MineQuest Report #215
Ref. No. RM5302

GEOPHYSICS, TRENCHING AND REVERSE CIRCULATION DRILLING on the ASTRO 1 GROUP

Osoyoos Mining Division

N.T.S. 82E/5W

Latitude 49° 22' N
Longitude 119° 48' W

by
Tim Sandberg
and
Linda J. Lee

MineQuest Exploration Associates Ltd.

for
QPX Minerals Inc.

Claim Name	Record Number	Number of Units	Record Date
Astro 1 Group			
Ford 2	3002	18	02 Sept 1988
Akira I	2912	3	14 June 1988
Akira II Fr	2913	1	14 June 1988
Astro 1	213	12	09 Mar. 1977
Astro 33	245	20	09 Mar. 1977
Astro 34	246	20	09 Mar. 1977

Vancouver, B.C. February, 1989
MineQuest Exploration Associates Ltd.

ARIS SUMMARY SHEET

District Geologist, Nelson — Off Confidential: 90.02.28

ASSESSMENT REPORT 18527 — MINING DIVISION: Osoyoos

PROPERTY: Astro
LOCATION: LAT 49 22 00 LONG 119 48 00
UTM 11 5471769 296714
NTS 082E05W
CLAIM(S): Astro 34
OPERATOR(S): QPX Min.
AUTHOR(S): Sandberg, T.;Lee, L.J.
REPORT YEAR: 1989, 95 Pages
COMMODITIES
SEARCHED FOR: Gold,Silver
KEYWORDS: Paleozoic,Marron Formation,Kitley Lake Member,Andesite Feldspar Porphyry,Conglomerate,Chalcedony,Pyrite Argillic Alteration
WORK
DONE: Geophysical,Drilling,Physical,Geochemical
EMGR 5.0 km;VLF
Map(s) - 1; Scale(s) - 1:2000
LINE 5.0 km
MAGG 5.0 km
Map(s) - 2; Scale(s) - 1:2000
PERD 248.0 m 5 hole(s)
Map(s) - 1; Scale(s) - 1:500
ROAD 0.6 km
SAMP 177 sample(s) ;AU,ME
Map(s) - 2; Scale(s) - 1:200,1:1000
SCGR 0.6 km
Map(s) - 1; Scale(s) - 1:500
TREN 150.0 m 5 trench(es)
RELATED
REPORTS: 13199,14062,16674,18284
MINFILE: 082ESW190

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Vancouver, B.C. February, 1989

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* External Plan Number

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1.0 INTRODUCTION

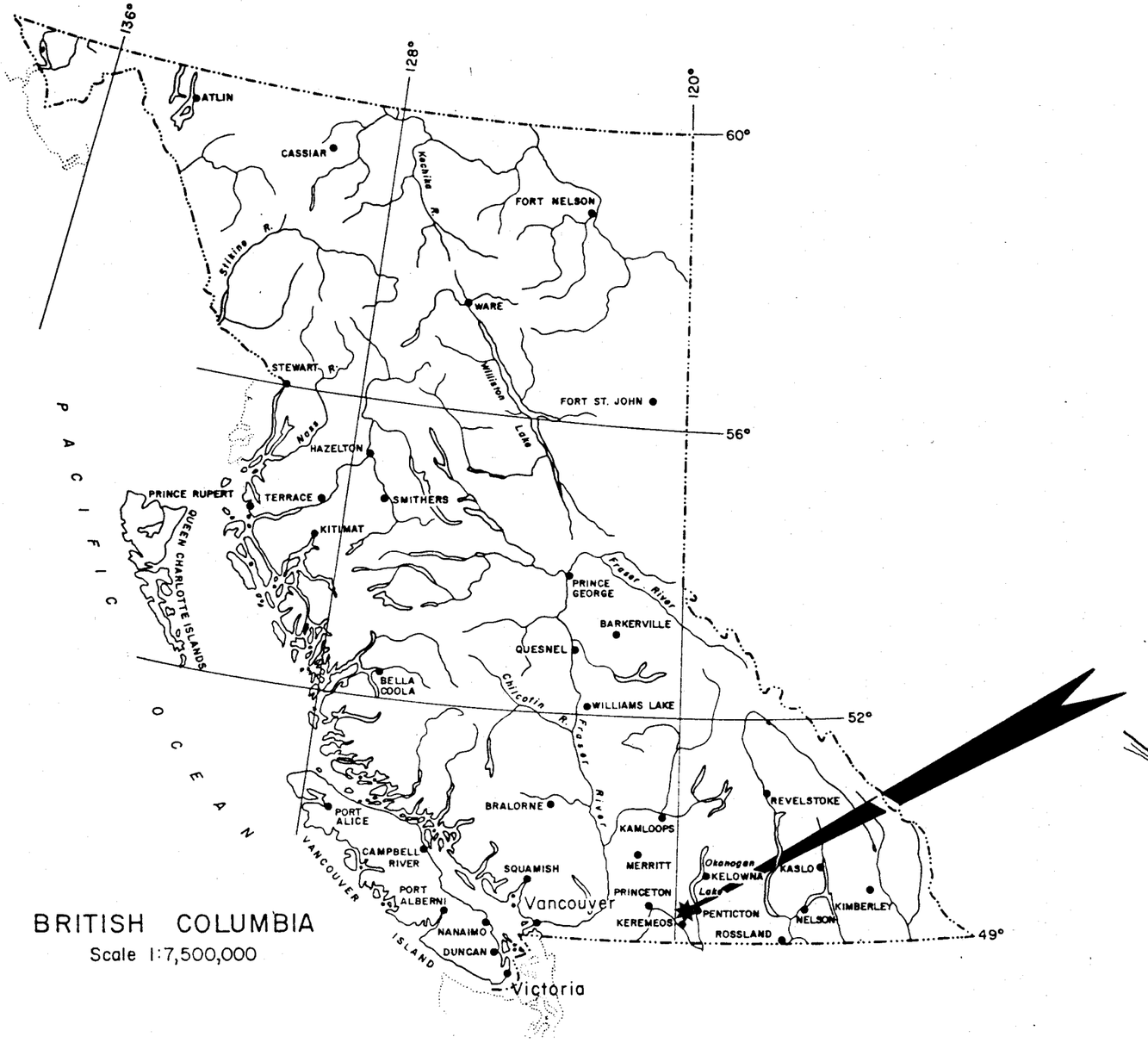
1.1 Location, Access and Terrain

The PDL and Astro Groups are located near Ford (Fish) Lake which lies about 4 km east of Dividend Mountain in the Keremeos Creek valley (see Figure 1). The property is centered at about 49°22' N, 119°48'W, in NTS 82E/5W. Access to the property is good. The Green Mountain Road, a major gravel road, passes through the PDL claim near its western edge. The road can be reached from Highway 3A, about 13 km north of Keremeos. The property is located about 7.5 km by road from this intersection. Alternately, the property can be reached by following the Apex Alpine Ski Resort road west from Penticton, a distance of about 20 km. The eastern portion of the property can also be accessed by a network of four-wheel drive roads, which lead northwest from Highway 3A, between Yellow Lake and Trout Lake. The southern and eastern portions of the Ford 1 and 2 claims can be reached by the B.C. Hydro access road which heads west from Highway 3A, a short distance south of Yellow Lake.

The topography on the PDL property is generally rugged. Western portions of the claims consist of near vertical cliffs and steep talus slopes. To the east the topography is somewhat more subdued, with moderate to gentle slopes.

1.2 Claim Status

The PDL and Astro Groups collectively consist of 19 mineral claims held by QPX Minerals Inc. as shown in Figure 2 and listed below. The claims are controlled in part by an option agreement with Placer Development Limited and in part by an option agreement with Petro-Canada Inc. The area of interest clause of the Placer Option incorporates a portion of the Petro-Canada claims. A number of additional claims were acquired by QPX Minerals Inc. by staking. Several of these claims lie within the Area of Interest subject to the Placer Development Limited option while others are controlled entirely by QPX Minerals Inc. The following table summaries the ownership of the claims.



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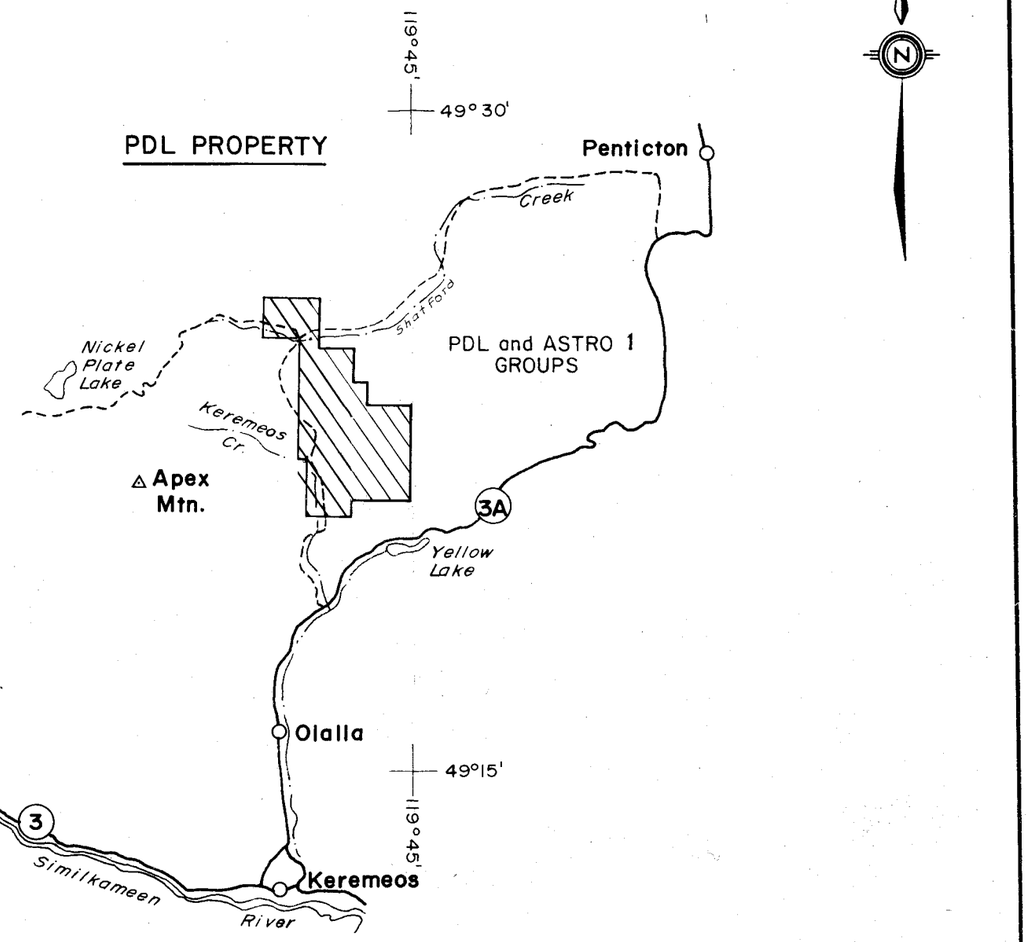
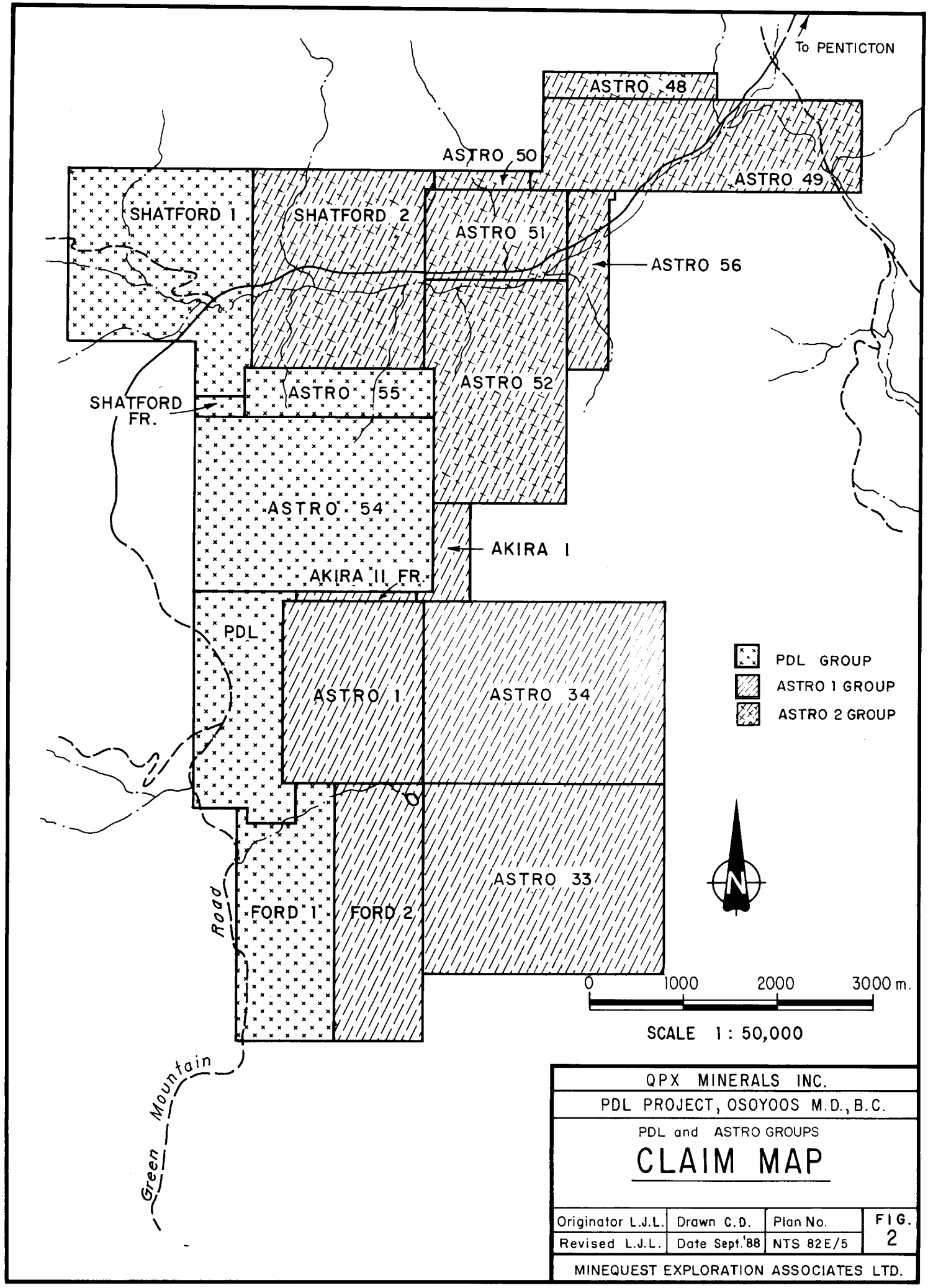


Scale 1:250,000
0 5 10 15 20km

QPX MINERALS INC.			
PDL PROJECT-OSOYOOS M.D., B.C.			
LOCATION MAP			
PLAN No. ES-112	DRAWN T. A. D. S.	DATE JUNE, 87	FIGURE 1
Originator: G.R.P.		N.T.S. 82E/5W	
MINEQUEST EXPLORATION ASSOCIATES LTD.			



QPX MINERALS INC.

PDL PROJECT, OSOYOOS M.D., B.C.

PDL and ASTRO GROUPS

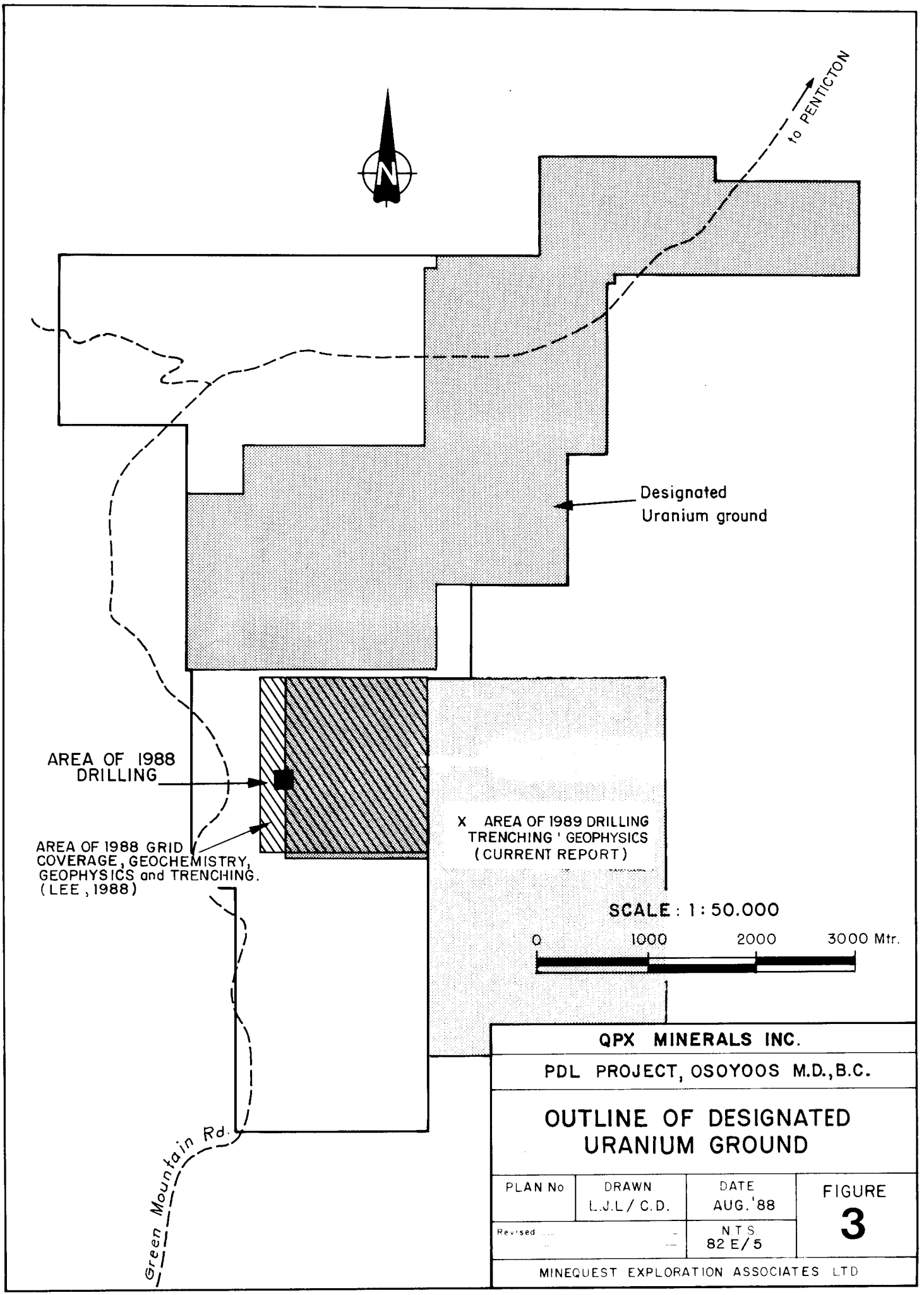
CLAIM MAP

Originator L.J.L.	Drawn C.D.	Plan No.	FIG. 2
Revised L.J.L.	Date Sept.'88	NTS 82E/5	

MINEQUEST EXPLORATION ASSOCIATES LTD.

Claim Name	Record Number	Number of Units	Record Date	Due Date before Submission of this Report	Agreements Controlling Claims
PDL Group					
Ford 1	2639	14	06 July 1987	06 July 1992	QPX/Placer Dev.
PDL	1963	15	23 Dec. 1983	23 Dec. 1992	Placer Dev.
Astro 54	618	20	05 Jan. 1979	05 Jan. 1991	Petro-Canada/ Placer Dev.
Astro 55	619	4	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Shatford Fr	2758	1	09 Nov. 1987	09 Nov. 1992	QPX Minerals
Shatford 1	2756	20	09 Nov. 1987	09 Nov. 1992	QPX Minerals
Astro 1 Group					
Ford 2	3002	18	02 Sep. 1988	02 Sept 1992	QPX/Placer Dev.
Akira I	2912	3	14 June 1988	14 June 1992	QPX/Placer Dev.
Akira II Fr	2913	1	14 June 1988	14 June 1992	QPX/Placer Dev.
Astro I	213	12	09 Mar. 1977	09 Mar. 1991	Petro-Canada/ Placer Dev.
Astro 33	245	20	09 Mar. 1977	09 Mar. 1991	Petro-Canada
Astro 34	246	20	09 Mar. 1977	09 Mar. 1991	Petro-Canada
Astro 2 Group					
Astro 48	612	04	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Astro 49	613	14	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Astro 50	614	02	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Astro 51	615	06	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Astro 52	616	15	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Astro 56	620	04	05 Jan. 1979	05 Jan. 1991	Petro-Canada
Shatford 2	2757	20	09 Nov. 1987	09 Nov. 1991	QPX Minerals

The Astro claims, under option from Petro-Canada, were originally staked during the period 1977 - 1979. At this time, exploration on the claims was directed towards uranium and thorium. Although no uranium or thorium was found, the claims were classed as designated uranium ground under the Uranium Moratorium. Since the termination of the Moratorium in February of 1987, the claims remain classed as designated uranium ground even though exploration is presently directed towards precious metals. As a result, all exploration on these claims (outlined in Figure 3) is governed by the Exploration Regulation - Uranium and Thorium (Order in Council No. 335).



QPX MINERALS INC.

PDL PROJECT, OSOYOOS M.D., B.C.

OUTLINE OF DESIGNATED URANIUM GROUND

PLAN No	DRAWN	DATE	FIGURE
	L.J.L / C.D.	AUG. '88	3
Revised		N.T.S. 82 E/5	

MINEQUEST EXPLORATION ASSOCIATES LTD

1.3 Property Definition and History

The PDL property is located in an area which has been extensively explored for a number of different minerals since the late 1800's. There have been many significant deposits in the region, the largest of these being the Giant Mascot gold mine and related deposits at Hedley (MinFile 92HSE 36,38,144). Gold was also discovered on nearby Dividend and Apex Mountains in the early 1900's. Some production has been recorded from these showings which are primarily hosted in Triassic or older skarn bodies (MinFile 82 ESW 47,48,124). Numerous other gold showings are located in the area, including the Reno and Star of Hope/Yuniman properties (MinFile 82ESW 123,51). In these deposits gold occurs in pyrite/arsenopyrite stringers in east-west and northeast trending fracture systems (Exploration in B.C., 1985; Di Spirito, et al, 1985). Several deposits from which a significant amount of gold, silver and molybdenum was shipped were discovered at Olalla in the 1920's (MinFile 82ESW 15, 16; Little, 1961). These deposits are related to quartz veining in the large pyroxenite intrusion at Olalla. In the late 1960's there was renewed interest in the area for copper exploration in particular on the Papex/Kopr/Paychex showings (MinFile 82ESW 49,50; Exploration in B.C., 1967). Here, sulphide mineralization is primarily disseminated, although some sulphides occur with quartz as fracture fillings. Mineralization is hosted in metasediments of the Paleozoic Old Tom and Shoemaker Formations.

On the PDL claim, there is evidence of previous work in the Pre-Tertiary rocks but no published record of this work exists. A short (about 10m) adit at the base of the cliffs cross-cuts a small massive sulphide lens. According to a local prospector (L. Reichert, personal communication), this adit was dug in the 1930's. Near the adit, a casing with flowing water marks the position of an inclined diamond drill hole. Above this, at the top of the cliffs, several bulldozer trenches were excavated some years ago. One of these exposes another small massive sulphide pod. The diamond drilling and bulldozer work are believed to have both been done in 1971 (L. Reichert, personal communication) however, this work was not filed for assessment credit.

The PDL claim was staked in 1983 by Placer Development Ltd. In 1984 and 1985 Placer established a grid on the property, collected soil samples and ran geophysics (magnetometry and VLF-EM) over the grid. The geophysics was largely unsuccessful but several strong gold anomalies resulted from the geochemical program. The property was optioned to QPX Minerals Inc. in 1987. The 1987 work program by QPX was directed towards following up geochemical anomalies defined by Placer. In addition, geological mapping of the property was done. This work program, described in detail by Lee (1987), attributed previous geochemical anomalies to narrow gold bearing pyrite/arsenopyrite stringers found to outcrop on the property. Geological mapping and geochemical sampling suggested mineralization could be controlled by major N-S trending structures and that the ground to the north, south and east of the PDL claim was potentially of interest. As a result, several claims were staked and the Astro 1, 48-52 and 54-56 claims were acquired from Petro-Canada Inc.

The Astro claims were staked in 1977 and 1979 by Pacific Petroleum Ltd., now Petro-Canada Inc. Exploration was directed towards uranium and thorium and consisted of geological mapping, geochemistry, geophysics, and both diamond and rotary drilling. This work is described in Salazar (1979) and Racicot and Salazar (1980). Several generations of old claim posts have been discovered on ground underlain by Tertiary rocks on the Astro 1 claim. With the exception of a single diamond drill hole drilled in 1979 by Pacific Petroleum, no workings in these rocks have been found.

In the summer of 1988, QPX conducted a major work program on the PDL and Astro Groups. This work included geological mapping, soil sampling, geophysics and diamond drilling. The details of this program are described in Lee (1988). Drilling was successful in confirming an episode of Tertiary mineralization but did not encounter any economic gold values. A number of geochemical anomalies (coincident gold, arsenic, copper and silver) with values to 780 ppb gold, were defined by the soil sampling program.

Regional work done during the 1988 summer program resulted in the discovery of an alteration system in the Marron volcanics on the Astro 34 claim adjacent to the then existing QPX property. As a result of this discovery two additional claims, the Astro 33 and 34, were optioned from Petro-Canada Inc. in November, 1988.

In the fall of 1988, a program of trenching and sampling was carried out to evaluate soil geochemical anomalies identified by the summer 1988 program (Lee 1989). Twenty-three backhoe trenches were excavated, cleaned out, and sampled. Trenching did not locate any mineralization, and indicated that the majority of the anomalies are derived from glacial overburden.

In addition, the Astro 34 Showing was prospected and chip sampled (Lee, 1989). Twenty-seven rock chip samples were collected. Results indicated that anomalous gold values (up to 1030 ppb) with accompanying anomalous silver (up to 34.1 ppb) are associated with narrow chalcedonic veinlets in argillically altered Marron volcanics (see Figure 4).

1.4 Summary of Work, Current Program

This report covers linecutting, geophysics, trenching and reverse circulation drilling on the Astro 34 claim (Astro 2 Group) during the period December 1988 to February 1989.

In the late fall of 1988 a small grid was established over the Astro 34 showing by C. O'Neill and S. Handley. A 400 metre long north-south baseline was established, with 4.6 kilometres of crosslines. Magnetometer and VLF-EM surveys were then conducted and interpreted by Lloyd Geophysics of Vancouver, B.C. This work is summarized in the current report.

Trenching and drilling of the Astro 34 showing in January of 1989 is also covered in this report. Five trenches totalling 150 metres in length were excavated, mapped and sampled. A total of 98 trench samples were collected by C. O'Neill and C. Young. Trench mapping was done by T. Sandberg.

Five reverse circulation drill holes totalling 248.4 metres (815 feet) were drilled. Drill chips were logged by P. Conroy and samples were collected in 10 foot intervals by J. Caldwell. A total of 79 chip samples were collected.

All samples were shipped to Eco-Tech Laboratories in Kamloops and analyzed for gold and 30 element ICP. Because of the classification of this ground as "Designated Uranium Claims" analyses for uranium and thorium were done in accordance to government regulations.

Trenching and drilling necessitated the rehabilitation and construction of approximately 600 metres of road. All trenches and drill sites were reclaimed and seeded.

The area of the project is shown in Figure 5. The program of trenching and drilling described in this report was supervised by T. Sandberg under the direction of R.V. Longe. Field work was done from December 7-8 and December 16-18, 1988 and January 3-14, 1989.

2.0 GEOLOGY

2.1 Regional Geology

The Keremeos-Olalla area has been mapped at a regional scale by Bostock (1927) and Little (1961). The area of interest was covered more recently by Church (1982) in his map of the Penticton Tertiary Outlier.

The PDL property covers a portion of the western margin of the Penticton Tertiary Outlier. The western part of the property is underlain by rocks of the Triassic or older Shoemaker, Old Tom and Independence Formations. These rocks consist primarily of cherts and greenstones, with minor limestone and tuffs. To the east, the cherts and greenstones are overlain by the Lower Eocene Springbrook conglomerate, a polymictic pebble to boulder conglomerate with clasts composed mainly of the Triassic or older basement rocks. The conglomerate can exceed 100 metres in thickness and its distribution marks the margins of the Pre-Tertiary basin. Narrow quartz diorite to porphyritic latite dykes cut the Shoemaker and Old Tom Formations. Similar dykes cut rocks of the Springbrook Formation. Overlying the conglomerate to the east is a sequence of phonolitic, basaltic and trachytic lavas of the Lower to Mid Eocene Marron Formation. A series of north to north-east trending faults cut rocks of all the above mentioned units.

2.2 Property Geology

The geology of the PDL and Astro group is described in detail in Lee (1988).

The western portion of the property is underlain by rocks of the Triassic or older Shoemaker, Old Tom and Independence Formations which consist mainly of cherts and greenstones. Minor small limestone bodies are also present which may locally be skarnifed. In the area of the PDL and Astro 1 claims, where mapping to date has been concentrated, the basement rocks are predominately cherts. Commonly, these cherts are brecciated and may contain minor disseminated pyrite.

The Paleozoic rocks, exposed in the west are in contact with rocks of the Lower Eocene Springbrook Formation to the east. In Pre-Tertiary time, the Paleozoic cherts and greenstones formed a large basin which was later infilled by Tertiary volcanics and sediments. The Pre-Tertiary/Tertiary contact is near vertical and striking north to northeast where exposed near the PDL-Astro 1 claim boundary. At this point the contact, which may be in part fault controlled, marks the western margin of the Pre-Tertiary basin. Drilling has indicated that east of here the basement contact dips shallowly to the east (Lee, 1988).

The Springbrook Formation is composed of talus, alluvium and tuffaceous materials that accumulated in the Pre-Tertiary basin before deposition of the Eocene Marron volcanics. The Springbrook Formation consists mainly of a polymictic pebble to boulder conglomerate with clasts composed primarily of Paleozoic cherts and greenstones in a sandy, locally tuffaceous matrix. Locally the matrix may be bleached or altered to clays. Narrow carbonate stringers are common cutting both clasts and matrix of the conglomerate. Minor narrow sandstone and tuffaceous sandstone interbeds also occur. Where intersected by diamond drilling, the Springbrook Formation exceeds 100 metres in thickness (Lee, 1988).

A number of narrow, medium to coarse grained dykes of quartz diorite, diorite or porphyritic latite composition cut the Triassic or older cherts and greenstones (Lee 1987). Clasts of these intrusives are also contained in the Springbrook conglomerate. A single outcrop exposure was mapped where a narrow dyke of similar composition intruded rocks of the Springbrook Formation. Whether the dykes represent a single intrusive episode, coeval with the deposition of the Springbrook Formation, or whether two episodes of intrusion occurred is unclear.

Overlying the Springbrook Formation to the east is a series of phonolitic, basaltic and andesitic flows of the Eocene Marron Formation. The lowermost four members of the Marron Formation, the Yellow Lake, Kitley Lake, Kearns Creek and Nimpit Lake members, are exposed on the property. Church (1973, 1982) describes each of these members in detail. Locally, very narrow quartz stringers are seen in the volcanics.

A conglomerate of uncertain age, but at least post-Marron is exposed in a number of trenches on the Astro 1 claim (Lee, 1989). This conglomerate consists of subround pebbles and rare boulders of Marron volcanics, Post-Triassic intrusions and Triassic or older basement rocks. The matrix is very fine grained with minor euhedral biotite and pyroxene crystals and up to 5 percent rounded quartz pebbles. The origin of this unit is somewhat uncertain. Topographically and stratigraphically, the conglomerate occurs several hundred metres above the basement rocks. Laterally, the nearest exposure of basement rocks is at least one kilometre away. It is difficult to envisage a process by which clasts of these rocks could be included in the conglomerate, unless the conglomerate is fault related. Where exposed the conglomerate is always in close proximity to a fault of regional importance, suggesting that this may be the case.

Finally, narrow coarse grained granodiorite dykes have been exposed in several trenches (Lee, 1989). These dykes are strongly weathered and cross-cut the post-Marron conglomerate, trending north-south. Narrow quartz stringers may occur in these dykes.

A series of north to northeast trending near vertical block faults occurs on the property. Information obtained from drilling suggests that movement on these faults is down to the east. A number of east-west faults have also been intersected by trenching. Faults are commonly marked by wide zones (up to 17 metres) of clay gouge (Lee, 1988).

In eastern portions of the claims outcrops are commonly smoothed as a result of glacial scouring. Striations indicate that the trend of the ice direction was 040°. Regional directions of glacial transport from Nasmith (1962) suggest that movement was towards 220°.

2.3 Alteration and Mineralization

The area trenched and drilled in the current program is underlain by the Kitley Lake Member of the Marron Formation. The Kitley Lake Member consists of brown to reddish coloured feldspar biotite porphyritic andesite, commonly containing zeolite filled amygdules. The Astro 34 showing is locally exposed in outcrop and consists of argillic alteration and silicification of these volcanics, with narrow chalcedonic veinlets. Previous sampling (Lee, 1989) returned values to 1229 ppb gold associated with these chalcedonic veinlets (Figure 4).

Trench geology is shown in Figure 6. Trenching exposes a north-south trending belt of clay alteration up to 20 metres wide over a strike length of 140 metres. The alteration zone is still strong where lost due to thick overburden. Minor amounts of propylitic alteration occur both marginal to, and within the clay altered zone.

Clay alteration surrounds a silicified core, up to three metres wide, well exposed in Trench 1. The core consists of brecciated clay-altered volcanics cut by a network of hairline chalcedonic veinlets with weak pervasive silicification.

Extensive limonite staining of altered rock and local pyrite boxwork indicate the presence of pyrite in the unweathered rock. This was confirmed by drilling, where quantities of 1% - 5% pyrite were observed in drill chips.

Drill data is presented in Figures 7, 8, 9 and 10. Drilling shows continuity of the zone of silicification to at least 47 metres below the elevation of the road, and a widening of the zone to approximately 14 metres true width. This may be due to a merging at depth of two smaller zones of silicification found in Trench 1. The zone appears to dip vertically to steep easterly. There is no sign that the zone is weakening with depth and the expectation is that it continues down dip for a substantial distance.

The distribution of alteration is probably controlled by a north-south striking fault, indicated by the VLF-EM survey (Figure 13). The presence of this fault is confirmed in trenches by zones where overburden could not be penetrated, and in drill holes by zones where squeezing of the rods occurred. This fault has been intruded by a post-alteration dyke containing 3-5 mm long hornblende phenocrysts in a dark green to black aphanitic matrix. Drilling indicates that the dyke dips 90° to 80° easterly.

Northeasterly trending fractures and small shears observed in the trenches may have served to further focus hydrothermal fluids.

3.0 GEOPHYSICS

3.1 Procedures

In the late fall of 1988 a small grid was established over the Astro 34 showing. A 400 metre long baseline was run at an azimuth of 360°, with 4.6 kilometres of crosslines. In the central portion of the grid the cross lines were spaced at 25 metre intervals. To the north and south, line spacing was 50 meters. Stations were flagged at 10 metre intervals.

Magnetometry and VLF-EM surveys were conducted by Lloyd Geophysics of Vancouver, B.C. using an EDA Omni Plus combination magnetometer - VLF-EM unit. An EDA Omni IV base station was used for the magnetic survey, while the Seattle transmitter station was used for the VLF-EM survey.

Geophysical data was interpreted by Lloyd Geophysics. This interpretation is contained in Appendix I.

3.2 Results and Interpretation

The results of the geophysical surveys are presented in Figures 11-14 and summarized below. A more detailed interpretation of the results is contained in Appendix 1.

Three very well defined, north-south trending conductors were identified by the VLF-EM survey, as shown on Figure 13. The central portion of the westernmost conductive lineament corresponds with the Astro 34 showing and has been tested by trenching and drilling. Trenching indicates that the conductors represent north-south striking faults. Except for the central portion of the westernmost conductor, the lineaments have not been tested by trenching, drilling or surface mapping. Follow-up of these conductors is strongly recommended.

Along portions of the strike length of the VLF-EM conductors there is excellent correlation with magnetic low zones (see Figure 11). These zones probably represent zones of alteration (silicification) and warrent testing (by drilling).

4.0 TRENCHING PROGRAM

4.1 Trenching and Sampling Procedure

A John Deere 450 C mounted backhoe operated by David Lusted of Cawston, B.C. was used to evaluate the Astro 34 showing. Five trenches were excavated across the strike of the zone (see Figure 6). A total of 150 metres of trenching was done over a strike length of about 140 metres.

Of the 150 metre total length of trenches, 112 metres represented bedrock exposure. Trenches 1 and 3 exposed the full width of the altered zone at depths of 1 - 1.5 metres while Trench 2 lost bedrock near the eastern end. Trenches 4 and 5 exposed only the western edge of the clay alteration. Although the theoretical limit of the machine is 3 - 3.5 metres, it was defeated at 2 - 2.5 metres by the blocky, compact nature of the overburden, and the fact that the machine is somewhat hydraulically underpowered.

Sample intervals of an average one metre length were marked out on geologically determined intervals and sampled using rock hammers, chisels and a two pound sledge. Every effort was made to obtain a continuous, representative chip sample. Samples were collected in 30 cm x 50 cm plastic sample bags. The average sample weight was approximately 2.5 kg.

4.2 Analytical Techniques

Samples were shipped to Eco-Tech Laboratories Ltd. in Kamloops, B.C. for preparation and analysis. Samples were dried, jaw-crushed and split to a 250 gram subsample which was then ring-pulverized to minus -140 mesh. One hour of digestion with hot aqua regia was followed by a 30 element ICP analysis. For gold, a 20 gram sample was concentrated by fire assay. The bead was digested for one hour in hot aqua regia and analysed by atomic absorption. Uranium and thorium were analysed colourimetrically.

4.3 Results and Interpretation

No economically significant gold or silver values were encountered in this trenching program. A number of sub-anomalous to anomalous metal values will be discussed on a trench by trench basis. Trench geology and sample results are shown on Figure 6. The geology is detailed in Appendix II and the analytical results for the trench samples are contained in Appendix III.

Trench 1

Trench 1 exposed a 19.4 metre wide zone of moderate to intensely clay-altered volcanics. Within this zone there were two short sections containing silica. Near the western end of the trench a 3 metre wide zone consisted of brecciated, heavily clay-altered volcanic with weak pervasive silicification and a network of fine chalcedonic quartz veinlets. Samples in this section returned values in the 20 to 60 ppb gold range with up to 1.8 ppm silver and 70 to 145 ppm arsenic.

Towards the eastern end of the trench a 2 metre wide zone of clay alteration and weak pervasive silicification with chalcendonic veinlets and up to 1% disseminated pyrite, gave values to 145 ppb gold, 6.0 ppm silver and 420 ppm arsenic. Adjacent to this zone, a value of 235 ppb gold was obtained from clay-altered volcanic.

Trench 2

Trench 2 exposed 18.5 metres of clay-altered volcanics, before losing bedrock at the eastern end of the trench. Samples TMS-89-011 and 012 consisted of weakly silicified, clay-altered volcanics and contained gold values of 95 ppb and 95 ppb, silver values of 5.2 ppm and 7.8 ppm, and arsenic values of 40 ppm and 30 ppm, respectively.

Trench 3

Trench 3 exposed 18 metres of clay altered volcanic with no silicification. Arsenic values up to 185 ppm and gold values in the 30 to 55 ppb range were associated with a clay shear zone trending 165°/90° and with northeasterly trending fractures in the western portion of the trench.

Trench 4

Trench 4 encountered mostly deep, blocky overburden. Two grab samples were taken from the overburden. Only 10 metres of bedrock was exposed at the western end of the 32.5 metre long trench. Two metres of clay alteration was exposed before bedrock plunged off to the east. One sample of relatively fresh volcanics gave a value of 55 ppb gold without corresponding anomalous silver or arsenic values.

Trench 5

Trench 5 also encountered problems with overburden. Sixteen metres of bedrock was exposed, most of it unaltered, except for weak clay alteration in the easternmost bedrock exposure. Three samples were taken of oxidized till, one of which gave a result of 205 ppb gold. The remaining 9 metres of trench consisted of till and was not sampled.

In summary, trenching was successful in exposing a zone of alteration in the vicinity of the original Astro 34 showing outcrops. The alteration zone ranged up to 20 metres in width and consisted of a silicified core surrounded by clay-altered volcanics. Deep overburden to the north and south prohibited further trenching along strike, although the alteration remained strong and VLF-EM suggested that the structure continued for a considerable distance. A larger backhoe might be successful in penetrating this overburden. No significantly anomalous gold values were obtained from trench samples.

5.0 REVERSE CIRCULATION DRILLING

5.1 Drilling and Sampling Procedure

Five reverse circulation drill holes totalling 248.3 metres were completed by Northspan Drilling Ltd. of Westbank, B.C. using a track mounted reverse circulation percussion drill. Drilling was done on an eight hour per day basis and was completed in four days. Water was supplied to the site by a five ton 4x4 truck with a 1,000 gallon water tank, operated by Leo Reichert of Keremeos, B.C.

Samples were collected in 10 foot intervals, with two or three duplicate samples from each hole for check assays. Drill return was run through a riffle splitter to reduce sample size to approximately 1/8 of original size. Samples were collected in plastic buckets. Both the splitter and buckets were cleaned with water or compressed air between samples to reduce contamination. Samples, averaging 4-5 kg in weight, were double bagged in 30 cm x 50 cm plastic sample bags, sealed with twist ties and stored in plastic buckets with lids. Ninety-eight samples including 19 duplicates were collected.

Chips were sieved from the reject portion and logged with a binocular microscope. Samples of these chips were saved in small plastic sample bags as witness samples.

Drill hole locations are shown on Figure 5. Specifications for the drill holes are listed below.

DRILL HOLE SEPCIFICATIONS

Hole No.	Grid Co-Ordinates	Dip	Azimuth	Depth (metres)
PDL 89 RC-1	100+33N 99+14E	-65	090	53.3
PDL 89 RC-2	100+54N 99+31E	-45	250	38.1
PDL 89 RC-3	100+04N 99+21E	-90	--	35.0
PDL 89 RC-4	100+01N 99+13E	-45	064	59.4
PDL 89 RC-5	100+04N 99+17E	-80	090	62.5

5.2 Analytical Techniques

Samples were shipped to Eco-Tech Laboratories Ltd. in Kamloops, B.C. for preparation and analysis. Samples were dried, jaw-crushed and split to a 250 gram subsample which was then ring-pulverized to minus -140 mesh. One hour of digestion with hot aqua regia was followed by a 30 element ICP analysis. For gold, a 20 gram sample was concentrated by fire assay. The bead was digested for one hour in hot aqua regia and analysed by atomic absorption. Uranium and thorium were analysed colourimetrically.

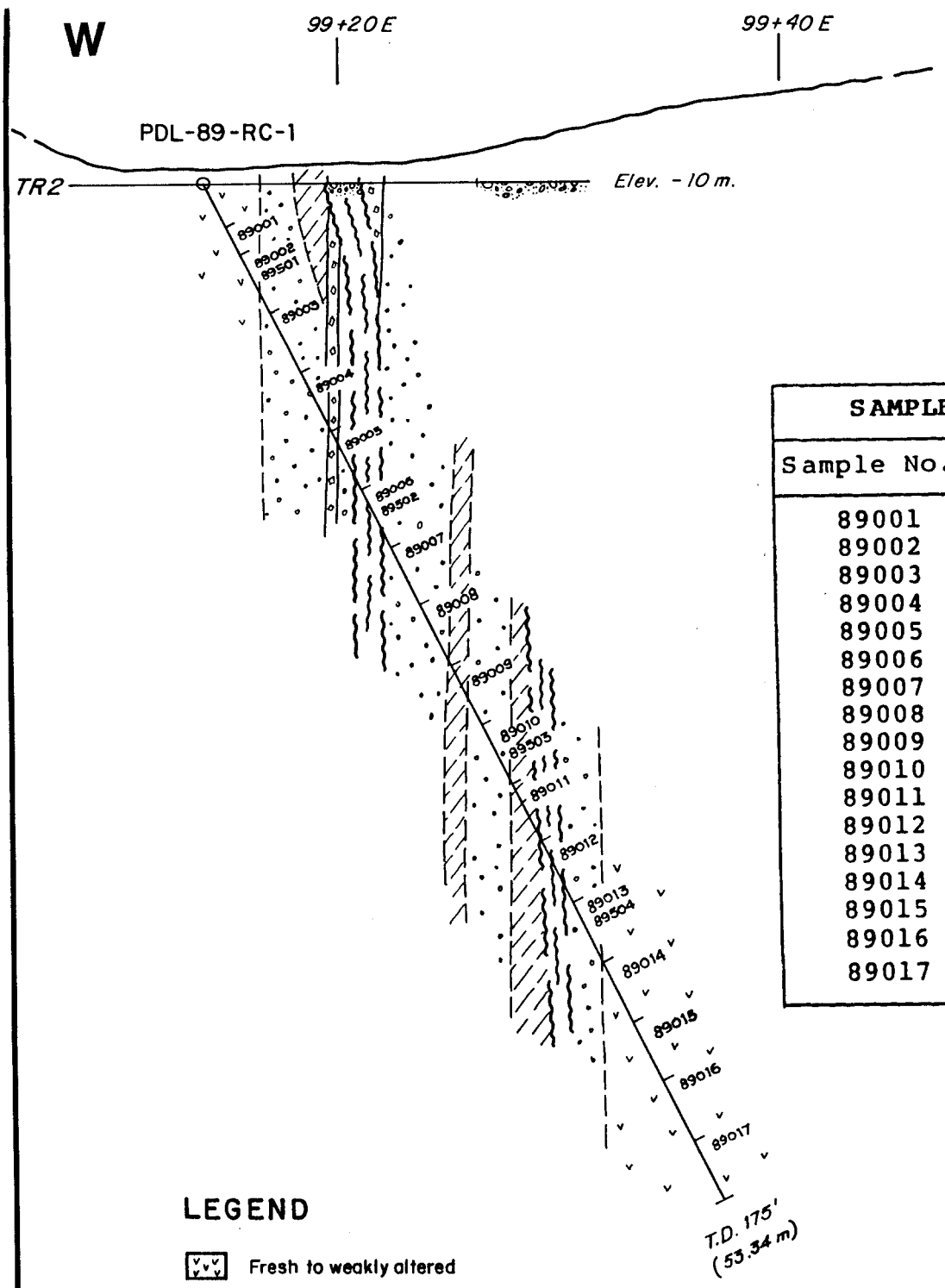
5.3 Results and Interpretation

Analytical data for the drill samples is contained in Appendix III. Drill logs are included in Appendix IV. A number of sub-anomalous to anomalous gold and silver values were obtained from drilling. These will be discussed on a hole by hole basis. Drill sections for each of the holes have been plotted on Figures 7-9 and a subsurface plan interpreting the down hole geology is shown in Figure 10.

Hole PDL-89-RC-1 (Figure 7): This hole intersected mostly clay altered volcanics with only short sections of weak-moderate silicification. A hornblende porphyry dyke was intersected from approximately 14-15 metres and a zone of fault gouge from approximately 15-18 metres. From 20-26 metres the hole contained moderate silicification and up to 5% pyrite. The hole bottomed at 53.3 metres in red coloured volcanics.

The section from 41.1 to 44.2 metres returned a value of 75 ppb gold over 3.1 metres (10 feet). This section consisted of clay-altered volcanics with less than 5% quartz chips.

Hole PDL-89-RC-2 (Figure 8:) The second hole was collared in unaltered reddish volcanics and entered clay alteration at a depth of approximately 10.7 metres. Strong clay alteration with moderate to strong silicification continued to 29 metres. Only trace amounts of pyrite were found. Several possible faults were intersected and a probable dyke at about 29 metres. The hole bottomed at 38.1 metres in weakly altered volcanics.



SAMPLE RESULTS	
Sample No.	Au (ppb)
89001	20
89002	20
89003	15
89004	25
89005	45
89006	30
89007	30
89008	30
89009	15
89010	20
89011	10
89012	55
89013	30
89014	75
89015	20
89016	20
89017	20

LEGEND

- Fresh to weakly altered
- Propylitic alteration
- Argillic alteration
- Silicification
- Dyke
- RC-HOLE and projection
- Fault zone
- Alteration contact (assumed)
- 82101 Sample interval and number
- Trench

Section along 100+35 N looking North

SCALE 1:300

QPX MINERALS INC.

PDL PROJECT, OSOYOOS M.D., B.C.

DRILL SECTION

PDL - 89-RC-1

Originator P.W.C.	Drawn C.D.		FIG. 7
Revised	Date Feb.89	NTS 82E/5W	

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W

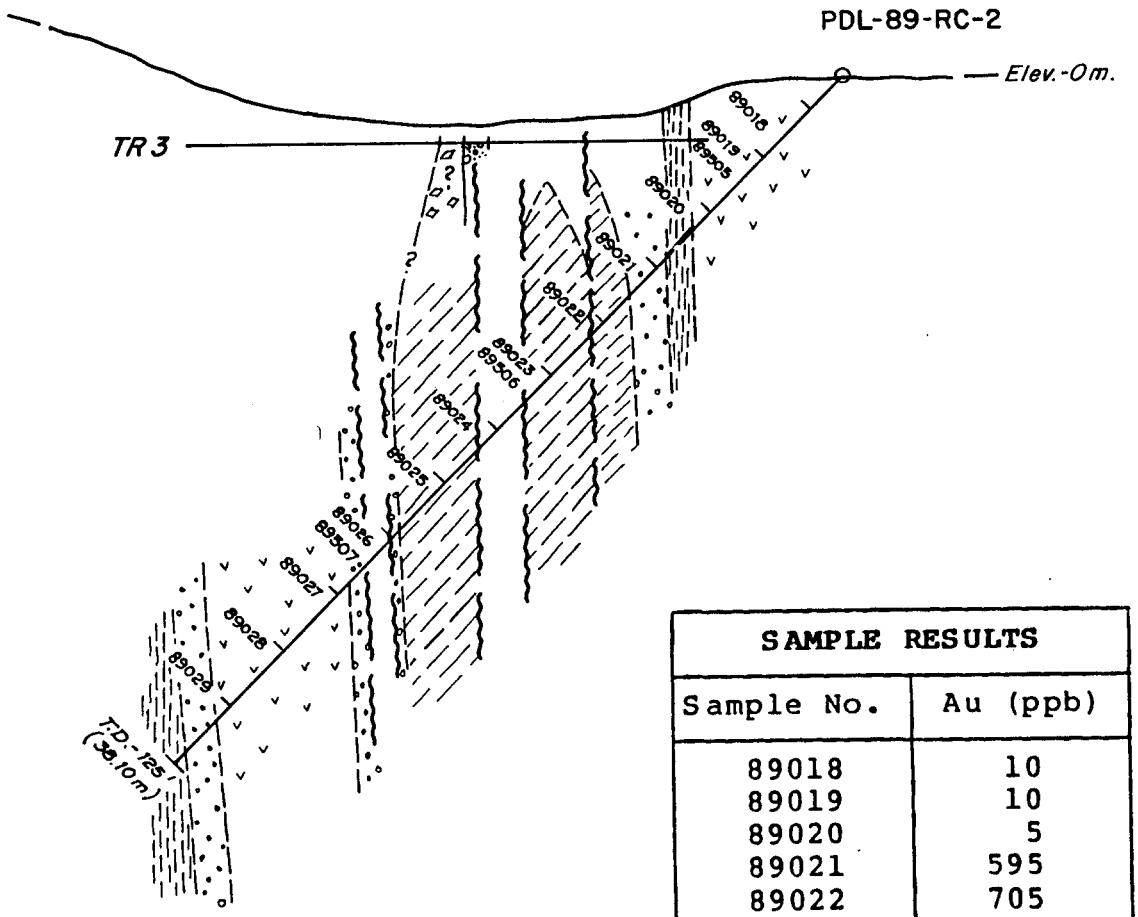
E

99+00E

99+20E

99+40E

N



SAMPLE RESULTS	
Sample No.	Au (ppb)
89018	10
89019	10
89020	5
89021	595
89022	705
89023	195
89024	160
89025	30
89026	45
89027	65
89028	25
89029	20

LEGEND

- Fresh to weakly altered
- Propylitic alteration
- Argillic alteration
- Silicification
- Dyke
- RC-HOLE and projection
- Fault zone
- Alteration contact (assumed)
- 82101 Sample interval and number
- Trench

Section along 10+55N looking North

SCALE 1:300

QPX MINERALS INC.

PDL PROJECT, OSOYOOS M.D., B.C.

DRILL SECTION
PDL- 89-RC-2

Originator P.W.C.	Drawn C.D.		FIG. 8
Revised	Date Feb. '89	NTS 82E/5W	

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This hole encountered anomalous gold values (160 to 705 ppb) in the interval of 10.7 to 22.9 metres. These anomalous values are associated with up to 14.8 ppm silver, 265 ppm arsenic, and 1513 ppm molybdenum. This section consisted of weakly to moderately silicified volcanics with traces of pyrite, adjacent to a fault.

Hole PDL-89-RC-3 (Figure 9): This hole was collared within the silicified zone in an attempt to follow it to depth. The hole was drilled vertically. Strong clay alteration with weak to moderate silicification and minor pyrite was encountered to a depth of 29 metres.

Samples from 2 to 4.5 metres and from 4.5 to 7.6 metres returned gold values of 120 ppb and 140 ppb from moderately silicified volcanics with traces of pyrite.

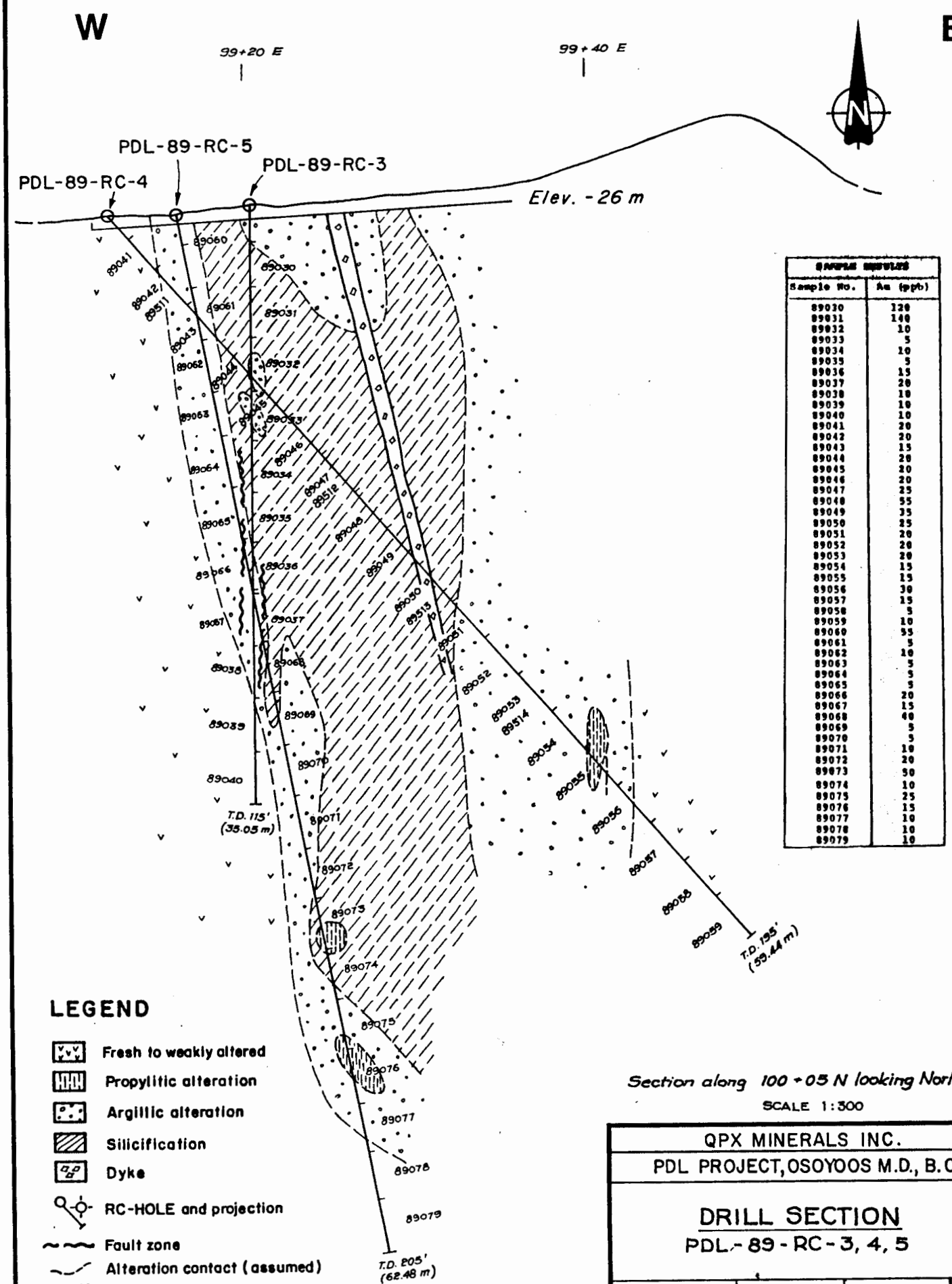
Hole PDL-89-RC-4 (Figure 9): Hole 4 was drilled to better define the dip of the alteration zone. The hole was collared in fairly fresh, brown volcanics. Moderate to strong silicification with up to 1% pyrite was intersected from 7.6 to 32 metres. The hole was drilled slightly off-section, which may account for the greater apparent width of the silicified zone.

A section from 16.8 to 19.8 metres returned a gold value of 55 ppb, associated with strong clay alteration and patchy silicification.

Hole PDL-89-RC-5 (Figure 9): This hole attempted to drill down dip in the silicified core, but appears to have only skimmed the footwall, intersecting clay alteration with only local silicification and traces of pyrite.

A value of 55 ppb gold was obtained from 2 to 4.5 metres in a zone of patchy silicification, and a value of 50 ppb gold from 41 to 44 metres in a zone of weak clay alteration.

In summary, drilling was successful in tracing the alteration to a depth of 47 metres below surface with no indication that the system is weakening



Sample No.	Au (ppb)
89030	120
89031	140
89032	10
89033	5
89034	10
89035	5
89036	15
89037	20
89038	10
89039	10
89040	10
89041	20
89042	20
89043	15
89044	20
89045	20
89046	20
89047	25
89048	55
89049	35
89050	25
89051	20
89052	20
89053	20
89054	15
89055	15
89056	30
89057	15
89058	5
89059	10
89060	55
89061	5
89062	10
89063	5
89064	5
89065	5
89066	20
89067	15
89068	40
89069	5
89070	5
89071	10
89072	20
89073	50
89074	10
89075	25
89076	15
89077	10
89078	10
89079	10

LEGEND

- Fresh to weakly altered
- Propylitic alteration
- Argillic alteration
- Silicification
- Dyke
- RC-HOLE and projection
- Fault zone
- Alteration contact (assumed)
- 82101 Sample interval and number
- Trench

Section along 100 + 05 N looking North

SCALE 1:300

QPX MINERALS INC.

PDL PROJECT, OSOYOOS M.D., B.C.

DRILL SECTION

PDL-89-RC-3, 4, 5

Originator P.W.C.	Drawn C.D.	Plan No.	FIG. 9
Revised	Date Feb.'89	NTS 82E/5W	

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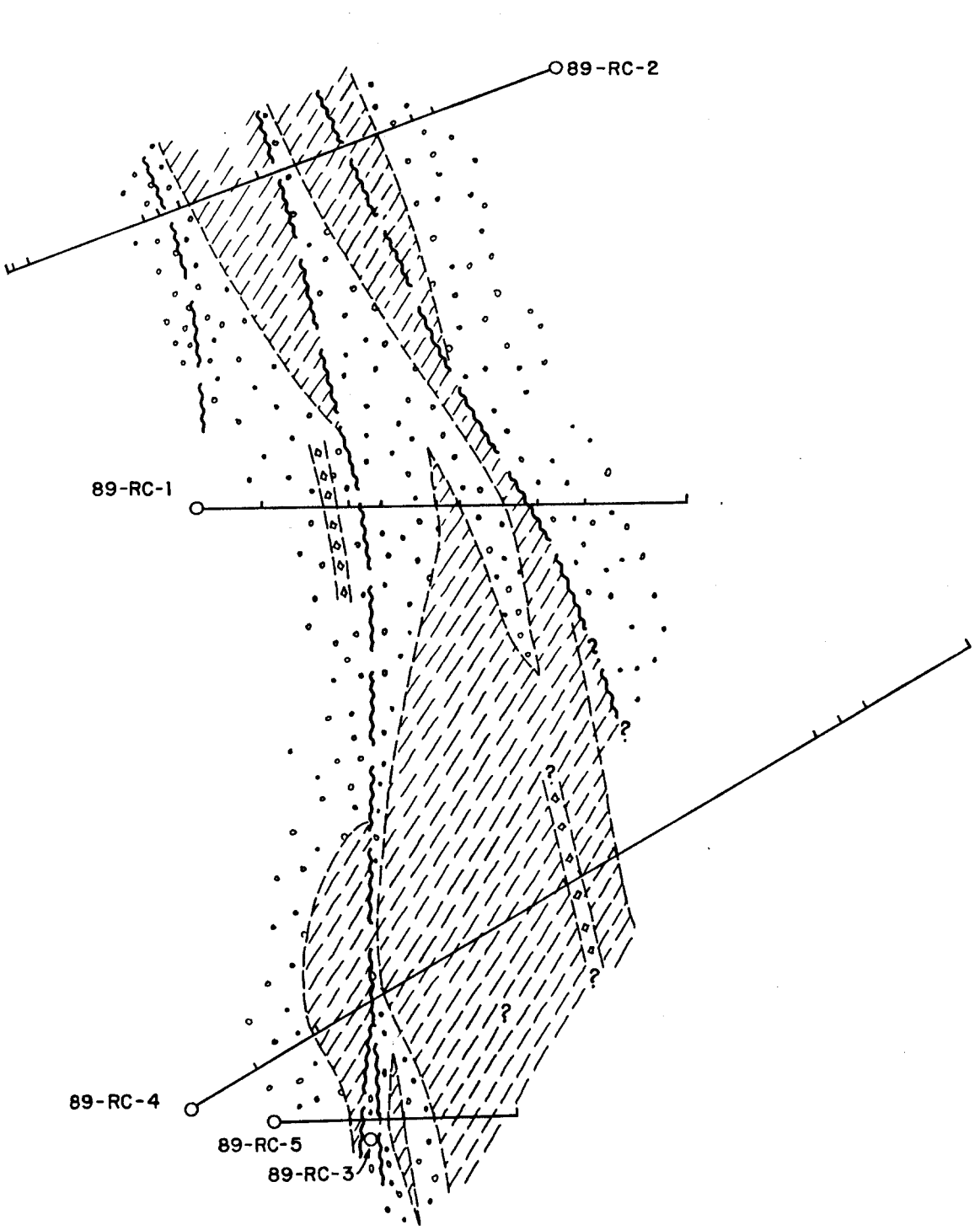

LEGEND

- Fresh to weakly altered
- Propylitic alteration
- Argillic alteration
- Silicification
- Dyke
- RC-HOLE and projection
- Fault zone
- Alteration contact (assumed)
- 82101 Sample interval and number
- Trench

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INTERPRETATION OF DOWN HOLE GEOLOGY

Originator P.W.C.	Drawn C.D.		FIG.
Revised	Date Feb. '89	NTS 82E/5W	10

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with depth. Anomalous gold, silver, arsenic and molybdenum values were obtained from chip samples. One disadvantage to reverse circulation drilling is the dilution of grade caused by sampling standard 10 foot runs. The best gold value, obtained was 705 ppb over 10 feet (from Hole 2) or the equivalent to 7 grams/tonne over 1 foot. Similarly, a value of 14.8 ppm silver over 10 feet translates to almost 150 grams/tonne of silver over 1 foot. It is recommended that, in future, reverse circulation drilling be used only for prospecting and for initial testing of alteration system. Follow-up of this system should be done by diamond drilling. Drilling should be done both along strike and to greater depths.

6.0 SCINTILLOMETER DATA

6.1 Procedure

In order to comply with Order in Council No. 335 Exploration Regulation - Uranium and Thorium (see Appendix V) a series of scintillometer readings were taken over the course of the program.

Readings were taken before the ground was disturbed, after road building, in the excavated trenches, and over the backfilled trenches. Readings were also taken from drill chip samples. A McPhar TV-1A scintillometer was used and readings were taken at 5 metre intervals. The unit was calibrated in accordance with the instruction manual using the thorium source supplied by the manufacturer.

6.2 Results

No anomalous scintillometer readings occurred before, during, or after trench and road construction, or in any of the drill holes. The results of the scintillometer surveys are presented in Figure 15.

7.0 CONCLUSIONS

1.0 Magnetometry and VLF-EM are both very effective tools for locating alteration systems and the structures controlling the alteration. Three very well defined conductive lineaments with corresponding magnetic lows were identified in the small survey which was done. Testing by trenching and drilling was restricted in a small portion of one of these anomalies.

2.0 Trenching was successful in exposing a zone of silicified and argillically altered volvanics to twenty metres in width over a strike length of 140 metres. Deep overburden made it impossible to follow the zone along strike with equipment available. Only weakly anomalous gold values were obtained from trench samples.

3.0 Reverse circulation drilling followed the alteration to a depth of 47 metres below surface at which point there was no evidence of a decrease in the strength or size of the system. Anomalous gold and silver values were obtained from drill samples (to 705 ppb gold and 14.8 ppm silver over 10 foot runs).

8.0 RECOMMENDATIONS

1.0 Grid coverage should be extended to cover the Astro 33 and 34 claims.

2.0 Detailed geological mapping and rock chip sampling should be done over the entire grid. Particular emphasis should be placed on areas of known geophysical anomalies.

3.0 Geophysical coverage (magnetometry and VLF-EM) should be extended over the entire grid. Due to the success of this particular survey, it is recommended that the same contractor be employed and similar equipment be used. Geophysics should be rerun over the Astro 1 grid since the earlier survey was of poor quality (Lee, 1988).

4.0 Soil sampling should be done over a small test area covering the Astro 34 showing in order to test whether alteration can be traced by geochemistry. If the soil survey is successful, soil sampling should be done over geophysically anomalous areas defined by the above surveys in order to locate particular regions of these anomalies requiring follow-up by trenching or drilling.

5.0 Current geophysical anomalies and further geophysical or geochemical anomalies resulting from the above program should be explored by trenching or drilling. In particular, the large magnetic low on the westernmost conductive lineament should be tested. Diamond drilling is recommended to test this target.

9.0 REFERENCES

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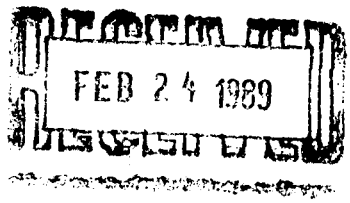
APPENDIX I

GEOPHYSICAL REPORT BY: JOHN LLOYD
LLOYD GEOPHYSICS

Lloyd Geophysics Limited, 1110-625 Howe Street, Vancouver, B.C. V6C 2T6 / (604) 688-5813

JOHN LLOYD
GEOPHYSICAL ENGINEER



Lloyd Geophysics

February 24, 1989

Mr. Robert Longe
MineQuest Exploration Associates Ltd.
5th floor - 164 Water Street
Vancouver, B.C.
V6B 1B8

RE: MAG. and VLF-EM Survey - ASTRO 34 Project

Dear Robert:

The following notes should help you with the geophysics section of your assessment report on the above captioned property.

1. Survey Date: December 17, 1988
   Surveyed By: Mr. David Hall, B.Sc.

2. Instrumentation

The equipment used was the OMNI PLUS combined magnetometer/ VLF-EM system manufactured by EDA INSTRUMENTS INC., Toronto, Canada.

The system is completely software/microprocessor controlled. A portable proton precession magnetometer measures and stores in memory the total earth's magnetic field at the touch of a key. It also identifies and stores

the location and time of each measurement and computes the statistical error of the reading and stores the decay and strength of the signal being measured. Throughout each survey day a similar base station magnetometer measures and stores in memory the daily fluctuations of the earth's magnetic field. The use of two magnetometers eliminates the need for a network of base stations on the grid. At the end of each day the field data is merged with the base station data in the field computer and automatic diurnal corrections are applied to correct the field data.

The VLF-EM module of the OMNI PLUS system has the ability to measure, both the VLF-EM magnetic and electric fields from at least two different transmitting stations. The system requires no operator orientation of the sensor head towards the transmitting stations. This is achieved by the utilization of three orthognal sensor coils rather than the two sensor coils used in conventional systems.

Before describing the results from the VLF-EM survey, mention should be made of the limitations imposed upon the method arising from the use of a fixed location transmitting station.

The field generated by VLF transmitting stations is primarily horizontal and the direction of this horizontal field is perpendicular to the direction of the transmitting station. Therefore to obtain maximum coupling with a geological conductor it is necessary to select a transmitting station whose direction is co-linear with the geological strike of the conductor. FOR THIS PARTICULAR SURVEY THESE CRITERIA WERE ONLY REASONABLY WELL FULFILLED.

3. Data Presentation - We are providing the following maps:

(a) Total Field Magnetic Contour Map (COLOUR)
(b) VLF-EM Frazer Filter Map (COLOUR)
(c) Total Field Magnetic Contour Map (MYLAR)
(d) Total Field Magnetic Profile Map (MYLAR)
(e) VLF-EM Profiles (MYLAR)
(f) VLF-EM Frazer Filter Map (MYLAR)

I have outlined the VLF-EM conductors on a rough copy (Preliminary Copy) of the VLF-EM Frazer Filter map and the magnetic lows on a rough copy (Preliminary Copy) of the Total Field Magnetic Contours.

The geology/trenching/drilling plan which you provided for me is presently en route to Toronto for use at the Prospectors and Developers meeting in early March. Despite this I recall the results were fairly encouraging.

The survey outlined three well-defined conductors. In most part these conductors show excellent correlation with magnetic lows. Based on your trenching/drilling there is evidence of north-south faulting on the westernmost conductor.

Your work to date, based on these results, has been concentrated on a very small strike length of the central portion of the westernmost conductor.

Based mainly on the geophysics it is strongly recommended that additional trenching and/or drilling should be carried out on the westernmost conductor particularly to the south where the magnetic low is about 2000nT below background of slightly more than 3000nT.

Similarly, trenching and/or drilling is strongly recommended for the other two conductors. This work should commence on the most pronounced portion of the magnetic low, where alteration (destruction of the ferro-magnesium minerals) is expected to be more intense.

Both the westernmost and the easternmost conductors remain open along strike to the north and the south. In view of this additional magnetic/VLF-EM surveying is recommended to close-off these anomalies, land holdings permitting.

The centrally located conductor lies on the flank of a magnetic low and may be truncated by a fault near the centre of the grid. In spite of this, the magnetic low continues for over 200 metres to the north before petering out. The position of the conductor on the eastern flank of the magnetic low may indicate a structure which dips steeply to the west. If the overburden increases fairly rapidly to the north then the interpreted fault may not in fact exist. This conductor remains open to the south.

Although the direction of the transmitting station was certainly not optimal, the method appears to work very well for this type of target.

Respectfully submitted,
LLOYD GEOPHYSICS LIMITED

John Lloyd

John Lloyd, M.Sc., P. Eng.
Geophysicist

JL:jz

APPENDIX II

DETAILED TRENCH GEOLOGY

Detailed Trench Geology

Trench No.	From (West) (m)	To (East) (m)	Description	Sample No.	Width (m)
TR-1	0	2	Weak clay alteration - reddish biotite feldspar porphyry	TMS-89-037	2.0
TR-1	2	3	Increasing clay alteration	-038	1.0
TR-1	3	3.8	Clay alteration	-039	0.8
TR-1	3.8	4.8	Limonitic clay alteration	-040	1.0
TR-1	4.8	5.8	Yellow clay alteration	-041	1.0
TR-1	5.8	6.8	Very limonitic brecciated clay alteration volcanic	-042	1.0
TR-1	6.8	7.8	Brecciated, silicificed volcanic yellow-green limonitic stain	-043	1.0
TR-1	7.8	8.8	Decreasing silificiation limonitic, clay alteration	-044	1.0
TR-1	8.8	9.8	Bleached, limonitic fractures	-045	1.0
TR-1	9.8	10.8	Weak clay, minor limonite	-046	1.0
TR-1	10.8	11.8	Moderate clay and limonite	-047	1.0
TR-1	11.8	12.8	Friable limonitic clay alteration	-048	1.0
TR-1	12.8	13.8	Clay alteration, limonite	-049	1.0
TR-1	13.8	14.8	Massive grey volcanic	-050	1.0
TR-1	14.8	15.8	Black masive unaltered hornblende porphyry dyke N160/90???	-051	1.0
TR-1	15.8	16.8	Bleached limonite volcanic	-052	1.0
TR-1	16.8	18.4	Slightly bleached volcanic with MnO stain	-053	1.6
TR-1	18.4	19.4	Clay alteration, weak silicification limonitic, fracture 080/90 @ 19.4	-054	1.0
TR-1	19.4	20.4	Clay altered, hairline chalcedonic Qv's, <1% dis py????	-055	1.0
TR-1	20.4	21.4	Bleached limonitic volcanic	-056	1.0
TR-1	21.4	22.4	Bleached limonitic volcanic	-057	1.0
TR-1	22.4	23.4	Bleached limonitic volcanic	-058	1.0
TR-1	23.4	24.4	Bleached limonitic volcanic	-059	1.0
TR-1	24.4	25.4	Bleached limonitic volcanic	-060	1.0
TR-1	25.4	26.8	Bleached limonitic volcanic	-061	1.4

Detailed Trench Geology (cont'd)

Trench No.	From (West) (m)	To (East) (m)	Description	Sample No.	Width (m)
TR-2	0	1	Clay alteration biotite feldspar porphyry	TMS-89-001	1.0
TR-2	1	2	Crumbly clay alteration volcanic 1.3 - 1.8 shear 026/90	-002	1.0
TR-2	2	3	Clay alteration	-003	1.0
TR-2	3	4	Chlorite alteration	-004	1.0
TR-2	4	5	Same - minor MnO	-005	1.0
TR-2	5	6.3	Same, with increasing clay alteration	-006	1.3
TR-2	6.3	7.5	Crumbly clay altered volcanic	-007	1.2
TR-2	7.5	8.5	Clay alteration, minor MnO	-008	1.0
TR-2	8.5	9.8	Clay alteration, fracture 017/90	-009	1.0
TR-2	9.8	10.8	Clay alteration, weak pervasive silicification	-010	1.0
TR-2	10.8	11.6	Same	-011	0.8
TR-2	11.6	12.3	Clay alteration, limonite MnO	-012	0.7
TR-2	12.3	13.4	OB	NS	
TR-2	13.4	14.3	Random chip sample - massive block hornblende porphyry dyke	-013	1.0
TR-2	14.3	15.2	OB	NS	
TR-2	15.2	16.0	Green hornblende porphyry	-014	0.8
TR-2	16.0	17	Clay alteration, limonite	-015	1.0
TR-2	17	18	Clay alteration, limonite	-016	1.0
TR-2	18	18.5	Clay alteration, limonite	-017	0.5
TR-2	18.5	24.5	OB	NS	

Detailed Trench Geology (cont'd)

Trench No.	(m) From (West)	To (East)	Description	Sample No.	Width (m)
TR-3	0	1	Clay altered bfp	TMS-89-018	1.0
TR-3	1	1.7	Same, fracture 016/75W	-019	0.7
TR-3	1.7	2.5	Clay alteration, clay veinlets 165/90	-020	0.8
TR-3	2.5	3.5	Clay alteration, irregular clay veinlets	-021	1.0
TR-3	3.5	4.5	Clay/chlorite alteration	-022	1.0
TR-3	4.5	5.5	Friable limonitic clay alteration	-023	1.0
TR-3	5.5	6.5	Friable limonitic clay alteration	-024	1.0
TR-3	6.5	7.4	OB	NS	
TR-3	7.4	8.4	Friable clay alteration, limonite	-025	1.0
TR-3	8.4	9.2	Same	-026	0.8
TR-3	9.2	10.4	Hornblende porphyry dyke	-027	1.2
TR-3	10.4	11.3	OB	NS	
TR-3	11.3	12.3	Friable limonitic clay alteration	-028	1.0
TR-3	12.3	13.3	" " "	-029	1.0
TR-3	13.3	14.3	" " "	-030	1.0
TR-3	14.3	15.3	" " "	-031	1.0
TR-3	15.3	16.3	" " "	-032	1.0
TR-3	16.3	17.3	" " "	-033	1.0
TR-3	17.3	18.0	" " "	-034	1.0
TR-3	18.0	19.0	Chlorite alteration, weak clay	-035	1.0
TR-3	19.0	21.0	Chloritic bfp	-036	1.0
TR-3			Grab limonitic clay/silica altered volcanic	-062	---
TR-3			Grab clay/limonite alteration volcanic	-063	---

Detailed Trench Geology (cont'd)

Trench No.	From (m) (West)	To (East)	Description	Sample No.	Width (m)
TR-4	0	2	Reddish bfp	TMS-89-064	2.0
TR-4	2	4	Reddish bfp	-065	2.0
TR-4	4	6	Reddish bfp	-066	2.0
TR-4	6	8	Chloritic bfp	-067	2.0
TR-4	8	10	Weak-moderate clay	-068	2.0
TR-4	10	32.5	OB	NS	
TR-5	0	2	Massive weakly clay alteration bfp	-069	2.0
TR-5	2	4	Massive weakly clay alteration bfp	-070	2.0
TR-5	4	6	Massive weakly clay alteration bfp	-071	2.0
TR-5	6	8	Massive weakly clay alteration bfp	-072	2.0
TR-5	8	10	Massive weakly clay alteration bfp	-073	2.0
TR-5	10	12	Massive weakly clay alteration bfp	-074	2.0
TR-5	12	14	Massive weakly clay alteration bfp	-075	2.0
TR-5	14	16	Weak clay alteration	-076	2.0
TR-5	16	17.5	OB	-077	1.5
TR-5	17.5	18.5	Red stained oxidized till	-078	1.0
TR-5	18.5	19.5	Red stained oxidized till	-079	1.0
TR-5	19.5	20.2	Red stained oxidized till	-080	0.7
TR-5	20.2	27.0	OB	NS	

APPENDIX III

ANALYTICAL DATA

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 17, 1989

CERTIFICATE OF ANALYSIS ETK 89 10

MINEQUEST EXPLORATION ASSOCIATES LTD.
5TH FLOOR, 164 WATER STREET
VANCOUVER, B.C.
V6B 1B5

ATTENTION: ROBERT LONGE

SAMPLE IDENTIFICATION: 53 ROCK samples received January 11, 1989
PROJECT: PDL
NOTE: U & TH GEOCHEMS TO FOLLOW

ET#	Description			AU (ppb)
10 - 1	TMS 89	1	TR-2	10
10 - 2		2		20
10 - 3		3		15
10 - 4		4		10
10 - 5		5		15
10 - 6		6		10
10 - 7		7		10
10 - 8		8		20
10 - 9		9		20
10 - 10		10		20
10 - 11		11		95
10 - 12		12		95
10 - 13		13		5
10 - 14		14		5
10 - 15		15		10
10 - 16		16		10
10 - 17		17	TR-2	10
10 - 18		18	TR-3	30
10 - 19		19		45
10 - 20		20		55
10 21		21		45
10 22		22		20
10 - 23		23		20
10 - 24		24		45
10 - 25		25		30
10 - 26		26		15
10 - 27		27		5
10 - 28		28		20
10 - 29		29		10
10 - 30		30		15

ECO-TECH LABORATORIES LTD.

ASSAYING · ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

MINEQUEST EXPLORATION ASSOCIATES LTD. JANUARY 17, 1989

ET#	Description	AU (ppb)	
10 - 31	31	35	
10 32	32	40	
10 - 33	33	235	—
10 - 34	34	20	
10 35	35	5	
10 - 36	36	5	TR3
10 - 37	37	<5	TR1
10 - 38	38	<5	
10 - 39	39	<5	
10 - 40	40	5	
10 41	41	15	
10 - 42	42	60	
10 - 43	43	30	
10 - 44	44	20	
10 45	45	25	
10 - 46	46	5	
10 - 47	47	20	
10 - 48	48	25	
10 49	49	30	
10 - 50	50	10	
10 - 51	51	5	
10 - 52	52	70	
10 - 53	53	10	

NOTE: < = LESS THAN

ECO-TECH LABORATORIES LTD.
DON ENDERS
LABORATORY MANAGER

cc: LINDA LEE
VANCOUVER, B.C.
SC89/PDL

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

MINEQUEST EXPLORATION ASSOCIATES LTD. - ETK 89-10A

5TH. FLOOR,164 WATER STREET
VANCOUVER, B.C. V6B 1B5
ATTENTION: R. LONGE

JANUARY 13, 1989

VALUES IN PPM UNLESS OTHERWISE REPORTED
PAGE 1

PROJECT: PDL
55 ROCK SAMPLES RECEIVED JANUARY 11, 1989

ETK#	DESCRIPTIONS	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN	
10 - 1	T M S 89-00 1	1.8	1.16	85	<2	185	<5	.35	2	4	41	12	2.03	.36	150	.38	126	87	.04	2	1370	18	15	<20	74	.09	10	90	<10	8	44	TR-2
10 - 2	T M S 89-00 2	.6	1.27	90	<2	225	<5	.50	2	6	40	16	2.48	.41	170	.43	336	17	.04	5	1610	14	5	<20	81	.06	10	95	<10	12	87	
10 - 3	T M S 89-00 3	.4	1.18	40	<2	245	<5	.50	1	8	40	17	2.76	.38	150	.55	745	9	.04	7	1660	14	5	<20	82	.14	10	95	<10	12	88	
10 - 4	T M S 89-00 4	.4	1.08	15	<2	240	<5	.48	1	8	38	12	2.54	.37	160	.60	659	5	.05	5	1440	10	5	<20	95	.21	10	91	<10	12	83	
10 - 5	T M S 89-00 5	.4	1.12	20	<2	215	5	.47	<1	9	50	12	2.53	.36	150	.62	687	7	.05	6	1540	10	5	<20	101	.20	10	94	<10	12	84	
10 - 6	T M S 89-00 6	.6	1.17	20	<2	225	<5	.48	1	8	45	11	2.66	.34	140	.63	648	6	.06	3	1440	8	<5	<20	107	.18	<10	85	<10	11	89	
10 - 7	T M S 89-00 7	.4	1.22	30	<2	190	<5	.49	1	9	38	11	2.52	.25	160	.60	632	4	.05	4	1510	10	5	<20	83	.15	10	81	<10	10	89	
10 - 8	T M S 89-00 8	.4	1.31	20	<2	210	<5	.46	<1	8	41	12	2.52	.34	140	.52	521	7	.04	5	1510	10	5	<20	89	.13	10	82	<10	11	87	
10 - 9	T M S 89-00 9	.6	1.25	40	<2	210	<5	.44	1	10	36	11	2.38	.28	160	.49	452	16	.04	5	1340	14	5	<20	76	.09	10	79	<10	10	84	
10 - 10	T M S 89-00 10	.4	.99	50	<2	170	5	.26	1	2	39	5	1.35	.33	140	.33	83	19	.04	2	1130	12	5	<20	63	.09	10	56	<10	8	36	
10 - 11	T M S 89-00 11	5.2	1.04	40	<2	210	5	.23	1	4	34	9	1.55	.37	140	.25	96	143	.04	2	1070	14	5	<20	114	.09	10	61	<10	6	29	
10 - 12	T M S 89-00 12	7.8	1.05	30	<2	190	5	.31	2	8	78	12	2.55	.36	150	.39	162	149	.04	5	1430	12	5	<20	94	.11	<10	95	<10	9	61	
10 - 13	T M S 89-00 13	.2	1.07	10	<2	220	<5	.96	1	13	37	8	3.43	.28	70	.86	601	7	.15	5	2050	6	5	<20	213	.23	10	161	<10	13	83	
10 - 14	T M S 89-00 14	.2	1.24	10	<2	225	<5	1.03	<1	18	61	12	3.62	.27	80	.90	515	6	.17	4	2150	14	5	<20	251	.23	10	164	<10	14	112	
10 - 15	T M S 89-00 15	.6	1.62	25	<2	195	<5	.75	1	14	60	18	3.17	.43	160	.79	699	16	.04	16	2850	22	5	<20	147	.10	<10	137	<10	13	99	
10 - 16	T M S 89-00 16	.4	1.83	25	<2	200	<5	.80	1	13	45	19	3.47	.37	150	.85	627	14	.04	14	2670	24	5	<20	152	.10	10	143	<10	14	99	
10 - 17	T M S 89-00 17	.4	1.62	20	<2	180	<5	.78	1	13	32	16	3.65	.35	150	.87	740	12	.03	10	2810	26	10	<20	142	.07	20	133	<10	13	95	TR-2
10 - 18	T M S 89-00 18	.4	1.36	80	<2	145	<5	.51	2	7	30	10	2.17	.33	170	.43	267	5	.04	4	1530	16	5	<20	107	.07	10	78	<10	10	72	TR-3
10 - 19	T M S 89-00 19	.4	1.15	180	<2	120	<5	.25	2	2	43	7	1.39	.32	150	.34	73	20	.04	2	1210	14	5	<20	87	.06	<10	56	<10	8	26	
10 - 20	T M S 89-00 20	.2	1.16	60	<2	120	<5	.58	2	3	18	9	1.68	.31	120	.30	262	41	.04	3	1630	18	5	<20	135	.04	10	49	<10	8	52	
10 - 21	T M S 89-00 21	.4	1.90	120	<2	215	5	.83	3	9	30	18	2.59	.33	230	.52	386	34	.05	6	1780	18	10	<20	229	.05	<10	68	<10	16	92	
10 - 22	T M S 89-00 22	.2	1.60	100	2	225	<5	.68	3	7	31	14	2.25	.34	220	.48	362	46	.05	4	1840	18	5	<20	185	.05	<10	44	<10	15	74	
10 - 23	T M S 89-00 23	.2	1.50	65	<2	215	5	.53	2	13	45	16	2.59	.31	210	.51	491	17	.05	6	1810	12	5	<20	149	.06	<10	46	<10	14	98	
10 - 24	T M S 89-00 24	.2	1.39	185	<2	215	<5	.51	5	5	22	11	2.71	.32	200	.47	167	27	.05	3	1790	14	10	<20	173	.06	<10	88	<10	11	58	
10 - 25	T M S 89-00 25	<.2	1.64	100	<2	220	<5	.50	3	9	25	14	3.01	.30	200	.54	379	8	.05	5	1720	10	15	<20	145	.06	<10	53	<10	13	79	
10 - 26	T M S 89-00 26	<.2	1.61	50	<2	190	<5	.64	2	11	20	17	2.70	.29	180	.69	258	17	.05	8	1610	10	5	<20	182	.04	<10	54	<10	13	84	
10 - 27	T M S 89-00 27	.2	1.19	10	<2	460	<5	.82	1	18	59	18	3.67	.33	110	.91	683	5	.10	6	2240	14	10	<20	201	.21	<10	56	<10	16	93	
10 - 28	T M S 89-00 28	.2	1.67	55	<2	375	<5	.64	2	8	20	18	3.42	.30	220	.67	746	7	.05	8	2010	12	10	<20	147	.07	<10	65	<10	14	122	
10 - 29	T M S 89-00 29	<.2	1.63	55	<2	205	5	.57	2	8	38	14	2.47	.31	230	.60	814	9	.04	6	1940	10	10	<20	127	.05	<10	49	10	15	104	
10 - 30	T M S 89-00 30	<.2	1.59	65	<2	230	<5	.53	2	6	27	12	2.97	.32	220	.61	176	12	.05	7	1880	10	10	<20	205	.06	<10	49	<10	13	63	

PAGE 2

ETK#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
10	- 31	T M S 89-90 31	.2	1.22	70	<2	170	5	.38	2	4	29	10	2.64	.29	180	.48	150	25	.03	4	1420	14	5	<20	122	.04	<10	35	<10	9	58
10	- 32	T M S 89-90 32	1.8	1.05	55	<2	190	5	.49	1	2	8	8	2.54	.28	200	.40	60	133	.03	3	1990	32	10	<20	129	.02	<10	42	<10	10	33
10	- 33	T M S 89-90 33	.2	1.58	50	<2	150	5	.86	2	9	21	27	4.06	.31	210	.68	378	12	.03	16	3830	26	10	<20	164	.03	<10	84	10	19	104
10	- 34	T M S 89-90 34	.2	1.79	25	<2	95	5	1.04	1	20	30	36	4.43	.27	230	.99	608	4	.02	16	4860	28	10	<20	177	.02	<10	101	<10	19	121
10	- 35	T M S 89-90 35	<.2	1.60	25	<2	115	<5	1.01	1	15	25	27	3.99	.24	180	1.06	808	4	.03	12	4170	16	10	<20	153	.04	<10	80	<10	16	97
10	- 36	T M S 89-90 36	.2	1.54	25	<2	230	<5	1.09	1	19	25	29	4.04	.22	190	1.12	968	5	.04	13	4450	14	5	<20	548	.08	<10	85	<10	16	99
10	- 37	T M S 89-90 37	.2	1.59	15	<2	270	<5	.73	<1	7	5	14	2.48	.48	200	.72	910	4	.03	3	1720	32	5	<20	120	.06	<10	36	<10	12	68
10	- 38	T M S 89-90 38	<.2	1.69	20	<2	210	<5	.73	<1	9	7	15	2.13	.45	190	.72	539	5	.03	4	1920	30	5	<20	124	.03	<10	33	<10	12	72
10	- 39	T M S 89-90 39	.4	1.85	50	<2	185	5	.67	1	6	4	17	2.28	.56	160	.68	563	20	.03	6	1650	32	5	<20	135	.03	10	41	<10	13	77
10	- 40	T M S 89-90 40	.4	1.78	65	<2	190	<5	.68	1	8	10	13	2.75	.56	170	.66	757	29	.03	7	1650	24	10	<20	156	.02	<10	40	<10	12	80
10	- 41	T M S 89-90 41	.6	1.67	95	<2	195	<5	.68	2	9	17	16	3.29	.35	180	.58	519	45	.03	10	1700	26	10	<20	123	.02	<10	48	<10	13	100
10	- 42	T M S 89-90 42	1.2	1.66	145	<2	165	<5	.58	4	20	75	30	5.28	.24	120	.65	451	428	.05	21	2900	14	15	<20	150	.13	10	98	10	21	130
10	- 43	T M S 89-90 43	.8	1.07	70	<2	175	<5	.21	2	2	50	6	1.74	.37	150	.38	72	267	.04	1	1220	20	10	<20	90	.05	<10	29	<10	6	24
10	- 44	T M S 89-90 44	1.8	1.24	80	2	175	<5	.16	1	2	50	7	2.22	.38	160	.42	84	520	.04	3	1230	16	10	<20	85	.05	<10	38	<10	6	24
10	- 45	T M S 89-90 45	.4	1.20	125	<2	185	<5	.21	3	2	42	7	2.57	.40	160	.39	61	61	.04	3	1550	20	10	<20	74	.03	<10	39	<10	6	26
10	- 46	T M S 89-90 46	.4	1.45	65	<2	190	<5	.31	2	5	47	12	2.84	.35	190	.51	152	41	.05	2	1600	16	10	<20	62	.05	<10	51	<10	7	40
10	- 47	T M S 89-90 47	.4	1.72	85	<2	160	<5	.34	2	2	36	11	2.06	.39	150	.53	105	60	.04	2	1570	20	10	<20	70	.02	<10	46	<10	6	31
10	- 48	T M S 89-90 48	.4	1.52	125	<2	175	<5	.40	3	4	29	12	3.20	.32	190	.54	138	34	.04	3	1770	16	10	<20	87	.05	<10	47	<10	10	59
10	- 49	T M S 89-90 49	.6	1.75	165	<2	160	<5	.52	2	9	32	15	3.61	.34	200	.56	333	293	.04	6	1940	18	10	<20	109	.04	<10	67	<10	14	79
10	- 50	T M S 89-90 50	.4	1.58	55	<2	200	<5	.47	1	5	41	14	2.94	.36	190	.55	712	45	.04	4	1660	20	10	<20	102	.04	<10	56	<10	10	80
10	- 51	T M S 89-90 51	.4	1.50	30	<2	215	<5	.50	1	17	79	15	3.08	.54	190	.73	770	11	.07	7	1620	14	5	<20	128	.08	<10	69	10	15	120
10	- 52	T M S 89-90 52	.4	1.72	115	<2	225	<5	.37	3	14	75	15	3.07	.38	200	.56	477	25	.05	6	1660	18	10	<20	101	.05	<10	64	<10	14	102
10	- 53	T M S 89-90 53	.4	1.41	110	<2	195	<5	.35	3	10	32	17	2.83	.35	200	.52	657	33	.04	6	1600	20	5	<20	93	.05	<10	46	<10	11	108

NOTE: < = less than

CC: L.J. LEE
VANCOUVER, B.C.
FAX: YCR

SC89/PBL

ECO-TECH LABORATORIES LTD.
Don Enders
Laboratory Manager

TT2-3
TT2-1

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 24, 1989

CERTIFICATE OF ANALYSIS ETK 89-27

MINEQUEST EXPLORATION ASSOCIATES LTD.
5TH FLOOR, 164 WATER STREET
VANCOUVER, B.C.
V6B 1B5

ATTENTION: ROBERT LONGE

SAMPLE IDENTIFICATION: 10 ROCK samples received January 18, 1989
PROJECT: PDL
NOTE: U & TH GEOCHEMS TO FOLLOW

ET#	Description	AU (ppb)	
27 - 1	TMS 89 54	145	TR-1
27 - 2	TMS 89 55	30	
27 - 3	TMS 89 56	15	
27 - 4	TMS 89 57	235	
27 - 5	TMS 89 58	15	
27 - 6	TMS 89 59	20	
27 - 7	TMS 89 60	15	
27 - 8	TMS 89 61	5	TR1
27 - 9	TMS 89 62	10	TR4
27 10	TMS 89 63	5	

ECO-TECH LABORATORIES LTD.
DON ENDERS
LABORATORY MANAGER

cc: LINDA LEE
VANCOUVER, B.C.
SC89/PDL

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

MINEQUEST EXPLORATION ASSOCIATES LTD. - ETK 89-27A

5TH. FLOOR,164 WATER STREET
VANCOUVER, B.C. V6B 1B5
ATTENTION: R. LUNGE

JANUARY 23, 1989

VALUES IN PPM UNLESS OTHERWISE REPORTED
PAGE 1

PROJECT: PBL
10 ROCK SAMPLES RECEIVED JANUARY 18, 1989

ETK#	DESCRIPTIONS	MO	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SE	SR	TI(%)	U	V	W	Y	ZN
27 - 1	TMS 89 054	6.0	1.03	420	8	185	<5	.28	9	9	48	17	3.19	.27	160	.34	234	229	.04	2	1550	26	20	<20	118	.04	10	33	<10	8	54
27 - 2	TMS 89 055	2.0	1.20	75	<2	225	<5	.41	1	8	29	12	2.18	.21	180	.45	745	72	.03	8	1450	22	10	<20	81	.03	<10	43	<10	11	54
27 - 3	TMS 89 056	1.0	1.25	75	<2	225	<5	.28	2	7	15	11	2.75	.24	150	.53	555	20	.03	4	1570	22	10	<20	98	.04	<10	36	<10	10	86
27 - 4	TMS 89 057	.6	1.20	50	<2	270	<5	.38	1	14	46	16	3.02	.21	170	.58	717	46	.04	6	1670	20	10	<20	76	.04	<10	36	<10	11	102
27 - 5	TMS 89 058	.4	1.48	65	<2	210	<5	.39	2	9	33	13	2.62	.28	260	.46	470	21	.04	5	1690	18	10	<20	71	.04	<10	33	<10	10	93
27 - 6	TMS 89 059	.4	1.01	55	<2	240	<5	.29	1	7	40	10	2.59	.26	140	.41	352	21	.04	4	1570	18	5	<20	104	.05	10	29	<10	8	66
27 - 7	TMS 89 060	.8	.89	40	<2	205	<5	.22	1	7	43	10	2.47	.21	140	.37	270	37	.03	3	1480	22	10	<20	64	.04	<10	33	<10	8	71
27 - 8	TMS 89 061	.6	1.12	90	<2	355	<5	.41	2	6	37	11	2.70	.25	150	.43	432	43	.03	3	1610	36	10	<20	68	.05	<10	28	<10	5	79
27 - 9	TMS 89 062	.2	1.25	40	<2	370	<5	.53	1	8	47	8	3.15	.25	90	.64	201	6	.06	4	2460	16	10	<20	532	.11	10	89	<10	12	59
27 - 10	TMS 89 063	.4	1.89	50	<2	220	5	.37	1	6	18	11	2.67	.37	160	.55	390	9	.04	3	1650	28	5	<20	63	.08	<10	36	<10	7	76

NOTE: < = less than

CC: LINDA LEE
VANCOUVER, B.C.
FAX: WCR

SC89/PSL

ECO-TECH LABORATORIES LTD.
Don Enders
Laboratory Manager

ECO-TECH LABORATORIES LTD.
ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 20, 1989

CERTIFICATE OF ANALYSIS ETK 89-20

MINEQUEST EXPLORATION ASSOCIATES LTD.
5TH FLOOR, 164 WATER STREET
VANCOUVER, B.C.
V6B 1B5

ATTENTION: ROBERT LONGE

SAMPLE IDENTIFICATION: 18 CORE samples received January 16, 1989
PROJECT: PDL

ET#	Description		AU (ppb)	
20 - 1	TMS 09	65	55	TR4
20 - 2		66	10	
20 - 3		67	15	
20 4		68	20	
20 - 5		69	10	TR5
20 - 6		70	15	
20 - 7		71	10	
20 - 8		72	20	
20 - 9		73	10	
20 - 10		74	15	
20 11		75	20	
20 - 12		76	15	
20 13		77	5	
20 - 14		78	205	
20 - 15		79	25	
20 - 16		00	<5	
20 - 17	PDL	30	120	PC-3
20 - 18		31	140	

NOTE: < = LESS THAN

ECO-TECH LABORATORIES LTD.
DON ENDERS
LABORATORY MANAGER

cc: LINDA LEE
VANCOUVER, B.C.
SC89/PDL

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

JANUARY 20, 1989

MINEQUEST EXPLORATION ASSOCIATES LTD. - ETK 89-20A

5TH. FLOOR, 164 WATER STREET
VANCOUVER, B.C. V6B 1B6
ATTENTION: R. LOWE

VALUES IN PPM UNLESS OTHERWISE REPORTED
PAGE 1

PROJECT: PEL
18 ROCK SAMPLES RECEIVED JANUARY 16, 1989

ETK#	DESCRIPTIONS		AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN	
20 - 1	TMS 89	65	.6	1.79	20	<2	190	<5	.95	1	12	24	24	2.25	.43	180	.80	910	2	.05	8	1250	26	10	<20	164	.11	<10	49	<10	12	125	TR4
20 - 2		66	.8	2.04	15	<2	175	<5	1.02	1	10	44	21	3.33	.49	190	.93	1681	3	.02	8	2030	40	10	<20	159	.05	<10	45	<10	10	61	
20 - 3		67	.6	1.32	15	<2	170	<5	1.47	1	12	25	23	2.52	.37	200	.55	991	1	.03	10	2120	42	10	<20	156	.05	<10	40	<10	11	78	
20 - 4		68	.8	1.83	15	<2	185	<5	1.19	1	11	32	20	2.78	.41	200	.56	1975	2	.03	9	2020	36	5	<20	142	.06	<10	42	<10	10	82	
20 - 5		69	.6	1.05	15	<2	105	<5	.55	<1	8	61	14	2.28	.22	160	.57	946	7	.05	5	1720	4	5	<20	156	.06	<10	55	<10	14	91	
20 - 6		70	.4	1.21	10	<2	130	<5	.61	<1	9	37	13	2.53	.26	160	.53	941	6	.07	6	1790	4	5	<20	153	.05	<10	54	<10	13	76	
20 - 7		71	.6	1.24	15	<2	150	<5	.55	<1	10	53	14	2.93	.27	160	.61	978	8	.06	6	1620	4	10	<20	137	.08	<10	61	<10	12	85	
20 - 8		72	.6	1.19	15	<2	180	<5	.60	1	9	117	12	2.73	.23	160	.62	634	8	.08	5	1580	10	10	<20	187	.09	<10	53	<10	12	86	
20 - 9		73	.6	1.01	10	<2	165	<5	.53	1	10	90	12	2.89	.29	160	.55	752	6	.06	4	1770	6	5	<20	145	.11	<10	52	<10	12	91	
20 - 10		74	.6	1.12	5	<2	170	<5	.57	1	9	71	11	2.94	.28	160	.71	1002	6	.06	4	1630	6	5	<20	108	.14	<10	66	<10	13	99	TR5
20 - 11		75	.6	.94	10	<2	190	<5	.50	1	10	113	11	2.88	.20	150	.54	729	9	.09	5	1680	8	5	<20	125	.16	<10	59	<10	13	86	
20 - 12		76	.4	.97	15	<2	160	<5	.56	<1	8	53	13	2.56	.22	200	.52	555	5	.07	7	1810	6	5	<20	334	.36	<10	35	<10	15	76	
20 - 13		77	.4	1.01	10	<2	110	<5	.57	<1	6	65	10	2.22	.20	190	.48	468	8	.04	4	1780	12	5	<20	197	.04	<10	30	<10	14	66	
20 - 14		78	.4	2.11	55	<2	175	<5	1.12	2	18	71	28	4.61	.18	180	.92	713	9	.05	19	3670	12	10	<20	467	.03	<10	109	<10	16	169	
20 - 15		79	.4	2.22	75	<2	200	<5	1.17	1	19	88	29	4.76	.21	190	.86	719	9	.07	17	3900	14	10	<20	824	.04	<10	112	<10	17	167	
20 - 16		80	.4	1.14	15	<2	155	<5	.56	<1	7	54	10	2.50	.28	190	.54	550	7	.05	5	1830	8	5	<20	152	.04	<10	40	<10	15	72	
20 - 17	PEL	30	.6	.36	340	<2	155	<5	.14	1	2	22	11	3.28	.22	180	.25	102	62	.04	2	1300	22	5	<20	69	.03	<10	28	<10	7	37	PC-3
20 - 18		31	.6	1.23	340	<2	55	<5	.50	1	10	39	13	3.27	.28	190	.55	299	28	.04	5	1640	14	10	<20	53	.03	<10	30	<10	12	138	

NOTE: < = less than

ECO-TECH LABORATORIES LTD.
Ben Enders
Laboratory Manager

CC: LINDA LEE
VANCOUVER, B.C.
FAX: YCE

SC89/PEL

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ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

JANUARY 26, 1989

CERTIFICATE OF ANALYSIS ETK 89-28

MINEQUEST EXPLORATION ASSOCIATES LTD.
5TH FLOOR, 164 WATER STREET
VANCOUVER, B.C.
V6B 1B5

ATTENTION: ROBERT LONGE

SAMPLE IDENTIFICATION: 77 ROCK CHIP samples received January 18, 1989
PROJECT: PDL

ET#	Description		AU (ppb)
28 - 1	PDL 89 1	RC-1	20
28 - 2	2		20
28 - 3	3		15
28 - 4	4		25
28 - 5	5		45
28 - 6	6		30
20 7	7		30
28 - 8	8		30
28 - 9	9		15
28 - 10	10		20
28 - 11	11		10
28 - 12	12		55
28 - 13	13		30
20 14	14		75
28 - 15	15		20
28 - 16	16		20
20 17	17	RC-1	20
28 - 18	18	RC-2	10
20 19	19		10
28 - 20	20		5
28 - 21	21		595
28 - 22	22		705
28 - 23	23		195
20 24	24		160
28 - 25	25		30
28 - 26	26		45
28 - 27	27		65
28 - 28	20		25
28 - 29	29	RC-2	20
28 - 30	32	RC-3	10

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MINEQUEST EXPLORATION ASSOCIATES LTD. JANUARY 26, 1989

CT#	Description		AU (ppb)
28 - 31	33		5
28 - 32	34		10
28 - 33	35		5
28 - 34	36		15
28 - 35	37		20
28 - 36	38		10
28 - 37	39		10
28 - 38	40	RC-3	10
28 - 39	41	RC-4	20
28 - 40	42		20
28 - 41	43		15
28 - 42	44		20
28 - 43	45		20
28 - 44	46		20
28 - 45	47		25
28 - 46	48		55
28 - 47	49		35
28 - 48	50		25
28 - 49	51		20
28 - 50	52		20
28 - 51	53		20
28 - 52	54		15
28 - 53	55		15
28 - 54	56		30
28 - 55	57		15
28 - 56	58		5
28 - 57	59	RC-4	10
28 - 58	60	RC-5	55
28 - 59	61		5
28 - 60	62		10
28 - 61	63		5
28 - 62	64		5
28 - 63	65		5
28 - 64	66		20
28 - 65	67		15
28 - 66	68		40
28 - 67	69		5
28 - 68	70		5
28 - 69	71		10
28 - 70	72		20
28 - 71	73		50
28 - 72	74		10
28 - 73	75		25
28 - 74	76		15
28 - 75	77		10

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MINEQUEST EXPLORATION ASSOCIATES LTD. JANUARY 26, 1989

ET# Description	AU (ppb)
28 - 76 78	10
28 - 77 79	10

NOTE: < = LESS THAN

ECO-TECH LABORATORIES LTD.
DON ENDERS
LABORATORY MANAGER

cc: LINDA LEE
VANCOUVER, B.C.
SC89/PDL

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

JANUARY 25, 1989

MINEQUEST EXPLORATION ASSOCIATES LTD. - ETK 89-28A

5TH. FLOOR, 164 WATER STREET
VANCOUVER, B.C. V6B 1B5
ATTENTION: R. LOOSE

VALUES IN PPM UNLESS OTHERWISE REPORTED
PAGE 1

PROJECT: PEL
77 ROCK CHIP SAMPLES RECEIVED JANUARY 18, 1989

ETK#	DESCRIPTIONS	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN	
28 - 1	PEL 89001	.4	1.13	10	<2	190	<5	.60	1	10	19	15	3.17	.22	170	.73	948	5	.04	5	1540	14	10	<20	128	.15	<10	77	<10	12	106	PLC-1
28 - 2	89002	.4	1.20	60	<2	220	<5	.51	2	7	15	18	3.08	.25	150	.54	559	11	.04	4	1490	22	10	<20	91	.08	<10	58	<10	13	108	
28 - 3	89003	.2	1.21	80	<2	235	<5	.58	2	9	14	14	2.70	.31	190	.51	405	20	.04	6	1660	24	15	<20	94	.06	10	57	<10	10	117	
28 - 4	89004	.2	1.13	85	<2	185	<5	.59	2	13	25	19	3.25	.29	120	.49	579	40	.03	17	1630	22	10	<20	103	.04	<10	72	<10	9	118	
28 - 5	89005	1.4	1.42	85	<2	90	<5	.79	2	14	47	23	3.49	.22	110	.54	354	160	.03	23	2020	24	15	<20	139	.02	<10	83	<10	15	117	
28 - 6	89006	1.2	1.23	60	<2	85	<5	.75	2	9	10	23	2.17	.37	150	.51	264	329	.04	11	1770	46	20	<20	158	.02	<10	44	<10	9	108	
28 - 7	89007	1.2	1.19	75	2	45	<5	.71	2	10	15	14	4.48	.41	140	.53	271	360	.03	5	1850	40	25	<20	113	.02	<10	38	<10	11	105	
28 - 8	89008	.2	1.22	25	<2	55	<5	.77	1	10	9	16	3.73	.35	120	.58	321	17	.03	5	1720	20	15	<20	120	.03	<10	25	<10	12	95	
28 - 9	89009	.2	1.74	60	2	145	<5	.98	2	9	17	26	3.13	.38	140	.71	593	11	.03	4	1730	36	10	<20	154	.03	10	47	<10	11	113	
28 - 10	89010	.2	1.55	55	<2	95	<5	1.31	2	8	14	16	3.73	.31	170	.61	527	17	.03	4	1970	34	10	<20	197	.02	<10	55	<10	11	116	
28 - 11	89011	.2	1.67	30	<2	140	<5	3.16	1	6	6	14	3.22	.29	160	.69	950	107	.05	3	1830	28	10	<20	413	.03	<10	72	<10	10	108	
28 - 12	89012	.4	1.60	50	<2	135	<5	4.33	1	6	5	15	1.89	.32	190	.45	975	7	.05	3	1320	42	5	<20	592	.02	<10	25	<10	11	59	
28 - 13	89013	.2	2.21	35	<2	115	<5	6.93	1	7	8	13	2.53	.33	120	.49	1026	10	.05	5	1720	40	10	<20	893	.02	<10	28	<10	11	68	
28 - 14	89014	.2	2.63	90	4	60	<5	2.78	2	9	11	12	3.36	.28	170	.76	656	15	.08	4	1750	38	15	<20	874	.07	10	71	<10	11	113	
28 - 15	89015	<.2	1.28	30	<2	165	<5	1.27	1	10	27	14	3.59	.28	180	.77	557	18	.07	5	1870	20	10	<20	886	.13	10	57	<10	12	107	
28 - 16	89016	<.2	1.01	40	<2	140	<5	1.93	1	13	33	15	3.16	.25	150	.66	742	13	.07	6	1790	16	10	<20	984	.16	10	52	<10	12	109	
28 - 17	89017	.4	.86	20	<2	115	<5	.71	<1	8	22	10	2.46	.24	200	.61	406	11	.06	2	1710	8	5	<20	560	.08	10	47	<10	12	73	PLC-1
28 - 18	89018	<.2	1.20	10	<2	80	<5	1.18	1	33	55	30	6.07	.21	160	1.41	1695	10	.07	19	4360	14	15	<20	251	.27	<10	190	<10	17	150	PLC-2
28 - 19	89019	<.2	1.47	25	4	75	<5	1.26	1	27	45	24	6.45	.17	190	1.56	1487	5	.05	19	4620	18	15	<20	267	.24	<10	180	<10	16	157	
28 - 20	89020	.4	1.52	30	<2	115	<5	1.75	1	11	12	22	3.39	.26	235	.96	901	2	.04	6	3355	50	10	<20	133	.03	<10	75	<10	14	148	
28 - 21	89021	1.4	.80	95	<2	70	<5	.57	3	10	9	16	2.94	.29	180	.27	97	247	.03	3	2260	42	15	<20	166	.02	<10	42	<10	9	96	
28 - 22	89022	14.8	.39	265	28	100	<5	.13	7	4	20	7	3.68	.90	240	.17	204	1513	.03	<1	1630	70	10	<20	739	.06	<10	66	<10	4	38	
28 - 23	89023	2.4	.58	155	2	105	<5	.29	4	4	20	15	2.80	.36	180	.28	131	267	.02	2	1280	36	10	<20	164	.04	<10	50	<10	8	70	
28 - 24	89024	3.2	.85	150	<2	140	<5	.51	4	10	33	15	2.78	.34	210	.40	235	82	.04	5	1500	26	10	<20	110	.04	<10	60	<10	12	139	
28 - 25	89025	.8	.80	100	<2	200	<5	.55	3	6	22	30	2.12	.25	150	.38	572	75	.03	4	1310	24	5	<20	101	.03	<10	23	<10	8	84	
28 - 26	89026	.4	1.51	65	<2	140	<5	1.83	2	14	85	25	3.40	.38	70	.87	863	55	.04	28	1380	30	10	<20	174	.04	<10	73	<10	7	103	
28 - 27	89027	.6	1.65	15	<2	295	<5	1.20	1	15	103	39	2.92	.47	50	.99	692	28	.05	26	1030	18	10	<20	455	.08	<10	92	<10	6	99	
28 - 28	89028	.2	1.68	15	<2	640	<5	1.48	1	8	10	28	2.43	.37	200	.87	671	5	.05	6	1880	40	5	<20	751	.02	<10	41	<10	12	78	
28 - 29	89029	.2	1.94	15	<2	705	<5	1.57	1	8	5	15	2.15	.45	290	.30	735	5	.06	3	1630	42	10	<20	719	.02	10	32	<10	13	72	PLC-2
28 - 30	89030	.2	1.30	30	<2	165	<5	1.85	1	7	9	13	1.87	.41	180	.57	539	5	.04	3	1540	26	5	<20	241	.02	<10	22	<10	12	77	PLC-3

ECO-TECH LABORATORIES LTD. MINEQUEST EXPLORATION ASSOCIATES LTD. - ETK 89-28A

PAGE 2

ETK#	DESCRIPTIONS	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN	
28 - 31	89033	.2	1.23	10	<2	165	<5	1.84	1	6	8	12	1.79	.35	170	.52	507	4	.04	3	1370	22	5	<20	225	.03	<10	32	<10	13	66	
28 - 32	89034	.2	1.36	10	2	200	<5	1.74	1	7	15	12	2.21	.28	170	.64	714	4	.13	3	1470	20	5	<20	257	.04	<10	49	<10	12	77	
28 - 33	89035	.2	2.03	15	2	625	<5	1.69	<1	10	26	15	2.57	.26	180	.78	778	5	.21	4	1500	26	10	<20	711	.10	10	62	<10	12	89	
28 - 34	89036	<.2	1.75	15	<2	255	<5	2.10	1	9	20	24	2.30	.30	180	.76	659	8	.07	6	1850	34	10	<20	329	.05	<10	57	<10	14	64	
28 - 35	89037	.2	2.00	15	<2	270	<5	1.33	1	12	58	53	2.29	.41	140	.79	538	6	.05	16	1870	36	10	<20	737	.04	<10	70	<10	13	84	
28 - 36	89038	.2	3.76	20	6	190	<5	1.18	1	12	17	25	2.33	.41	190	.87	680	5	2.15	9	1870	42	5	<20	369	.11	<10	69	<10	12	88	
28 - 37	89039	.2	4.23	20	4	240	<5	1.14	1	11	18	22	2.39	.37	200	.63	650	6	2.80	6	1870	42	20	<20	377	.12	<10	67	<10	12	93	
28 - 38	89040	.2	4.00	20	4	195	<5	1.71	1	11	16	25	2.45	.30	250	.55	519	3	2.55	7	1860	36	10	<20	529	.08	<10	67	<10	12	86	RC-3
28 - 39	89041	.4	2.42	15	<2	175	<5	.76	<1	7	22	19	2.26	.75	170	.78	894	4	.05	3	1510	40	10	<20	110	.09	<10	37	<10	13	117	
28 - 40	89042	.2	2.32	15	2	165	<5	1.72	<1	8	29	15	2.30	.39	170	.82	857	5	.04	2	1650	20	10	<20	150	.07	<10	58	<10	13	74	RC-4
28 - 41	89043	.4	2.10	15	<2	190	<5	1.65	<1	7	27	13	2.46	.34	180	1.01	1086	6	.04	2	1610	16	10	<20	148	.07	<10	58	<10	13	82	
28 - 42	89044	.4	2.17	15	<2	165	<5	1.52	<1	8	22	13	2.42	.45	170	.90	857	3	.03	2	1580	22	5	<20	150	.07	<10	42	<10	13	69	
28 - 43	89045	.2	2.19	10	2	160	<5	2.16	<1	6	8	15	1.82	.75	180	.68	503	2	.03	3	1580	28	10	<20	272	.02	<10	29	<10	15	62	
28 - 44	89046	.4	1.53	25	<2	190	<5	.67	1	7	18	11	2.24	.23	180	.69	310	3	.03	3	1500	20	5	<20	107	.03	<10	46	<10	11	91	
28 - 45	89047	.4	1.37	40	<2	90	<5	.64	1	8	20	14	2.20	.24	190	.64	292	9	.04	3	1500	18	5	<20	102	.04	<10	38	<10	12	89	
28 - 46	89048	.4	1.13	110	<2	100	<5	.88	2	9	24	12	2.44	.25	180	.60	433	9	.04	2	1500	18	5	<20	242	.06	<10	41	<10	12	89	
28 - 47	89049	.4	1.17	80	<2	95	<5	.94	2	8	25	12	2.58	.24	170	.65	480	10	.04	2	1510	14	10	<20	229	.06	<10	43	<10	12	87	
28 - 48	89050	.2	1.22	30	<2	160	<5	.61	<1	8	18	11	2.23	.27	170	.68	556	11	.04	2	1400	18	5	<20	273	.05	<10	41	<10	11	77	
28 - 49	89051	.4	.97	10	<2	180	<5	.84	<1	9	27	10	2.51	.25	150	.65	1123	4	.05	1	1380	14	5	<20	319	.24	<10	56	<10	11	98	
28 - 50	89052	.6	.88	10	<2	200	<5	.68	<1	12	34	9	2.51	.26	140	.61	353	5	.07	2	1470	8	5	<20	441	.27	<10	59	<10	12	131	
28 - 51	89053	.6	.83	15	<2	165	<5	.73	<1	9	18	8	2.37	.23	140	.54	1102	4	.05	1	1480	12	5	<20	311	.27	<10	61	<10	12	97	
28 - 52	89054	.6	.85	15	<2	180	5	.65	1	9	22	9	2.47	.24	150	.59	649	7	.06	2	1380	12	5	<20	354	.15	<10	52	<10	13	88	
28 - 53	89055	.4	.76	25	<2	205	<5	.64	1	9	41	11	2.65	.25	150	.51	506	5	.07	2	1470	14	5	<20	623	.14	<10	49	<10	13	76	
28 - 54	89056	.4	.79	10	<2	170	<5	1.29	<1	8	26	11	1.91	.16	170	.53	515	3	.05	2	1350	16	5	<20	287	.13	<10	37	<10	14	68	
28 - 55	89057	.4	.79	30	<2	165	<5	.62	1	10	46	10	2.49	.24	150	.55	500	9	.07	3	1420	10	5	<20	618	.13	10	46	<10	14	81	
28 - 56	89058	.4	1.47	15	<2	255	<5	1.11	<1	11	15	17	2.42	.28	180	.67	433	2	.07	3	1590	36	10	<20	257	.19	<10	49	<10	13	85	
28 - 57	89059	.4	1.33	15	<2	259	<5	1.66	<1	10	29	13	2.50	.30	170	.66	455	2	.08	3	1580	30	5	<20	278	.21	<10	46	<10	12	77	RC-4
28 - 58	89060	.4	1.75	25	<2	150	<5	.77	1	11	39	19	2.97	.21	150	.73	497	34	.06	9	1940	16	10	<20	190	.07	<10	60	<10	13	91	RC-5
28 - 59	89061	.4	1.78	10	<2	120	<5	1.39	1	7	11	13	2.44	.28	150	.90	801	9	.04	3	1480	26	10	<20	129	.04	<10	48	<10	9	81	
28 - 60	89062	.4	1.64	15	2	165	<5	.90	1	8	27	13	2.50	.32	150	.89	984	6	.60	3	1460	18	5	<20	177	.10	<10	50	<10	11	85	
28 - 61	89063	.2	1.58	15	<2	290	<5	2.04	1	6	7	10	1.86	.31	140	.60	1157	6	.05	2	1450	20	5	<20	361	.04	<10	33	<10	12	62	
28 - 62	89064	.4	1.57	15	<2	235	<5	1.80	1	7	17	12	2.17	.30	130	.74	636	3	.06	4	1460	18	5	<20	492	.05	<10	37	<10	12	92	
28 - 63	89065	.4	2.11	15	<2	680	<5	3.27	<1	7	16	12	2.24	.24	140	.75	842	2	.20	3	1480	24	10	<20	605	.07	<10	42	<10	10	78	
28 - 64	89066	.2	1.09	10	<2	410	<5	1.00	<1	4	7	7	1.29	.12	70	.37	343	2	.11	2	810	18	5	<20	622	.05	<10	23	<10	6	44	
28 - 65	89067	.2	2.28	10	<2	225	<5	1.58	<1	10	31	38	2.28	.44	120	.76	496	1	.04	13	1990	32	10	<20	642	.05	<10	55	<10	14	33	
28 - 66	89068	.4	3.02	20	<2	170	<5	1.32	1	12	18	24	2.42	.43	160	.80	1025	3	1.39	8	2110	40	15	<20	345	.11	<10	55	<10	12	86	
28 - 67	89069	.4	4.29	20	4	170	<5	1.10	1	11	17	21	2.42	.32	160	.60	650	2	3.92	7	1860	36	20	<20	541	.12	<10	57	<10	11	90	

PAGE 3

ET#	DESCRIPTIONS	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
29 - 69	89070	.4	4.58	25	4	180	<5	1.16	1	11	17	20	2.38	.29	160	.50	635	3	4.77	7	1940	40	15	<20	629	.13	<10	58	<10	10	91
29 - 69	89071	.4	4.09	15	4	215	<5	1.02	1	11	22	18	2.10	.26	130	.42	606	5	3.86	6	1580	28	15	<20	633	.18	<10	53	<10	9	80
29 - 70	89072	.4	3.20	15	2	345	<5	.88	<1	11	25	29	1.23	.32	140	.48	521	3	2.21	7	1630	24	10	<20	654	.15	<10	56	<10	10	81
29 - 71	89073	.4	3.27	20	4	310	<5	1.71	<1	10	21	21	2.09	.36	140	.53	514	3	1.09	6	1490	26	10	<20	628	.09	<10	47	<10	9	91
29 - 72	89074	.6	3.20	15	2	200	<5	1.51	1	11	16	21	2.57	.39	160	.77	765	3	2.08	7	1810	26	10	<20	481	.17	<10	58	<10	10	92
29 - 73	89075	.6	4.25	20	4	205	<5	1.79	<1	13	13	29	2.24	.45	190	.75	711	2	2.57	6	1810	48	15	<20	314	.18	<10	43	<10	11	85
29 - 74	89076	.6	4.00	20	2	170	<5	2.44	<1	11	8	23	2.01	.39	150	.81	659	1	3.22	7	1860	46	20	<20	414	.14	<10	42	<10	10	75
29 - 75	89077	.4	3.09	15	2	200	<5	1.16	1	10	17	22	2.28	.33	160	.66	673	2	1.36	6	1580	24	10	<20	596	.12	<10	50	<10	10	93
29 - 76	89078	.6	2.55	15	2	270	<5	1.04	1	13	18	23	2.26	.44	160	.65	664	3	.82	8	2090	40	10	<20	692	.18	10	54	<10	11	90
29 - 77	89079	.4	2.45	15	<2	395	<5	1.06	1	11	40	19	2.55	.38	220	.65	707	4	1.14	6	2050	24	10	<20	533	.20	<10	72	<10	11	85

NOTE: < = less than

CC: LINDA LEE
VANCOUVER, B.C.
FAX: VCR

ECO-TECH LABORATORIES LTD.
Doe Enders
Laboratory Manager

SCB9/PBL

APPENDIX IV

REVERSE CIRCULATION DRILL LOGS

MINEQUEST EXPLORATION ASSOCIATES LTD.

PROPERTY: PDL

HOLE No.: PDL 89-RC-1

DRILL LOG - CORE

CLAIM BLOCK CODE: PDL
NTS: UTM:
CLAIM NAME:
LOCATION - GRID NAME:
GRID N: 100+33N GRID E: 99+14E
SECTION: ELEV:
AZIM: 090 LENGTH: ~~165'~~ 175'
DIP: -65 CASING LEFT?:
CORE SIZE:
CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHSPAN
STARTED: JAN 9/~~86~~ 89
COMPLETED: JAN 10/89
PURPOSE: to test silicified zone structure + Au content
CORE RECOVERY:
LOGGED BY: Paul Conrey
DATE LOGGED: Jan 9+10, 1989
ASSAYED BY: Ecotech Lab, K'ps.
LAB REPORT NOS.:

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL ET	DESCRIPTION	INTERVAL (m) FROM	INTERVAL (m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	0							
	5							
ANDESITE ‡	10	med. bn to dk gy-bn; v. wk alt'n w/ minor sauss'n of flsp'l phenos	10	15		PDL	89001	
‡	15	dk gy bn to ~18'; med bn to ~22'; both wk.	15	25			89002	
		alt'd; med. gy, bleached, v. more saussoritized					89501	
	20	flsp, med clay alt'n; some zeolites; tr PY						
a								
a	25	lt -> med gy w/ wk -> mod clay alt'n + sauss'd flsp; ~15-20% frgts strong LI-staining.	25	35			89003	
	30							
a	35	med bn. LI-stained mod clay alt'n to ~~39~~ 41'; lt gy	35	45			89004	
		bleach'd to ~42', wkly alt'd dk bn. andesite						
	40	to ~44'; med gy wkly porph (hbl), hi silica.						
DYKE? 44'								
a	45	med bn as above to ~46'; med bn -> med gy	45	55		PDL	89005	
ANDESITE 46		strong clay alt'n w/ tr PY, locy cg., strongly						
FAULT ZONE ~ 53' ~~42~~	50	sauss'd; Fault @ ~ ~~48~~ 53'						
	55							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE | HOLE No. PDL 89-RC-1 | PAGE No. 2/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL FT	DESCRIPTION	INTERVAL (m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	5 5	fault gouge to ~62'; gy w/ hi clay alt'n,	55	65		PDL	89006	
		locally blue; some LI-staining					89502	
ANDESITE (2')	6 0							
a								
	6 5	moderate → intense clay alt'n w/ much blue	65	75			89007	
		bolouring, 70-30%. hi LI; ~5% cg PY; flsp						
	7 0	phenos destroyed.						
small chips a,s?	7 5	red, mod sl'td rock w/ flsp → clay; blue →	75	85			89008	
		wt clay; <5% mg PY; fr ~84' green silic'd						
	8 0	w/ fr PY, sec BI?						
s	8 5	red, mod sl'td to ~90' as prev; blue to wt	85	95			89009	
		intense clay alt'n w/ ~1% PY, 5% CL; <1%						
a	9 0	qtz chips.						
a	9 5	lt → med gy strong clay alt'n w/ wk s/fn;	95	105			89010	
		~2% PY; fr ~104' olive green EP alt'n					89503	
	10 0							
a	10 5	~10% str. clay alt'n to ~106'; med gy mod	105	115			89011	
s		s/fd w/ secondary rd-bn BI, ≤5% qtz						
	11 0	chips + <1% PY (vfg)						
FAULT? 115'	11 5	intense clay alt'n or fault to ~122';	115	125			89012	
to ~122'		rest mod clay ± s/fd w/ some ZE; <1% PY;						
	12 0	some qtz-CL fgts.						
as								
sp	12 5	olive gn mod s/fd + EP-alt'd w/ some ZE; tr	125	135			89013	
		PY; ~10% qtz-carbonate chips; ~10% clay					89504	
	13 0	fgts.						
a	13 5	med gy, mod clay alt'd w/ some qtz chips	135	145		PDL	89014	
		(<5%); some qtz-carb-zeolite stgrs.						
	14 0							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. PDL 89-RC-1 | PAGE No. 3/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL CT	DESCRIPTION	INTERVAL (FT) FROM	INTERVAL (FT) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
f	A S	maroon w/ wk s/fn + sauss'd flsp, also wk clay alt'n; some FE stgrs, tr PY, <1%.	145	155		PDL	89015	
	S C	qtz chips						
f	S S	as previ. w/ < alt'n, PY<1% as stgrs	165	165			89016	
	G C							
f	G S	dk maroon, rel. unalt'd w/ tr PY.	165	175		PDL	89017	
	F C							
	A S	E.O.H.						

PROPERTY: PDL

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. PDL 89-RC-2

DRILL LOG - CORE

CLAIM BLOCK CODE: PDL
NTS: UTM:
CLAIM NAME:
LOCATION - GRID NAME:
GRID N: 100+54 GRID E: 99+31
SECTION: ELEV:
AZIM: 250 LENGTH: 125'
DIP: -45° CASING LEFT?:
CORE SIZE:
CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHSPAN
STARTED: JAN 10/~~88~~89
COMPLETED: JAN 10/~~88~~89
PURPOSE:

CORE RECOVERY:
LOGGED BY: PAUL CONROY
DATE LOGGED: JAN 10/1989
ASSAYED BY: ECOTECH
LAB REPORT NOS.:

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL (m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	0							
ANDESITE 6' f	5	rel. unalt'd maroon volc., wk saussd flsp; some L-staining, tr PY, rare qtz fgts?	6	15		PDL	89018	
	10							
f	15	as previous	15	25			89019	
							~~89020~~	
	20							
f	25	maroon unalt'd to ~28' w/ occ'l EP; mod	25	35			89020	
ap		EP-clay alt'd to ~33'; mod clay (grey)						
	30	alt'n						
a								
a	35	lt gy mod clay altd w/ poss. wk slfn, tr PY	35	45			89021	
		locy cg.; ~5% L-stained						
	40							
s	45	as above, sl→mod slfd? w/ ~10% near—	45	55		PDL	89022	
FAULT ~47'		white ~~clay~~. Fault ~47'.						
	50	~~qtz~~ slfd.						
	55							

sm xcBIF?

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE | HOLE No. PDL 89-RC-2 | PAGE No. 2/2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL(m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
s	55	lt gy-gn str. s/fd w/ tr PY+AS; much CL;	55	65		PDL	89023	
		intense clay alt'n & gouge (fault) for ~					89506	
FAULT 60' to 70'	60	60'						
	65	fault gouge w/ much mixed alt'n types	65	75			89024	
		to ~ 70'; lt grey str. s/fd w/ tr PY,						
ANDESITE 70's	70	little remnant textures, few stgrs; sm sec BT?						
s	75	lt grey, mod→str. s/fn w/ mod LT staining	75	85			89025	
		to ~ 83'; mod→str clay alt'n w/ wk						
	80	s/fn, ~10% qtz chips, <1% PY assoc w/ clay						
a								
	85	intense clay to ~ 90', poss fault; med	85	95			89026	
		gn-gy clay alt'n w/ hi CL to ~ 93';					89507	
FAULT 85' a 90'	90	red-brn wk alt'd w/ hi LT						
f	95	mostly unalt'd to wk clay ± saussenite;	95	105			89027	
		tr PY + v. rare qtz stgrs; ~20% fsts						
	100	cherty red hbl porph dykes.						
f	105	dk gy-brn, v. wk alt'n w/ <5% med	105	115			89028	
		clay alt'd fsts.						
	110							
f	115	60% red-brn wk clay alt'n; 30% lt gn-gy	115	125		PDL	89029	
		mod clay w tr PY; 10% rel unalt w/						
qp f	120	EP+ZE patches.						
	125	E.O.H						

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. PDL 89-RC-3

PROPERTY: PDL

DRILL LOG - CORE

CLAIM BLOCK CODE: PDL
NTS: UTM:
CLAIM NAME:
LOCATION - GRID NAME:
GRID N: 100+05 GRID E: 99+21
SECTION: ELEV:
AZIM: N/A LENGTH: 115'
DIP: -90° CASING LEFT?:
CORE SIZE:
CORE STORAGE:

DRILLING CO.: NORTHSPAN
STARTED: JAN 11/89
COMPLETED: JAN 11/89
PURPOSE:

CORE RECOVERY:
LOGGED BY: PAUL CONROY
DATE LOGGED: JAN 11/89
ASSAYED BY: ECOTECH
LAB REPORT NOS.:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL	FT	DESCRIPTION	INTERVAL (FT) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
		0							
6' ANDESITE		5	ltgrn-md gy (locly LI-stng) w/ mod slfn; flsp str'y saussid;	6	15		PDL	89030	
S			tr ifg ~PY; <1% qtz chips w/ rare stgrs; sm sec BI					89029	
		10							
S		15	md gy, wk→mod slfd w/ to ~1% dssm PY, some	15	25			89031	
			sec. BI; v. rare qtz chips + stgrs; loc. hi						
		20	LI-stng						
S		25	as prev. w/ sl > slfn, < PY; > qtz chips;	25	35			89032	
			small clay seam betw 32' & 33'						
		30							
S		35	as prev w/ < slfn to 38'; rel fresh reddish	35	45			89033	
f			w/ some saussin + clay alt'n to ~42'; md gn-gy						
S		40	qtz-Cl alt'd w/ tr PY						
S		45	md gn-gy as last above to ~48'; tan w/	45	55			89034	
a			md clay alt'n + poss wk slfn to ~52'; md						
		50	gy wk→mod slfn w/ tr PY + rare qtz						
S			chips						
		55							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. PDL 89-RC-3 | PAGE No. 2/2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL (m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
s	55	med gy w/ mod s/fn as prev to 57'; tan w/ wk clay + s/fn alt'n, some ~~ZE~~ stgrs to 62';	55	65		PDL	89038	
							89509	
	60	med gn-gy wk s/fn, tr PY						
s	65	med gn-gy to 67' med pinkish w/ wk-mod	65	75			89039	
a		clay alt'n + wk s/fn to 73'; med gn-gy, wk						
	70	s/fn w/ tr PY, loc'y hi Cl; rare local						
		clay-rich.						
	75	Med gn-gy as prev to 77'; red w/ wk s/fn	75	85			89037	
a		+ mod clay alt'n to 82'; med-gy, wk s/fn						
	80	w/ ~5% clay chips, tr PY + rare CP; mod clay						
a	85	med gn-gy w/ mod clay alt'n, few ~~pheno's~~;	85	95			89038	
		ZE stgrs, tr PY; <5% ~~fsts~~ s/fd red.						
	90							
f	95	v. fresh maroon andesite w/ sev. carbonate-	95	105			89039	
		zeolite s/fg's; ~~flsp~~ v. wk. alt'd					89510	
	100							
f	105	s.a.p.	105	115		PDL	89040	
	110							
	115	E.O.H.						

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. PDL 89-RC-4

PROPERTY: PDL

DRILL LOG - CORE

CLAIM BLOCK CODE: PDL
NTS: UTM:
CLAIM NAME:
LOCATION - GRID NAME:
GRID N: 100+01 GRID E: 99+13
SECTION: ELEV:
AZIM: 064 LENGTH: 195'
DIP: -45° CASING LEFT?:
CORE SIZE:
CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHSPAN
STARTED: JAN 11/89
COMPLETED: JAN 12/89
PURPOSE:
CORE RECOVERY:
LOGGED BY: PAUL CONROY
DATE LOGGED: JAN 11+12/89
ASSAYED BY: ECOTECH
LAB REPORT NOS.:

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. Ft	DESCRIPTION	INTERVAL(m) FT FROM	INTERVAL(m) FT TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	0							
	5							
F ANDESITE		rel unaltd red-brn andesite, wk saussn of flsp to	7	15		PDL	89041	
f	10	13'; dk pk-gy wk→mod clay altn, wk saussn						
a								
a	15	dk pk-gy w/ mod clay altn, patches intense,	15	25			89042	
		<1% qtz-CL fgts.					89511	
	20							
a	25	as prev to 28'; red-brn wk clay altn, some	25	35			89043	
sp		patches + vns EP-CB; wk saussn of f/sp, mod						
	30	silfn.						
sp	35	red-brn wk altn as prev to 43'; lt-med pk-gy	35	45			89044	
		w/ mod→str clay altn, mod saussn fl sp.						
	40							
a								
a	45	lt-med pk-gy as prev to 47', sl > clay altn;	45	55		PDL	89045	
s		lt-med gy w/ mod to locly str silfn, some						
	50	CL + tr PY; few qtz fgts; poss sec. BT						
	55							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. PDL 89-RC-4 | PAGE No. 2/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL (FT) FROM	INTERVAL (FT) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
a+s	55	med→lt gn·gy, str clay alt'n w/ patchy mod→str s/fn; ~5% qtz chips, tr to ~1% PY,	55	65		PDL	89046	
	60	some sec. BI?						
s	65	as prev; sl > s/fn, sl > CL; rare EP, tr PY, 5–10% qtz chips; sec. BI?	65	75			89047	
							89512	
	70							
s	75	as prev; mod s/fn w/ to 1% PY, 5% qtz chips; some red. ZE stgrs; flsp alt'd to sby,	75	85			89048	
	80	some sec. BI?						
a	85	as prev; > ZE, mod s/fn w/ ~5% vfg PY; 5% qtz chips, sm stgrs; some sec BI; ~10%,	85	95			89049	
DYKE? 90-97'	90	dk gn s/fd dyke? featureless.						
	95	dk gn s/fd dyke? to ~97'; med→lt gn·gy w/	95	105			89050	
s		s/fn sl > than prev; PY sl <, sm stgrs,					89513	
	100	< qtz chips.						
a	105	med gy·gn wk s/fd w/ ~10% lt gy·gn str s/fd; tr vfg PY, ~5% qtz stgs + some CL	105	115			89051	
	110							
a	115	as prev, wk s/fn w/ > CL, mod clay alt'n w/ tr PY, <1% qtz chips.	115	125			89052	
	120							
a	125	as prev w/ ~20% stgs mod s/fn; mod clay w/ mod qtz-ZE-CB stgrs w/ PY; 1% qtz chips	125	135			89053	
	130	+ ~1% PY					89514	
a	135	as prev, sl < s/fn, < PY	135	145			89054	
	140							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE | HOLE No. PDL 89-RC-4 | PAGE No. 3/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL(m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
a	145	med→dk gn-gy, wk→mod clay alt'n w/ patchy wk	145	155		PDL	89055	
		s/fn, tr PY, ~2% qtz chips to ~150'; med bn						
	150	wk clay alt'd, flsp→qtz-CL; tr PY.						
a	155	med gn-gy as prev to ~156'; olive gn w/ sm EP-stgs.78	155	165			89056	
p		stgs + patches to ~160'; med gn w/ wk→mod						
a	160	clay alt'n + patchy wk s/fn; <1% qtz chips, tr PY; some calcite? stgs						
a	165	med gn as prev to ~170'; maroon w/ wk clay	165	175			89057	
		alt'n, mod saussi'd flsp.					89515	
f	170							
f	175	mod. malt'd maroon w/ mod saussi'd flsp,	175	185			89058	
		local wk clay alt'n						
	180							
f	185	as prev, v sl. alt'd.	185	195		PDL	89059	
	190							
	195	E.O.H.						

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. PDL 89-RC-5

PROPERTY: PDL

DRILL LOG - CORE

CLAIM BLOCK CODE: PDL
NTS: UTM:
CLAIM NAME:
LOCATION - GRID NAME:
GRID N: 100+04 GRID E: 99+17
SECTION: ELEV:
AZIM: 090 LENGTH: 205'
DIP: -80° CASING LEFT?:
CORE SIZE:
CORE STORAGE:

DRILLING CO.: NORTHSPAN
STARTED: JAN 12/89
COMPLETED: JAN 12/89
PURPOSE:
CORE RECOVERY:
LOGGED BY: PAUL CONROY
DATE LOGGED: JAN 12/89
ASSAYED BY: ECOTECH
LAB REPORT NOS.:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL. FT	DESCRIPTION	INTERVAL (m) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	0							
d ANDESITE f,a	5	sample contam. by cuttings; 60% dk gn wk CL-clay alt'd w/ wk saussn; 40% fr s/fd fam → lt bn w/ fr PY	6	15		PDL	89060	
	10							
a	15	dk bn to med gy bn; wk → mod clay alt'd w/ mod to str saussn of flsp, poss. wk s/fn; sm clay seams	15	25			89061	
							89516	
	20							
a	25	as prev to ~27'; dk gn-gy mod clay-CL alt'd w/ wk s/fn, tr PY; flsp → qtz+CL	25	35			89062	
	30							
a	35	dk gn-gy as prev w/ occ'l u-ins qtz to ~37'; maroon wk clay alt'd, loc'y strong; flsp mod saussd	35	45			89063	
	40							
a	45	maroon as prev to ~49'; dk gn-gy w/ mod clay-CL alt'n, wk → mod s/fn; some qtz chips,	45	55		PDL	89064	
± S	50	tr PY						
	55							

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. PDL 89-RC5 | PAGE No. 3/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL	FT	DESCRIPTION	INTERVAL (FT) FROM	INTERVAL (FT) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
	a	55	dk gn gy as prev to ~59'; maroon w/ wk clay alt'n to ~63'; lt gn-gy str s/f'n w/	55	65		PDL	89063	
		60	wk clay alt'n, tr PY, fent qtz chips.						
	s								
FAULT 65-67'		65	lt bn to near wt clay to ~67' (fault?); med gn-gy	65	75			89066	
	a		mod clay alt'd, wk s/fn to ~72'; lt gn-gy str					89517	
		70	s/fd w/ tr PY to 74'; maroon wk alt'd (clay).						
	s								
FAULT 75-85'?		75	fault zone? w/ fgts maroon unalt'd (20%), clay alt'd	75	85			89067	
			dk gn-gy (30%), lt gn-gy s/fd (20%) in clay matrix						
		80							
~~f.s fgts~~		85	maroon unalt'd to ~88'; md, stry s/fd w/ much	85	95			89068	
	a		qtz + HE to 88'; dk→med gy w/ str clay alt'n to						
	s	90	~91'; maroon + str. s/fd?						
	a	95	dk bn mod clay alt'd, flsp wk s/fd? + saussd	95	105			89069	
		100							
	a	105	mod bn to maroon wk clay alt'd w/ patchy	105	115			89070	
			wk s/fn						
		110							
	a+s	115	med bn wk clay alt'd w/ some mod s/fn, tr	115	125			89071	
	a		PY, occ'l qtz stgts to 117'; mod gy-bn mod clay					89518	
		120	alt'd, wk s/fn; tr PY						
	a	125	med gy bn as prev to ~133'; med-dk gy, mod	125	135			89072	
			s/fd?, flsp intact?						
		130							
	s								
		135	med→dk gy as prev to ~141'; olive bn w/ wk clay	135	145			89073	
			alt'n, mod ED w/ much CB-HE fgts; flsp→						
	p	140	clay or HE.						

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. PDL 89-RC-5 | PAGE No. 3/3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL FT	DESCRIPTION	INTERVAL(≈) FT FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS
s	145	med gy, wk clay alt'n, mod s/fd to ~151'; maroon w/ str clay-HE alt'n, v friable	145	155		PDL	89074	
a	150							
a	155	maroon as prev to ~164'; dk maroon w/ wk clay, rare EP alt'n	155	165			89075	
							89519	
	160							
f	165	dk maroon as prev to 172'; maroon HE-clay alt'n	165	175			89076	
	170							
a								
	175	Maroon HE-clay alt'd to 180'; dk maroon w/ wk clay alt'n to 183'; dk bn-gy w/ wk	175	185			89077	
f	180	clay alt'n						
f	185	dk bn-gy to ~187'; dk maroon w/ v. wk clay alt'n	185	195			89078	
	190							
f	195	dk maroon to dk gy, rel fresh to sl clay alt'd.	195	205		PDL	89079	
	2010							
	2015	E.O.H.						

APPENDIX V

ORDER IN COUNCIL NO. 335
EXPLORATION REGULATION
URANIUM AND THORIUM

PROVINCE OF BRITISH COLUMBIA

ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 335 , *Approved and Ordered* FEB 27 1987

Lieutenant Governor

Executive Council Chambers, Victoria FEB 26 1987

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that, effective March 1, 1987, the regulation set out in the attached Schedule be made and B.C. Reg. 154/80 be repealed.

DEPOSITED
FEB 27 1987
B.C. REG. 59/87

Minister of Energy, Mines and Petroleum Resources

Presiding Member of the Executive Council

(This part is for the records of the Office of Legislative Counsel, and is not part of the Order.)

Authority under which Order is made:

Act and section:- Mines Act, section 37., Mineral Act

Other (specify):- O/C 923/80

Examined by: Elizabeth King
(Attorney General examiner)

February 17, 1987

357/87/cnc

SCHEDULE

EXPLORATION REGULATION - URANIUM AND THORIUM

Interpretation

1. In this regulation

"**Act**" means the *Mines Act*;

"**chief inspector**" means the Chief Inspector of Mines under the *Mines Act*;

"**designated area**" means an area of the Province that

(a) is subject to a mineral claim under the *Mineral Act*, or

(b) is subject to a lease under the *Mining (Placer) Act*

referred to in Schedule A;

"**designated site**" means a site in the Province referred to in a notice sent to the chief inspector under section 2;

"**exploration**" means the search for coal, minerals, rock, limestone, earth, clay, sand or gravel by drilling, trenching, excavation, blasting or other disturbance of the ground by mechanical means, including underground work;

"**inspector**" means an inspector designated under section 2 (1) of the Act.

Designated site

2. (1) Where a person intends

(a) to commence exploration or cause exploration to be commenced for uranium, thorium or both, or

(b) to commence exploration or cause exploration to be commenced in a designated area

he shall notify the chief inspector of his intention by filing the form set out in Schedule B at least 30 days before commencing exploration.

(2) A person who notifies the chief inspector under subsection (1) shall, forthwith after filing that information with the chief inspector, cause a notice of the location of the intended exploration to be published in the Gazette and in a newspaper that circulates in the area close to the designated site.

Baseline survey

3. In addition to all the requirements of the Act and the Mines Regulation, B.C. Reg. 227/83, and the Coal Mines Regulation, B.C. Reg. 226/83, no person shall commence exploration or cause exploration to be commenced at a designated site until

(a) a baseline survey of the designated site has been conducted in accordance with the requirements of Schedule C to this regulation,

(b) a copy of the results of that baseline survey has been filed with the chief inspector, and

(c) the chief inspector has given his written approval for the intended exploration at that designated site.

Testing for uranium and thorium

4. Every owner, agent and manager of a mine at a designated site shall, during exploration at the designated site,

(a) ensure that all drill cores taken during exploration and other excavated or disturbed materials resulting from exploration at that site are tested as soon as practicable,

(i) in the case of a drill core, after the drill core is removed from the ground, and

(ii) in the case of materials excavated or disturbed, after the materials are excavated or disturbed, as the case may be,

for gamma radiation to detect if uranium or thorium mineralization is present,

(b) where under paragraph (a), gamma radiation is detected as being above background level for a designated site, determine as soon as practicable after that detection, the grade of that uranium or thorium or both, as the case may be, and

(c) keep a written record at that designated site of the grade of the uranium or thorium determined under paragraph (b).

Uranium of 0.05% grade or more

5. Where, in the course of exploration at a designated site, uranium or thorium mineralization is encountered in a grade of 0.05% by weight or greater, the owner, agent and manager of the mine at that designated site shall

Must analyse for U & Th

(a) ensure that the chief inspector is informed, within 72 hours after the determination of the grade of uranium or thorium so analyzed, of the location and grade of that uranium and thorium or both, as the case may be, and

(b) only carry out further exploration at the designated site and activities related to this exploration, including terminating exploration at the designated site, in accordance with Schedule D.

Exploration at a site other than a designated site

6. Where in the course of exploration at a site, other than a designated site, uranium or thorium mineralization is encountered in a grade of 0.05% by weight or greater, the owner, agent and manager of the mine at that site shall ensure that

(a) the chief inspector is informed within 72 hours after the determination of the grade of uranium or thorium so analyzed, of the location and grade of that uranium or thorium, or both, as the case may be,

(b) the form set out in Schedule B is filed with the chief inspector, within 72 hours after the determination of the grade of uranium or thorium so analyzed,

(c) a notice of the location of the exploration is published in the Gazette and a newspaper that circulates in the area close to that location,

forthwith after the grade of the uranium or thorium or both is determined,

(d) a baseline survey of the site of the exploration is conducted within 14 days after encountering the uranium or thorium, in accordance with the requirements of Schedule C, as if this site were a designated site and for the purpose of this section all references to designated site in Schedule C shall be interpreted as reference to a site,

(e) a copy of the results of the baseline survey referred to in paragraph (d) is filed with the chief inspector as soon as practicable, and

(f) all further exploration at this site and activities related to this exploration, including terminating exploration at this site, are carried out in accordance with Schedule D, as if this site were a designated site and for the purpose of this section all references in Schedule D to a designated site shall be interpreted as references to a site.

Offence - penalty

7. A person who contravenes this regulation commits an offence and is liable to a fine of not more than $5 000 or to imprisonment for not more than one year or both.

SCHEDULE C

Baseline Survey Requirements

Gamma radiation measurements

1. Gamma radiation measurements shall be taken 1 m above the existing surface

(a) at every place on the designated site that drilling, stripping, trenching, pitting or other excavation including roadmaking will be carried out, and

(b) at other places specified by an inspector.

Water samples

2. (1) Water samples shall be taken in accordance with Schedule E from all water courses and ground water that are capable of being affected by the exploration.

(2) Water samples taken under subsection (1) shall be analyzed in accordance with Schedule E by a laboratory experienced in analyzing for dissolved uranium, gross alpha and any other constituents required by the chief inspector.

(3) The results of the gamma radiation survey and the analyses of water samples taken under sections 1 and 2 (1) of this Schedule, and a map showing the location where the measurements and samples were taken, shall be sent to the chief inspector by the owner, agent or manager of the mine at that designated site.

Surveys for radioactivity

3. The owner, agent and manager of a mine at a designated site shall ensure that measurements for radioactivity required under sections 1 and 2 of this Schedule are carried out at the designated site with instruments that are calibrated in accordance with Schedule E and the manufacturers' instructions and used by persons knowledgeable in the use of these instruments.

SCHEDULE D

Exploration on Designated Sites

Sealing of drill holes

1. (1) Unless the chief inspector permits otherwise under the Act, all surface drill holes at a designated site that encounter uranium or thorium mineralization in excess of 0.05% shall be completely filled with concrete on completion of exploration at that designated site.

(2) Before sealing a surface drill hole under subsection (1), an inspector shall be informed of the procedure to be used in sealing that surface drill hole.

(3) After a drill hole is sealed in accordance with subsection (1) it shall be marked in a durable way with the following information:

(a) the name of the owner of the mine;

(b) the date the drill hole was sealed;

(c) the depth of the drill hole.

(4) A plan showing the location, size and depth of each drill hole sealed pursuant to this Schedule shall be forwarded to an inspector at the end of the exploration season in which it was sealed.

Water

2. (1) Where there is surface drilling at a designated site, the owner, agent and manager of the mine at that designated site shall take all the necessary steps to ensure that no drilling fluid, water or drill cuttings contaminate any drinking water supply, irrigation water supply or surface water.

(2) Where ground water issues from a borehole during surface exploration at a designated site, the owner, agent and manager of a mine at that designated site shall ensure that the flow of water from the borehole is stopped or contained in a containment structure prepared for that purpose, and that is capable of preventing any escape of the ground water into surface drainage water until

(a) samples of the ground water from this borehole have been taken and analyzed for radioactivity and dissolved uranium, in accordance with Schedule E, by a laboratory experienced in analyzing for radioactivity and dissolved uranium, and

(b) the results of the analyses referred to in paragraph (a) show that the ground water from the borehole does not exceed by more than 10% the average background level of radioactivity and dissolved uranium in the ground water at that designated site, as determined by the baseline survey required by this regulation.

(3) The owner, agent and manager of a mine at a designated site shall ensure that copies of the test results referred to in subsection (2) are forwarded to the chief inspector within 7 days after receipt from the laboratory.

Surface disturbance other than drilling

3. (1) The owner, agent and manager of a mine at a designated site shall take all the necessary steps to ensure that no water escapes from any surface pit, trench or other excavation at the designated site until

(a) samples of the water from the surface pit, trench or other excavation, as the case may be, have been taken and analyzed for radioactivity and dissolved uranium in accordance with Schedule E by a laboratory experienced in analyzing for radioactivity and dissolved uranium, and

(b) the results of the analyses referred to in paragraph (a) show that the water from the surface pit, trench or other excavation does not exceed by more than 10% the average background level of radioactivity and dissolved uranium in the water at that designated site, as determined by the baseline survey required by this regulation.

(2) The owner, agent and manager of a mine at a designated site shall ensure that copies of the test results referred to in subsection (1) are forwarded to the chief inspector within 7 days after receipt from the laboratory.

Sample and core storage

4. (1) No owner, agent or manager of a mine at a designated site shall store, on the surface of the designated site, drill cores or exploration samples containing uranium or thorium or both during the period of exploration at the designated site except

(a) in an enclosed facility, or

(b) a non-enclosed storage area

that has been approved by an inspector.

(2) Where drill cores or exploration samples that contain uranium or thorium are stored pursuant to subsection (1), the owner, agent and manager of the mine at that designated site shall ensure that,

(a) in the case of drill cores or exploration samples stored in an enclosed facility,

(i) the drill cores and exploration samples are not accessible to any person other than a person authorized by the manager,

(ii) the enclosed facility is locked or otherwise secured when it is not in use,

(iii) the enclosed facility is adequately ventilated, and

(iv) a radiation warning sign is posted at or near the enclosed facility prohibiting entry unless authorized by the manager, and

(b) in the case of drill cores or exploration samples placed in a non-enclosed storage area,

(i) the drill cores and exploration samples are not accessible to any person other than a person authorized by the manager, and

(ii) a radiation warning sign is posted at or near the storage area prohibiting access unless authorized by the manager.

(3) The owner, agent and manager of a mine at a designated site shall cause all drill cores and exploration samples stored pursuant to subsection (1) to be monitored,

(a) in the case of an enclosed facility, for levels of radon daughters and gamma radiation at such times and in such a manner so as to ensure

that no person entering the enclosed facility is exposed to a level of radiation greater than that prescribed under the Act, and

(b) in the case of a non-enclosed storage area, for levels of gamma radiation at such times and in such a manner so as to ensure that no person entering onto the non-enclosed storage area is exposed to a level of radiation greater than that prescribed under the Act.

(4) When drill cores or exploration samples containing uranium or thorium or both are shipped from a designated site, the owner, agent or manager of the mine at the designated site shall keep a copy, and forward to the chief inspector a copy, of a report that contains the following information:

(a) the location on the designated site from where the drill cores or exploration samples were taken;

(b) the weight of the drill cores or exploration samples shipped;

(c) the type of rock, gravel, sand or other material containing the uranium or thorium;

(d) the grade of the uranium or thorium;

(e) the date of shipment;

(f) the person to whom the drill cores or exploratory samples were shipped.

Gamma radiation exposure

5. (1) During exploration at a designated site, the owner, agent and manager of a mine at the designated site shall ensure that gamma radiation measurements are taken daily in the same manner as set out in section 3 of Schedule C.

(2) Where gamma radiation measurements indicate that a person working at a designated site may receive a radiation dose greater than 0.25 mrems/hr., a gamma radiation dosimeter of a type approved by the chief inspector shall be provided to and worn by each person who could be so exposed.

Termination of exploration at designated site

6. (1) Where exploration at a designated site ceases and any exposed surface or excavated material, including any drill cores, exploration samples and rock piles on the surface at that designated site, emits radiation above the level measured during the baseline survey at that location, the owner, agent and manager of the mine at the designated site shall, subject to subsection (2), ensure that the level of radiation is restored to a value not greater than 60 microrems above the level of radiation measured at that location during the baseline survey, by covering the exposed surface or excavated material with suitable material.

(2) The owner, agent and manager of the mine at a designated site need not comply with subsection (1) where any one of them has received prior permission under the Act from the chief inspector to not comply with subsection (1).

(3) The owner, agent and manager of a mine at a designated site shall take the steps necessary to minimize the risk of erosion of any cover material placed in accordance with subsection (1).

Radon daughters in underground exploration areas

7. (1) The owner, agent and manager of a mine at a designated site shall, where underground exploration of the designated site is being carried out, ensure that the air in all parts of the underground exploration area where persons work or through which they pass is sampled daily to determine the concentration of radon daughters and tested daily to determine the level of gamma radiation.

(2) The method of sampling and testing for radon daughters under subsection (1) shall be done in the manner required by an inspector.

(3) The owner, agent and manager of a mine at a designated site shall, where underground exploration at the designated site is being carried out, ensure that

(a) records showing the total exposure to radon daughters for each person who works in the underground exploration area at the designated site, are kept at the designated site,

(b) copies of the records referred to in paragraph (a) are sent to the chief inspector once a month and given to each person who has been exposed, during the month following that person's exposure, and

(c) a person who works in the underground exploration area is not exposed to

(i) more than 0.2 working level months of radon daughters per quarter of a year, nor

(ii) more than 0.4 working level months of radon daughters per year.

Smoking prohibited underground

8. The owner, agent and manager of a mine at a designated site shall cause signs prohibiting smoking to be posted at an underground exploration area at the designated site where a person has been or could be exposed to radon daughters while working there.

Respirators to be worn

9. (1) Where tests show that any portion of the underground exploration area or any enclosed surface storage facility for drill cores or exploration samples at a designated site has a concentration of radon daughters in excess of 0.7 working level, the owner, agent and manager of a mine at the designated site shall provide to every person entering that portion of the designated site a respirator of a type that is acceptable to the chief inspector.

(2) A person who is provided with a respirator under subsection (1), shall wear that respirator while he is in that portion of the designated site.

Inactive exploration areas.

10. (1) Where any entrances, pits or openings on a designated site are fenced or otherwise protected against inadvertent access pursuant to section 14 of the Act, the owner, agent and manager of the mine at the designated site shall ensure that signs warning of radiation are kept posted at the designated site.

(2) No person shall enter into an underground exploration area at a designated site, where signs warning of radiation have been posted at that site

unless the person is allowed to enter by the owner, agent or manager for the designated site.

(3) No person shall grant permission under subsection (2) unless the underground exploration area meets the requirements of this Schedule.

Water in underground workings

11. No owner, agent or manager shall allow water from an underground exploration area at a designated site to be discharged or to escape into surface waters until

(a) samples of the water from the underground exploration area have been taken and analyzed for radioactivity and dissolved uranium in accordance with Schedule E by a laboratory experienced in analyzing for radioactivity and dissolved uranium, and

(b) the results of the analyses of the samples from the laboratory referred to in paragraph (a) show that the water does not exceed by more than 10% the average background level of radioactivity and dissolved uranium as determined by the baseline survey at that designated site.

SCHEDULE E

Analytical Standards

Collection of water samples

1. Water samples shall be collected in accordance with the following standards of the American Society for Testing and Materials, as amended from time to time:

(a) methods D1066;
(b) method D1192;
(c) method D3370.

Analysis of water samples

2. Where a person analyzes water samples for the following constituents, he shall use the methods specified by the standards of the American Society for Testing and Materials, as amended from time to time, set out opposite that constituent:

Column 1		Column 2
(a)	Gamma Radioactivity of Water	ASTM D1690
(b)	Beta Particle Radioactivity of Water	ASTM D1890
(c)	Alpha Particle Radioactivity of Water	ASTM D1943
(d)	Uranium in Water	ASTM D2907
(e)	Thorium in Water	ASTM D2333

Calibration

3. (1) Where a person is testing for uranium or thorium or both, pursuant to this regulation, he shall use radiation measuring devices that are calibrated

(a) before use, on the day so used, and
(b) at least once a month using reference materials containing concentrations of uranium or thorium or both that have been certified by the Canada Center for Minerals and Energy Technology (CANMET) Certified Reference Materials Project.

(2) A person who tests for uranium or thorium or both under this regulation shall keep records of each calibration of the radiation measuring devices so used.

Determination of concentration of uranium or thorium

4. Where a person is determining the concentration of uranium or thorium in a geological sample under this regulation, he shall use

(a) conventional analytical techniques,
(b) equipment calibrated and monitored using reference materials containing concentrations of uranium or thorium or both that are

certified by the Canada Center for Minerals and Energy Technology (CANMET) Certified Reference Materials Project, and

(c) where the level of uranium or thorium in the sample exceeds 0.01% by weight, methods of analyses that are adequate to ensure that no error occurs that is greater than 10% of the concentration of the uranium or thorium or both present in the sample analyzed.

Queen's Printer for British Columbia ©
Victoria, 1987

APPENDIX VI

STATEMENTS OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I Tim Sandberg, of 201 - 1286 West 14th Avenue, Vancouver, B.C., hereby certify that:

1) I graduated from the University of British Columbia in May 1982 with the degree of Bachelor of Science (Major) in Geological Sciences.

2) I am an Associate Member of the Geological Association of Canada.

3) I have worked in the mining and mineral exploration industry, mostly in British Columbia since 1978.

4) The information contained in this report is based on fieldwork performed by the author and upon a review of the available literature.

_____

Tim Sandberg
Dated this 25th day of January, 1989

STATEMENT OF QUALIFICATIONS

I Linda J. Lee, hereby certify that:

1. I am presently employed by MineQuest Exploration Associates Ltd. as a Geologist.

2. I am a graduate of the University of British Columbia (B.A.Sc., Geological Engineering, 1985) and University of Calgary (M.Sc., Geology and Geophysics, 1988).

3. I have completed 7 seasons of mineral exploration in British Columbia.

Signed: L. Lee

Linda J. Lee

Dated at Vancouver, B.C. this 28th day of February, 1989.

APPENDIX VII

COST STATEMENT

Cost Statement

Fees and Wages:

R.V. Longe	2 days at $525	$ 1,050	
L.J. Lee	3 days at 385	1,155	
T.M. Sandberg	20 days at 300	6,000	
P. Conroy	6 days at 300	1,800	
C. Donders	5 days at 235	1,175	
C. O'Neill	14 days at 200	2,800	
S. Handley	2 days at 165	330	
C. Young	12 days at 130	1,560	
J. Caldwell	6 days at 130	780	
		$ 16,650	$ 16,650

Disbursements:

Scheduled air fares	$ 700	
Rental vehicles	800	
Fuels and lubricants	200	
Contract drilling (815 ft X $10.00)	8,150	
Contract bulldozer/backhoe	4,150	
Contract water truck	1,088	
Contract geophysics	777	
Room and board	2,755	
Field supplies	300	
Analytical 98 @ 29.00	2,842	
79 @ 25.00	1,975	
Communications, shipping, etc.	500	
Rental equipment (Scintillometer, etc.)	300	
Reprod. graphics, maps, etc.	150	
	$ 24,687	
+ 10% override	2,468	
	$ 27,155	$ 27,155

MineQuest Charges

Photocopies	$ 30	
Word Processing	200	
	$ 230	
		230
		$ 44,035

APPENDIX VIII

STATEMENT OF WORK

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

MINERAL ACT

DOCUMENT No. _____ OFFICE USE ONLY

SUB-RECORDER
RECEIVED
FEB 28 1989
M.R. # ..... $.....
VANCOUVER, B.C.
RECORDING STAMP

Statement of Work — Cash Payment

I, Linda Lee (Name)
Valid subsisting FMC No. 280827
500 - 164 Water Street (Address)
Vancouver, B.C.
V6B 1B5 (604) 669-2251 (Postal Code) (Telephone Number)

Agent for QPX Minerals Inc. (Name)
Valid subsisting FMC No. 280831
500 - 164 Water Street (Address)
Vancouver, B.C.
V6B 1B5 (604) 669-2251 (Postal Code) (Telephone Number)

STATE THAT: [NOTE: If only paying cash in lieu, turn to reverse and complete columns G to J and S to V.]

1. I have done, or caused to be done, work on the ASTRO 1, ASTRO 33, ASTRO 34, AKIRA 1, AKIRA II Fr, FORD 2 (ASTRO 1 GROUP) Claim(s)

Record No(s). 213, 245, 246, 2912, 2913, 3002

Situate at KEREMEOS in the OSOYOOS Mining Division,

Work was done from December 7, 19 88, to February 27, 19 89.

TYPE OF WORK

PHYSICAL: Work such as trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails. Details as required under section 13 of the Regulations, including the map and cost statement, must be given on this statement.

PROSPECTING: Details as required under section 9 of the Regulations must be submitted in a technical report. Prospecting work can only be claimed once by the same owner of the ground, and only during the first three years of ownership.

GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL, DRILLING: Details must be submitted in a technical report conforming to sections 5 through 8 (as appropriate) of the Regulations.

PORTABLE ASSESSMENT CREDIT (PAC) WITHDRAWAL: A maximum of 30% of the approved value of geological, geophysical, geochemical and/or drilling work on this statement may be withdrawn from the owner's or operator's PAC account and added to the work value on this statement.

TYPE OF WORK (Specify Physical (include details), Prospecting, Geological, etc.)	VALUE OF WORK Physical	*Prospecting	*Geological etc.	
Geological, Geophysical, Drilling			44,000	
(Report to follow)				
TOTALS	A +	B +	C 44,000 =	D 44,000
PAC WITHDRAWAL — Maximum 30% of Value in Box C Only			E →	E
from account(s) of _____			TOTAL	F 44,000

* Who was the operator (provided the financing)? Name QPX Minerals Inc.
Address 500 - 164 Water Street
Vancouver, BC V6B 1B5 Phone: 669-2251

Transfer amount in Box F to reverse side of form and complete as required.

M26 2024

MTL 112

: $ 44,000 I WISH TO APPLY $ 20,800 OF THE TOTAL VALUE FROM BOX F AS FOLLOWS:

Columns G through R inclusive MUST BE COMPLETED before work credits can be granted to claims.
Columns G through J and S through V inclusive MUST BE COMPLETED before a cash payment or rental payment can be credited.
Columns not applicable need not be completed.

Cash Payment

CLAIM IDENTIFICATION | **APPLICATION OF WORK CREDIT** | **CASH IN LIEU OF WORK OR LEASE RENTAL**

G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
CLAIM NAME (one claim/lease per line)	RECORD No.	No. OF UNITS*	CURRENT EXPIRY DATE	WORK TO BE APPLIED: VALUE	WORK TO BE APPLIED: YEARS	WORK TO BE APPLIED: EXCESS CREDIT	RECORDING FEES 5% OF K	PENALTY FEES 10% OF K	PRIOR EXCESS CREDIT BEING USED	NEW EXPIRY DATE	EXCESS CREDIT REMAINING	C/L	RECORDING FEE 50% OF S	MINERAL LEASE RENTAL	NEW EXPIRY DATE
ASTRO 1	213	12	09/03/91	4,800	2		240			09/03/93					
ASTRO 33	245	20	09/03/91	8,000	2		400			09/03/93					
ASTRO 34	246	20	09/03/91	8,000	2		400			09/03/93					
				20,800			1,040								
				TOTAL OF K			TOTAL OF N	TOTAL OF O				TOTAL OF S	TOTAL OF T	TOTAL OF U	

NOTICE TO GROUP No. _____ RECORDED _____

* 2 POST FRACTION. REV. CROWN GRANT ARE 1 UNIT EACH

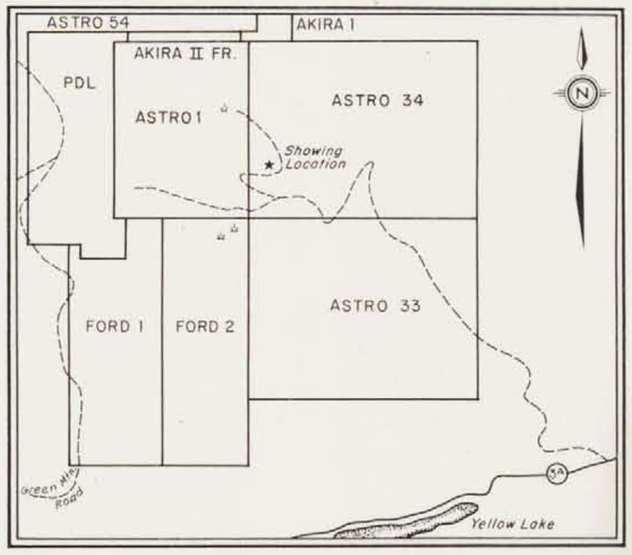
Value of work to be credited to portable assessment credit (PAC) account(s).
[May only be credited from the approved value of Box C not applied to claims.]

Name of owner/operator		AMOUNT
	1. QPX Minerals Inc.	23,200
	2.	
	3.	

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the *Mineral Act*. I further acknowledge and understand that if the statements made, or information given, in this Statement of Exploration and Development are found to be false and the exploration and development has not been performed, as alleged in this Statement of Exploration and Development, then the work reported on this statement will be cancelled and the subject mineral claim(s) may, as a result, forfeit to and vest back to the Province.

M. Lar

Signature of Applicant



SHOWING LOCATION MAP

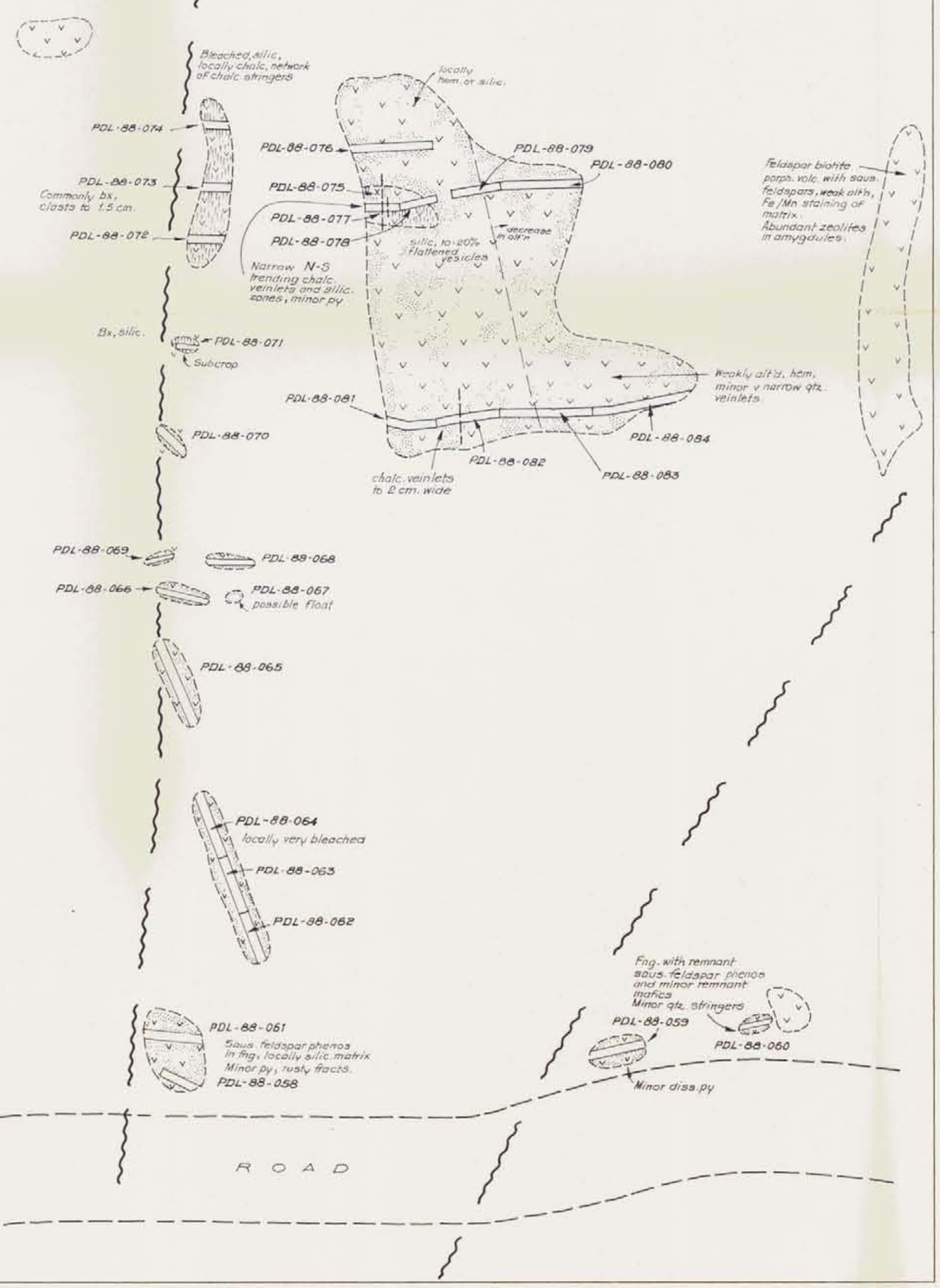
SCALE 1 : 50,000

Volc. cliffs

Moderate – Nil S-slope

Break in Slope

Steep S-slope



LEGEND

MARRON FORMATION

EOCENE — Killey Lake Member:
PALE BROWN FELDSPAR BIOTITE PORPHYRITIC ANDESITE. LOCALLY UP TO 20% VESICLES WHICH MAY BE FILLED W/ZEOLITES.

ARGILLIC ALTERATION OF VOLCANICS

SILICIFIED VOLCANICS

OUTCROP-SUBCROP BOUNDARY

FAULT

GEOLOGICAL CONTACT

QUARTZ / CHALCEDONIC QUARTZ VEINLET

ROCK CHIP SAMPLE LOCATION

ROAD

CLIFFS

ABBREVIATIONS

Py	PYRITE	Diss.	DISSEMINATED
Chalc.	CHALCEDONY	Bx	BRECCIATED
Qtz.	QUARTZ	Hem.	HEMATITIC
Arg.	ARGILLITE	Fng.	FINE GRAINED
Saus.	SAUSSURITIZATION	Fracts	FRACTURES
Silic.	SILICIFIED	Phenos	PHENOCRYST
		Alt'n	ALTERATION

SAMPLE RESULTS

	Au (ppb)		Ag (ppm)	As (ppm)	Cu (ppm)
PDL 88-058	35		0.3	100	6
PDL 88-059	45		0.4	127	9
PDL 88-060	40		0.4	36	10
PDL 88-061	20		0.7	43	10
PDL 88-062	15		0.6	76	11
PDL 88-063	10		0.1	111	6
PDL 88-064	10		<0.1	79	6
PDL 88-065	15		0.3	41	10
PDL 88-066	20		1.2	41	8
PDL 88-067	10		0.3	31	12
PDL 88-068	10		0.2	50	11
PDL 88-069	90		1.8	195	7
PDL 88-070	15		0.1	43	9
PDL 88-071	20		1.1	92	6
PDL 88-072	185		11.3	104	8
PDL 88-073	245		12.7	227	5
PDL 88-074	74		7.6	130	10
PDL 88-075	1030	(0.03 oz/t)	6.0	71	11
PDL 88-076	55		1.5	59	21
PDL 88-077	175		34.1	72	18
PDL 88-078	330		0.6	41	15
PDL 88-079	10		0.1	23	22
PDL 88-080	15		0.1	66	17
PDL 88-081	10		0.2	28	13
PDL 88-082	60		0.9	45	11
PDL 88-083	25		0.8	56	13
PDL 88-084	5		0.2	42	13

Scale 1:100
0 1 2 3 4 5 6 mtr.

QPX MINERALS INC.

PDL PROPERTY, OSOYOOS M.D., B.C.

ASTRO 34 SHOWING

GEOLOGY, SAMPLE LOCATIONS and RESULTS

	Originator	Drawn	Date	PLAN	FIG.
Originator	L.J.L.	C.D.	Nov. 1988	1405	4
Revision				N.T.S.	
Revision				82E/5W	

MINEQUEST EXPLORATION ASSOCIATES LTD.

0 10 20 30 40 50 60 m
SCALE : 1 : 500

Legend

- Trench 2 — Backhoe Trench
- Reverse Circulation Drill Hole (inclined, vertical)
- Road

QPX MINERALS INC.

PDL PROPERTY OSOYOOS M.D., BRITISH COLUMBIA

ASTRO 34 SHOWING

ROAD, TRENCH and DRILL HOLE PLAN

	Originator	Drawn	Date	PLAN No.	FIG.
Original	T.M.S.	C.D.	Feb.'89	1491	5
Revision				N.T.S.	
Revision				82E/5W	

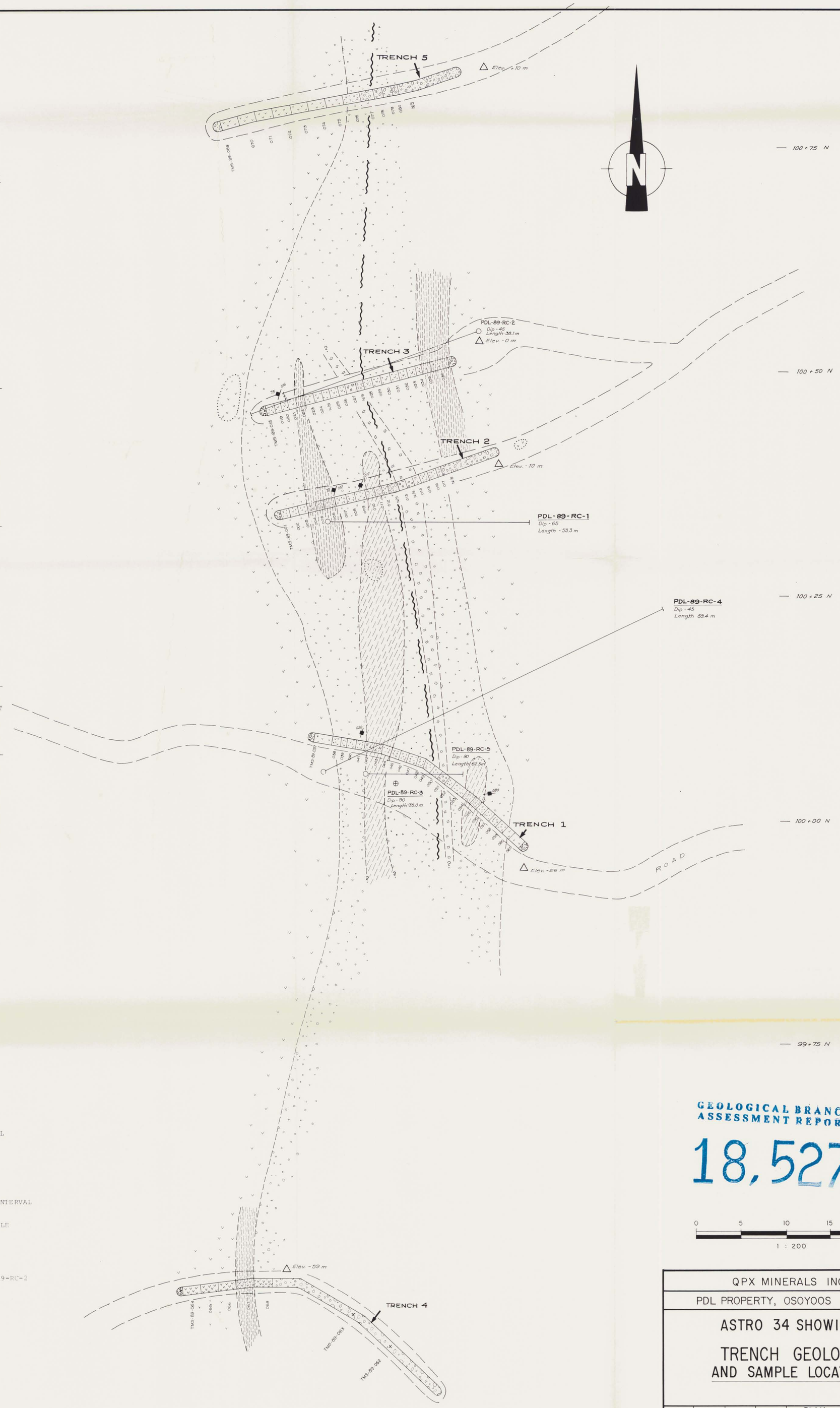
MINEQUEST EXPLORATION ASSOCIATES LTD.

TRENCH ASSAY DATA

Trench No.	Sample No.	Width (m)	Au (ppb)	Ag (ppm)
TR-1	TMS-89-037	2.0	<5	0.2
	-038	1.0	<5	<.2
	-039	0.8	<5	0.4
	-040	1.0	5	0.4
	-041	1.0	15	0.6
	-042	1.0	60	1.2
	-043	1.0	30	0.8
	-044	1.0	20	1.8
	-045	1.0	25	0.4
	-046	1.0	5	0.4
	-047	1.0	20	0.4
	-048	1.0	25	0.4
	-049	1.0	30	0.6
	-050	1.0	10	0.4
	-051	1.0	5	0.4
	-052	1.0	70	0.4
	-053	1.6	10	0.4
	-054	1.0	145	6.0
	-055	1.0	30	2.0
	-056	1.0	15	1.0
	-057	1.0	235	0.6
	-058	1.0	15	0.4
	-059	1.0	20	0.4
	-060	1.0	15	0.8
	-061	1.4	5	0.6
TR-2	TMS-89-001	1.0	10	1.8
	-002	1.0	20	0.6
	-003	1.0	15	0.4
	-004	1.0	10	0.4
	-005	1.0	15	0.4
	-006	1.3	10	0.6
	-007	1.2	10	0.4
	-008	1.0	20	0.4
	-009	1.0	20	0.6
	-010	1.0	20	0.4
	-011	0.8	95	5.2
	-012	0.7	95	7.8
	-013	1.0	5	0.2
	-014	0.8	5	0.2
	-015	1.0	10	0.6
	-016	1.0	10	0.4
	-017	0.5	10	0.4
TR-3	TMS-89-018	1.0	30	0.4
	-019	0.7	45	0.4
	-020	0.8	55	0.2
	-021	1.0	45	0.4
	-022	1.0	20	0.2
	-023	1.0	20	0.2
	-024	1.0	45	0.2
	-025	1.0	30	<.2
	-026	0.8	15	<.2
	-027	1.2	5	0.2
	-028	1.0	20	0.2
	-029	1.0	10	<.2
	-030	1.0	15	<.2
	-031	1.0	35	0.2
	-032	1.0	40	1.8
	-033	1.0	235	0.2
	-034	1.0	20	0.2
	-035	1.0	5	<.2
	-036	1.0	5	0.2
TR-4	TMS-89-062	GRAB	10	0.2
	-063	GRAB	5	0.4
	-064	2.0	LOST IN SHIPMENT	
	-065	2.0	55	0.6
	-066	2.0	10	0.8
	-067	2.0	15	0.6
	-068	2.0	20	0.8
TR-5	TMS-89-069	2.0	10	0.6
	-070	2.0	15	0.4
	-071	2.0	10	0.6
	-072	2.0	20	0.6
	-073	2.0	10	0.6
	-074	2.0	15	0.6
	-075	2.0	20	0.6
	-076	2.0	15	0.4
	-077	1.5	5	0.4
	-078	1.0	205	0.4
	-079	1.0	25	0.4
	-080	0.7	<5	0.4

LEGEND

- OVERBURDEN
- HORNBLENDE PORPHYRY DYKE
- SILICIFICATION
- ARGILLIC ALTERATION
- PROPYLITIC ALTERATION
- MARRON VOLANICS PALE BROWN FELDSPAR BIOTITE PORPHYRITIC ANDESITE
- ASSUMED CONTACT
- INFERRED FAULT
- BRECCIATION
- FRACTURE: INCLINED, VERTICAL
- SHEAR
- OUTCROP
- TRENCH OUTLINE WITH SAMPLE INTERVAL
- REVERSE CIRCULATION DRILL HOLE INCLINED, VERTICAL
- ROAD
- △-59m SPOT ELEVATION RELATIVE TO 89-RC-2
- x FLOAT SAMPLE



GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,527

0 5 10 15 20 m

1 : 200

QPX MINERALS INC.

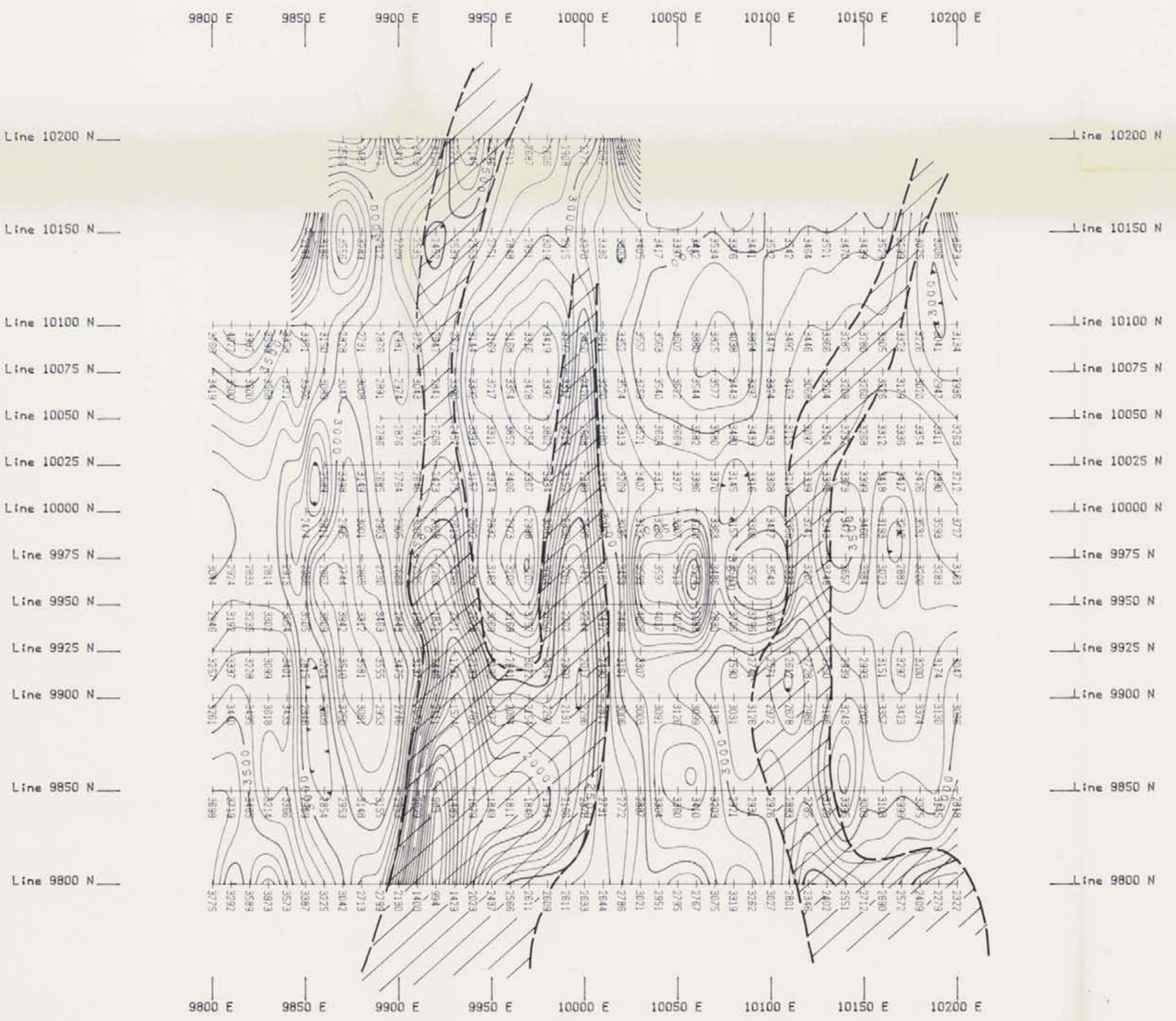
PDL PROPERTY, OSOYOOS M.D., B.C.

ASTRO 34 SHOWING

TRENCH GEOLOGY AND SAMPLE LOCATION

	Originator	Drawn	Date	PLAN 1492	FIGURE 6
Original	T.M.S.	C.D.	Feb. '89		
Revision				N.T.S. 82E / 5W	
Revision					

MINEQUEST EXPLORATION ASSOCIATES LTD.



LEGEND

CONTOUR INTERVALS

100 nT

500 nT

2500 nT

III Magnetic Low

54000 nT REMOVED FROM ALL READINGS

INSTRUMENT

EDA OMNI PLUS
EDA OMNI IV BASESTATION

SCALE 1 : 2000

50 0 50 (metres) 100 150 200

Figure 11 *External Plan: 648*

MINEQUEST EXPLORATION ASSOCIATES LTD.

ASTRO 34 PROPERTY

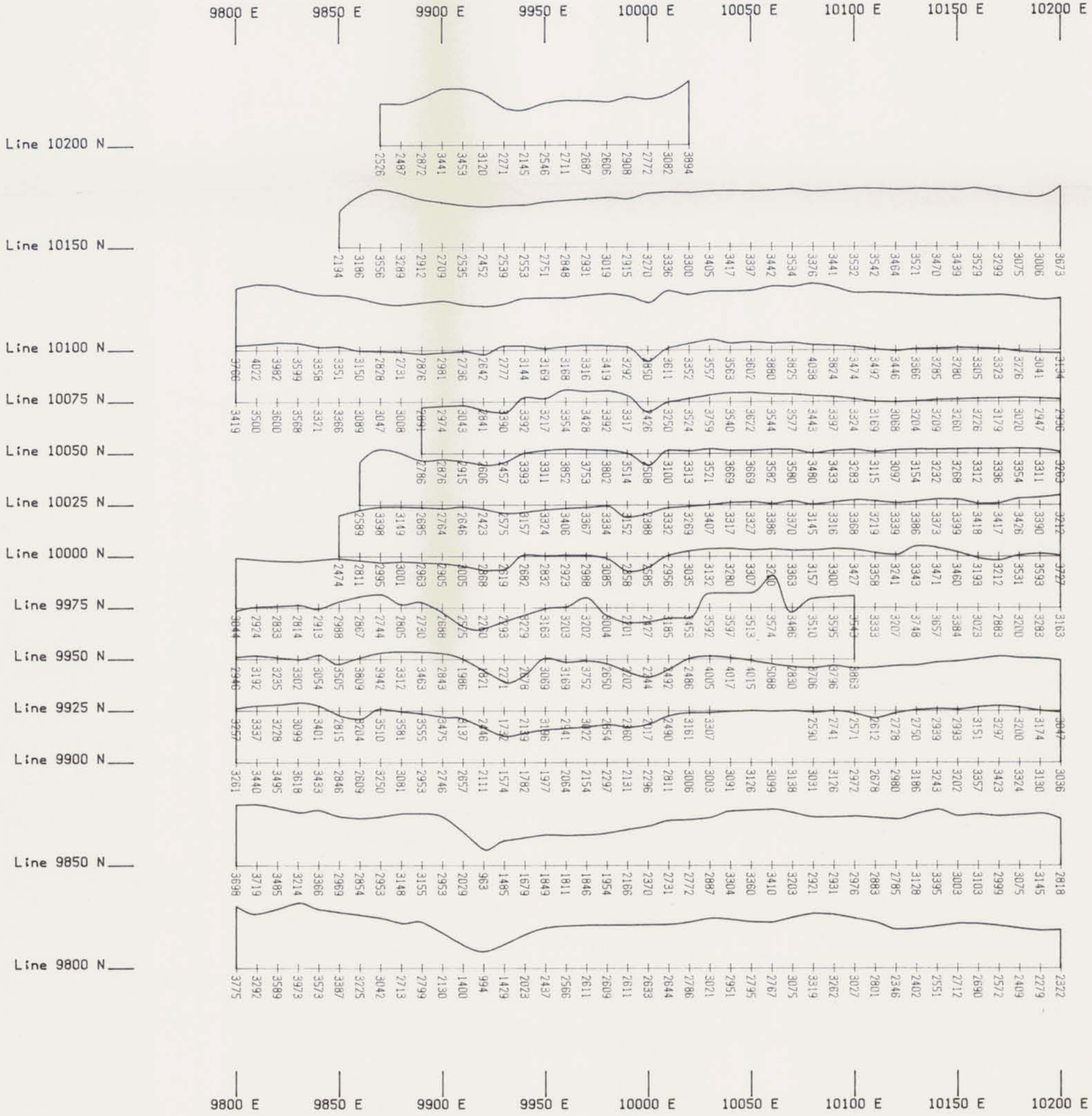
Osoyoos Mining Division

Penticton, British Columbia

TOTAL FIELD MAGNETIC CONTOURS

Scale 1 : 2000 NTS 82 E/5

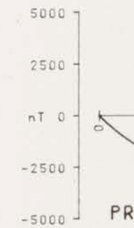
LLOYD GEOPHYSICS LIMITED



Line 10200 N
Line 10150 N
Line 10100 N
Line 10075 N
Line 10050 N
Line 10025 N
Line 10000 N
Line 9975 N
Line 9950 N
Line 9925 N
Line 9900 N
Line 9850 N
Line 9800 N

LEGEND

BASE LEVEL OF 54000 nT REMOVED FROM ALL READINGS



PROFILE SCALE : 2500 nT / cm

INSTRUMENT

EDA OMNI PLUS

EDA OMNI IV.BASESTATION

SCALE 1 : 2000

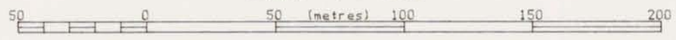


Figure 12 *External Plan: 649*

MINEQUEST EXPLORATION ASSOCIATES LTD.

ASTRO 34 PROPERTY

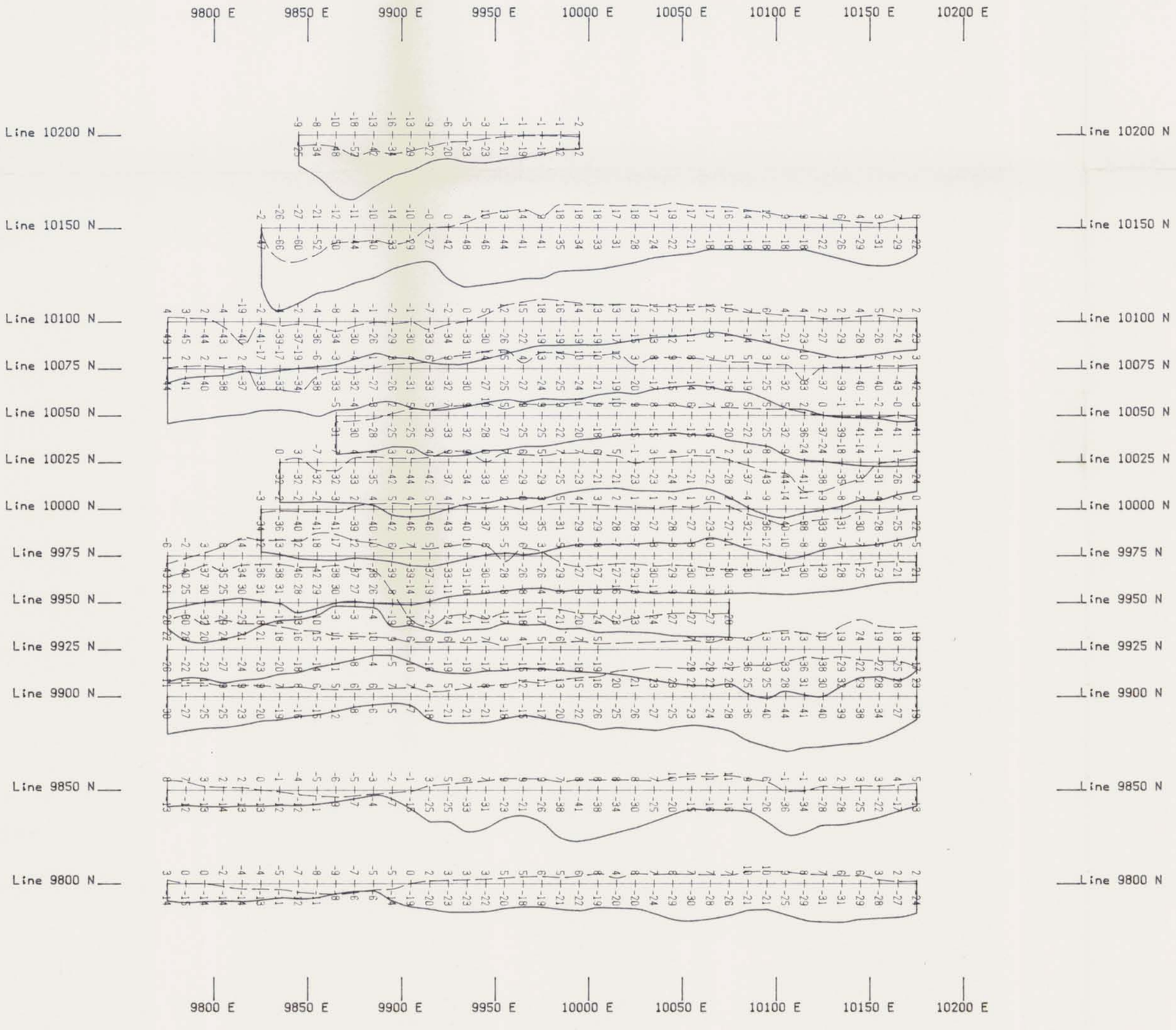
Osoyoos Mining Division

Penticton, British Columbia

TOTAL FIELD MAGNETIC PROFILES

Scale 1 : 2000 NTS 82 E/5

LLOYD GEOPHYSICS LIMITED

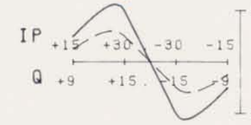


LEGEND

IN-PHASE

QUADRATURE

POSTING



PROFILE SCALE 30% / CM

TRANSMITTER STATION

NLK SEATTLE, WA. USA 24.8 kHz

INSTRUMENT

EDA OMNI PLUS

SCALE 1 : 2000

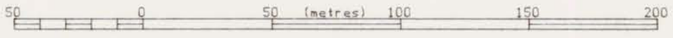


Figure 13 *External Plan:650*

MINEQUEST EXPLORATION ASSOCIATES LTD.

ASTRO 34 PROPERTY

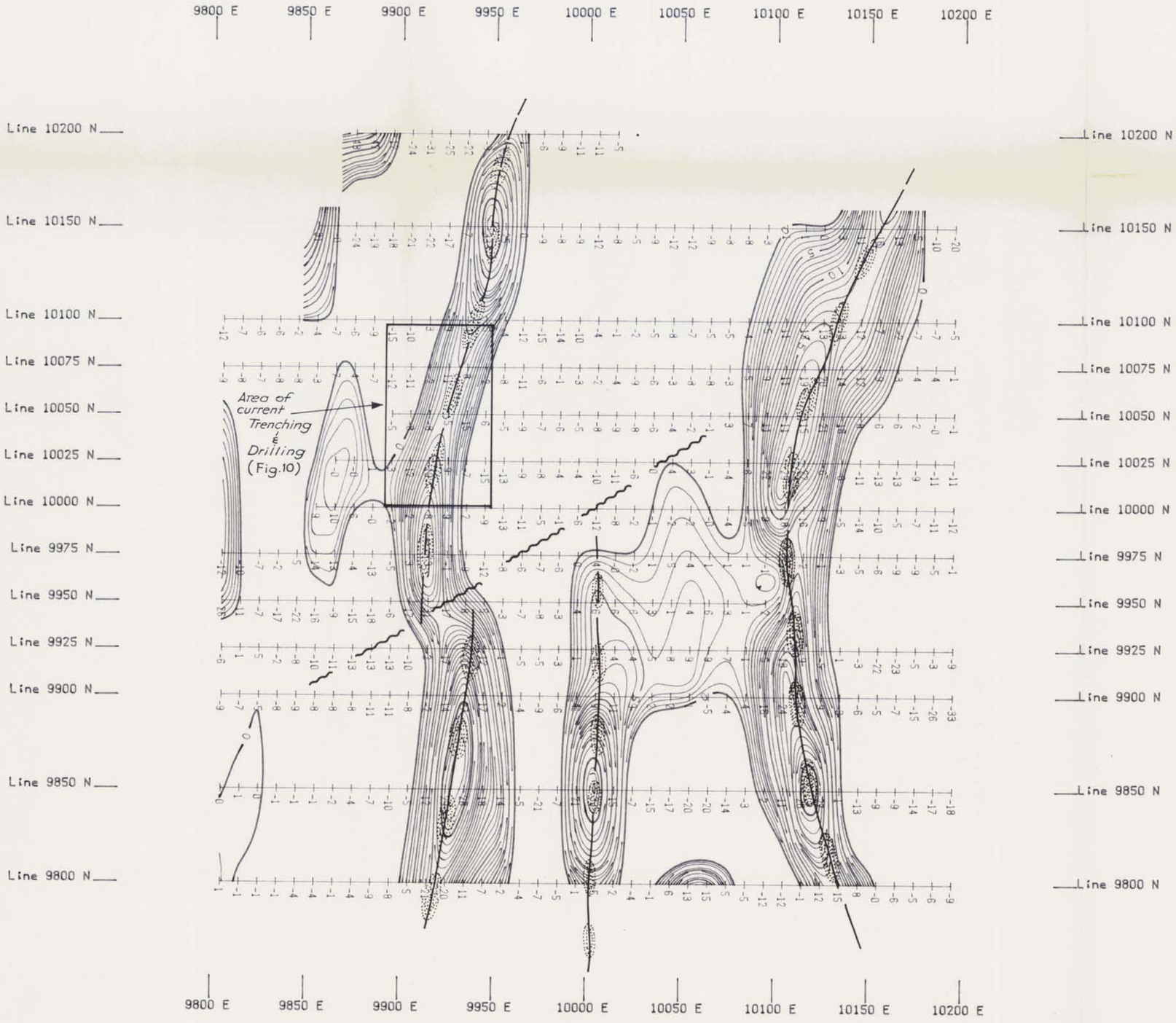
Osoyoos Mining Division

Penticton, British Columbia

VLF-EM PROFILES

Scale 1 : 2000 NTS 82 E/5

LLOYD GEOPHYSICS LIMITED



LEGEND

CONTOUR INTERVALS

1.0

5.0

25.0

VLF-EM Conductor

Interpreted Fault

READING DIRECTION : WEST TO EAST

TRANSMITTER STATION

NLK SEATTLE, WA. USA 24.8 kHz

SCALE 1 : 2000

50 0 50 (metres) 100 150 200

Figure 14 *External Plan : 651*

MINEQUEST EXPLORATION ASSOCIATES LTD.

ASTRO 34 PROJECT

Osoyoos Mining Division

Penticton, British Columbia

VLF-EM FRASER FILTER

Scale 1 : 2000 NTS 82 E/5

LLOYD GEOPHYSICS LIMITED

— 97+50 E — 98+00 E — 98+50 E — 99+00 E — 99+50 E — 100+00 E — 100+50 E — 101+00 E

N

— 101+50 N

— 101+00 N

— 100+50 N

— 100+00 N

— 99+50 N

— 99+00 N

— 98+50 N

— 98+00 N

0 10 20 30 40 50 60 m

SCALE : 1 : 500

Legend

1. Readings before road building
2. Readings after road building
3. Readings in trench
4. Readings over back filled trench

Drill Chip Sample Scintillometer Data

Sample No.	Reading	Sample No.	Reading
PDL-89 - 001	50	PDL-89 021	
002	80	022	
003	90	023	
004	60	024	
005	40	025	
006	60	026	
007	70	027	
008	40	028	
009	50	029	
010	50	030	125
011	40	031	150
012	50	032	170
013	50	033	180
014	60	034	170
015	60	035	150
016	50	036	180
017	45	037	160
018		038	145
019		039	150
020		040	130
		041	150

QPX MINERALS INC.

PDL PROPERTY OSOYOOS M.D., BRITISH COLUMBIA

ASTRO 34 SHOWING

SCINTILLOMETER DATA

	Originator	Drawn	Date	PLAN No.	FIG.
Original	T.M.S.	C.D.	Feb.'89	1493	15
Revision				N.T.S.	
Revision				82E/5W	

MINEQUEST EXPLORATION ASSOCIATES LTD.