521548

OBOY JOINT VENTURE
1988 DIAMOND DRILLING PROGRAMME
NAZKO, B C
CARIBOO MINING DIVISION

NTS: 93C/9, 16; 52°45'N LAT; 124°15'W LONG.

OPERATOR:
Lornex Mining Corporation Ltd
1650, 609 Granville Street
Vancouver BC
V7Y 1G5

OWNERS:
Lornex Mining Corporation Ltd/
Canadian Nickel Company Ltd.

G R Cope, B Sc
September 1988

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SUMMARY

The Oboy property is located 120km west of Quesnel in central British Columbia. The property was staked in 1985 and is currently held jointly by Lornex Mining Corporation Ltd and Canadian Nickel Company Ltd.

The claims are entirely underlain by Lower Tertiary Ootsa Lake Group andesite flows and minor volcaniclastics. Reconnaissance mapping and prospecting in 1985 and 1986 located five zones of silicified bedrock and subcrop containing anomalous arsenic ± silver ± gold values in rock and soil.

Fieldwork in 1987 concentrated on the largest area of alteration named the Camp zone. Work consisted of soil sampling, trenching, induced polarization and magnetometer surveys and diamond drilling. This programme confirmed the presence of epithermal style alteration with associated anomalous geochemistry. The highest geochemical values obtained in the drilling programme came from a 2.0m intersection yielding 320ppb Au, 6.2ppm Ag and 995ppm As. Based on this modest encouragement, a recommendation was made to test the Camp zone at greater depth.

The 1988 exploration programme consisted of 1043m of NQ wireline diamond drilling, 1.6km of VLF-EM surveying and limited geological mapping and sampling. The drilling programme confirmed the persistence of the Camp zone with depth. A number of silicified zones peripheral to the Camp zone were intersected. The highest gold value obtained in the 1988 programme came from a 1.0m intersection yielding 225ppb Au, 2.5ppm Ag and 3140ppm As.

Reconnaissance mapping over the Ridge zone and VLF-EM surveying over the Oboy 2 zone indicate that these are weak epithermal systems of limited areal extent.

Although the alteration zones on the Oboy property exhibit epithermal characteristics, the systems are weak and precious metal distribution within the zones is erratic and low-grade. Therefore, no further work is recommended at this time.

1.0 INTRODUCTION

The 1988 Phase I exploration programme on the Oboy property was carried out between June 7 and July 8 1988. Geological fieldwork consisted of 1043m of NQ wireline diamond drilling in four holes within the silicified Camp zone identified in 1987. The objective of the drilling programme was to test for increasing silicification and improvement of gold grade with depth within the zone.

Limited geological mapping and rock sampling were carried out on the Ridge zone and a VLF-EM survey was conducted over the Oboy 2 grid. These surveys were carried out with the object of confirming 1987 results and to test for additional exploration targets on the property.

The 1988 programme was supervised and performed by Lornex geologists Graham R Cope, B Sc and Myra G Schatten, B Sc.

2.0 PROPERTY LOCATION, ACCESS AND TITLE

The Oboy property is located 120km west of Quesnel, British Columbia and is centred at 52°45'N latitude; 124°15'W longitude on NTS map sheets 93C/9 and 93C/16 (Figure 1). Topography on the property consists of gentle, rolling hills with elevations ranging between 1400m and 1700m above mean sea level. Vegetation is characterized by open stands of lodgepole pine with swampy meadows along stream valleys.

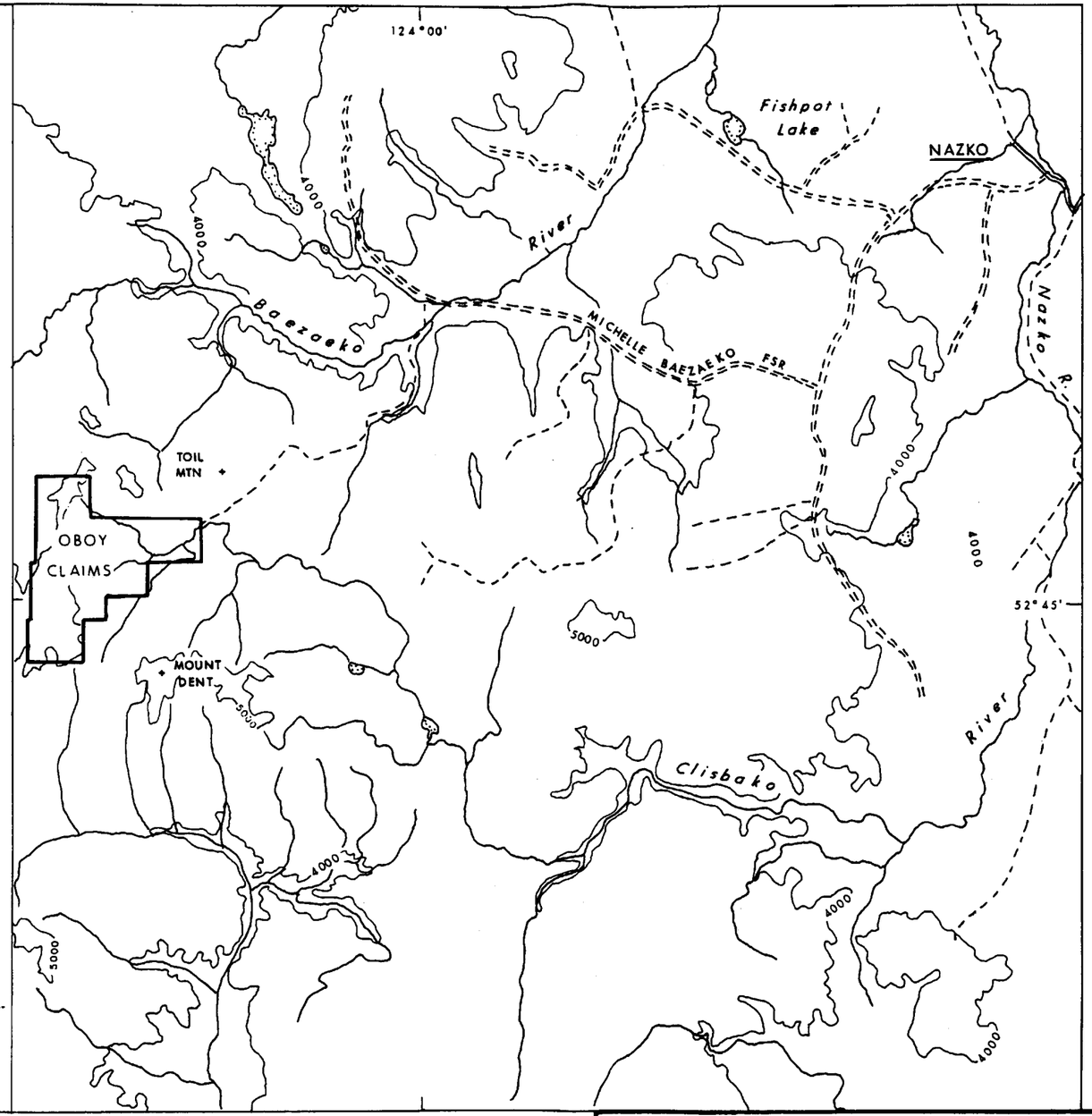
Access to the property is by helicopter from Quesnel. The B C Forest Service Michelle Fire road provides access to four-wheel drive vehicles to the eastern border of the property. A trail suitable for motorbikes connects the Michelle Fire road with the camp area. The property is traversed by three seismic roads which are suitable for all-terrain vehicles.

The Oboy property comprises eight contiguous mineral claims (Figure 2), located within the Cariboo Mining Division, as summarized below:

CLAIM	UNITS	RECORD NO:	RECORD DATE	EXPIRY DATE
Oboy 1	20	7140	Sept 18 1985	Sept 18 1993
Oboy 2	20	7141	Sept 18 1985	Sept 18 1993
Oboy 3	15	7142	Sept 18 1985	Sept 18 1993
Oboy 4	20	7143	Sept 18 1985	Sept 18 1993
Oboy 5	20	7144	Sept 18 1985	Sept 18 1993
Oboy 6	12	8961	Dec 17 1987	Dec 17 1988
Oboy 7	20	8692	Dec 17 1987	Dec 17 1988
Oboy 8	20	8693	Dec 17 1987	Dec 17 1988

The Oboy 1 to 5 claims were grouped as the Oboy group (Notice to Group No: 3221) on September 12 1986. The Oboy 6 to 8 claims were staked in anticipation of the construction of an access road. As a result of recent logging road construction, access through Oboy 6 to 8 is no longer the most efficient route and no work is to be applied to the claims for assessment purposes.

The Oboy claims are held jointly by Lornex Mining Corporation Ltd and Canadian Nickel Company Ltd. Lornex is the current operator by virtue of a joint venture agreement dated August 7 1987.



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LORNEX MINING CORPORATION LTD.		
OBOY CLAIMS		
LOCATION MAP		
DATE	DRAWN BY	DWG.
SEPT. 1988.	R.M.C./J.S.	FIG. 1

3.0 PROPERTY HISTORY

The Oboy claims were staked in 1985 by Rio Algom Exploration Inc in response to anomalous silver and arsenic geochemistry discovered during a regional reconnaissance sampling programme. There is no known mineral exploration in the area prior to 1985.

The claims were subsequently transferred to Lornex in August 1986 and reconnaissance mapping, prospecting and soil sampling performed (Watkins and Atkinson, 1986). This work identified a number of areas with elevated concentrations of Ag, As and Au in soil and/or rock overlying silicified bedrock.

In 1987, work concentrated on the largest area of alteration designated the Camp zone (Cann and Laird, 1987). Trenching and detailed soil sampling were carried out to better expose and define the alteration identified in 1986. Grab samples collected from the trenches yielded gold analyses of up to 260ppb Au. Silver and arsenic concentrations were found to increase with increasing degree of silicification. Alteration and metal associations were thought to indicate epithermal mineralization.

A joint venture was established in August 1987 between Lornex and Canadian Nickel Company Ltd. Induced polarization and magnetometer surveys were performed over the Camp zone grid and the highest priority targets subsequently drilled. The drilling programme confirmed the presence of a silicified zone with elevated Ag, As and Au concentrations. The highest metal concentration was obtained in hole 5 with 6.2ppm Ag, 320ppb Au and 995ppm As over 2.0m.

Based on modest encouragement and similarities to certain epithermal deposits, a recommendation was made to commence with the current programme.

4.0 REGIONAL GEOLOGY

The Oboy claims are entirely underlain by the Lower Tertiary Ootsa Lake Group (Tipper, 1969). Regionally, the Ootsa Lake Group consists of a thick (450m) nonmarine assemblage of rhyolitic to dacitic flows. The flow are varicoloured, red-mauve, buff, white-grey or yellow. In the immediate vicinity of the Oboy claims, green to dark green andesite predominates. The assemblage is flat-lying or gently warped into broad open folds and rests with apparent angular discordance on the Jurassic Hazelton Group. The Lower Tertiary rocks appear to have formed a topographic high during the Miocene as the area is surrounded and invaded along valleys by Miocene Plateau basalts.

Few mineral prospects are known in the area, however, this may be a consequence of extensive drift cover rather than the absence of mineralization.

5.0 1988 EXPLORATION PROGRAMME

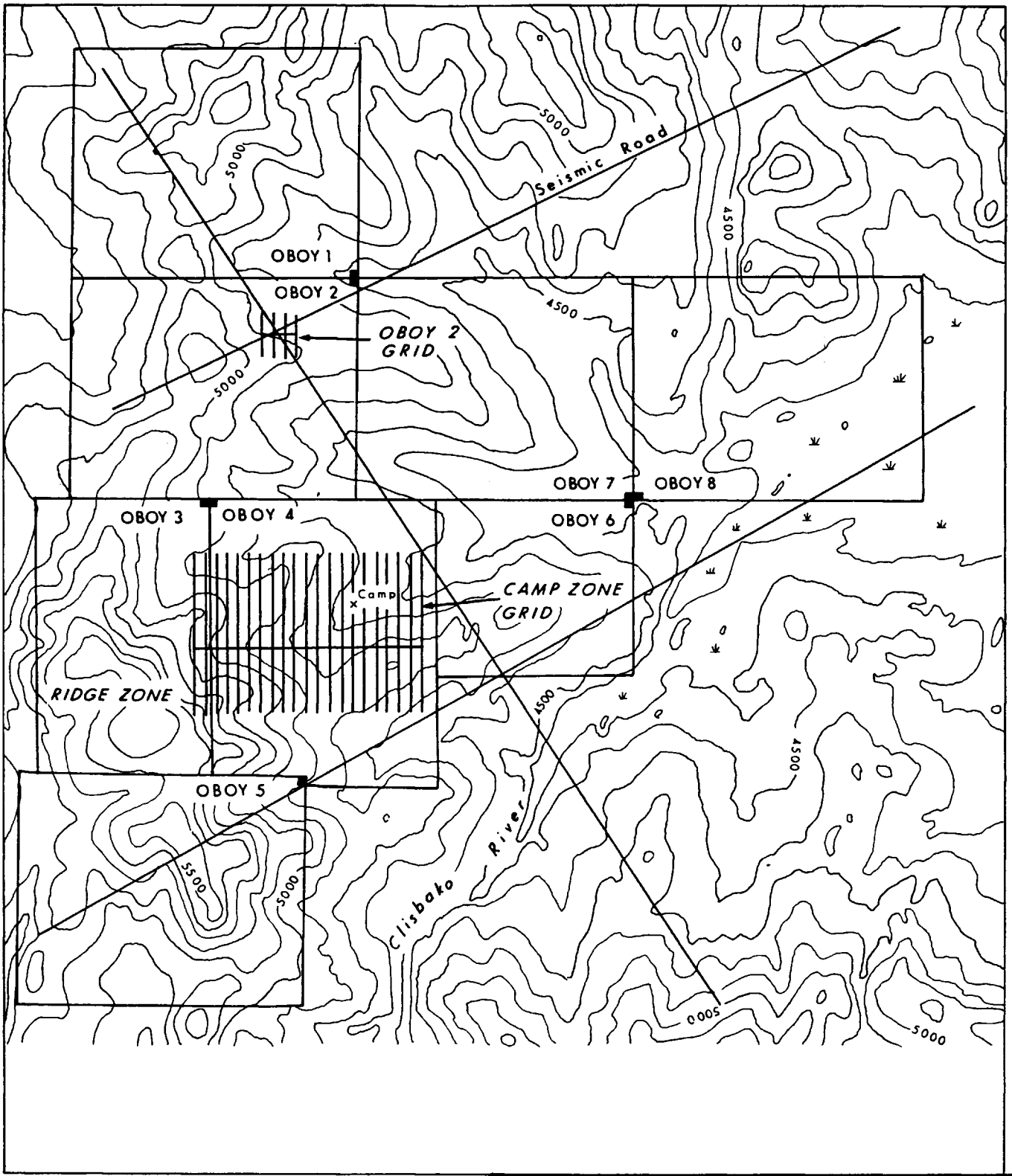
5.1 Introduction

The objectives of the 1988 Phase I exploration programme on the Oboy property were firstly to test for improved precious metal grade with depth within the Camp zone and secondly, to assess the potential for economic precious metal concentrations within the Ridge and Oboy 2 zones shown in Figure 2.

A total of 1043m of NQ wireline diamond drilling in four holes from four setups was completed by Van Alphen Exploration Services in the Camp zone. All silicified and or pyritic intervals were split and samples sent to Acme Analytical Laboratories of Vancouver, British Columbia. A total of 118 drill core samples was analyzed geochemically for gold and for 30 additional elements by inductively coupled plasma (ICP). Drill core from the 1987 exploration programme was re-examined and two additional samples collected. Drill core from both the 1987 and 1988 programmes is stored on the property near the collar of OB87-1. The results of the 1988 drilling programme are presented in section 5.2 of this report.

Limited geological mapping and rock sampling were conducted over the Ridge zone. A total of six rock samples was collected and analyzed geochemically for gold and by 30 element ICP. Results of this examination are found in section 5.3.

A VLF-EM survey was conducted over 1.6km of the Oboy 2 grid. Three rock samples were collected in conjunction with the geophysical survey and subsequently analyzed geochemically for gold and by 30 element ICP. Results from work on the Oboy 2 grid are discussed in section 5.4.



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NTS 93C/9,16

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LORNEX MINING CORPORATION LTD.

OBOY CLAIMS

CLAIM MAP AND
GRID LOCATIONS
CARIBOO MINING DIVISION

DATE	DRAWN BY	DWG.
SEPT. 1988.	R. M.C. / J.S.	2

5.2 Diamond Drilling, Camp Zone

5.2.1 General

The 1987 diamond drilling programme in the Camp zone was successful in locating a zone of significant silicification central to a more widespread zone of potassic alteration in andesites of the Lower Tertiary Ootsa Lake Group. Weak gold, silver and arsenic enrichment was found to accompany the silicification and an epithermal deposit of the quartz-adularia classification was postulated. To test this theory, a drilling programme designed to test the silicified zone at depth was recommended.

The 1988 drilling programme intersected silicified zones at vertical depths of up to 215m in drill holes OB88-2 and OB88-3. The main zone identified in 1987 was traced an additional 100m to the south and a number of smaller, peripheral silicified zones were intersected.

The silicified zones are characterized by pervasive silicification with local minor (less than 10%) quartz veinlets. The quartz veinlets are generally less than 5mm wide and are finely crystalline to chalcedonic. Quartz druses are present locally and are typically less than 5mm wide with rare druses to 2cm. The Main zone has a true width of between 10 and 25m. Silicification within the Main zone appears to increase in intensity with depth.

The degree of enrichment in gold, silver and arsenic does not appear to increase with degree of silicification or with depth. The highest gold analysis resulting from the 1988 programme was one of 255ppb Au over 1.00m at a depth of 189m

in OB88-2. Indeed, the highest gold analysis on the property to date is one of 1270ppb Au over 0.58m at a depth of 123m in OB87-4.

The andesite which hosts the Camp zone can be subdivided into five distinct units:

UNIT 1 MASSIVE, PYROXENE PORPHYRITIC ANDESITE

Dark green to green where fresh, becoming pale green with increasing potassium metasomatism and silicification, fine-grained andesite. 5-10%, 2-5mm subhedral to anhedral pyroxene phenocrysts generally altered to chlorite and locally amphibole. Pyroxene phenocrysts locally exhibit preferred orientations.

UNIT 2 FLOW-BANDED, PYROXENE PORPHYRITIC ANDESITE

Essentially the same as Unit 1. Flow bands range in thickness from a few millimetres to several centimetres. Locally, bands are variously altered to chlorite and hematite imparting a striped appearance to the unit.

UNIT 3 VARIOLITIC ANDESITE

Locally, 2mm to 5cm varioles comprise up to 40% and exhibit weak alteration, relative to the surrounding andesite. The varioles are spherical to ovate and form distinctive layers.

UNIT 4 ANDESITE FLOW BRECCIA

Clasts of pyroxene porphyritic andesite, 2 to 10cm wide, comprise 50 to 70% of unit. Clasts are generally angular and

matrix supported. Matrix is comprised of fine-grained andesite which is locally pyroxene porphyritic.

UNIT 5 ASH FALL ANDESITE TUFF

Minor amounts of clast-supported lapilli tuff were encountered. Heterolithic angular lapilli to 1cm comprise up to 90% in a fine-grained, gritty matrix. Weak layering is exhibited.

5.2.2 Drill Hole Summaries

Drill hole locations are shown on Figure 4 and drill hole data are summarized below:

				Collar Coordinates	
Hole No:	Length(m)	Azimuth	Dip	Latitude	Departure
OB88-1	105.15	090	-45°	0+00	0+90W
OB88-2	303.26	090	-45°	1+00S	1+40W
OB88-3	294.12	090	-50°	2+00S	1+90W
OB88-4	339.84	090	-50°	1+00N	1+00W

Drill logs and certificates of analysis are found in appendices III and IV respectively.

OB88-1 (Figure 8)

The objective of OB88-1 was to intersect, at depth, the Main silicified zone encountered in OB87-5. Due to drill hole instability, OB88-1 was abandoned before reaching the target depth.

Flow-banded andesite was intersected between 154.68m and 165.12m. The andesite exhibits moderate propylitic alteration with minor silicification.

From 165.12m to 292.05m, andesite flow breccia with local intervals of flow-banded andesite was encountered. Moderate propylitic alteration and K-feldspar metasomatism are evident throughout the interval. Between 266.69m and 269.73m the andesite is brecciated and quartz-carbonate altered with up to 5% quartz-carbonate veinlets. Trace to 10% pyrite, in blebs up to 2cm, is present in association with the quartz-carbonate alteration. The highest geochemical analysis in OB88-4 was obtained within this zone, 1.1ppm silver over 2.0m (sample 6120).

Flow-banded andesite was encountered between 292.15m and the end of the hole at 339.84m. Moderate propylitic alteration is present throughout with local intervals of weak silicification.

5.2.3 Discussion

The 1988 diamond drilling programme confirmed the presence of silicified zones at depths of at least 200m within the Camp zone. The Main silicified zone strikes between 030° and 045° with moderate to steep westerly dips. Drill hole intersections were obtained along 240m of strike length. The average width of the Main zone is approximately 15m. Continuity of the Main zone through to the trenched area was not demonstrated.

Pyrite content within the silicified zones is typically in trace amounts with rare concentrations to 10%. Traces of

chalcopyrite and marcasite are present locally. Precious metal concentrations are distributed erratically and are low (gold <255ppb, silver <4.1ppm). Similarly, base metal concentrations are uniformly low. Arsenic and antimony exhibit a strong association with gold with correlation coefficients of 0.88 and 0.87 respectively. Molybdenum enrichment is present with certain higher gold analyses but is not everywhere associated. Silver concentrations generally increase with gold content. Silver to gold ratios approach 30:1 with increasing precious metal content.

Alteration in the Camp zone grades outwards from a pervasively silicified core through a zone of potassium feldspar metasomatism to widespread propylitic (chlorite) alteration. Rocks within the Camp zone are extensively faulted and fractured. Quartz fragments within the fault zones indicate that silicification took place prior to the most recent tectonic event. Quartz veinlets cutting pervasive silicification indicate that two episodes of silica enrichment are possible.

While silicification appears to increase in intensity with depth, precious metal concentrations exhibit no appreciable increase. Given that the Camp zone has many characteristics of known epithermal deposits, a number of explanations for negligible precious metal values are possible. The most probable explanation is that paleo-conditions were not amenable to gold deposition. These conditions might include a short time span for the mineralizing event, lack of pulses of mineralization to increase grade and a lack of precious metals within source rocks.

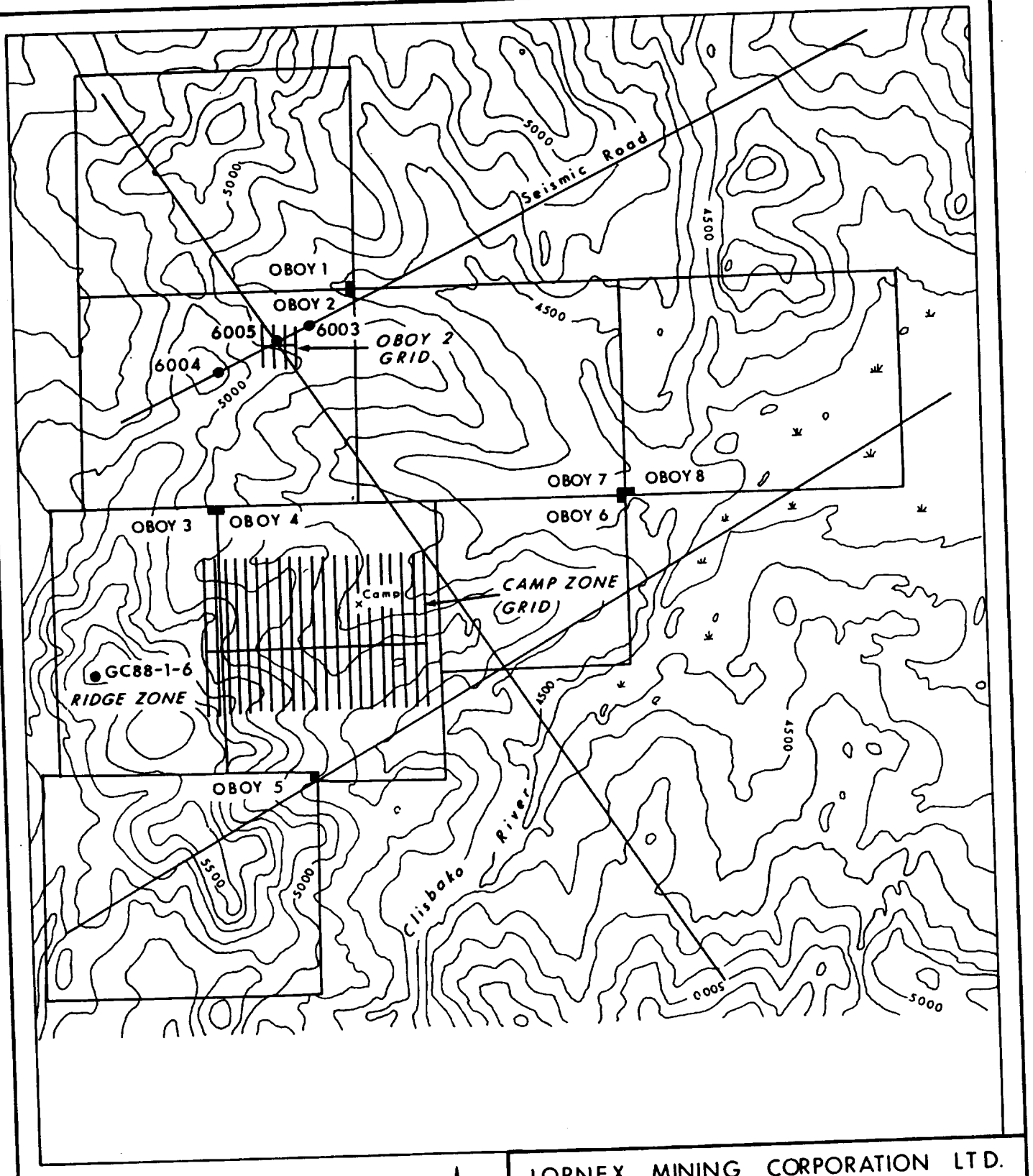
The second possibility is that the Camp zone is either too high or too low in the epithermal system. If the Camp zone is too low in the system, then greater enrichment in base metals would be expected. This alternative is more probable than that of a mineralized zone lying at depth in which case an increase in precious metal concentration with depth would be expected.

5.3 Ridge Zone

Samples collected by previous workers (Watkins & Atkinson, 1986) indicated weak gold enrichment in the Ridge zone. One day was spent mapping and rock sampling to test for improved gold concentrations.

The ridge zone, shown in Figure 3, measures 50m x 25m and is characterized by rusty manganese oxide fracture coatings on pale to olive green, flow-banded andesite. The andesite is generally weakly silicified with sparse, coarsely crystalline quartz veins. Drusy quartz veins and chalcedonic veinlets are rare but locally comprise up to 10%. Limonitized pyrite locally comprises 1%.

The highest gold analysis, 19ppb Au (sample GC88-5), was obtained from a selective grab sample of andesite with approximately 30% secondary silica. Given the limited areal extent of the silicification and absence of strongly anomalous gold values, the Ridge zone is not considered an exploration target.



LEGEND

● 6003 Rock sample site and number

NTS 93C/9,16

0 1 2 km

Scale 1 : 50 000

LORNEX MINING CORPORATION LTD.

OBOY CLAIMS

ROCK SAMPLE LOCATION MAP

CARIBOO MINING DIVISION

DATE	DRAWN BY	DWG.
SEPT. 1988.	G.R.C. / J.S.	3

5.4 Oboy 2 Zone

Soil and subcrop sampling in 1986 and 1987 yielded a number of anomalous gold analyses in the Oboy 2 zone. Soil samples returned analyses of up to 360ppb Au and rock samples returned analyses of up to 60ppb Au. Outcrop is very scarce in this area and a source for the gold enrichment was not identified. The distribution of anomalous samples appears random.

The aim of the 1988 VLF-EM survey was to test for mineralized structures under the overburden that might exhibit an association with the anomalous surface samples. A total of 1.6km of VLF-EM surveying was performed using a Geonics EM-16. Readings were taken facing north at 25m station intervals. The Annapolis, Maryland transmitter (NSS, 21.4 kHz) was selected and provided good coupling with the north-south grid. Quadrature and in-phase measurements were recorded and are plotted at a scale of 1:2500 in Figure 13.

A single feature of weak to moderate amplitude was identified in the southern portion of the grid. This feature is in fact a crossover caused by topography. A low ridge crosses the grid between line 1+00W, 1+60S and line 2+00E, 0+30S. No conductive bedrock features are apparent from the VLF-EM data.

Three rock samples were collected during the VLF-EM survey. Sample locations are shown in Figure 3. Sample 6005 yielded the only anomalous values consisting of 210ppb Au, 802ppm Ba and 452ppm As. This is a float sample of altered andesite exhibiting moderate silicification and rusty-red iron stain.

Results in the Oboy 2 zone are geochemically similar to the Camp zone. It is probable that a zone of silicification underlies or is proximal to the Oboy 2 zone. No through-going structures are apparent to facilitate multi-phase precious metal enrichment and values remain sub-economic.

6.0 CONCLUSIONS

i) The Oboy property is entirely underlain by Lower Tertiary Ootsa Lake Group rocks consisting of andesite flows and minor volcaniclastics.

ii) At least three weak to moderate epithermal alteration zones are present on the property (Camp, Ridge and Oboy 2 zones).

iii) Alteration within these epithermal zones grades outwards from a silicified core through a halo of potassic alteration to widespread chloritic alteration.

iv) The silicified zones exhibit, at most, two phases of epithermal activity.

v) Metal and pathfinder element associations within the alteration zones are consistent with those of an epithermal system.

vi) Gold and silver mineralization is erratic and very low-grade.

7.0 RECOMMENDATIONS

Exploration on the Oboy property has consisted of the identification and delineation of alteration zones consistent with epithermal style mineralization. Although anomalous precious metal concentrations are associated with the alteration zones, the distribution of anomalous values is erratic and typically low-grade. Precious metal values do not exhibit a trend towards improvement with depth or along strike.

In the absence of geochemical encouragement, in the form of ore-grade metal concentrations and multi-phase silicification, no further work on the Oboy property is recommended at this time.

REFERENCES

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