been stretched to include mineralization associated with 70 Ma intrusions.

The majority of plutonic-Au deposits occur within or in close proximity to the apical portions of small to moderate sized igneous plugs or stocks. These are interpreted to be high level, highly differentiated cupolas, comagmatic with adjacent or underlying plutons. Low sulphide gold mineralization is most often hosted in steep brittle quartz-pyrite sericite stockworks or sheeted quartz veins that occur within the intrusive and less often in the enclosing host rocks. Structural preparation of the host rock is essential for quartz vein development and gold deposition.

TABLE III

TARGET MODEL CHARACTERISTICS

Feature	Porphyry Deposit	Typical Plutonic Au Deposit
age	<ul style="list-style-type: none"> mid and late Cretaceous 70-105 Ma 	<ul style="list-style-type: none"> mid Cretaceous 85-105 (100Ma)
igneous association?	<ul style="list-style-type: none"> small stocks equigranular to porphyritic quartz monzonite and granite porphyry 	<ul style="list-style-type: none"> Yes: high level small stocks evolved intrusions equigranular to porphyritic, metaluminous to peraluminous quartz monzonite-granodiorite-low quartz granite
pressure of formation	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 0.5-2 Kbars
temperature of formation	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 270-350°C
salinity of inclusions	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> moderate
CO ₂ content of inclusions	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> high
methane in inclusions	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> no
quartz vein types	<ul style="list-style-type: none"> white quartz-sulphide veins stockworks quartz-carbonate veins 	<ul style="list-style-type: none"> primarily thin milky quartz stringer stockworks also shear veins with gouge some drusy veins
placer association	<ul style="list-style-type: none"> yes 	<ul style="list-style-type: none"> often
primary metal signature	<ul style="list-style-type: none"> Cu-Mo-As-Au 	<ul style="list-style-type: none"> Au-Bi-As-Te
associated metals	<ul style="list-style-type: none"> Pb-Zn 	<ul style="list-style-type: none"> Sb-W-Mo-Pb
alteration and vein minerals	<ul style="list-style-type: none"> potassic, argillic, propylitic, silicification, pyritic halo QZ-CB-sulphide oxide mineralization to 80 m depth, manganese and limonite breccia 	<ul style="list-style-type: none"> QZ-MS-AS-TO-CB-PY±BI-KF-AB
metamorphic grade of hosts	<ul style="list-style-type: none"> greenschist 	<ul style="list-style-type: none"> variable, mostly greenschist
metamorphic aureole	<ul style="list-style-type: none"> yes 	<ul style="list-style-type: none"> yes
contact Sn-W skarns	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> yes when reactive rocks intruded
structural control	<ul style="list-style-type: none"> yes: major NW-SE faults secondary E-W and NE-SW faults brecciation 	<ul style="list-style-type: none"> yes: both steep stockworks and often shallow, often brittle shear or fault zones best developed along lithological contacts, including different phases of composite intrusive bodies
major controlling structures	<ul style="list-style-type: none"> Big Creek Fault 	<ul style="list-style-type: none"> intersection of regionally extensive structures is sometimes suggested

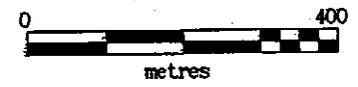


GEOLOGY

- TERTIARY**
Carmacks Volcanics
- Ba Basalt, porphyry, minor
- CRETACEOUS**
Intrusives
- Qmp Quartz monzonite porphyry, pyrite common/ accessory
 - Gbp Granite porphyry, biotitic, pyrite and magnetite common medium grained
 - Gd Granodiorite, coarse grained
 - G Granite, quartzose, coarse grained

LEGEND

- Diamond Drillhole Location
DDH 10
- KGd Outcrop and rock unit
- TBa Felsenmeer, scree, regolith and rock unit
- Bulldozed Trench
- X Zn, Pb Mineral Showing
- ~ ~ ~ Magnetic Linear
- ... Magnetic Low
- — — Magnetic High
- 50 Gold Contour



Scale: 1 : 16,000

PAN OCEAN EXPLORATIONS LTD.

TAD/TORO PROPERTY

FIG. 6
PROPERTY GEOLOGY MAP

NIS: 115 I/2 Datum: NAD 27

Mining District: Whitehorse

Job: 99-1 Date: 21-Feb-99

AMEROK GEOSCIENCES LTD.

At True North and Ester Dome the quartz veins are in gold-bearing sulphide mineralization that occurs in thrust faults and wide shear zones, mainly within highly metamorphosed rocks. The high Pb-Zn-Sb sulphide content at True North gives a similar geochemical response to the Prospector Mountain Suite intrusions. Bi in soils from the 1996 Kodiak sampling was weakly elevated in areas of Au-As soil anomalies.

6.0 PROPERTY GEOLOGY

6.1 Introduction

The TORO property rock types are described as follows:

DEVONO-MISSISSIPPIAN

Wolverine Creek Metamorphic Complex-metaigneous and metasedimentary schist and gneiss consisting of quartz biotite schist, hornblende schist, gneissic equivalents, quartzite and minor limestone. The primary foliation trends northwest-southeast.

MID-CRETACEOUS

Dawson Range Batholith, quartz-hornblende-biotite granitic rocks

LATE CRETACEOUS

Prospector Mountain Plutonic Suite, felsic porphyry stocks of granitic or monzonitic composition, felsic dykes and breccias. The Tad Porphyry is a quartz-feldspar-biotite porphyry with clear quartz and feldspar phenocrysts and lesser biotite. Quartz monzonite porphyry and biotite granite porphyry are two sub units of the Tad Porphyry identified by geological mapping. Typically fresh specimens of quartz monzonite are pale gray in colour with abundant muscovite. Argillic and propylitic alteration, and brecciation of the porphyry was extensive in the IMS drill core.

Carmacks Group, basalt, porphyry and breccia outcrop on the north side of the Hayes Creek valley. The rock weather brown to reddish brown and overlie granitic rocks. Variable in composition from olivine rich to feldspathic.

A more detailed description of the regional rock units starts with the oldest rocks in the map area, the Wolverine Creek Metamorphics composed of metamorphic units of Early Palaeozoic age, part of the Yukon-Tanana Terrane. The metamorphic lithologies consisted of rocks of sedimentary, volcanic and lesser plutonic origin. Regional tectonic metamorphism altered these lithologies during the Late Ordovician to Middle Jurassic time to quartz-mica schist, gneiss, and metasedimentary units. The thin units display a strong and generally consistent, parallel lineation that closely parallels their original bedding. During the Early Jurassic period, a major structural event of arc-continent collision created a strong northwest (NW) structural orientation as well as stress related high angle shear and extensional fractures in the northeast (NE) direction.

In Early Jurassic to Triassic time, granitic rocks of the Minto Plutonic Suite, the large Cretaceous Dawson Range Batholith and later the Prospector Mountain Plutonic Suite were emplaced into the metamorphic suite. Typically these intrusives range from granodiorite and quartz diorite to biotite-hornblende rich units which are medium to coarse grained with equigranular texture. In the Hayes Creek area the batholith is biotite rich, leucocratic quartz monzonite and granite. Bodies of Late Cretaceous quartz monzonite porphyry, granite porphyry and latite porphyry breccias of the Prospector Mountain Plutonic Suite lie along the margins of the batholith and underlie most of the TORO property. The Tad Porphyry appears to be the youngest intrusive body evident from sharp contacts shown by the airborne magnetics.

The Carmacks Group volcanics and dykes were emplaced after the granitic units possibly as the volcanic component of the Prospector Mountain Plutonic Suite. The source pluton caused local uplift and doming of the Dawson Range granodiorite allowing a greater rate of erosion. The Carmacks Group volcanics consist mainly of mafic flows and tuffs with local rhyolite, andesite to latite breccia, subvolcanic dykes and sills intruded extensively into the local monzonitic bodies.

6.2 Structure

Structural events in Jurassic time consisted of arc-continent collision. The principal stress direction was southeast-northwest (130-150°) which created dextral (right-hand) transcurrent faulting. The Tintina Fault is a prominent NW structure of regional proportions located one-hundred and fifty kilometres northeast of the Hayes Creek area and the Denali Fault located 75 kilometres west of Hayes Creek marks the western margin of the Yukon Tanana Terrane. The Tintina Fault has been interpreted to have moved as much as 450 kilometres in a right-lateral, strike-slip displacement. The Big Creek Fault is also a NW trending structure that has been interpreted as displaying a similar right-lateral faulting with up to 14 kilometres of displacement. The Big Creek fault zone trends along the Hayes Creek valley but is not exposed due to overburden. Multiple, parallel NW striking normal and thrust faults are found along the Big Creek trend.

Intrusion of the Prospector Mountain Suite occurred along the NW faults causing local uplift and collapse features. During the intrusion, both porphyry dykes and later stage mesothermal and epithermal quartz veins and breccias infilled many of these NW faults. Continued fault movements are evidenced by slickensides and brecciation found within many veins and porphyry dykes.

Epithermal mineralization is a very late stage event within the porphyry system and appears to have been emplaced in breccia zones and along faults. The epithermal veins in fault zones generally display only small shearing features from the continued lateral tectonic movements.

TABLE IV

TABLE OF FORMATIONS

<p>LATE CRETACEOUS to TERTIARY</p> <p><u>Carmacks Group (Mount Nansen Group):</u> uKC, undifferentiated mafic to intermediate volcanics with less felsic volcanic plugs and dykes, andesite dykes. This unit consists of mafic flows and agglomerates, dark green andesite and andesite stockwork and minor fine-grained flow banded rhyolite and fine-grained pink felsite to felsite stockwork. The felsic dykes are associated with stockwork mineralization at the Antoniuk deposit, Mount Nansen and Freegold Mountain.</p> <p>uKIC & uKsC, black sediments and volcanics; mainly graphitic siltstone (uKsC) with very minor silty sandstone; intercalated with and intruded by a number of highly altered porphyritic volcanic bodies (uKIC) composed of quartz and feldspar phenocrysts in a muscovite matrix. In places sericite mats replace the feldspar. The graphitic siltstone contains terrestrial fossils including grasses, stems, twigs and leaves. This unit hosts auriferous quartz veins at Caribou Creek.</p>
<p>LATE CRETACEOUS</p> <p><u>Prospector Mountain and Mount Freegold Meta-Plutonic Suite:</u> uKTG, pink feldspar porphyry, granite porphyry (uKTGbp), quartz monzonite porphyry (uKTQmp) and andesite to latite dykes and breccia.</p>
<p>EARLY to MID CRETACEOUS</p> <p><u>Dawson Range Batholith:</u> mKgD, granodiorite and quartz monzonite</p> <p><u>Minto Plutonic Suite:</u> Ksy, syenite, coarse hornblende phenocrysts</p>
<p>DEVONO-MISSISSIPPIAN</p> <p><u>Wolverine Creek Metamorphic Suite:</u> DMiW, quartz biotite schist and gneiss with some magnetite and goethite skarn.</p>

Three structural orientations with varying degrees of lateral displacement are interpreted:

- 1) 120-150° The dominant SE-NW structural trend on the property consistent with the Big Creek Fault zone.
- 2) 045-060° A secondary structural trend primarily as splays of the main NW features. Mineralized quartz veins occur in this trend although they are discontinuous and narrow.
- 3) 010° A third regional trend expressed as minor faults, fractures and joints.

6.3 Mineralization

Mineralization has been oxidized to depths of up to 80 meters. The gold bearing oxide zone lies in brecciated and intensely altered quartz monzonite porphyry. Strong manganese staining and limonite is present with higher gold grades. A narrow supergene zone sometimes lies above the hypogene zone. The best target for gold mineralization is the oxidized breccias, structures and alteration zones in the quartz monzonite porphyry. The underlying hypogene zone may contain gold bearing quartz arsenopyrite veins. Sulphide mineralization consists of up to 10 % pyrite disseminated in the granite porphyry and in alteration zones. Narrow quartz sulphide veins in breccias and structures containing sphalerite, galena and arsenopyrite bearing quartz veins are present along shear zones. Three primary mineralization types are recognised:

- 1) Porphyry Cu-Mo: The focus of exploration in the early 1970's in the Dawson Range, porphyry mineralization known as the TAD occurrence was explored by geochemistry, geophysical surveys and drilling intersecting lenses grading 0.6% Cu and 0.06% MoS₂. Average grades in the hypogene zone were lower, determined at 0.12% Cu and 0.01 % MoS₂ with approximately double the grade in the supergene enrichment zone at about 65 meters of depth. The best copper grades were associated with minor potassic alteration in a broader phyllic altered zone in quartz monzonite porphyry stocks and breccia. Exploration parameters include potassic alteration, high chargeability response, magnetic high caused by magnetite and tourmaline breccia and Cu-Au geochemical anomaly.
- 2) Porphyry Breccia: Located on the north side of the Tad Porphyry body, oxide gold mineralization is hosted by breccia and alteration zones in porphyry stocks, breccia zones and NW fault zones. Gold-arsenopyrite bearing zones may follow the NW structural trend. Quartz-sphalerite-galena veins are common in the breccia. Gold-pyrite bearing argillic to phyllic alteration zones intermix with the breccia. Exploration parameters include variable chargeability response (peak highs are caused by pyrite halo), intense phyllic alteration, strong multi-element geochemistry, moderate to low magnetic response.
- 3) Shear hosted and Mesothermal Quartz Veins: The primary NW trend and the secondary NE structures have the potential to host quartz veins that are often sulphide bearing. Near surface these veins are moderately to completely oxidized. Precious metal and quartz content tend to increase with sulphide content and depth. The strong silver, lead and zinc geochemistry at the TORO appears to be caused by numerous narrow quartz sulphide veins found in breccia and fault zones.

7.0 GEOCHEMISTRY

The original geochemical surveys on the TORO by IMS in 1969-70 outlined a broad multi-element anomaly over the central portion of the quartz monzonite plug. Zinc and lead produced the strongest response with weaker copper, silver and molybdenum values. Several smaller geochemical anomalies were also delineated by the IMS geochemistry. Noranda performed soil sampling in 1986-87 on a much smaller grid and found gold-silver-arsenic anomalies somewhat coincidental to the base metal geochemistry.

Like the earlier IMS and Noranda soil surveys, the Kodiak sampling in 1996 located strong base and precious metal responses on grid lines at 50 m intervals. The more detailed Kodiak sampling defined a strong L-shaped gold anomaly (Anomaly A) that has a moderate correlation with anomalous arsenic levels and a lesser correlation with Ag-Pb & Zn. The strong gold anomaly has both NW-SE and NE-SW trends and is about 750 m long. Several peak highs are indicated within the gold anomaly by the color shade plot. Drill holes T-2, T-12 and T-14 were drilled within this anomaly and produced > 1 gpt gold values. Several other drill holes in the anomaly produced elevated gold (200-780ppb) and silver values (up to 20gpt). The As response is correlative to the gold response and also features an L-shaped anomaly with a primary NW-SE trend and secondary NE-SW trend.

Two other As-Pb-Zn anomalies (B and C) lie on an E-W trend south of the main anomaly. They are coincidental with moderate to strong chargeability response and magnetic lows. Anomaly B is centered at L4800W 2050S and Anomaly C is located at 3400W 1100S. The magnetics at both targets indicate E-W linear lows and E-W chargeability highs. These linear anomalies may overlie mineralized structures containing sulphide bearing quartz veins. A VLF-EM survey over Anomalies B and C may help delineate a linear target and assist in planning drill hole orientations.

8.0 GEOPHYSICAL SURVEYS

The GSC flew the Hayes Creek area in a radiometrics, magnetometer and VLF-EM survey in 1994. The broad coverage survey had flight lines spaced 0.5 kilometre apart. The property shows an eThorium/Potassium anomaly, a high magnetic gradient, a magnetic dipole, and VLF total field anomalies (see Appendix I, Figures 8-10) of similar parameters to those at the Casino Cu-Au porphyry deposit. The airborne residual magnetic plot shows the outlines of the granite porphyry as an L-shaped body.

IMS completed ground magnetometer and IP surveys in 1969-1970 on the TORO. The magnetometer survey outlined two main areas of high values that outline the centre of the granite porphyry while the surrounding quartz monzonite porphyry shows lower magnetic values. Magnetite content is higher in the granite causing variation in the magnetic gradient at the contacts. Highly altered zones in the quartz monzonite porphyry feature the lowest magnetic readings. Breccia zones and structures in the quartz monzonite porphyry are also marked by deeper magnetic lows and linear magnetic lows. Evident on the magnetic shade plot, linears represent possible fault zones at NW-SE, E-W and N-S patterns. The linears and magnetic lows are shown on the compilation map Fig. 6. The magnetic lows correlate moderately well with geochemical Anomalies A, B & C and possible linear features are indicated by the magnetic shade plot.

The IMS IP survey was replotted in a stacked profile format and a colour shade plot. The main chargeability high (Zone 1) was by far the most extensive response that covers the central portion of the grid. Three distinct chargeability highs are present within Zone 1 and these highs are somewhat coincidental with the geochemistry. Drill hole T-6 on one of the IP chargeability highs intersected granite porphyry containing narrow quartz-calcite veining with 1-10% pyrite, sphalerite and galena. Sulphide content was highest in the more intensely fractured and altered zones. Gold and silver values in hole T-6 were low in 6 split samples collected by Noranda.

A second chargeability high (Zone 2) is coincidental with geochemical Anomaly B. An E-W trend is indicated by this zone. Drill hole 87-4 at the western end of this chargeability zone intersected pyritic granite porphyry with weak gold values. Anomaly C has weaker chargeability values but a linear E-W trend is evident.

9.0 DRILLING

IMS completed 18 drill holes and Noranda completed 4 drill holes targeting the IP and geochemical anomalies. Gold was found to be most concentrated about 3/4 of the way through the oxide horizon in areas of intense argillic and/or sericitic alteration at a depth of 70-80 m. The best values were in IMS holes T-2, T-12 & T-14 that had 6-8 meter intersections of 1.0-2.0 gpt gold.

The first two Noranda drill holes targeted the southeast end of Anomaly A on a strong chargeability response and a magnetic low. Noranda drill hole T-87-2 located 75 meters east of the peak of this anomaly intersected a porphyry breccia that carried gold values of 780 and 200 ppb over 2 m sections.

Anomaly B was drilled in one hole (T-87-4) located in a valley bottom. It failed to intersect any mineralization but the center of the geophysical and geochemical response is east and upslope of the drill site. This hole appears to be downslope of the main Anomaly B. Anomaly C has not been drilled.

A comparative chart between the drill intersections and geochemical-geophysical response is presented in Table V.

Table V

Drill Results and Exploration Characteristics

DRILL RESULTS	GEOLOGY	GEOPHYSICAL RESPONSE	GEOCHEMICAL RESPONSE
T-2 163-190 ft 27'(8.2 m) of 1.03 gpt Au, 12.3 gpt Ag	highly altered Tad Porphyry, argillic alt. breccia, limonite and hematite, py-gal-sph stringers and disseminations, calcite/barite veins	possible E-W or NW-SE linear magnetic low, moderate chargeability high	Au 50-100 ppb, As >100 ppm, Pb >250 ppm, Zn >1500 ppm
T-12 146-162 ft 16'(4.9 m) of 1.23 gpt Au, 7.5 gpt Ag	intensely altered Tad Porphyry, fractured, some brecciation, limonite and manganese staining, 1% py	possible E-W or NW-SE linear magnetic low, moderate chargeability high	Au 50-100 ppb, As >100 ppm, Pb >250 ppm, Zn >1500 ppm
T-14 63-86 ft 23'(7.0 m) of 1.75 gpt Au, 12.0 gpt Ag	intensely altered Tad Porphyry, some breccia, rusty limonite staining, fine py and disseminated sph	NW-SE linear magnetic low, low chargeability values	Au >50 ppb, As >100 ppm, Pb > 500 ppm, Zn >900 ppm
T-5 58-110 ft 52' (15.8 m) of 0.15 gpt Au, 20.0 gpt Ag	brecciated Tad Porphyry, wellfractured, manganese and limonite staining on fractures, calcite veinlets, < 1% py	moderate magnetics, moderate chargeability high	Au >50 ppb, As >100 ppm, high Pb-Zn

Table V-Cont.

Drill Results and Exploration Characteristics

<p>T-8 87-127 ft 40' (12.2 m) of 0.15 gpt Au, 7.5gpt Ag</p>	<p>argillic altered Tad Porphyry, silicification, sections of breccia, fractured, heavy limonite and/or manganese staining, calcite veinlets, minor py</p>	<p>Nw-SE magnetic low, moderate chargeability high</p>	<p>Au >50 ppb, As >100 ppm, high Pb- Zn</p>
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10.0 DISCUSSION & RECOMMENDATIONS

Noranda first examined the bulk tonnage potential for structurally controlled oxide gold deposits on the TAD-TORO property. Noranda performed a brief program that located a promising gold bearing oxide breccia zone however after four widely spaced drill holes that produced weak gold values, they left the property.

Geochemical sampling by International Kodiak in 1996 defined several soil anomalies that are coincidental with IMS and Noranda geochemical and geophysical responses. A compilation of the past 30 years of geochemical and geophysical surveys provides several coincidental anomalies located upslope of earlier drill holes. New plots of the magnetics delineate linear lows that may outline mineralized structures responsible for the high geochemical values.

The main Au-As-Pb-Zn soil response (Anomaly A) is coincidental with several linear magnetic lows and moderate to high chargeability responses. This area was originally drilled by IMS in six holes targeting the main Pb-Zn geochemical anomaly. Holes T-2, T-12 and T-14 contain gold values greater than 1 gpt. Hole T-5 has one section that ran 20 gpt silver but gave weakly anomalous gold values. Holes T-3 and T-4 intersected breccia with weak gold values. Five new drill sites (Site 1-5) are proposed to test the upslope portion of the main soil anomaly.

One peak area of Au-As values located in the southeast portion of Anomaly A was tested in drill holes T 87-1 & 2. T 87-2 intersected anomalous gold values in the oxide zone in a limonitic and manganese stained breccia. These holes were drilled northeast and downslope of the core of this anomaly. Drill sites 6, 7 and 8 are proposed to test this area. A second peak area of metal values located on the southwest corner of Anomaly A is proposed for drill site 9.

Soil Anomaly B, an intense linear Ag-Pb-Zn-As anomaly with patchy gold values has a moderate to strong chargeability response but fairly uniform magnetics. Quartz sulphide veins are suggested as a source for this Ag-Pb-Zn anomaly. Drill hole T 87-4 tested the western edge of the anomaly about 200 meters downslope of its center. Drill sites 10 and 11 are proposed approximately 250 meters east of T-87-4 to target the main portion of anomaly B.

The IMS data identified a strong Ag-Pb-Zn feature (Anomaly C) in a moderate chargeability zone with a coincidental magnetic low. No previous drilling has occurred at this location and one drill hole (site 12) is proposed.

Prior to proceeding with a drill program the Kodiak grid should be expanded to cover Anomalies B & C, and a magnetometer and VLF-EM survey performed over this area of the grid.

The airborne geophysical maps identify a potential porphyry intrusion just east of the claims and an anomalous area south of the claims. It is suggested that these areas be staked.

The following grid locations are proposed for drill sites contingent on the results of the Phase I geophysical program:

TABLE VI
PROPOSED DRILL SITES

	Grid Location	Target Description	Azimuth and Depth
Site 1	IMS grid L3200W, 700N	Au 50-100ppb, As >100ppm, Pb >250ppm, Zn >1500ppm, moderately low magnetics, magnetic linear indicates E-W or NW-SE fault, moderate chargeability values	Vertical hole to 100 m
Site 2	IMS grid L3200W 1250N	Au >50ppb, As >100ppm, Pb >500ppm, Zn >900ppm, NW- SE linear magnetic low, chargeability low	Vertical hole to 100 m
Site 3	IMS grid L3600W 1200N	Au >50ppb, As >100ppm, Pb >500ppm, Zn >500ppm, NW- SE linear magnetic low, chargeability low	Azimuth 170° at -60° to 100m

**TABLE VI CONT.
PROPOSED DRILL SITES**

Site 4	IMS grid L3600W 600N	Au >50ppb, As >100ppm, Pb >250ppm, Zn >2000ppm, average magnetic values and moderate chargeability high	Azimuth 170° at -60° to 100m
Site 5	IMS grid L2800W 400N	Au >100ppb, As >100ppm, Pb >100ppm, Zn >1000ppm, margin of E-W magnetic low, moderate chargeability high	Azimuth 170° at -60° to 100m
Site 6	IMS grid L2400W 300S	Au > 100ppb, weak As-Pb-Zn, magnetic low, linear chargeability high	Azimuth 180° @ -60° to 150 m
Site 7	IMS grid 2200W 750S	Au >100ppb, weak As-Pb, Zn > 250ppm, magnetic low, chargeability high	Azimuth 240° @ -60° to 150 m
Site 8	IMS grid 1700W 1150S	Au >40ppb, As >250ppm, Pb > 250ppm, Zn >800ppm, Magnetic low, chargeability high	Azimuth 170° at -60° to 100m
Site 9	IMS grid 3900W 200S	Au >100ppb, As >50ppm, Pb >100ppm, Zn >500ppm, possible E-W linear magnetic low, moderate chargeability high	Azimuth 170° at -60° to 100m
Site 10	IMS grid L4800W 2050S	As >500ppm, Pb >250ppm, Zn > 600ppm, E-W magnetic linear low, chargeability high	Azimuth 140° at -60° to 150m
Site 11	IMS grid L4400W 2250S	As >500ppm, Pb > 250ppm, Zn >500ppm, magnetic low and E-W linear magnetic low, linear chargeability high	Azimuth 140° at -60° to 150m
Site 12	IMS grid 3400W 1100S	As >100ppm, Pb >250ppm, Zn > 500ppm, deep magnetic low, E-W magnetic linear, chargeability high	Azimuth 140° at -60° to 150m

The TORO property is considered prospective for oxide breccia gold deposits of the Antoniuk-Casino-Revenue Creek style and for porphyry copper-molybdenum deposits similar to Casino. The property is located 50 km southeast of the Casino property and 60 km west of the Revenue property. The TORO property is in an active placer mining district underlain by Mesozoic to Cenozoic plutonic rocks intruding Paleozoic metasedimentary rock. The area has a strong northwest-southeast fault zone with parallel and crosscutting quartz veins and fractures, and structurally controlled mineralization.

10.1 Proposed Program Budget

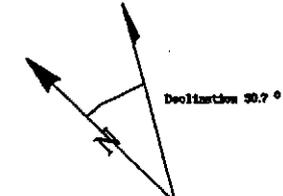
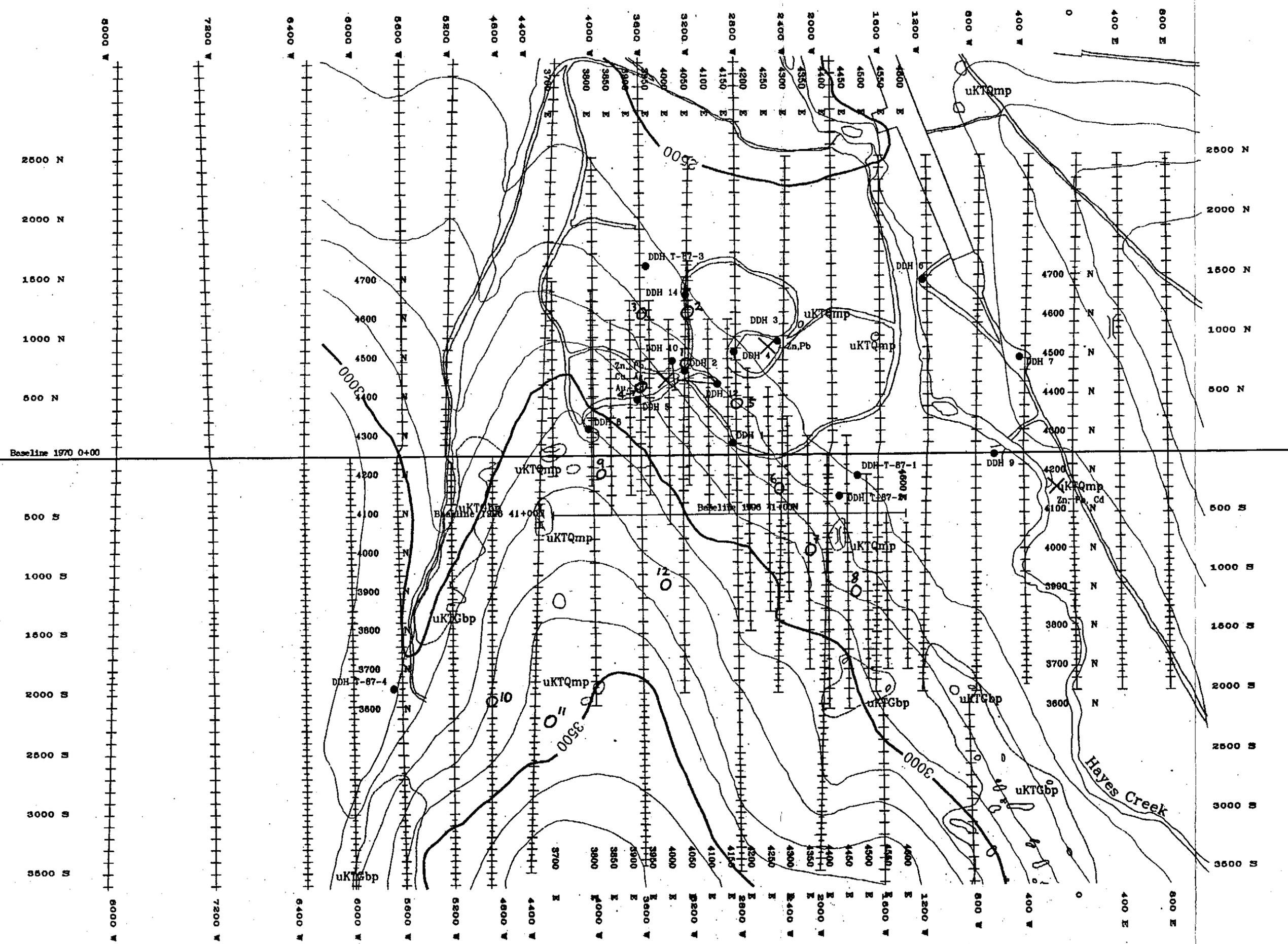
Phase I Program:

Grid rehabilitation, mag and vlf surveys, camp and supplies \$35,000

Phase II Program:

Diamond drill program \$200,000

TOTAL BUDGET \$235,000

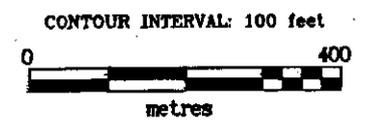


GEOLOGY

- TERTIARY**
Carmacks Volcanics
- Ba Basalt, porphyry, minor
- CRETACEOUS**
Intrusives
- Qmp Quartz monzonite porphyry, pyrite common accessory
- Gbp Granite porphyry, biotitic, pyrite and magnetite common medium grained
- Gd Granodiorite, coarse grained
- G Granite, quartzose, coarse grained

LEGEND

- Diamond Drillhole Location
DDH 10
- KGd Outcrop and rock unit
- TBA Felsenmeer, scree, regolith and rock unit
- Bulldozed Trench
- X Zn, Pb Mineral Showing
- 10 Proposed Drill Site
- Grid Lines
1970, feet, shown in black
1986, metres, shown in blue



PAN OCEAN EXPLORATIONS LTD.

TAD/TORO PROPERTY

FIG. 7
PROPOSED DRILL SITES

NTS: 115 I/2	Datum: NAD 27
Mining District: Whitehorse	
Job: 99-1	Date: 21-Feb-99

AMEROK GEOSCIENCES LTD.

11.0 REFERENCES

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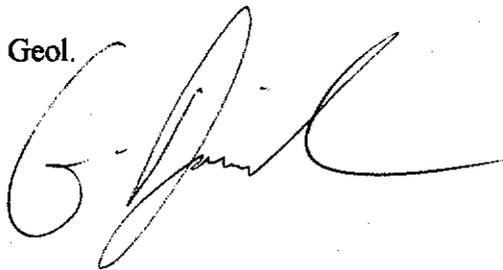
12.0 CERTIFICATE

I, GRAHAM DAVIDSON, of 1 Boswell Cr., Whitehorse, Yukon, Y1A 4T2, HEREBY CERTIFY:

1. That I am a consulting geologist and that I reviewed published and private reports and maps on the TORO property provided by Mr. Nicholson and that I worked on the subject property in 1996.
2. That I am a graduate of the University of Western Ontario (H. BSc., Geology, 1981).
3. That I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta (No.42038).
4. That I have been engaged in mineral exploration for fourteen years in the Yukon & Northwest Territories and British Columbia.

SIGNED at Whitehorse, Yukon, this 15th day of October 2000.

G. S. DAVIDSON, P. Geol.

A handwritten signature in black ink, appearing to read 'G. S. Davidson', written over the typed name.

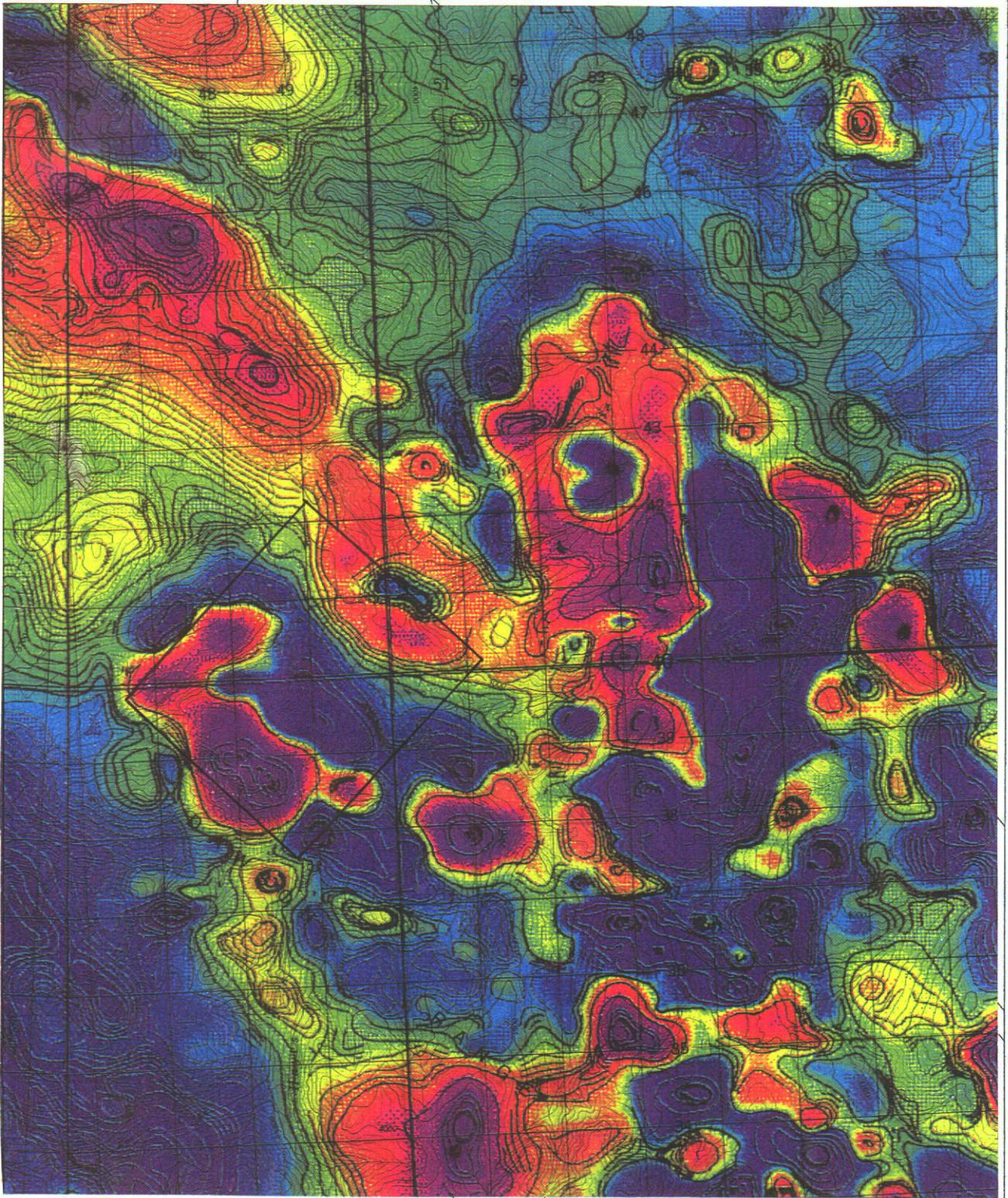
13.0 STATEMENT OF COSTS

Period: May 7, 1999 to May 7, 2000

Amerok Geosciences: geophysical data compilation and digitizing	\$1,717.35
Amerok Geosciences: geochemical data compilation and map plotting	1,896.55
Amerok Geosciences: geology, drill sites and plotting	1,080.70
Geological Drafting Services:	47.08
Report and compilation of data:	2,100.00
Property visist, B. Harris, Oct/ 1999:	<u>750.00</u>
TOTAL COSTS:	\$7,591.68

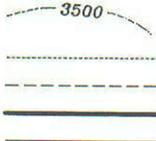
A handwritten signature in black ink, appearing to be 'G. David', written in a cursive style.

APPENDIX - FIGURES 8-19



LEGEND

- elevation contour interval, (500 feet)
- stream, creek
- road, trail
- claim group boundary
- claim line



094126



PAN OCEAN EXPLORATIONS INC

**TORO PROPERTY
RESIDUAL TOTAL MAGNETIC FIELD**

Graham Davidson, Consulting Geologist

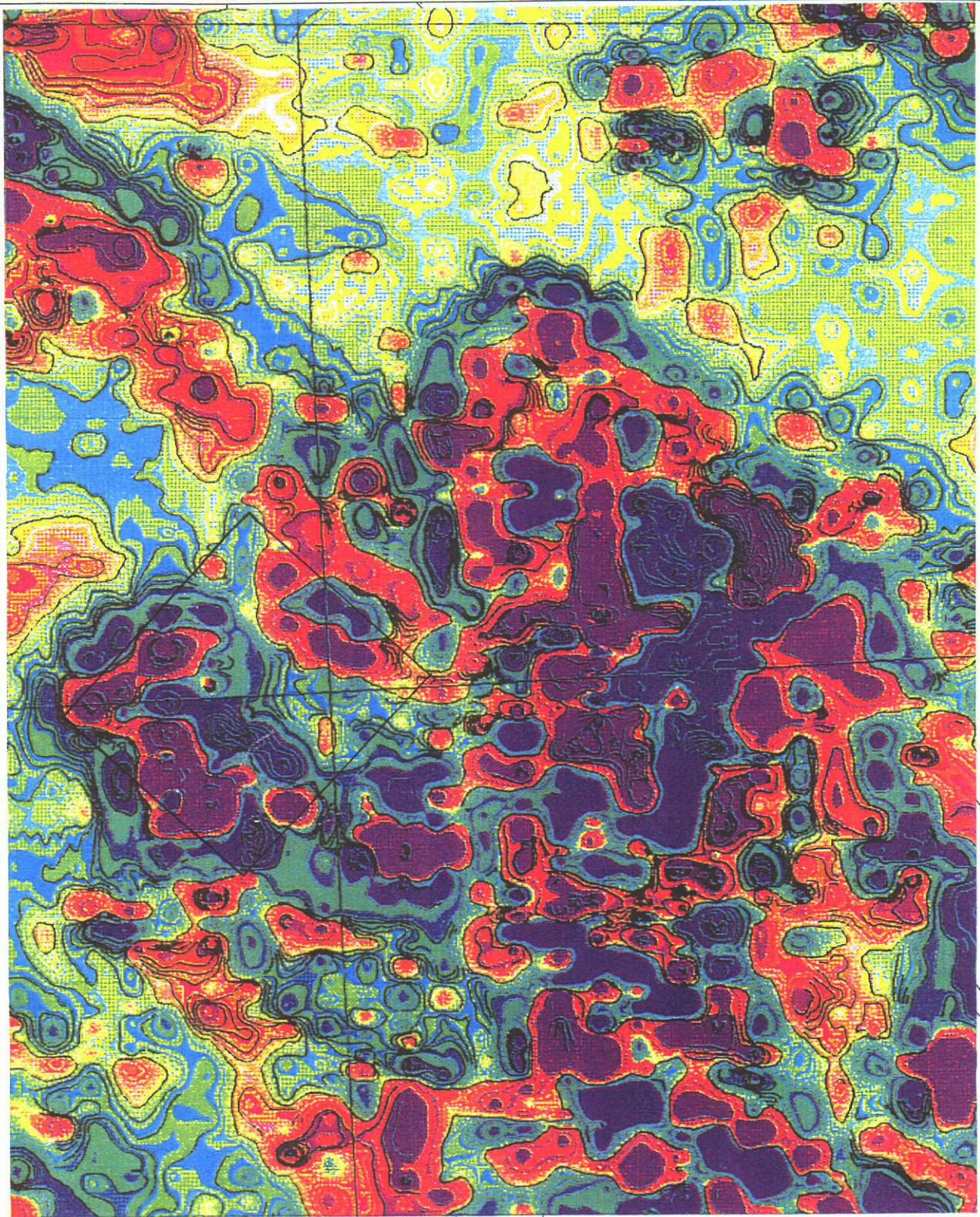
SCALE: 1 : 75,000

DATE: 97.04.23

NTS: 115 1/12

DRAWN:

FIGURE 8



LEGEND

elevation contour
interval, (500 feet)

stream, creek

road, trail

claim group boundary

claim line

3500

094126



PAN OCEAN EXPLORATIONS INC

**TORO PROPERTY
VERTICAL MAGNETIC GRADIENT**

Graham Davidson, Consulting Geologist

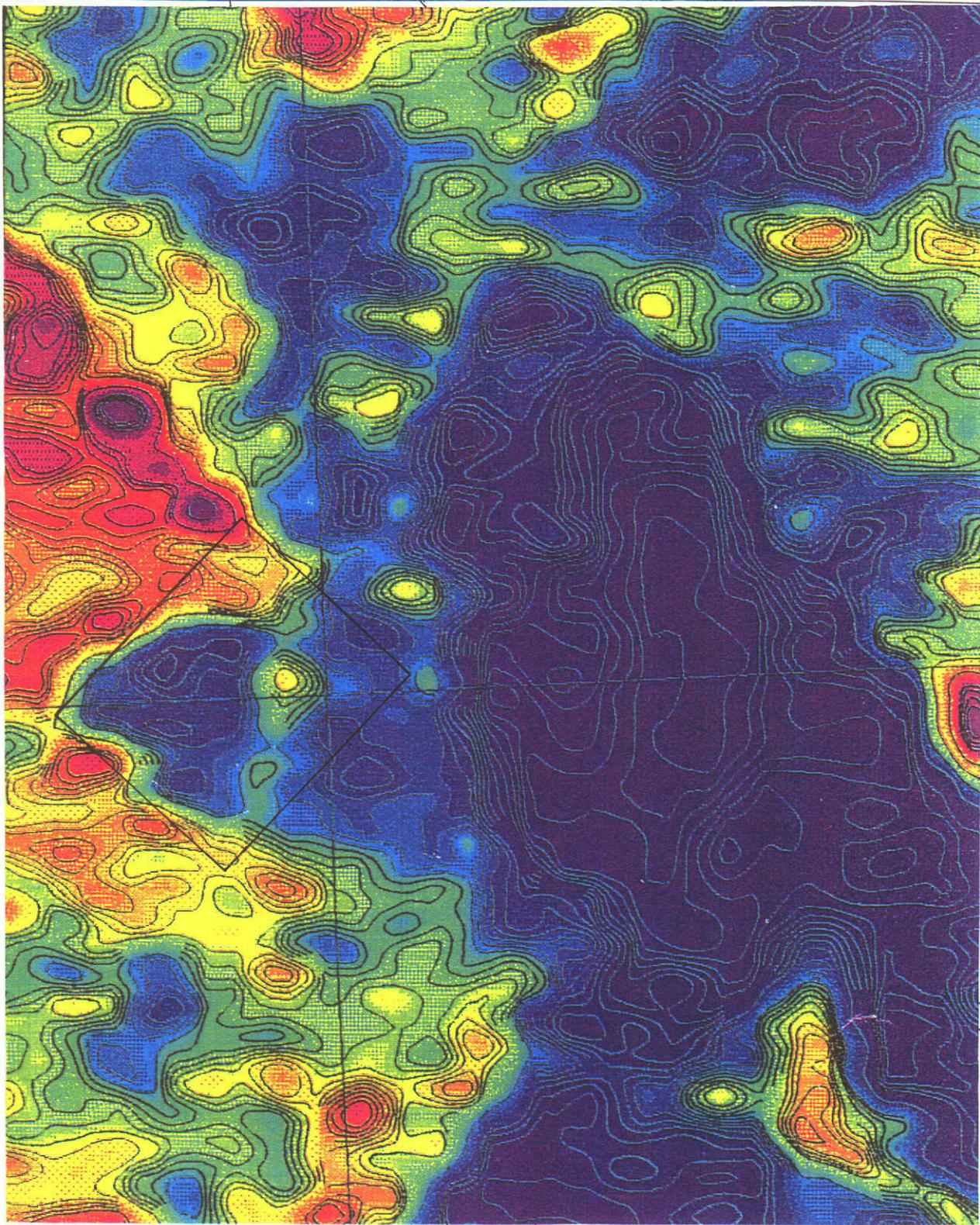
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DATE: 97.04.23

NTS: 115 I/12

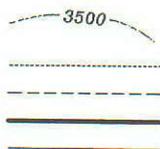
DRAWN:

FIGURE 9



LEGEND

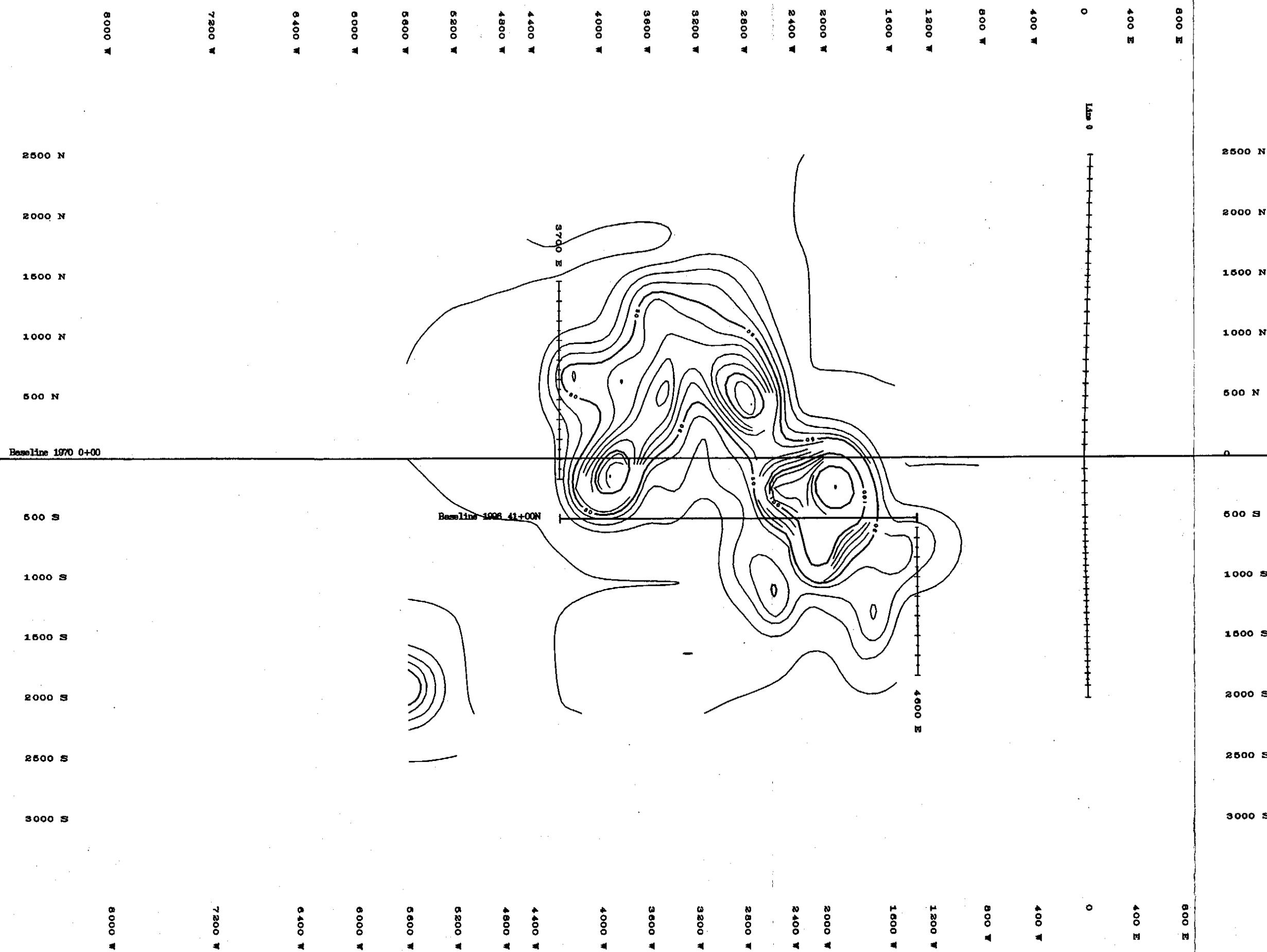
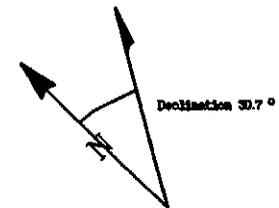
- elevation contour interval, (500 feet)
- stream, creek
- road, trail
- claim group boundary
- claim line



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PAN OCEAN EXPLORATIONS INC		
TORO PROPERTY		
eTHORIUM / POTASSIUM (x10⁴)		
<i>Graham Davidson, Consulting Geologist</i>		
SCALE: 1 : 75,000		DATE: 97.04.23
NTS: 115 1/12	DRAWN:	FIGURE 10



GOLD (ppb)
CONTOUR INTERVALS: 10, 50, 250 ppb

GRID CELL SIZE: 30m



Scale: 1 :10,000

PAN OCEAN
EXPLORATIONS LTD.

TAD/TORO PROPERTY

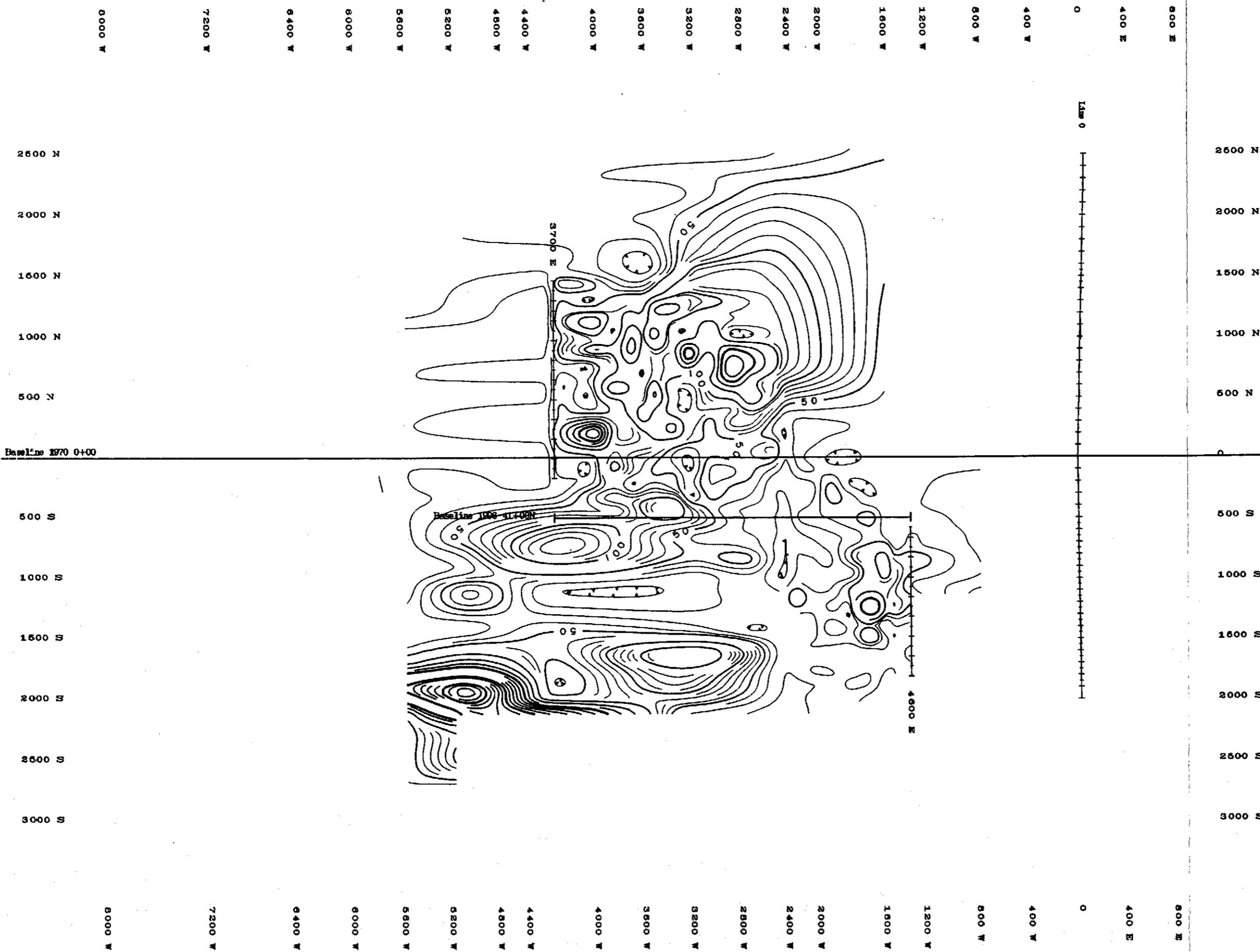
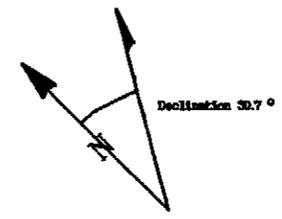
Fig. 11
SOIL GEOCHEMISTRY
GOLD

NTS: 115 I/2 Datum: NAD 27

Mining District: Whitehorse

Job: 99-1 Date: 16-Feb-99

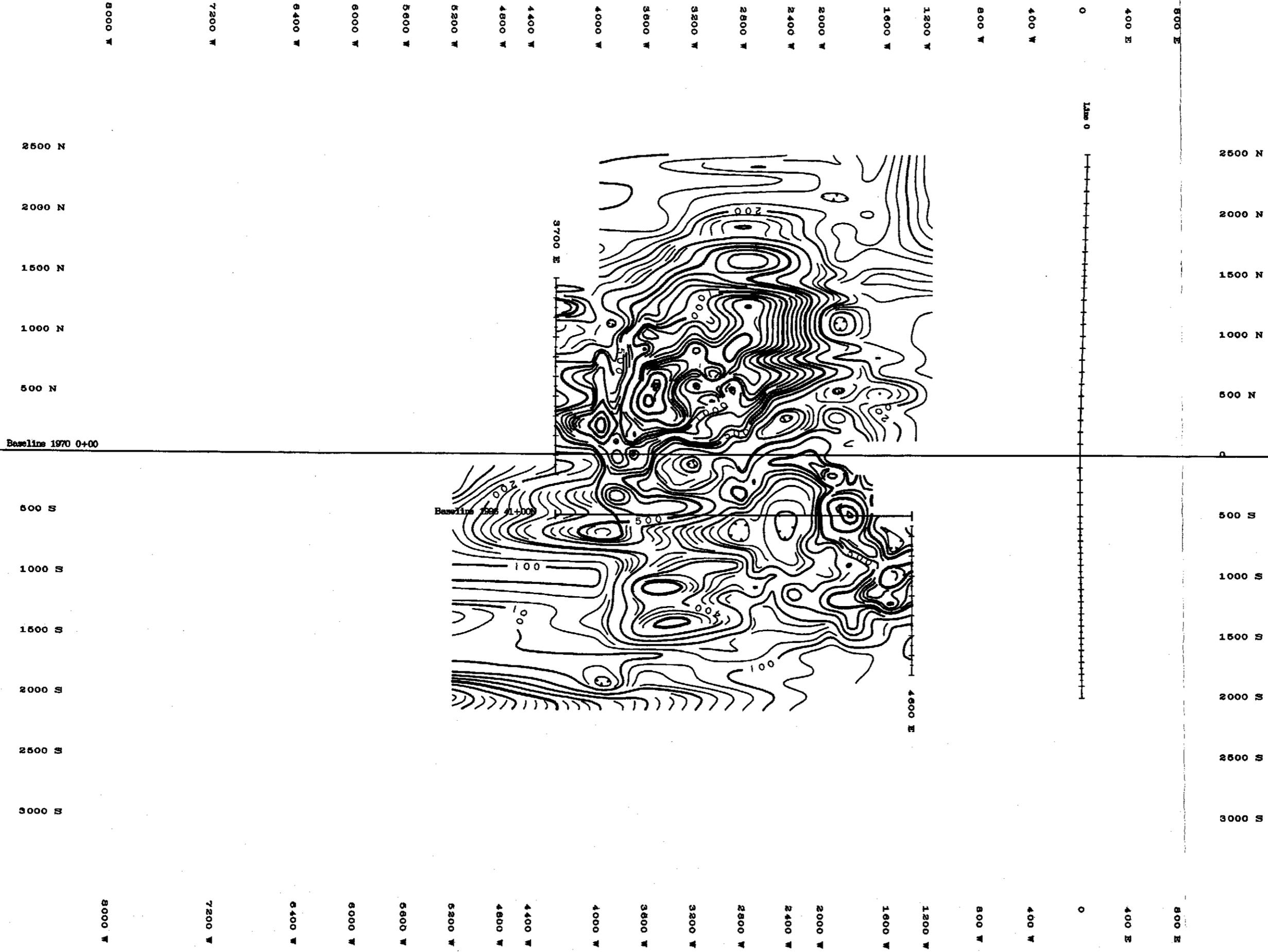
AMEROK GEOSCIENCES LTD.



 ARSENIC (ppm)
 CONTOUR INTERVALS: 10, 50, 250 ppm
 GRID CELL SIZE: 10m

 Scale: 1 : 10,000

PAN OCEAN
 EXPLORATIONS LTD.
 TAD/TORO PROPERTY
 Fig. 12
 SOIL GEOCHEMISTRY
 ARSENIC
 NTS: 115 I/2 Datum: NAD 27
 Mining District: Whitehorse
 Job: 99-1 Date: 16-Feb-99
 AMEROK GEOSCIENCES LTD.



ZINC (ppm)

CONTOUR INTERVALS: 25, 100, 500 ppm

GRID CELL SIZE: 10m

Scale: 1 : 10,000

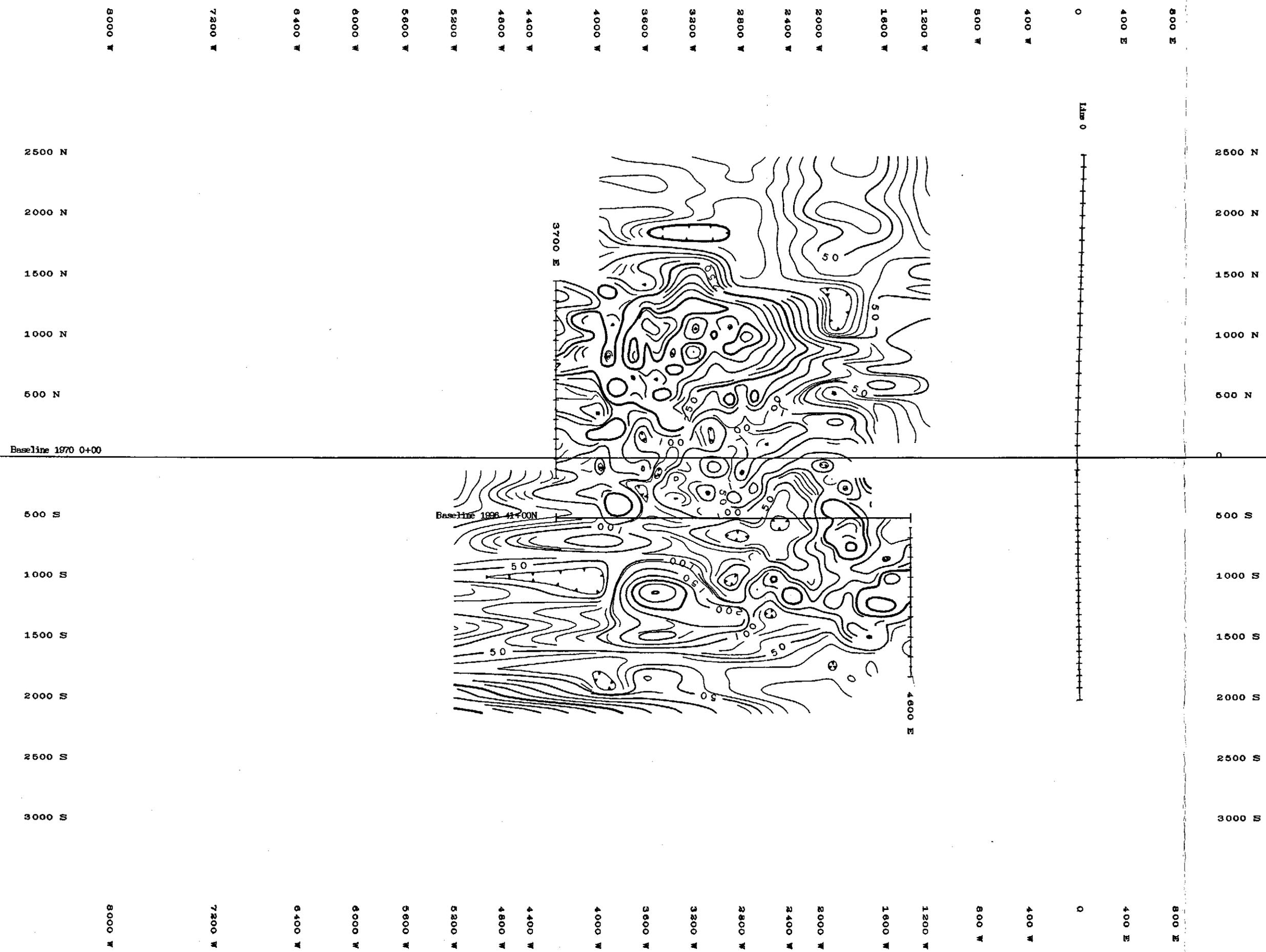
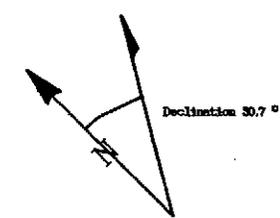
PAN OCEAN
EXPLORATIONS LTD.

TAD/TORO PROPERTY

Fig. 13
SOIL GEOCHEMISTRY
ZINC

NTS: 115 I/2	Datum: NAD 27
Mining District: Whitehorse	
Job: 99-1	Date: 16-Feb-99

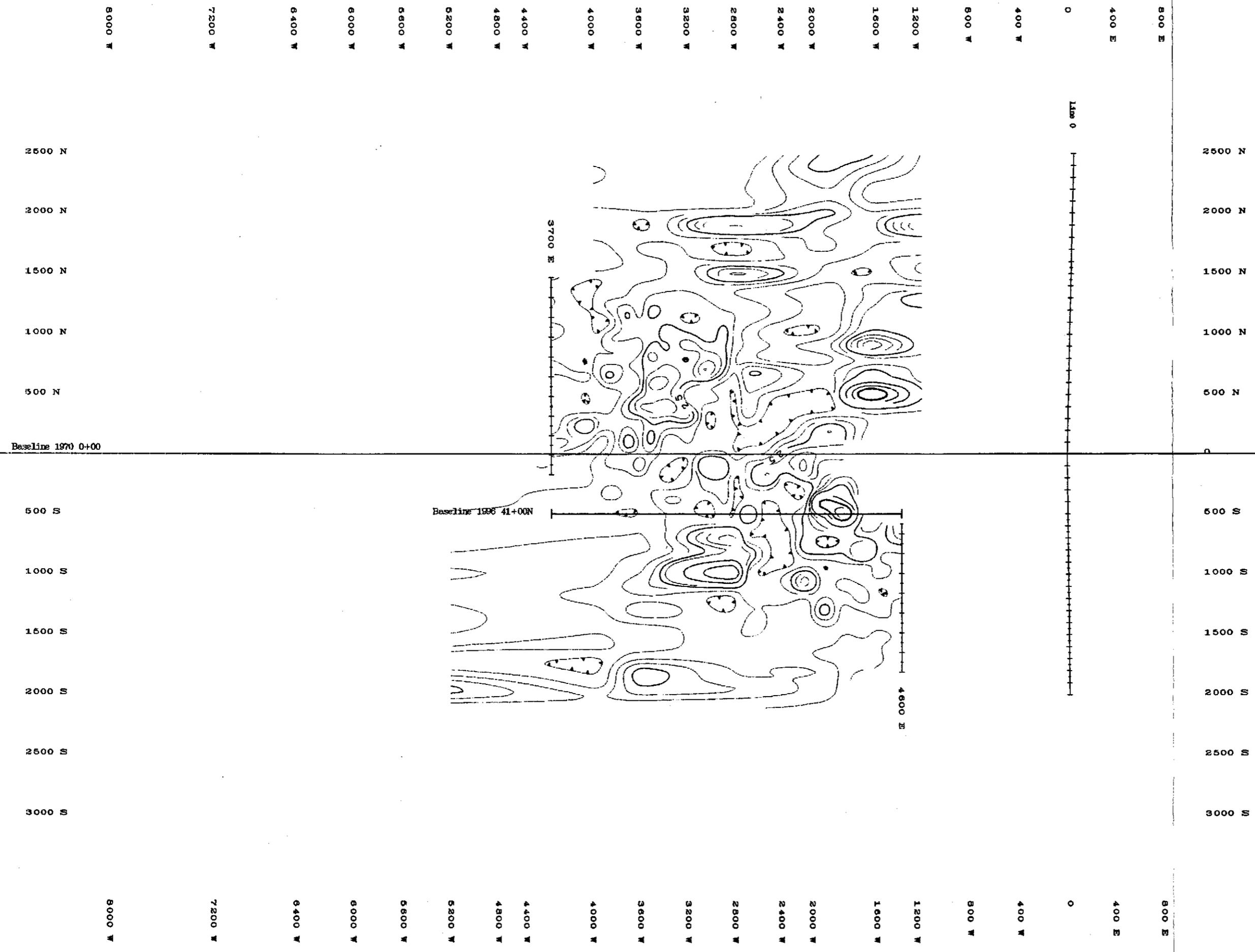
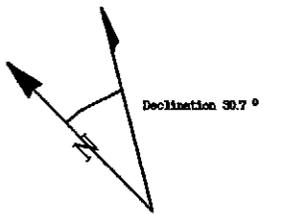
AMEROK GEOSCIENCES LTD.



 LEAD (ppm)
 CONTOUR INTERVALS: 10, 50, 250 ppm
 GRID CELL SIZE: 10m

 metres
 Scale: 1 : 10,000

PAN OCEAN
 EXPLORATIONS LTD.
 TAD/TORO PROPERTY
Fig. 14
 SOIL GEOCHEMISTRY
 LEAD
 NTS: 115 I/2 Datum: NAD 27
 Mining District: Whitehorse
 Job: 99-1 Date: 16-Feb-99
 AMEROK GEOSCIENCES LTD.



COPPER (ppm)
 CONTOUR INTERVALS: 5, 25, 100 ppm

GRID CELL SIZE: 10m



Scale: 1 :10,000

PAN OCEAN
 EXPLORATIONS LTD.

TAD/TORO PROPERTY

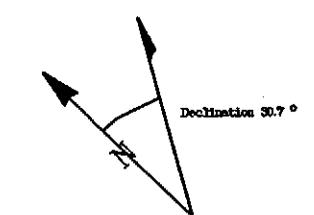
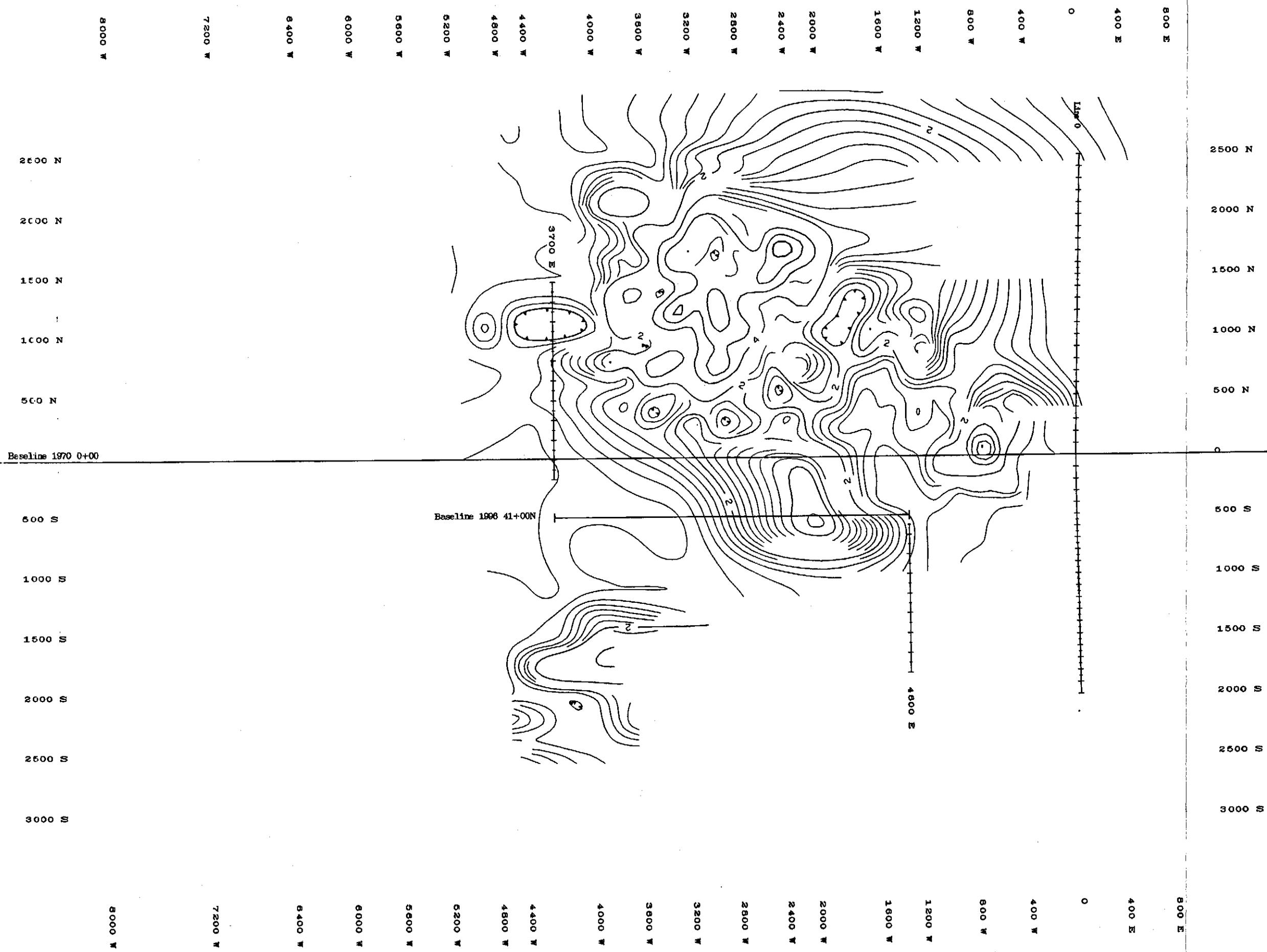
Fig. 15
 SOIL GEOCHEMISTRY
 COPPER

NTS: 115 I/2 | Datum: NAD 27

Mining District: Whitehorse

Job: 99-1 | Date: 16-Feb-99

 AMEROK GEOSCIENCES LTD.



2500 N
2000 N
1500 N
1000 N
500 N
0
500 S
1000 S
1500 S
2000 S
2500 S
3000 S

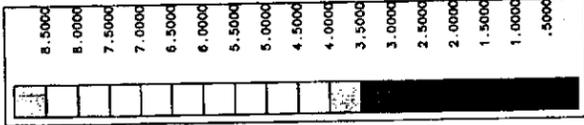
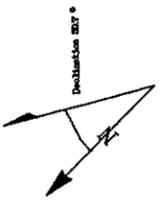
SILVER (ppm)
CONTOUR INTERVALS: 0.25, 2.0, 10 ppm
GRID CELL SIZE: 30m
Scale: 1 : 10,000



PAN OCEAN
EXPLORATIONS LTD.
TAD/TORO PROPERTY
Fig. 16
SOIL GEOCHEMISTRY
SILVER

NTS: 115 I/2 Datum: NAD 27
Mining District: Whitehorse
Job: 99-1 Date: 16-Feb-99

AMEROK GEOSCIENCES LTD.



chargeability - ms
a = 400 feet

Contour Interval: 1.5 milliseconds

Grid Cell Size: 60m

NOTE: Line and Station Labels in Feet



Scale: 1:25,000

PAN OCEAN
EXPLORATIONS INC.

TAD/TORO PROPERTY

Fig. 1
INDUCED POLARIZATION SURVEY

APPARENT CHARGEABILITY

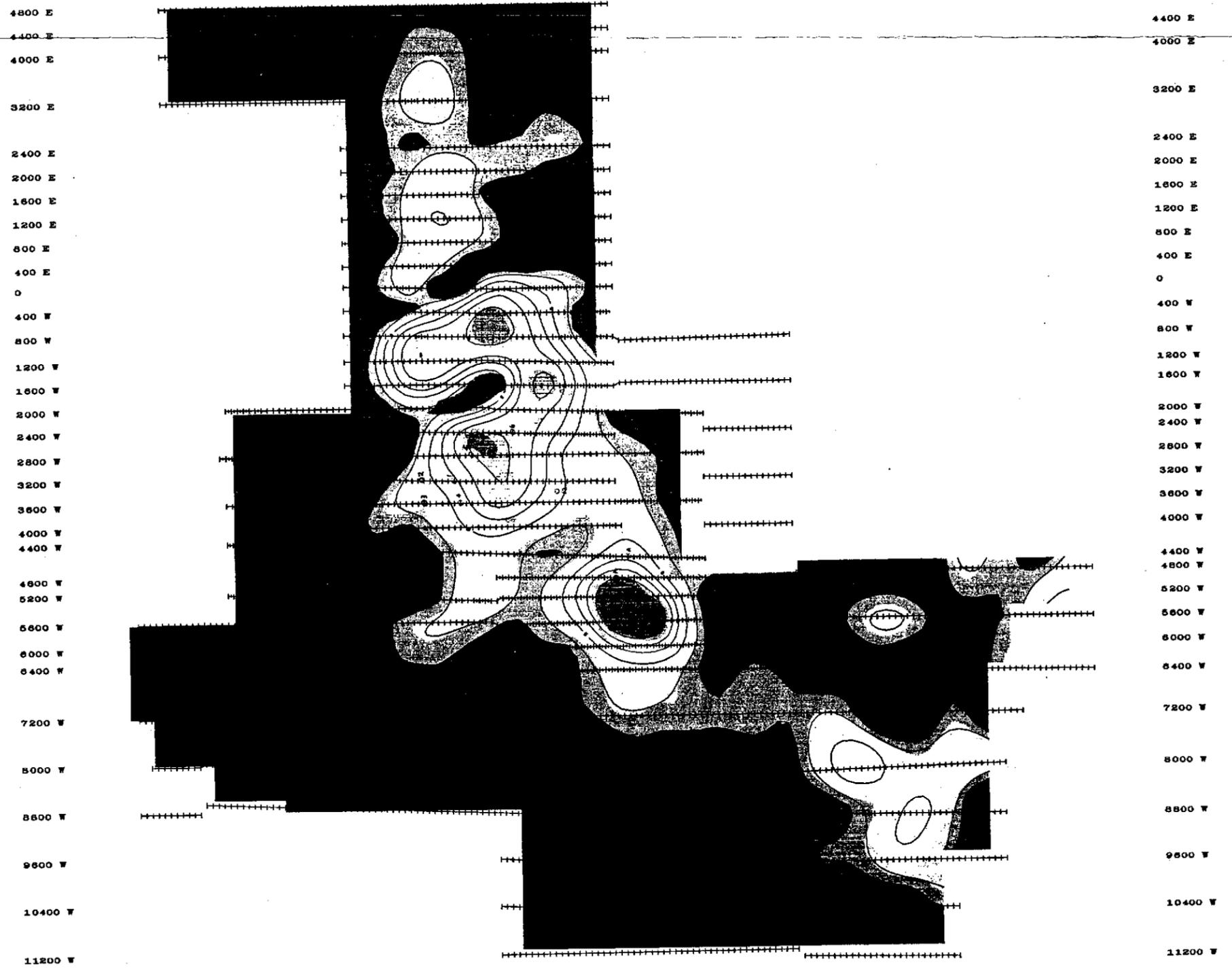
CONTOUR MAP

NTS: 115 I/12 Datum: NAD 27
Mining District: Whitehorse

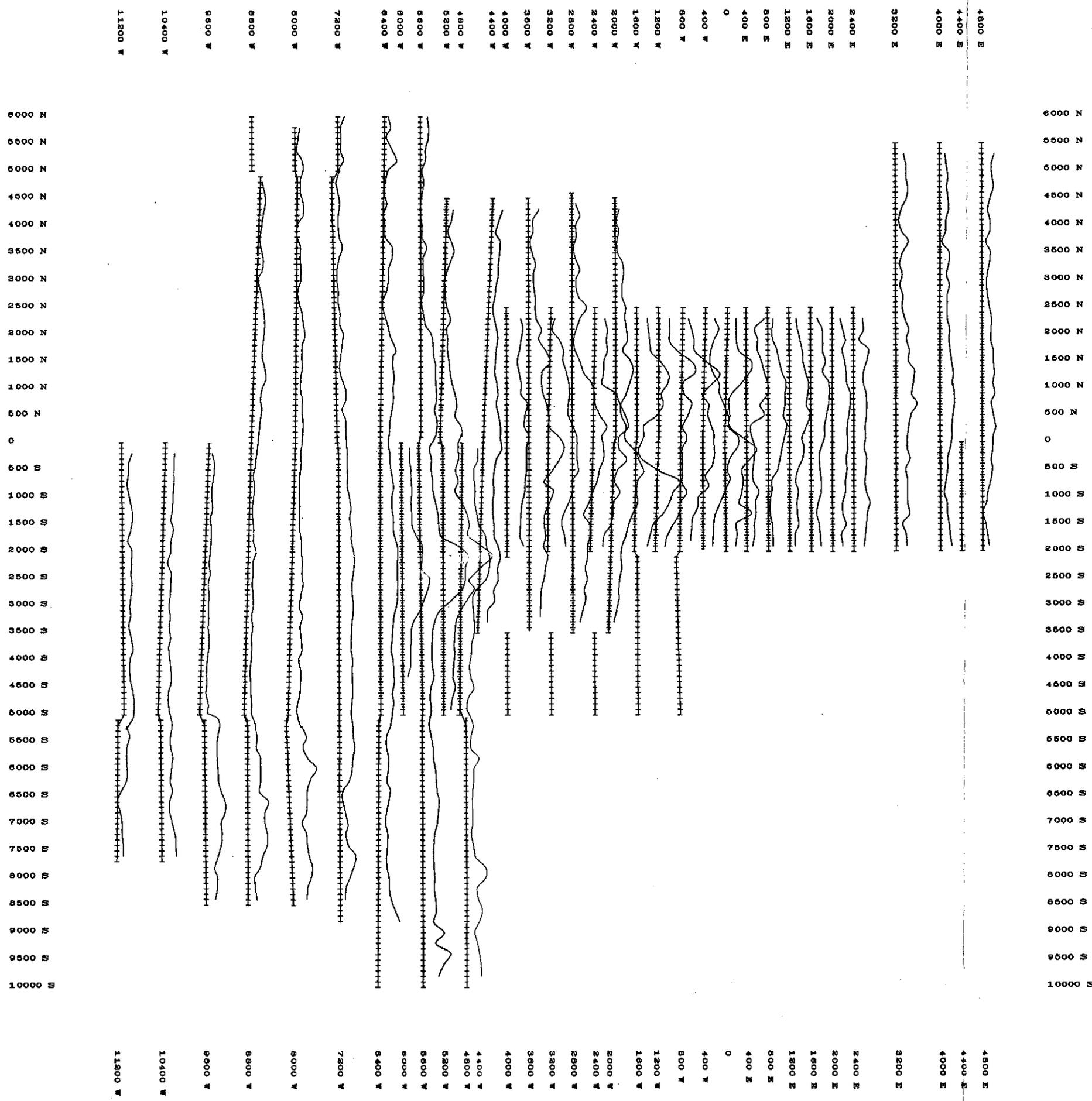
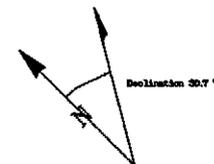
Job: 88-1 Date: 21-Jan-88

AMEPROK GEOSCIENCES LTD.

6000 N
5500 N
5000 N
4500 N
4000 N
3500 N
3000 N
2500 N
2000 N
1500 N
1000 N
500 N
0
500 S
1000 S
1500 S
2000 S
2500 S
3000 S
3500 S
4000 S
4500 S
5000 S
5500 S
6000 S
6500 S
7000 S
7500 S
8000 S
8500 S
9000 S
9500 S
10000 S



6000 N
5500 N
5000 N
4500 N
4000 N
3500 N
3000 N
2500 N
2000 N
1500 N
1000 N
500 N
0
500 S
1000 S
1500 S
2000 S
2500 S
3000 S
3500 S
4000 S
4500 S
5000 S
5500 S
6000 S
6500 S
7000 S
7500 S
8000 S
8500 S
9000 S
9500 S
10000 S



IP Survey
a = 400 feet

Profiles
Right of Line - Positive
Profile Scale: 1 cm = 5 ms
Base Level - 0 ms

NOTE: Line and Station Labels in Feet



Scale: 1:25,000

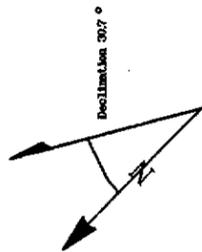
PAN OCEAN
EXPLORATIONS INC.
TAD/TORO PROPERTY
FIG. 18
INDUCED POLARIZATION SURVEY
APPARENT CHARGEABILITY
STACKED PROFILES

NTS: 115 I/12 Datum: NAD 27

Mining District: Whitehorse

Job: 99-1 Date: 17-Feb-99

AMEROK GEOSCIENCES LTD.



1851.70
1366.80
1236.10
1132.10
949.30
884.00
842.30
817.70
801.00
786.20
773.20
761.00
751.80
738.50
728.80
718.00
695.80
683.10
668.90
656.80
637.90
622.40
604.50
576.90
536.10
483.00
389.20
228.20

mf

GRID CELL SIZE: 30m

Note: Line and Station Labels in feet.
data from 1970 INS survey



Scale: 1 : 10,000

PAN OCEAN
EXPLORATIONS LTD.

TAD/TORO PROPERTY

RELATIVE VERTICAL
MAGNETIC FIELD

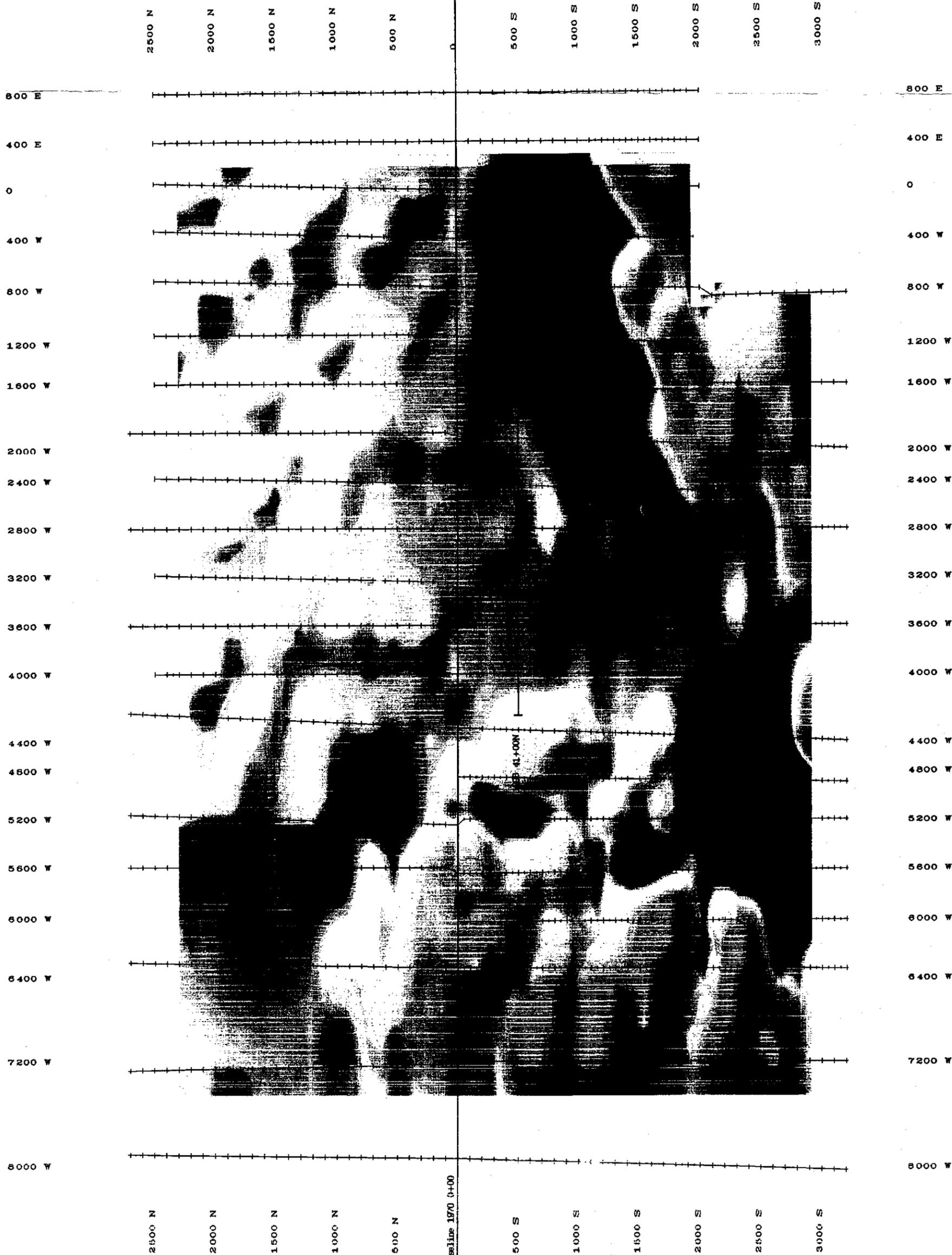
SHADED CONTOUR MAP

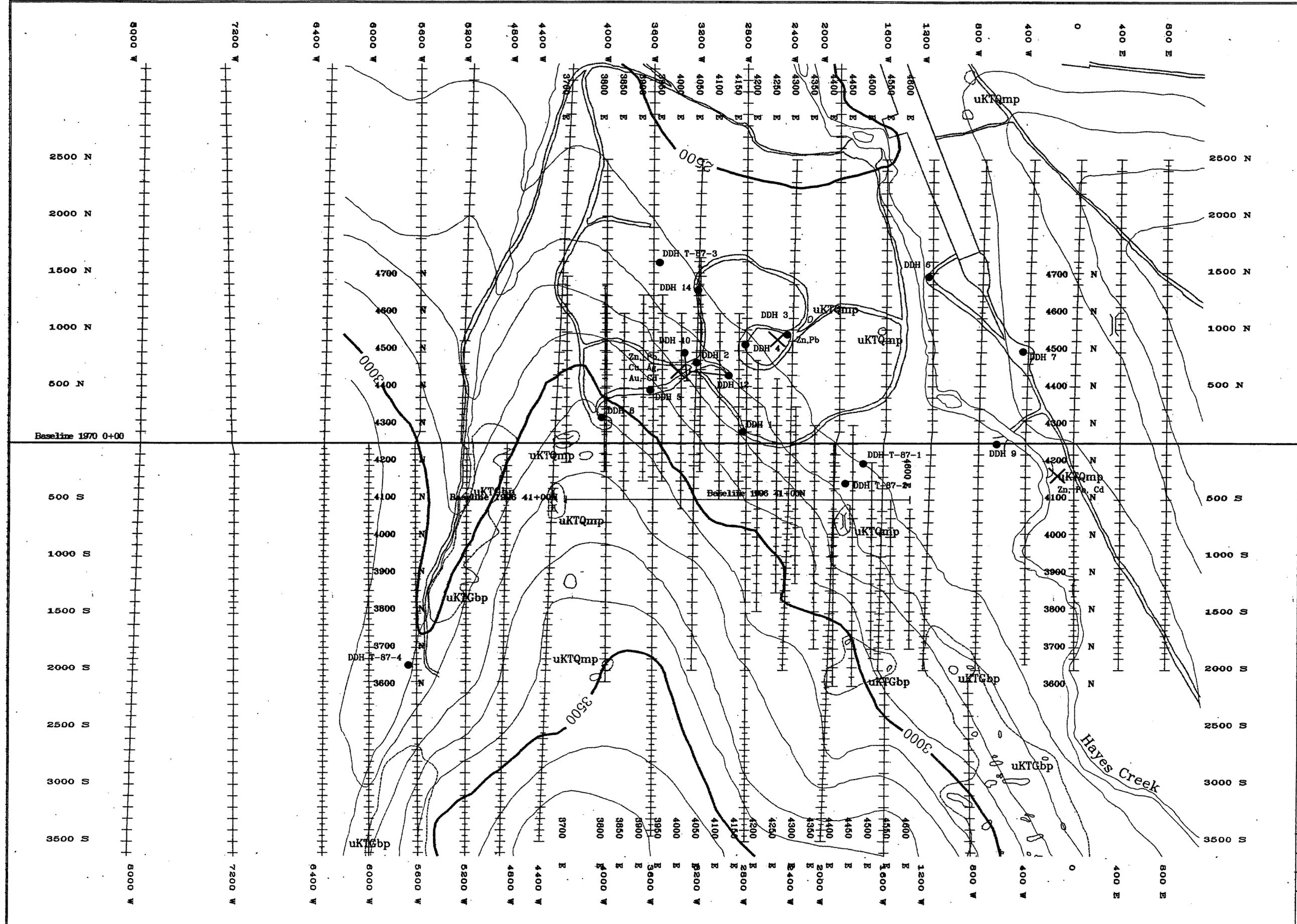
NTS: 115 I/2 Datum: NAD 27

Mining District: Whitehorse

Job: 89-1 Date: 16-Feb-98

AMEROK GEOSCIENCES LTD.





GEOLOGY

- TERTIARY**
Carmacks Volcanics
- Ba Basalt, porphyry, minor
- CRETACEOUS**
Intrusives
- Qmp Quartz monzonite porphyry, pyrite common accessory
 - Gbp Granite porphyry, biotitic, pyrite and magnetite common medium grained
 - Gd Granodiorite, coarse grained
 - G Granite, quartzose, coarse grained

LEGEND

- Diamond Drillhole Location
- DDH 10
- KGd Outcrop and rock unit
- TBa Felsenmeer, scree, regolith and rock unit
- Bulldozed Trench
- ✕ Zn, Pb Mineral Showing

094126

Grid Lines
1970, feet, shown in black
1996, metres, shown in blue

CONTOUR INTERVAL: 100 feet



Scale: 1 : 5,000

PAN OCEAN
EXPLORATIONS LTD.
TAD/TORO PROPERTY
PROPERTY GEOLOGY MAP

NTS: 115 I/2 Datum: NAD 27
Mining District: Whitehorse
Job: 99-1 Date: 21-Feb-99

AMEROK GEOSCIENCES LTD.