86-659-15298
9/87

ASSESSMENT REPORT

- -

GEOLOGY

SOIL and ROCK CHEMISTRY

on the

OBOY CLAIM GROUP

CARIBOO MINING DIVISION

NTS 93C/9,16E

52° 45' 124° 14'

- -

on behalf of

LORNEX MINING CORPORATION LTD.
P.O. Box 10335, Stock Exchange Tower
Suite 1650, 609 Granville Street
VANCOUVER, B.C. V7Y 1G5

Submitted by
JAM GEOLOGICAL SERVICES
John J. Watkins
Marilyn Atkinson

October 25, 1986

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF MAPS (in Pocket)

APPENDICES

SUMMARY AND RECOMMENDATIONS

The Oboy property has potential for hosting a high level epithermal Ag-Au deposit. Hydrothermal alteration of shallow, east-dipping andesite flows is interpreted as a north-trending zone extending for the length of the claim group. Spatially associated with the zone of alteration are four areas carrying elevated concentrations of Ag, As and Au in soils and/or rock. The Camp anomaly is the largest, and is defined by anomalous soils covering a two square kilometer area centered on altered bedrock reporting Ag and Au enrichment. An isolated, but well exposed alteration zone, the Ridge anomaly, covers a small, 50 by 50 meter area at the west edge of the claim group. Here gold and silver enrichment is in a quartz stockwork.

Further work is recommended:

1. At the Camp anomaly mechanical slit trenching would better expose altered bedrock for sampling and mapping. Open forest cover can accommodate various geophysical techniques of which IP and VLF-EM are recommended.
2. Other anomalies lying on or near the projection of the alteration should be closely prospected and soil sampled, and considered for an IP test.
3. The Ridge anomaly should be mapped and sampled in detail.
4. Off the claim group the north and south projection of altered rock should be prospected.

1. INTRODUCTION

1.1 The Property

The Oboy property consists of five contiguous mineral claims (Figure 1) totalling about 2,375 hectares, described as follows:

Claim Name	No. of Units	Record No.	Expiry Date
Oboy 1	20	7140	September 18, 1986
Oboy 2	20	7141	September 18, 1986
Oboy 3	15	7142	September 18, 1986
Oboy 4	20	7143	September 18, 1986
Oboy 5	20	7144	September 18, 1986
	95		

1.2 Location, Access and Physical Features

The property is located 120 km west and 135 km south of the logging communities of Quesnel and Vanderhoof (Figure 2).

Property access is best by helicopter from Quesnel. Roads from Quesnel access active logging areas seven km northeast of the property. Two seismic roads, bearing at 060° and 145°, pass through the property and could accommodate track and four wheel drive vehicles.

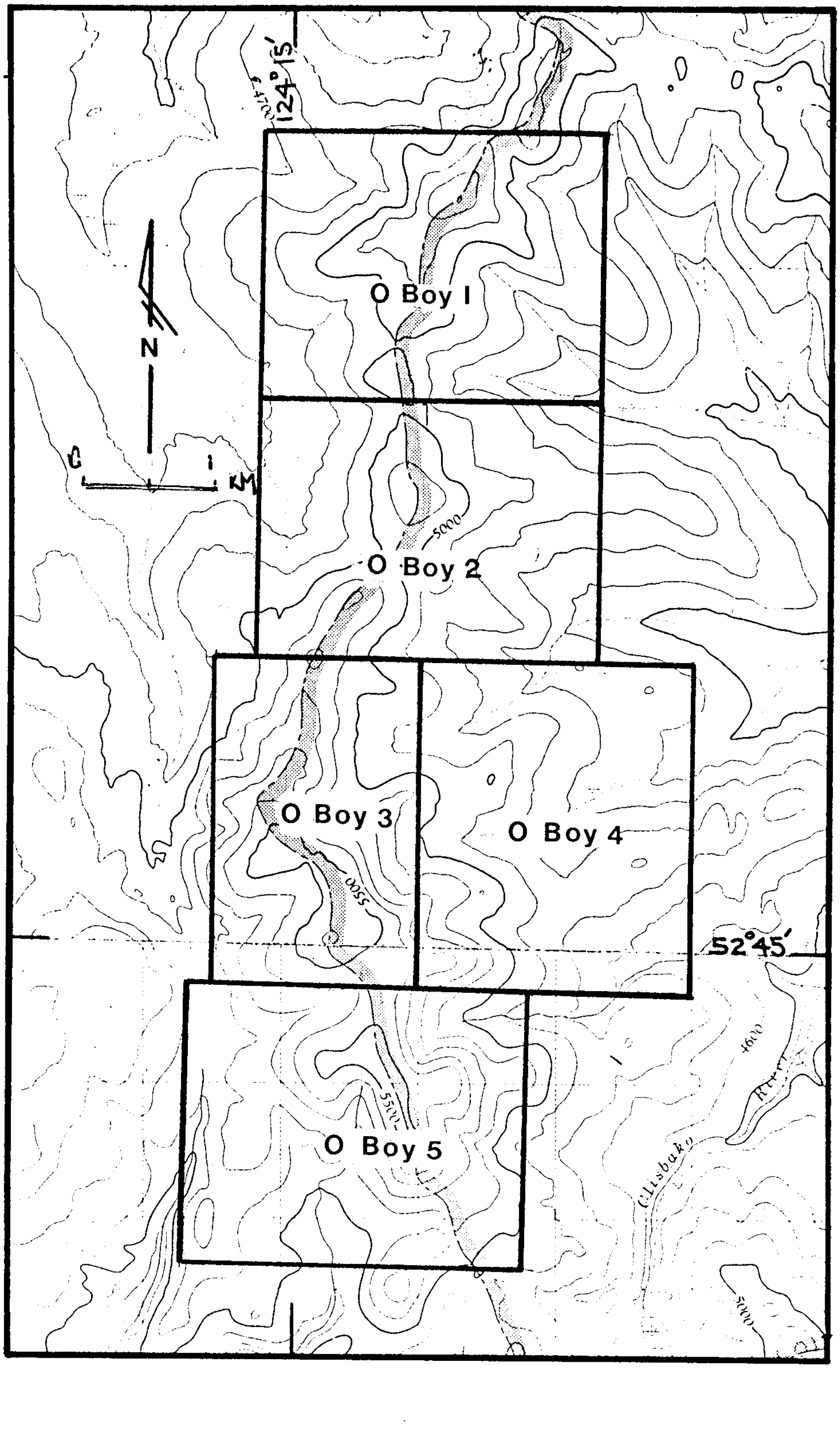


Figure 1. Map (1:50,000), O Boy claim group
NTS 93C/9.16

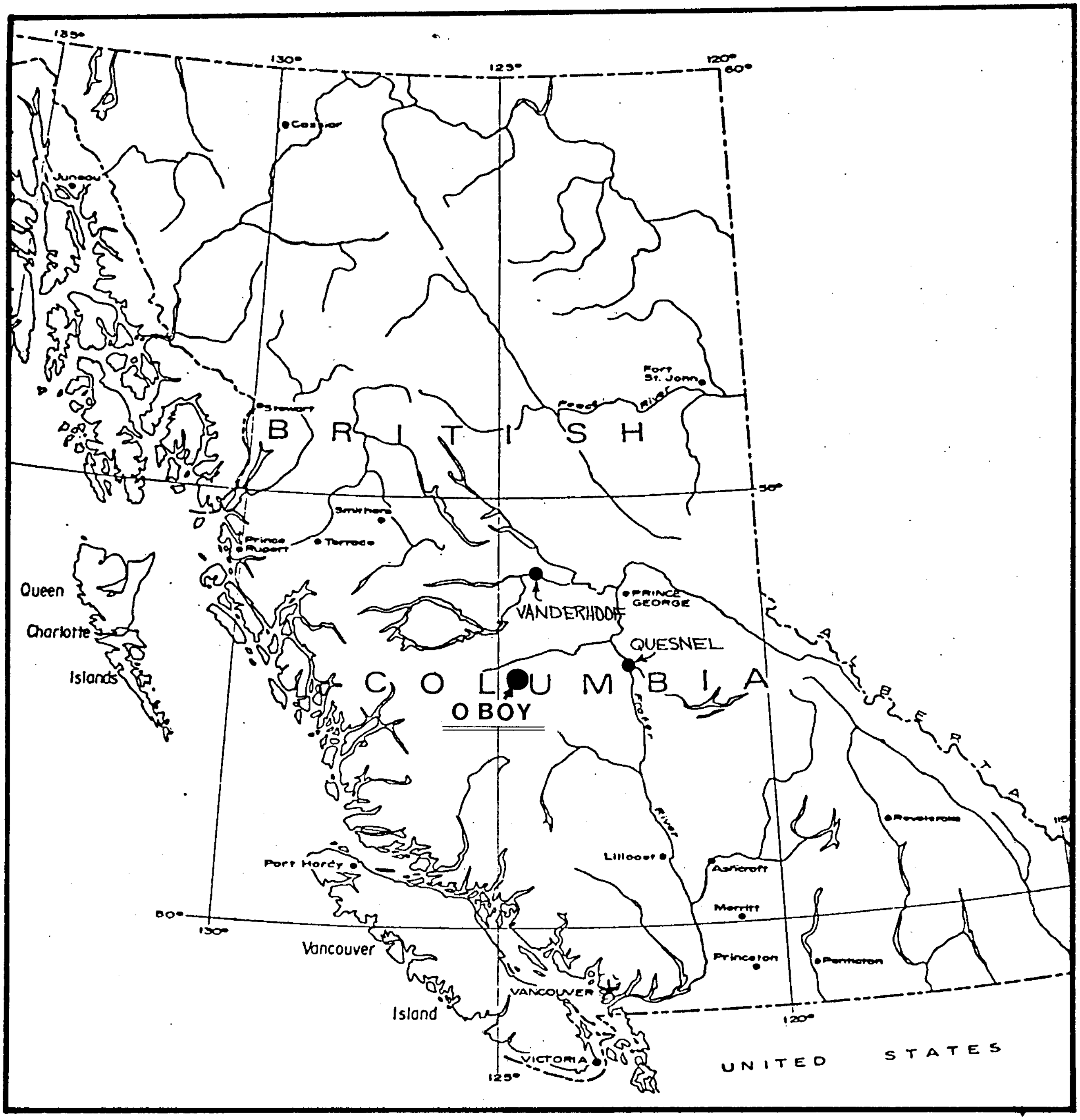


Figure 2. Location map, O Boy claim group

The property lies within the Interior Plateau, a large physiographic division of the Canadian Cordillera underlain, over large parts, by flat-lying Tertiary to Recent lava flows. The plateau surface is generally rolling and lies between 1,200 to 1,500 meters in elevation.

The property is centred on a north trending height of land, where elevations range from 1,370 to 1,700 meters, and is covered by mature, open stands of lodgepole pine interspersed, at lower elevations, with open meadows.

1.3 Property History

No history of mineral exploitation is known from the Oboy area.

The property was staked in 1985 by Rio Algom Exploration Inc. in follow up to a reconnaisance survey and was subsequently transferred to Lornex Mining Corporation Ltd.

2. GEOLOGICAL SETTING

2.1 Regional Geology

Tipper (1969) mapped the area of interest as part of a thick, non-marine assemblage of rhyolitic to dacitic flows, flat lying to broadly folded with angular discordance on older, probably Middle Jurassic Hazelton Group strata. These rocks are similar to mid-Tertiary rocks of the Ootsa Lake Group located to the north.

The Oboy property is positioned on a peralkaline magmatic system of late Cenozoic age (Souther, 1986) that formed a discontinuous east-trending belt through central British Columbia (Figure 3).

2.2 Local Geology

The subsurface geology of the Oboy claim group is inferred due to thin cover of glacial debris which obscures bedrock exposures.

The property appears to be underlain by shallow east dipping, massive andesite flows with intracalated areas of intense, carbonate, sericite, K-feldspar and silica alteration.

The distribution of lithologic types identified are shown on Maps 1 and 2, and interpreted relationships shown on Figure 4.

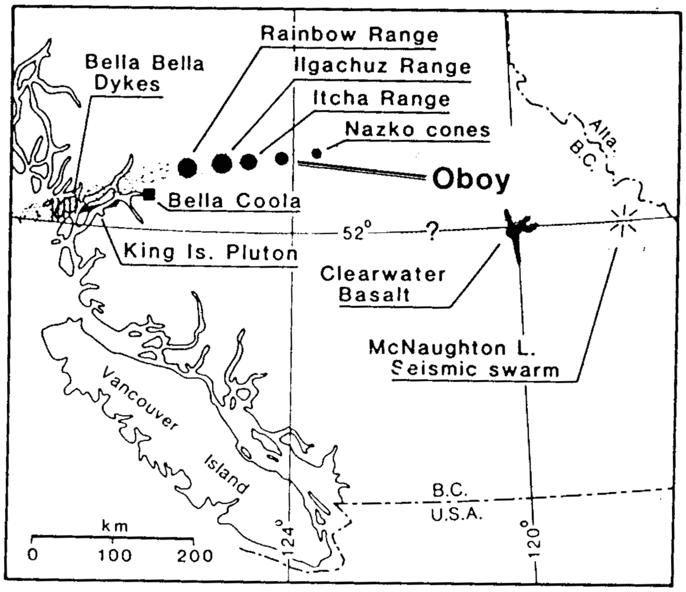


Figure 3. Index map showing the principal components of the Anahim Belt, their relationship to possible hot-spot traces (from Souther, 1986) and location of Oboy property.

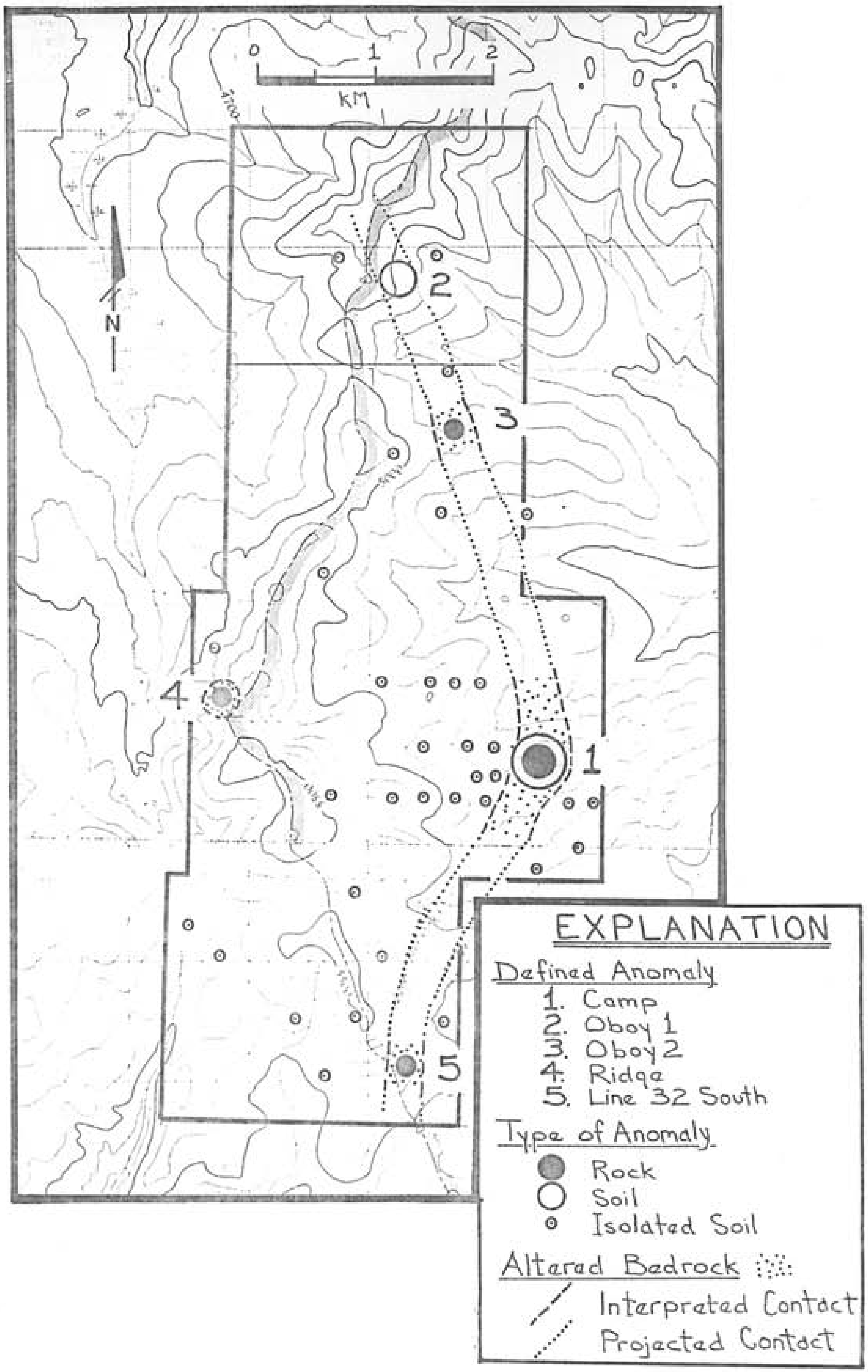


Figure 4. Map of the Oboy property with interpretation.

3. 1986 PROGRAM

3.1 Program Objectives

The objective of this work is to evaluate the economic significance of anomalous silver and arsenic concentrations in stream silts and soils reported by Rio Algom Exploration Ltd., and recommend further action.

3.2 Work Summary

Two geologists spent 10 days, between August 15 to August 25, 1986 on the Oboy property. Evaluation consisted of running east-west compass and hip-chain measured lines from a north-south base line. Line 0+00 on the base line was established at Camp located at the edge of an open meadow in the north central part of Oboy 4 claim (Map 1). Lines run are shown on Maps 1 and 2.

B-horizon soils were collected at 250 meter intervals on run lines. Lines were prospected, bedrock outcrops and areas of locally derived rubble identified and mapped. Twenty-eight (28) rock samples were submitted for chemical analysis and fifteen (15) rock samples submitted for petrographic examination. Six (6) stream silt samples were also submitted for chemical analysis. Results are in the Appendices of this report.

3.3 Results

3.3.1 Soil Geochemistry

Soil sample locations are listed in Appendix I, plotted on Maps 1 and 2, and analytical results listed in Appendix II.

Anomalous thresholds for arsenic, silver and gold were arbitrarily picked at 20 ppm, 0.5 ppm and 5 ppb, respectively and identified on Maps 1 and 2.

Two areas of anomalous soils are defined:

1. Twenty-five (25) anomalous soil samples (Table 1) outline a 1,500 X 1,500 meter area centred roughly on line 5+00 south, and 700 meters west of the base line (Map 1). This area, referred to as the Camp anomaly, is underlain predominantly by locally derived rubble of argillically altered, silica flooded and veined andesite.

2. A second area of anomalous soils is continuous for 800 meters on line 35+00N and centred 1,350 meters west of the base line. Line 35+00N anomaly may correlate with one anomalous sample on line 30+00N. The anomaly is referred to here as the Oboy 1 anomaly and its soil chemistry is summarized in Table 2. Oboy 1 is covered by glacial debris with one small exposed area of unaltered andesite.

Table 1. Camp Zone, soil chemistry

Sample	Ag(ppm)	As(ppm)	Au(ppb)	Sample	Ag(ppm)	As(ppm)	Au(ppb)
S2	0.6	3	1	S107	0.5	15	1
S3	0.5	22	1	S108	0.6	18	4
S4	0.5	40	2	S109	0.6	9	5
S5	0.3	21	1	S110	0.2	9	8
S19	1.3	37	13	S113	0.9	53	2
S20	1.5	55	7	S114	0.8	38	1
S21	0.8	11	1	S192	0.7	31	1
S22	1.2	10	1	S193	0.5	9	2
S23	1.9	82	7	S194	0.5	6	1
S24	0.3	25	1	S196	0.4	20	3
S25	0.2	61	1	S197	0.8	31	2
S92	0.8	5	1	S198	0.4	24	1
S93	0.5	5	1				

Table 2. Oboy 1 anomaly, soil chemistry

Sample	Ag(ppm)	As(ppm)	Au(ppb)
S166	0.4	25	1
S167	0.2	23	1
S168	0.3	69	1
S169	0.2	77	2
S177	1.2	83	12

Table 3. Isolated soil anomalies

Line	Sample .	Ag(ppm)	As(ppm)	Au(ppb)
32+00S	S37	0.2	59	1
27+50S	S46	0.1	32	5
	S48	0.1	20	1
	S51	1.1	74	6
25+00S	S52	0.6	50	1
22+50S	S64	0.3	29	1
	S59	0.5	29	3
17+50S	S72	0.3	30	5
13+00S	S79 (1)	0.2	26	1
9+00S	S101	0.6	44	1
	S105(1)	0.5	14	1
	S84 (1)	0.2	21	1
	S85 (1)	0.3	25	2
5+00S	S16	0.7	5	1
2+50N	S205	0.4	36	1
10+00N	S201	0.8	10	5
15+00N	S145	0.7	11	1
	S148	0.1	5	6
20+00N	S133	0.1	4	5
25+00N	S187(2)	0.1	27	1

(1) may be part of the Camp anomaly
(2) may be part of the Oboy 1 anomaly

3.3.2 Rock Chemistry

Of the 28 rock samples submitted for analysis, 17 returned anomalous results. Respective thresholds for arsenic, silver and gold were arbitrarily picked at 100 ppm, 1.0 ppm and 20 ppb. Four anomalous areas can be defined; Camp, Ridge, Oboy 2, and Line 32+00 South. Rock chemistry of the four areas is summarized in Table 4. Anomalous rock samples are indicated on Maps 1 and 2. The relationship between anomalous rock samples and inferred geology is characterized on Figure 4.

3.3.3 Petrography

J.F. Harris, Ph.D., Vancouver Petrographics Ltd., petrographically described fifteen (15) rock samples collected as representative of lithologic types on the Oboy property.

Two rock types, andesite and latite, are described. Latite is interpreted here as the hydrothermally altered equivalent of andesite.

Enrichment in arsenic, silver and gold is related to altered andesite at the Camp, Ridge, Oboy 2 and Line 32+00S anomalies.

The location of samples petrographically described are indicated on Maps 1 and 2.

Table 4. Summary of anomalous rock chemistry

Area	Sample	Ag(ppm)	As(ppm)	Au(ppb)
Camp	R-29(1)	5.3	1380	105
	R-30	4.1	864	20
	R-31(1)	1.0	25	4
	R-32	0.5	199	1
	R-40(1)	1.7	340	12
	R--41	4.7	806	18
	R-43	3.6	206	26
	R-45	1.4	70	1
	R-46	2.2	44	2
Ridge	R-6	1.4	64	9
	R-7	2.5	84	26
	R-56	1.3	71	20
	R-58	0.3	140	12
Oboy 2	R-37(1)	0.1	1197	24
	R-38	0.2	237	34
	R-39	0.6	264	150
Line 32+00S	R-11(1)	0.1	102	1

(1) petrographic description in Appendix 4

4. DISCUSSION

Precious metal concentrations near ore tenor were not identified on the Oboy property. However, silver and gold enrichment is present, and is related to several, hydrothermally altered areas that are obscured by a thin cover of glacial debris. Alteration mineralogy and geologic setting classifies the Oboy property with the adularia-sericite type described recently by Hayba and others (1986). Well known examples of the type are De Lamar, Idaho and Tonopah, Nevada.

5. STATEMENT OF COSTS

TRAVEL		
Northern Mountain Helicopter Inc.	3,027.60	
Truck, JAM Geological Services	200.00	
3 days, JAM Geological Services	900.00	
Fuel	62.75	
B.C. Ferry	46.00	
Lodging	418.76	
		4,655.11
FIELD		
JAM Geological Services, 11 days	3,300.00	
Groceries	240.86	
Hardware	142.70	
Radio Rental	100.00	3,783.56
ANALYTICAL		
ACME Analytical Labs Ltd.	3,101.00	
Vancouver Petrographics Ltd.	857.60	
Sample transport	48.40	4,007.00
REPORTING		
JAM geological Services	1,200.00	
Drafting, WHW Drafting Service	242.70	
Typing, photocopies, Woodcomp Management	166.00	
Materials	156.78	1,765.48
MANAGEMENT		
Lornex Mining Corp. Ltd., R. Cann, 4 days	745.00	
Lodging	137.16	882.16
TOTAL COST		15,093.31

6. REFERENCES

Hayba, D.O., Bethke, P.M., Heald, P., and Foley, N.F. (1986) in Geology and Geochemistry of epithermal systems, B.R. Berger and F.M. Bethke, editors, Reviews in Econ. Geol., Vol. 2.

Souther, J.G. (1986) The Western Anahim Belt: root zone of a peralkaline magma system, Can. J. Earth Sci., Vol. 23, p 895-908.

Tipper, H.W. (1968) Geology, Anahim Lake, Map 1202A, Geol. Surv. Can.

7. STATEMENT OF QUALIFICATIONS

I, John J. Watkins, of Royston, British Columbia, do hereby certify that:

I am a graduate of Queen's University, Kingston, Ontario, graduated with a B.Sc. Honours Degree in Geology in 1972, and with a M.Sc. Degree in Geology in 1980.

I have practised my profession continuously since graduating.

I am a Fellow of the Geological Association of Canada.

I personally supervised work on the Oboy claim group.

September 27, 1986
Royston, B.C.

J. J. Watkins

APPENDIX I

LIST OF SOIL SAMPLE LOCATIONS

SAMPLE NUMBER	GRID LOCATION		SAMPLE NUMBER	GRID LOCATION	
S-1	0+00	2+50W	S-24	5+00S	0+00
S-2	0+00	5+00W	S-25	5+00S	2+50E
S-3	0+00	7+50W	S-26	5+00S	5+00E
S-4	0+00	10+00W	S-27	2+50S	5+00E
S-5	0+00	12+50W	S-28	0+00	5+00E
S-6	0+00	15+00W	S-29	0+00	2+50E
S-7	0+00	17+65W	S-30	0+00	0+00
S-8	0+00	20+00W	S-31	32+50S	3+50W
S-9	0+00	22+50W	S-32	32+50S	6+00W
S-10	0+00	25+00W	S-33	32+50S	8+50W
S-11	0+00	27+50W	S-34	32+50S	11+00W
S-12	2+50S	27+85W	S-35	32+50S	13+50W
S-13	5+00S	27+50W	S-36	32+50S	16+00W
S-14	5+00S	27+00W	S-37	32+50S	18+50W
S-15	5+00S	+2+50W	S-38	32+50S	21+25W
S-16	5+00S	20+00W	S-39	32+50S	23+50W
S-17	5+00S	17+50W	S-40	32+50S	26+00W
S-18	5+00S	15+00W	S-41	32+50S	27+75W
S-19	5+00S	12+50W	S-42	30+00S	27+75W
S-20	5+00S	10+00W	S-43	27+50S	27+75W
S-21	5+00S	7+50W	S-44	27+50S	25+75W
S-22	5+00S	5+00W	S-45	27+50S	22+25W
S-23	5+00S	2+50W	S-46	27+50S	20+75W

SAMPLE NUMBER	GRID LOCATION	
S-47	27+50S	17+75W
S-48	27+50S	15+25W
S-49	27+50S	12+75W
S-50	27+50S	10+25W
S-51	27+50S	7+75W
S-52	25+00S	3+50W
S-53	22+50S	3+50W
S-54	20+00S	3+50W
S-55	17+50S	3+50W
S-56	22+50S	6+90W
S-57	22+50S	8+05W
S-58	22+50S	11+00W
S-59	22+50S	13+05W
S-60	22+50S	16+00W
S-61	22+50S	18+05W
S-62	22+50S	21+00W
S-63	22+50S	23+05W
S-64	22+50S	26+00W
S-65	22+50S	28+05W
S-66	20+00S	28+05W
S-67	17+50S	28+05W
S-68	17+50S	25+50W
S-69	17+50S	23+00W

SAMPLE NUMBER	GRID LOCATION	
S-70	17+50S	20+50W
S-71	17+50S	18+00W
S-72	17+50S	15+50W
S-73	17+50S	13+00W
S-74	17+50S	10+50W
S-75	17+50S	8+00W
S-76	17+50S	5+50W
S-77	15+00S	3+50W
S-78	13+00S	3+50W
S-79	13+00S	2+50E
S-80	13+00S	5+50E
S-81	13+00S	7+00E
S-82	11+00S	7+50E
S-83	9+00S	7+50E
S-84	9+00S	5+00E
S-85	9+00S	2+50E
S-86	5+00N	5+00E
S-87	5+00N	2+50E
S-88	11+00S	0+00
S-89	13+00S	2+50W
S-90	13+00S	5+00W
S-91	13+00S	7+50W
S-92	13+00S	10+00W

SAMPLE NUMBER	GRID LOCATION	
S-93	13+00S	12+50W
S-94	13+00S	15+00W
S-95	13+00S	17+50W
S-96	13+00S	20+00W
S-97	13+00S	22+50W
S-98	13+00S	25+00W
S-99	13+00S	27+50W
S-100	11+00S	27+75W
S-101	9+00S	27+75W
S-102	9+00S	25+00W
S-103	9+00S	22+50W
S-104	9+00S	20+00W
S-105	9+00S	17+50W
S-106	9+00S	15+00W
S-107	9+00S	12+50W
S-108	9+00S	10+00W
S-109	9+00S	7+50W
S-110	9+00S	5+00W
S-111	9+00S	2+50W
S-112	9+00S	0+00
S-113	7+00S	0+00
S-114	7+00S	0+00
S-115	5+00N	2+50W
S-116	5+00N	5+00W
S-117	5+00N	7+50W
S-118	5+00N	10+00W
S-119	9+75N	10+00W
S-120	10+00N	7+50W
S-121	10+00N	5+00W
S-122	10+00N	2+50W
S-123	7+50N	0+00
S-124	5+00N	0+00
S-125	2+50N	0+00
S-126	13+00N	1+80E
S-127	17+50N	1+80E
S-128	20+00N	0+00
S-129	20+00N	2+50W
S-130	20+00N	5+00W
S-131	20+00N	7+50W
S-132	20+00N	10+00W
S-133	20+00N	12+50W
S-134	20+00N	15+00W
S-135	20+00N	17+50W
S-136	20+00N	20+00W
S-137	20+00N	22+50W
S-138	17+50N	23+45W

SAMPLE NUMBER	GRID LOCATION		SAMPLE NUMBER	GRID LOCATION	
S-139	20+00N	23+45W	S-162	35+00N	0+00
S-140	20+00N	21+00W	S-163	35+00N	2+50W
S-141	20+00N	18+25W	S-164	35+00N	5+00W
S-142	20+00N	16+00W	S-165	35+00N	7+50W
S-143	20+00N	13+50W	S-166	35+00N	10+00W
S-144	20+00N	11+00W	S-167	35+00N	12+50W
S-145	20+00N	8+50W	S-168	35+00N	15+00W
S-146	20+00N	6+00W	S-169	35+00N	17+50W
S-147	20+00N	3+50W	S-170	35+00N	20+00W
S-148	20+00N	1+00W	S-171	35+00N	22+50W
S-149	20+00N	1+50E	S-172	32+50N	22+50W
S-150	40+00N	23+50W	S-173	30+00N	22+50W
S-151	40+00N	21+00W	S-174	30+00N	20+00W
S-152	40+00N	18+50W	S-175	30+00N	17+50W
S-153	40+00N	16+00W	S-176	30+00N	15+00W
S-154	40+00N	13+50W	S-177	30+00N	12+50W
S-155	40+00N	11+00W	S-178	30+00N	10+00W
S-156	40+00N	8+50W	S-179	30+00N	7+50W
S-157	40+00N	6+00W	S-180	30+00N	5+00W
S-158	40+00N	3+50W	S-181	30+00N	2+50W
S-159	40+00N	1+00W	S-182	30+00N	0+00
S-160	40+00N	1+50E	S-183	27+50N	1+45E
S-161	37+50N	1+60E	S-184	25+00N	0+00

SAMPLE NUMBER	GRID LOCATION	
S-185	25+00N	2+00
S-186	25+00N	5+50W
S-187	25+00N	7+00W
S-188	25+00N	10+50W
S-189	25+00N	12+00W
S-190	25+00N	15+50W
S-191	25+00N	17+00W
S-192	7+00S	1+50W
S-193	7+00S	3+75W
S-194	7+00S	6+75W
S-195	7+00S	2+25W
S-196	3+00S	2+00E
S-197	3+00S	0+00E
S-198	3+00S	1+75E
S-199	10+00N	12+00W
S-200	10+00N	15+50W
S-201	10+00N	17+00W
S-202	10+00N	20+50W
S-203	10+00N	22+00W
S-204	7+50N	22+50W
S-205	2+50N	22+50W
S-206	5+00N	27+50W
S-207	5+00N	22+50W

SAMPLE NUMBER	GRID LOCATION	
S-208	5+00N	20+00W
S-209	5+00N	17+50W
S-210	5+00N	15+00W
S-211	5+00N	12+50W
S-212	2+00N	1+25E
S-213	2+00N	1+25W

SILTS

C-1	16+25S	0+00
C-2	28+00S	3+50W
C-3	12+20S	7+50E
C-4	18+50S	28+05W
C-6	15+00N	22+80W
C-7	0+00	2+50E

APPENDIX II

LABORATORY REPORTS FOR SOIL AND SILT SAMPLES

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS -80MESH AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: AUG 22 1986 DATE REPORT MAILED: Aug 26/86 ASSAYER. D. Toye ..DEAN TOYE. CERTIFIED B.C. ASSAYER.

LORNEX MINING PROJECT - OBOY FILE # 86-2228 PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-1	1	14	13	35	.3	11	4	119	1.43	5	5	ND	2	20	1	2	2	22	.29	.059	14	20	.29	45	.15	4	.74	.02	.06	1	1
S-2	1	18	11	70	.6	20	9	1030	2.46	3	5	ND	1	63	1	2	2	36	.65	.065	22	29	.40	164	.11	5	1.67	.02	.09	1	1
S-3	1	13	11	95	.5	14	8	549	2.90	22	5	ND	2	12	1	2	2	49	.18	.164	11	26	.29	64	.11	4	1.74	.01	.05	1	1
S-4	1	13	12	43	.3	8	4	131	2.07	40	5	ND	2	9	1	2	2	36	.09	.103	14	21	.16	49	.09	2	1.16	.01	.06	1	2
S-5	1	19	4	92	.3	25	10	237	3.54	21	5	ND	2	11	1	2	2	53	.18	.174	15	39	.43	107	.07	2	2.29	.01	.05	1	1
S-6	1	13	8	68	.1	10	6	400	2.87	7	5	ND	1	10	1	2	2	48	.13	.156	11	30	.26	58	.07	3	1.39	.01	.05	1	1
S-7	1	15	5	46	.1	17	6	242	2.09	6	5	ND	1	66	1	2	2	39	.60	.046	15	33	.44	127	.11	4	1.20	.02	.05	2	1
S-8	1	8	13	99	.1	24	10	253	3.07	2	5	ND	2	13	1	2	2	56	.16	.114	7	36	.30	84	.21	4	2.13	.01	.05	1	1
S-9	1	14	4	79	.1	23	11	450	3.11	4	5	ND	2	16	1	2	2	54	.20	.142	9	36	.37	109	.20	3	2.19	.02	.05	1	1
S-10	1	12	5	62	.1	14	7	213	2.86	2	5	ND	2	11	1	2	2	58	.15	.086	10	32	.36	44	.10	2	1.64	.01	.04	1	1
S-11	1	12	16	78	.3	15	8	261	3.58	2	5	ND	2	11	1	3	2	61	.13	.159	11	39	.38	44	.09	7	2.12	.01	.06	1	1
S-12	1	10	12	67	.1	20	10	606	2.95	10	5	ND	2	17	1	2	2	59	.20	.094	10	35	.32	71	.19	4	1.80	.01	.05	1	1
S-13	1	15	7	56	.3	14	7	214	2.71	14	5	ND	1	14	1	3	2	49	.12	.092	12	34	.52	52	.07	4	1.54	.01	.04	1	1
S-14	1	10	8	71	.4	8	6	376	2.39	2	5	ND	1	13	1	2	2	42	.15	.118	8	27	.28	53	.05	6	1.80	.01	.06	1	1
S-15	1	17	12	111	.1	22	12	1101	3.68	3	5	ND	4	18	1	2	2	67	.24	.169	10	34	.51	92	.20	9	2.21	.02	.07	1	1
S-16	1	12	14	87	.7	12	8	242	3.79	5	5	ND	3	11	1	2	2	63	.13	.232	12	37	.21	47	.13	6	1.99	.01	.04	1	1
S-17	1	12	14	95	.1	17	9	426	3.57	2	5	ND	2	11	1	2	2	64	.15	.150	8	41	.26	59	.22	2	1.85	.01	.04	1	1
S-18	1	13	3	45	.1	12	7	195	2.33	4	5	ND	1	22	1	2	2	50	.24	.027	10	33	.28	68	.15	2	.92	.01	.04	1	1
S-19	1	20	10	45	1.3	16	6	210	2.10	37	5	ND	1	35	1	2	2	33	.53	.023	16	28	.33	87	.07	3	1.06	.01	.07	1	13
S-20	1	31	6	57	1.5	21	9	592	2.66	55	5	ND	1	41	1	2	2	38	.52	.038	21	29	.43	145	.05	2	1.67	.01	.12	1	7
S-21	1	21	9	94	.8	29	13	360	4.47	11	5	ND	1	16	1	3	2	73	.29	.190	12	48	.97	72	.08	2	2.04	.01	.07	1	1
S-22	1	27	10	63	1.2	29	10	601	2.99	10	5	ND	1	102	1	2	3	43	1.02	.063	22	36	.61	152	.10	6	1.84	.03	.09	1	1
S-23	2	71	9	80	1.9	39	16	1613	3.24	82	5	ND	1	60	1	2	2	39	.70	.056	31	46	.63	237	.02	2	2.67	.03	.16	1	7
S-24	1	13	8	28	.3	8	3	136	1.43	35	5	ND	1	8	1	3	2	29	.09	.022	16	18	.07	23	.09	2	.60	.01	.04	1	1
S-25	2	55	7	68	.2	28	12	408	2.91	61	5	ND	3	11	1	4	2	47	.14	.070	13	46	.43	50	.12	4	1.79	.01	.04	1	1
S-26	1	12	8	55	.2	10	4	148	1.32	2	5	ND	1	7	1	2	2	24	.09	.061	13	20	.16	42	.07	3	1.08	.01	.03	1	3
S-27	1	12	12	57	.2	10	6	274	1.99	7	5	ND	2	8	1	2	2	36	.10	.098	12	27	.15	37	.07	2	1.19	.01	.03	1	1
S-28	1	16	7	63	.1	23	8	170	2.95	5	5	ND	2	12	1	2	2	50	.13	.076	9	37	.28	61	.14	4	1.86	.01	.03	1	1
S-29	1	21	10	64	.1	21	8	225	2.66	17	5	ND	1	18	1	2	2	47	.21	.053	12	37	.39	76	.17	2	1.50	.01	.05	1	1
S-30	1	14	13	52	.2	17	7	304	2.43	6	5	ND	1	24	1	2	2	45	.25	.051	13	34	.34	73	.20	2	1.37	.02	.05	1	3
S-31	1	12	12	87	.1	16	7	313	2.02	2	5	ND	3	28	1	2	2	32	.28	.166	9	20	.17	184	.05	2	2.98	.02	.18	1	1
S-32	1	12	4	78	.1	15	8	873	2.14	5	5	ND	3	14	1	2	2	37	.11	.072	10	23	.16	129	.05	2	2.28	.01	.05	1	2
S-33	1	9	2	53	.1	8	4	172	1.62	3	5	ND	3	14	1	2	2	31	.22	.039	12	21	.20	80	.02	2	1.21	.02	.11	1	1
S-34	1	7	2	17	.2	3	2	77	.87	2	5	ND	5	35	1	2	2	12	.22	.012	18	4	.11	94	.01	2	.89	.01	.11	1	1
S-35	2	31	17	106	.1	10	7	560	2.03	2	5	ND	5	20	1	2	2	28	.17	.054	10	17	.27	131	.02	2	2.57	.01	.11	1	1
S-36	1	13	11	95	.1	15	7	178	2.84	5	5	ND	2	29	1	2	2	47	.26	.156	10	32	.26	110	.13	4	2.26	.01	.05	1	2
STD C/FA AU	21	61	41	137	7.1	70	29	1099	3.93	40	21	8	32	47	16	15	18	63	.45	.106	34	60	.88	176	.06	33	1.72	.06	.13	13	53

LORNEX MINING PROJECT - OBOY FILE # 86-2228

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-37	2	10	6	102	.2	18	9	245	2.49	59	5	ND	2	12	1	2	2	45	.13	.098	7	28	.24	57	.13	4	1.84	.01	.04	1	1
S-38	1	11	8	62	.1	20	7	144	2.17	14	5	ND	2	28	1	3	2	39	.20	.056	9	35	.23	118	.22	3	1.50	.03	.04	1	1
S-39	1	10	7	40	.1	16	5	154	1.96	7	5	ND	2	34	1	2	2	36	.33	.046	10	36	.24	96	.29	4	1.21	.03	.06	2	1
S-40	1	8	7	41	.1	12	6	127	2.04	5	5	ND	2	34	1	2	2	33	.31	.059	10	30	.21	91	.27	3	1.28	.03	.04	1	1
S-41	3	10	8	87	.1	24	9	177	2.50	8	5	ND	3	14	1	2	2	40	.13	.106	6	25	.19	92	.14	5	2.26	.01	.05	1	1
S-42	4	14	16	42	.1	12	16	2775	2.07	9	5	ND	1	40	1	2	2	48	.30	.037	12	19	.22	207	.16	4	1.34	.03	.08	1	1
S-43	1	16	12	43	.1	18	9	147	2.69	8	5	ND	3	16	1	2	2	43	.13	.059	4	22	.24	188	.17	3	2.88	.02	.05	2	2
S-44	1	11	13	80	.1	21	9	288	2.83	4	5	ND	2	20	1	2	2	49	.20	.107	10	29	.28	98	.19	4	2.55	.01	.05	1	1
S-45	1	10	14	57	.1	9	4	104	2.15	7	5	ND	3	19	1	2	2	38	.14	.093	10	22	.20	91	.10	2	1.81	.01	.05	1	1
S-46	1	10	14	67	.1	20	8	260	2.81	32	5	ND	3	13	1	2	2	52	.18	.091	10	33	.27	62	.15	3	1.64	.01	.04	1	5
S-47	1	13	11	71	.1	14	8	351	2.49	2	5	ND	3	15	1	2	2	42	.18	.121	11	29	.31	62	.15	4	1.74	.02	.07	1	1
S-48	1	17	14	91	.1	18	12	689	3.99	20	5	ND	3	15	1	2	2	67	.18	.239	14	42	.36	95	.18	7	2.43	.01	.06	1	1
S-49	1	16	16	96	.1	16	11	3773	2.92	7	5	ND	1	22	1	2	2	50	.23	.112	12	41	.38	123	.08	2	2.08	.02	.07	1	1
S-50	1	13	14	75	.1	14	8	252	2.63	4	5	ND	2	19	1	2	2	48	.24	.142	9	30	.28	93	.13	3	1.54	.01	.05	1	1
S-51	1	39	10	43	1.1	18	9	419	2.77	74	16	ND	2	124	1	2	3	46	1.37	.038	35	36	.34	296	.05	2	2.28	.02	.11	1	6
S-52	1	18	14	48	.6	20	10	1108	2.56	50	5	ND	1	84	1	2	2	41	1.00	.045	16	31	.47	176	.05	2	1.56	.02	.09	2	1
S-53	1	17	10	79	.2	35	16	1757	4.04	3	5	ND	1	57	1	2	2	60	.63	.070	20	41	1.18	385	.04	3	1.89	.01	.09	1	1
S-54	1	16	9	83	.1	32	10	428	3.40	9	5	ND	1	24	1	2	2	94	.22	.063	9	57	.56	103	.07	2	2.30	.02	.05	1	1
S-55	1	11	12	60	.2	14	7	205	2.54	10	5	ND	1	12	1	2	2	49	.14	.110	12	30	.33	90	.05	3	1.32	.01	.06	1	1
S-56	1	25	14	79	.2	25	13	568	3.79	19	5	ND	1	26	1	2	2	51	.40	.114	11	33	.99	260	.01	5	1.88	.01	.11	1	1
S-57	1	7	10	69	.4	8	5	208	1.84	9	5	ND	2	11	1	2	2	31	.14	.132	11	19	.16	84	.05	2	1.16	.01	.05	1	1
S-58	1	9	6	63	.1	10	6	355	1.83	2	5	ND	1	10	1	2	2	39	.15	.063	8	25	.20	151	.06	2	1.30	.01	.05	1	4
S-59	1	9	5	58	.5	15	8	264	2.38	29	5	ND	2	11	1	3	2	42	.14	.080	9	26	.27	46	.10	3	1.40	.01	.05	1	3
S-60	1	12	16	98	.1	11	11	2872	3.61	10	5	ND	1	13	1	2	2	55	.18	.303	8	39	.27	67	.10	6	2.30	.01	.06	1	1
S-61	1	10	9	49	.1	15	7	158	2.18	2	5	ND	2	15	1	2	2	41	.19	.056	8	24	.29	84	.14	2	1.60	.01	.04	1	1
S-62	1	10	12	88	.1	14	9	1082	2.36	6	5	ND	2	19	1	2	2	42	.19	.098	8	25	.27	70	.15	4	1.86	.01	.06	1	1
S-63	1	11	3	100	.1	10	7	190	1.79	3	5	ND	3	15	1	2	2	29	.11	.104	9	21	.20	94	.05	4	2.47	.01	.05	1	1
S-64	1	12	6	80	.3	8	4	92	1.69	29	5	ND	4	10	1	2	2	25	.08	.118	12	18	.20	76	.01	3	1.94	.01	.05	1	1
S-65	1	15	9	89	.1	27	8	178	2.81	12	5	ND	2	28	1	2	2	44	.21	.091	8	31	.32	133	.19	2	2.24	.02	.04	1	1
S-66	1	21	14	132	.1	40	17	592	3.82	36	5	ND	5	19	1	4	2	56	.15	.271	9	44	.33	262	.21	4	3.74	.02	.05	1	1
S-67	1	8	8	75	.1	9	5	383	1.72	2	5	ND	1	42	1	2	2	29	.32	.044	9	19	.31	96	.11	2	1.29	.01	.06	1	1
S-68	1	18	15	97	.1	38	14	260	3.99	12	5	ND	4	17	1	2	2	67	.15	.159	10	56	.37	160	.31	3	2.83	.01	.05	1	1
S-69	1	8	8	41	.1	7	3	115	1.82	2	5	ND	1	10	1	2	2	36	.12	.104	6	23	.17	40	.12	3	1.49	.01	.04	1	1
S-70	1	7	9	64	.4	10	5	153	2.21	4	5	ND	2	11	1	2	2	40	.12	.129	7	26	.25	57	.11	4	1.65	.01	.03	1	1
S-71	1	10	7	100	.2	17	6	179	2.62	6	5	ND	2	12	1	2	2	40	.15	.200	6	30	.36	63	.11	5	2.42	.01	.04	1	1
S-72	1	7	9	85	.3	10	7	255	2.29	30	5	ND	2	9	1	2	2	43	.10	.099	9	25	.19	72	.06	3	1.58	.01	.04	1	5
STD C/AU-FA	21	58	39	136	7.1	68	31	1096	3.93	41	20	8	32	47	17	15	17	62	.48	.108	35	59	.88	176	.08	34	1.73	.06	.13	14	50

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-73	1	12	7	43	.1	13	7	169	2.08	4	5	ND	1	35	1	2	2	38	.40	.036	14	28	.41	122	.08	3	1.41	.01	.05	1	1
S-74	2	12	9	47	.2	12	7	406	2.31	10	5	ND	2	21	1	3	2	43	.19	.036	17	28	.20	94	.17	2	.97	.01	.06	1	1
S-75	1	10	9	64	.2	13	8	144	2.48	14	5	ND	2	14	1	2	2	44	.15	.124	10	26	.25	88	.09	2	1.71	.01	.05	1	2
S-76	2	15	4	52	.1	17	8	275	2.77	6	5	ND	1	29	1	2	2	61	.32	.080	12	37	.54	106	.04	2	1.21	.02	.09	1	1
S-77	2	15	5	56	.2	11	7	257	2.08	22	5	ND	3	26	1	2	2	38	.16	.040	15	22	.28	89	.07	3	1.13	.02	.08	1	1
S-78	2	15	5	53	.4	9	5	197	1.91	8	5	ND	1	40	1	2	2	34	.39	.055	19	21	.25	120	.03	2	.76	.02	.10	1	1
S-79	1	20	9	41	.2	19	9	175	2.60	26	5	ND	2	26	1	2	2	44	.25	.047	15	32	.39	179	.07	2	1.28	.01	.08	1	1
S-80	1	12	10	45	.1	8	4	104	1.75	11	5	ND	2	10	1	2	2	33	.12	.053	12	21	.21	68	.11	2	1.16	.01	.04	1	1
S-81	2	28	7	121	.1	55	20	561	4.53	6	5	ND	2	13	1	2	2	66	.14	.248	11	44	.43	144	.18	4	4.03	.02	.06	1	1
S-82	1	17	9	42	.1	10	5	125	1.96	9	5	ND	1	27	1	2	2	36	.28	.040	15	25	.30	84	.11	2	.84	.02	.05	1	1
S-83	2	12	14	103	.1	14	8	170	2.80	14	5	ND	2	13	1	2	2	47	.13	.214	11	34	.21	91	.11	3	1.81	.01	.06	1	1
S-84	2	17	7	61	.2	12	6	117	2.24	21	5	ND	3	29	1	2	2	34	.28	.142	14	23	.29	108	.02	2	1.62	.01	.10	1	1
S-85	1	17	8	58	.3	24	11	228	2.86	25	5	ND	3	16	1	2	2	48	.17	.158	12	32	.28	117	.14	3	1.94	.01	.04	1	2
S-86	1	8	11	37	.2	11	4	139	1.55	4	5	ND	2	16	1	2	2	31	.18	.021	11	22	.21	55	.21	2	.91	.02	.03	1	1
S-87	1	14	9	59	.2	21	9	151	2.63	4	5	ND	3	23	1	2	2	41	.24	.100	11	28	.29	126	.15	2	2.29	.02	.06	1	1
S-88	2	15	7	77	.1	18	10	1013	2.67	5	5	ND	2	17	1	2	2	50	.24	.112	15	30	.57	154	.03	2	1.46	.02	.11	1	1
S-89	1	12	8	89	.3	22	9	190	3.55	11	5	ND	1	12	1	2	2	55	.13	.193	9	39	.29	72	.14	2	2.66	.01	.04	1	1
S-90	1	11	13	44	.3	17	7	394	2.30	5	5	ND	1	28	1	2	2	41	.29	.020	11	31	.42	79	.18	3	1.27	.02	.04	1	2
S-91	1	13	4	47	.4	15	8	212	2.31	11	5	ND	1	37	1	2	2	43	.49	.039	11	28	.46	89	.12	3	1.14	.01	.05	1	1
S-92	1	14	12	58	.8	13	6	211	2.34	17	5	ND	2	11	1	2	2	41	.16	.083	10	21	.28	51	.10	2	1.36	.01	.04	1	1
S-93	2	12	12	44	.5	10	5	941	1.62	5	5	ND	1	9	1	2	2	28	.11	.052	12	17	.19	32	.08	2	.81	.01	.10	1	1
S-94	1	18	10	114	.2	30	12	1029	3.63	8	5	ND	2	12	1	2	2	59	.20	.178	12	51	.56	95	.10	2	1.89	.02	.09	1	1
S-95	2	23	11	105	.1	34	13	483	3.66	6	5	ND	3	11	1	2	3	57	.19	.187	15	51	.80	54	.09	4	2.51	.02	.08	1	1
S-96	1	12	7	55	.1	23	8	166	2.41	3	5	ND	2	13	1	2	2	42	.18	.088	10	30	.42	75	.16	2	1.75	.01	.04	1	1
S-97	2	15	11	68	.2	13	10	362	2.62	9	5	ND	3	14	1	2	3	40	.26	.105	15	29	.58	49	.04	2	1.49	.01	.10	1	1
S-98	1	14	10	77	.2	19	9	326	2.88	6	5	ND	3	11	1	2	2	44	.14	.130	11	33	.42	63	.11	2	2.10	.01	.05	1	2
S-99	1	10	5	55	.2	13	7	161	2.21	2	5	ND	2	12	1	2	2	42	.17	.063	10	26	.36	63	.13	2	1.75	.01	.03	1	1
S-100	2	22	18	151	.3	17	17	5076	4.05	9	5	ND	2	45	1	2	2	72	.76	.165	25	46	.62	222	.01	2	3.64	.02	.11	1	4
S-101	1	11	18	68	.6	18	8	198	3.72	44	5	ND	2	9	1	2	2	56	.11	.208	12	38	.36	80	.07	2	2.34	.01	.05	1	1
S-102	1	11	5	61	.2	18	9	278	3.10	4	5	ND	2	20	1	2	2	66	.33	.042	11	37	.46	69	.18	2	1.30	.02	.04	1	1
S-103	2	26	7	99	.2	36	16	756	3.78	6	6	ND	2	12	1	2	2	61	.23	.135	16	58	1.07	48	.06	2	2.04	.02	.09	1	1
S-104	1	17	12	77	.4	23	11	265	3.53	9	5	ND	1	10	1	2	4	52	.13	.125	13	45	.65	49	.08	2	2.20	.01	.06	1	1
S-105	2	27	6	108	.5	32	14	377	4.01	14	5	ND	2	12	1	2	3	62	.22	.290	15	49	.78	61	.12	2	2.47	.01	.07	1	1
S-106	1	20	16	61	.1	18	8	223	2.90	9	5	ND	2	10	1	2	2	50	.13	.102	11	30	.38	56	.08	2	1.60	.01	.04	1	2
S-107	1	12	9	51	.5	23	9	175	2.76	15	5	ND	3	14	1	2	2	47	.17	.108	10	31	.32	72	.14	2	1.64	.01	.04	1	1
S-108	1	15	8	61	.6	34	12	210	3.31	18	5	ND	1	16	1	2	2	55	.19	.116	7	32	.37	174	.17	2	2.30	.01	.04	1	4
STD C/FA-AU	21	57	41	134	7.0	70	30	1085	3.93	42	20	7	31	47	17	17	21	61	.48	.102	33	58	.88	173	.08	36	1.73	.06	.13	15	51

LORNEX MINING PROJECT - ORDY FILE # 86-2228 PAGE 4

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-109	1	15	4	62	.3	20	8	167	2.46	9	5	ND	2	14	1	4	2	39	.17	.107	11	34	.38	104	.11	2	1.65	.01	.05	1	5
S-110	1	15	8	96	.2	25	11	265	3.08	9	5	ND	2	13	1	2	2	48	.17	.123	12	37	.33	63	.17	2	2.09	.01	.05	1	8
S-111	1	12	9	53	.3	15	13	767	2.39	10	5	ND	1	30	1	2	3	42	.30	.041	13	30	.38	99	.15	2	1.41	.02	.08	1	1
S-112	3	20	10	53	.4	24	9	205	2.49	15	5	ND	2	11	1	2	2	42	.13	.050	13	36	.27	66	.13	3	1.80	.01	.04	1	2
S-113	2	35	16	45	.9	19	7	198	2.24	53	5	ND	2	15	1	2	2	43	.18	.018	17	30	.29	47	.17	2	.99	.01	.04	1	2
S-114	1	14	13	54	.8	13	6	301	2.34	38	5	ND	2	16	1	3	2	44	.18	.054	14	29	.24	53	.15	2	.99	.01	.04	1	1
S-115	2	15	10	52	.2	13	9	484	2.29	11	5	ND	2	14	1	2	2	39	.18	.064	15	26	.26	47	.15	2	1.12	.01	.05	1	1
S-116	1	15	7	98	.3	22	10	187	3.52	6	5	ND	2	13	1	2	2	53	.19	.203	15	37	.32	81	.14	2	2.42	.01	.05	1	1
S-117	1	11	10	43	.2	16	10	510	2.76	13	5	ND	2	49	1	2	2	45	.54	.069	15	32	.41	71	.19	3	1.33	.04	.08	2	1
S-118	1	12	4	75	.1	27	9	192	2.88	3	5	ND	2	26	1	2	2	50	.29	.059	11	39	.37	91	.31	2	1.69	.03	.04	1	1
S-119	1	18	7	62	.2	23	13	862	2.95	7	5	ND	2	48	1	2	5	52	.49	.067	24	40	.51	116	.22	2	1.72	.03	.09	1	1
S-120	1	13	7	62	.2	24	10	365	2.90	4	5	ND	2	20	1	2	2	50	.21	.069	13	34	.32	92	.21	2	1.90	.02	.05	1	1
S-121	1	14	11	57	.1	12	6	226	2.12	2	5	ND	2	10	1	2	2	39	.13	.055	14	23	.22	55	.12	3	1.51	.01	.04	1	1
S-122	1	11	7	54	.1	15	6	225	2.36	3	5	ND	2	20	1	.2	2	42	.22	.065	13	32	.29	61	.19	2	1.43	.02	.05	1	1
S-123	1	13	8	44	.1	15	6	154	2.32	3	5	ND	2	18	1	2	2	40	.22	.056	14	32	.31	63	.18	2	1.47	.02	.04	1	1
S-124	1	13	14	42	.1	15	6	165	2.24	4	5	ND	2	23	1	2	2	45	.23	.024	12	29	.30	69	.22	3	1.23	.02	.04	2	1
S-125	1	11	7	46	.1	15	5	156	2.02	3	5	ND	2	20	1	2	2	39	.22	.024	11	30	.29	63	.27	2	1.19	.02	.04	1	1
S-126	1	18	10	44	.1	18	7	204	2.40	8	5	ND	2	20	1	2	3	40	.27	.040	15	31	.36	88	.17	2	1.10	.02	.07	1	2
S-127	1	10	14	32	.1	12	4	117	1.54	3	5	ND	2	16	1	2	2	28	.20	.020	10	26	.23	50	.24	3	.84	.02	.05	1	1
S-128	1	7	10	38	.1	9	4	163	1.13	2	5	ND	2	7	1	2	2	22	.09	.023	11	16	.13	51	.06	2	1.14	.01	.03	1	1
S-129	1	12	9	39	.1	15	6	155	2.12	5	5	ND	2	15	1	2	2	37	.18	.038	12	27	.30	57	.17	2	1.15	.02	.04	2	1
S-130	1	14	8	49	.1	17	8	245	2.55	7	5	ND	2	13	1	2	2	45	.16	.055	12	29	.26	87	.14	3	1.57	.01	.05	1	1
S-131	1	16	4	104	.2	33	12	207	3.08	7	5	ND	3	19	1	2	2	49	.19	.118	9	36	.31	193	.24	5	2.91	.02	.05	1	1
S-132	1	24	6	66	.2	26	12	234	3.86	7	5	ND	1	16	1	2	2	61	.29	.116	22	55	.70	85	.14	2	1.63	.01	.07	1	1
S-133	1	17	11	71	.1	22	12	236	3.22	4	5	ND	1	13	1	2	2	54	.18	.108	18	39	.56	92	.08	4	1.80	.01	.06	1	5
S-134	1	15	4	72	.3	33	12	268	3.60	5	5	ND	2	19	1	2	2	63	.23	.116	13	44	.46	113	.25	2	2.25	.02	.06	1	1
S-135	1	13	15	146	.2	26	16	1144	3.94	8	5	ND	2	16	1	2	2	67	.18	.134	15	43	.35	140	.19	4	2.69	.01	.05	1	1
S-136	1	10	9	64	.1	21	7	239	2.51	4	5	ND	3	36	1	2	2	44	.34	.023	12	40	.38	114	.31	4	1.88	.04	.06	1	2
S-137	1	13	2	62	.1	30	12	216	3.33	9	5	ND	3	33	1	2	2	61	.32	.080	12	42	.45	97	.24	4	2.22	.02	.04	1	2
S-138	1	12	2	78	.1	26	9	295	3.31	4	5	ND	1	24	1	2	2	63	.27	.089	10	41	.33	94	.31	2	2.07	.02	.05	1	2
S-139	1	15	5	205	.2	43	17	360	4.39	6	5	ND	2	23	1	2	2	74	.27	.217	10	51	.42	91	.29	2	3.11	.02	.05	1	3
S-140	1	7	11	83	.2	17	9	218	3.29	3	5	ND	2	13	1	2	2	65	.13	.079	9	40	.19	51	.30	3	1.71	.01	.04	1	1
S-141	1	12	13	68	.2	15	8	214	3.03	6	5	ND	2	13	1	2	2	49	.16	.098	16	35	.42	52	.16	4	1.52	.01	.05	3	1
S-142	1	20	13	86	.3	28	11	303	3.90	7	5	ND	2	15	1	3	2	64	.22	.183	20	46	.59	81	.15	3	2.10	.01	.06	1	3
S-143	1	16	2	83	.3	38	14	251	3.78	2	5	ND	2	21	1	2	2	61	.21	.145	10	45	.42	231	.26	3	3.15	.02	.05	1	1
S-144	1	13	2	57	.2	24	10	310	3.37	2	5	ND	2	41	1	2	2	57	.49	.035	7	39	.47	118	.30	3	1.84	.03	.06	1	1
STD C/FA-AU	20	55	39	133	7.0	67	29	1073	3.92	38	20	7	31	46	16	15	20	60	.48	.102	34	57	.88	171	.08	38	1.73	.06	.13	13	53

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-145	1	24	4	76	.7	31	12	677	3.62	11	5	ND	1	61	1	2	3	56	.71	.078	26	41	.66	202	.11	5	2.27	.03	.13	1	1
S-146	1	10	21	50	.1	16	7	241	2.29	3	5	ND	1	27	1	2	2	43	.29	.019	10	31	.26	64	.22	4	1.07	.03	.05	1	1
S-147	1	16	14	42	.1	16	7	195	2.16	11	6	ND	3	40	1	3	2	40	.48	.069	21	33	.35	80	.21	3	1.09	.03	.06	2	1
S-148	1	10	8	81	.1	12	6	129	2.10	5	5	ND	2	12	1	2	2	37	.13	.068	12	25	.23	80	.09	4	1.13	.01	.05	1	6
S-149	1	16	7	48	.1	17	6	161	1.84	5	5	ND	3	9	1	2	2	30	.11	.059	12	24	.22	72	.10	2	1.20	.01	.04	1	2
C-1	3	25	8	79	.8	27	12	2106	3.23	68	6	ND	1	107	1	3	2	44	1.18	.096	29	42	.64	203	.06	9	1.82	.02	.11	1	4
C-2	2	30	8	56	.6	20	10	1062	2.55	125	9	ND	2	111	1	2	2	39	1.12	.060	27	27	.37	268	.03	8	1.56	.03	.11	1	7
C-3	2	21	6	62	.4	25	13	1560	3.10	47	5	ND	2	65	1	2	2	36	.67	.082	23	32	.52	164	.05	5	1.47	.02	.10	1	2
C-4	2	22	12	84	.4	22	12	764	3.39	78	7	ND	2	95	1	2	3	47	.85	.091	25	43	.48	149	.06	9	1.84	.03	.12	1	3
C-6	1	32	5	88	.3	56	19	1067	4.17	18	5	ND	2	74	1	2	2	69	.96	.127	21	60	1.17	147	.25	3	1.59	.10	.09	1	1
STD C/AU 0.5	21	56	35	136	7.0	70	30	1097	3.92	45	20	7	32	46	17	15	19	62	.48	.109	35	60	.88	172	.08	40	1.73	.06	.13	13	495

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-150	3	18	9	111	.1	50	18	585	4.51	11	5	ND	3	56	1	4	2	63	.44	.122	10	48	.47	217	.39	5	3.31	.05	.08	1	3
S-151	3	15	3	106	.1	49	15	293	4.20	9	5	ND	3	27	1	2	2	75	.23	.138	5	43	.44	170	.33	4	3.13	.04	.05	1	1
S-152	2	15	8	93	.1	35	12	201	3.71	13	5	ND	3	29	1	3	2	63	.21	.101	8	35	.31	160	.25	4	2.99	.03	.05	1	1
S-153	3	18	5	64	.1	32	12	268	3.35	8	5	ND	3	17	1	2	2	68	.16	.086	6	33	.41	97	.26	4	2.05	.03	.05	1	1
S-154	2	8	14	67	.1	13	6	186	2.88	2	5	ND	3	13	1	4	2	55	.13	.111	6	26	.24	59	.16	4	1.88	.02	.06	1	1
S-155	2	13	6	59	.1	20	8	316	2.79	3	5	ND	3	20	1	3	2	54	.18	.092	8	33	.37	116	.21	7	2.24	.03	.04	1	2
S-156	2	23	8	69	.1	22	8	309	2.99	3	5	ND	3	11	1	3	2	62	.13	.102	13	40	.48	78	.08	3	2.30	.02	.07	1	1
S-157	3	15	12	86	.1	17	8	303	3.25	11	5	ND	3	55	1	4	2	64	.46	.055	12	36	.44	300	.14	4	1.99	.04	.05	1	1
S-158	3	15	7	106	.2	31	11	495	3.71	2	5	ND	4	23	1	2	2	67	.23	.156	11	37	.36	168	.24	6	2.73	.03	.07	1	1
S-159	3	31	12	103	.3	28	13	1128	4.22	15	5	ND	4	65	1	2	2	75	.88	.056	38	43	.64	202	.16	3	2.78	.06	.11	1	1
S-160	3	17	11	81	.1	33	12	270	4.02	2	5	ND	4	21	1	2	2	82	.20	.144	7	47	.31	111	.31	4	2.69	.03	.06	1	4
S-161	1	9	13	46	.1	10	4	150	1.55	2	5	ND	2	21	1	2	2	34	.22	.022	12	17	.21	66	.15	2	.87	.02	.05	1	1
S-162	2	14	3	102	.3	38	14	378	3.68	6	5	ND	3	16	1	2	2	70	.15	.139	7	43	.36	139	.28	5	2.69	.03	.05	1	2
S-163	3	17	12	92	.3	34	12	234	3.72	9	5	ND	4	17	1	5	2	66	.17	.189	8	38	.36	175	.27	5	2.81	.03	.05	1	1
S-164	1	13	7	70	.1	23	8	268	2.67	9	5	ND	3	18	1	2	2	51	.22	.131	10	29	.33	124	.14	6	1.97	.03	.06	1	1
S-165	2	16	10	61	.3	20	7	411	2.51	14	5	ND	3	32	1	3	2	54	.41	.036	17	34	.37	104	.21	5	1.20	.04	.07	1	1
S-166	2	16	10	57	.4	15	6	394	2.60	25	5	ND	4	34	1	2	2	54	.44	.018	15	33	.31	88	.21	5	1.23	.04	.07	1	1
S-167	2	10	12	82	.2	10	5	406	2.13	23	5	ND	3	13	1	2	2	42	.14	.067	10	21	.16	53	.10	5	1.12	.02	.07	1	1
S-168	3	16	12	50	.3	14	6	274	2.17	69	5	ND	4	17	1	3	2	39	.10	.061	12	22	.19	88	.11	4	1.19	.02	.06	1	1
S-169	2	16	8	89	.2	26	9	212	2.94	77	5	ND	3	29	1	4	2	57	.25	.073	11	30	.31	108	.21	5	1.61	.04	.06	1	2
S-170	2	13	14	105	.1	29	11	796	3.21	7	5	ND	4	29	1	2	2	61	.31	.103	7	34	.28	127	.27	5	2.22	.03	.07	1	3
S-171	3	9	10	115	.1	39	13	528	3.20	2	5	ND	3	25	1	4	2	59	.21	.123	6	33	.25	109	.33	10	2.92	.04	.06	1	1
S-172	2	19	7	65	.1	34	12	239	3.87	2	5	ND	4	35	1	3	2	79	.36	.107	7	42	.36	159	.34	5	2.43	.05	.07	1	1
S-173	2	13	9	156	.1	27	9	241	3.49	2	5	ND	2	36	1	4	2	63	.39	.175	8	34	.31	105	.25	7	2.12	.04	.05	1	5
S-174	3	19	8	117	.1	40	13	288	4.22	10	5	ND	4	30	1	3	2	75	.29	.241	10	42	.40	164	.26	6	3.01	.04	.06	2	1
S-175	2	17	13	67	.1	22	7	264	2.71	8	5	ND	4	29	1	2	2	51	.37	.051	13	32	.47	111	.22	5	1.41	.04	.07	1	2
S-176	2	15	10	60	.1	18	7	257	2.62	11	5	ND	3	15	1	2	2	50	.15	.075	11	25	.32	84	.11	7	1.63	.02	.04	1	1
S-177	2	53	19	62	1.2	18	9	631	2.63	83	5	ND	5	61	1	2	2	31	.84	.042	37	19	.34	169	.02	5	1.83	.04	.21	1	12
S-178	1	15	22	38	.2	16	5	199	2.16	7	5	ND	4	25	1	2	2	41	.31	.013	16	30	.24	118	.28	5	1.18	.04	.06	1	1
S-179	1	14	10	63	.1	24	9	227	2.82	5	5	ND	4	16	1	2	2	57	.14	.048	9	33	.27	176	.24	5	2.19	.03	.04	1	1
S-180	2	16	7	61	.1	29	9	184	2.99	2	5	ND	4	24	1	2	2	58	.21	.081	9	36	.31	121	.24	5	2.09	.03	.05	1	1
S-181	2	12	10	108	.1	29	11	221	3.29	9	5	ND	3	19	1	3	4	64	.19	.148	7	37	.28	110	.26	4	2.18	.03	.06	1	1
S-182	1	18	14	55	.1	22	7	228	2.71	2	5	ND	4	24	1	2	4	62	.31	.027	8	36	.31	69	.34	3	1.18	.05	.05	1	2
S-183	1	13	11	45	.1	13	6	211	2.38	2	5	ND	3	22	1	2	3	58	.29	.014	8	34	.24	48	.30	4	.87	.04	.06	1	1
S-184	2	69	13	67	.3	41	9	522	3.52	14	10	ND	4	169	1	2	2	50	1.64	.084	76	41	.72	270	.03	5	2.86	.06	.17	1	2
S-185	1	9	14	49	.1	10	4	141	1.91	2	5	ND	3	14	1	2	3	45	.14	.038	13	25	.23	67	.19	4	.91	.02	.04	2	1
STD C/FA AU	22	59	40	138	7.2	72	29	1114	3.96	40	16	7	35	48	18	16	19	69	.48	.105	35	58	.88	181	.08	34	1.73	.09	.14	12	49

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB
S-186	1	14	10	49	.1	16	6	503	2.10	10	5	ND	3	37	1	3	2	39	.30	.031	17	24	.32	107	.15	3	1.24	.04	.06	1	2
S-187	1	13	10	102	.1	25	11	512	3.13	27	5	ND	3	17	1	3	2	61	.16	.113	7	32	.21	104	.25	5	2.06	.03	.05	1	1
S-188	1	12	11	83	.3	20	8	259	2.90	2	5	ND	3	16	1	3	2	61	.14	.072	8	29	.23	86	.28	5	1.76	.03	.06	1	1
S-189	2	36	14	100	.3	35	15	661	4.40	13	5	ND	4	21	1	2	2	61	.33	.171	25	38	.80	119	.08	6	2.17	.04	.10	1	1
S-190	1	22	12	75	.2	30	11	516	3.83	14	5	ND	3	28	1	2	2	72	.34	.160	16	33	.56	167	.17	2	2.33	.04	.07	1	1
S-191	1	20	8	61	.1	30	10	268	3.75	3	5	ND	4	32	1	2	2	76	.40	.077	21	35	.59	141	.23	4	1.49	.05	.05	1	1
S-192	1	23	8	48	.7	14	5	160	2.16	31	5	ND	3	9	1	2	2	38	.10	.092	13	27	.21	36	.08	5	1.07	.02	.05	1	1
S-193	1	12	9	43	.5	14	6	280	2.24	9	5	ND	3	23	1	2	2	51	.24	.016	14	30	.32	62	.18	6	.93	.03	.05	1	2
S-194	1	16	7	64	.5	20	8	189	2.89	6	5	ND	4	13	1	2	2	57	.15	.092	14	37	.36	62	.16	5	1.66	.03	.04	1	1
S-195	1	19	9	60	.2	21	7	212	2.16	17	5	ND	4	13	1	2	2	43	.15	.083	12	30	.22	54	.14	4	1.34	.03	.04	1	1
S-196	1	20	11	44	.4	12	5	260	1.51	20	5	ND	3	21	1	4	2	30	.26	.020	16	22	.23	46	.08	2	.84	.02	.05	1	3
S-197	2	15	11	26	.8	6	2	189	1.20	31	5	ND	3	8	1	2	2	27	.06	.022	16	16	.07	27	.08	3	.55	.01	.04	1	2
S-198	1	17	5	30	.4	8	3	185	1.47	24	5	ND	2	8	1	2	2	32	.07	.024	15	18	.10	32	.11	3	.60	.01	.04	1	1
S-199	1	11	7	115	.1	29	12	314	3.38	3	5	ND	3	28	1	2	2	64	.28	.122	9	37	.28	102	.28	5	2.31	.04	.05	1	1
S-200	1	17	9	86	.1	45	14	334	3.79	5	5	ND	4	40	1	2	2	72	.40	.140	11	42	.46	150	.32	3	2.19	.05	.10	1	1
S-201	1	104	15	97	.8	45	14	509	4.58	10	5	ND	6	124	1	3	2	57	1.51	.059	34	54	1.35	550	.04	4	4.64	.06	.22	1	5
S-202	1	18	6	78	.1	38	13	391	3.74	11	5	ND	3	19	1	2	2	71	.20	.108	11	43	.45	123	.25	4	2.39	.04	.05	1	1
S-203	1	22	6	67	.1	27	10	230	3.79	4	5	ND	3	15	1	3	2	74	.19	.116	17	46	.64	79	.15	6	1.95	.03	.06	1	2
S-204	1	8	11	88	.1	11	7	638	2.22	3	5	ND	2	13	1	2	2	48	.15	.064	13	31	.24	65	.15	6	1.34	.02	.05	1	1
S-205	1	10	7	91	.4	12	8	2457	2.35	36	5	ND	3	12	1	2	2	45	.14	.115	11	28	.24	70	.08	4	1.51	.02	.06	1	1
S-206	1	16	5	60	.1	34	12	251	3.63	4	5	ND	4	28	1	3	2	75	.20	.075	10	43	.42	173	.29	3	2.48	.04	.04	1	4
S-207	1	17	9	63	.1	19	7	477	2.86	2	5	ND	4	32	1	4	2	59	.52	.043	17	32	.45	159	.24	5	1.76	.05	.07	1	1
S-208	1	12	8	96	.2	24	10	214	3.37	10	5	ND	3	14	1	9	2	63	.15	.155	9	35	.36	96	.15	4	2.51	.03	.06	1	2
S-209	1	11	6	50	.1	25	8	253	2.88	3	5	ND	3	42	1	2	2	60	.42	.028	8	39	.44	81	.38	8	1.21	.06	.04	1	1
S-210	1	15	10	57	.1	23	9	288	3.40	2	5	ND	3	38	1	4	2	71	.40	.024	12	43	.32	91	.46	4	1.45	.07	.04	1	3
S-211	1	16	4	94	.1	40	13	220	3.85	2	5	ND	3	31	1	3	2	75	.26	.159	9	43	.43	129	.26	4	2.51	.04	.06	1	1
S-212	1	15	10	53	.1	21	7	439	2.46	5	5	ND	3	30	1	5	2	48	.28	.055	14	36	.36	96	.23	3	1.95	.04	.08	1	2
S-213	1	14	13	54	.1	17	6	245	2.21	5	5	ND	3	20	1	4	2	47	.20	.037	11	31	.34	68	.24	4	1.17	.03	.05	1	2
C-7	4	31	9	68	1.5	34	13	3340	4.51	113	5	ND	4	130	1	2	2	55	1.25	.090	28	38	.50	322	.07	3	2.41	.06	.11	1	11
STD C/FA AU	22	60	41	136	7.3	70	29	1117	3.96	40	16	7	36	50	18	15	20	70	.48	.103	36	59	.88	187	.09	34	1.73	.09	.14	12	52

APPENDIX III

LABORATORY REPORT FOR ROCK SAMPLES

ACME ANALYTICAL LABORATORIES LTD. 852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK CHIPS AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMLESS AA.
P2-3 SOILS -80 mesh

DATE RECEIVED: AUG 27 1986 DATE REPORT MAILED: Sept 3/86 ASSAYER. D. Toye ...DEAN TOYE. CERTIFIED B.C. ASSAYER.

LORNEX MINING PROJECT - OBOY FILE # 86-2310 PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au** PPB	Hg PPB
R-2	1	25	2	61	.2	17	10	574	2.99	2	5	ND	3	46	1	6	2	69	1.65	.073	16	55	1.58	118	.16	6	1.55	.10	.10	1	1	-
R-4	1	23	6	54	.2	9	5	305	3.03	16	5	ND	6	29	1	9	2	61	.47	.065	22	43	.89	47	.01	6	1.08	.08	.12	1	1	-
R-5	1	32	7	54	.1	13	7	504	2.10	2	5	ND	4	69	1	2	2	34	1.53	.053	15	42	.80	115	.01	5	1.16	.09	.17	1	2	-
R-6	5	113	16	38	1.4	8	4	148	1.99	64	5	ND	4	7	1	3	2	32	.08	.050	19	29	.33	35	.01	4	.85	.03	.20	2	9	-
R-7	2	150	19	41	2.5	8	4	194	1.81	84	5	ND	3	7	1	4	2	36	.10	.041	13	28	.40	43	.01	4	.67	.02	.17	2	26	20
R-11	2	19	7	26	.1	3	1	81	1.34	102	5	ND	14	8	1	10	2	16	.06	.041	27	6	.10	91	.01	3	.59	.02	.27	1	1	-
R-12	1	37	2	73	.2	46	18	757	4.74	2	5	ND	4	210	1	2	2	134	2.25	.219	27	69	2.06	69	.07	8	1.38	.26	.08	1	1	-
R-22	1	33	6	86	.3	36	17	866	4.34	2	8	ND	5	246	1	2	2	80	4.32	.194	31	57	1.56	286	.01	7	1.82	.12	.16	1	1	-
R-23	1	8	6	55	.1	4	4	539	1.45	3	5	ND	14	17	1	2	3	18	.15	.037	25	6	.23	1168	.03	2	.80	.05	.19	1	1	-
R-24	1	41	5	58	.2	23	10	563	2.53	2	5	ND	6	26	1	2	2	43	.46	.056	17	53	.64	124	.12	5	1.41	.07	.10	1	1	-
R-26	1	24	5	90	.1	15	10	1421	2.84	2	5	ND	4	52	1	2	2	76	1.22	.071	17	49	1.36	97	.04	6	1.38	.13	.10	1	1	-
R-27	1	24	4	65	.1	15	10	624	2.65	2	5	ND	8	78	1	2	2	64	1.31	.074	22	44	1.08	143	.01	4	1.35	.07	.16	1	1	-
R-29	10	93	14	49	5.3	14	6	104	2.15	1380	5	ND	3	16	1	29	3	12	.05	.027	17	25	.11	49	.01	4	.49	.01	.16	1	105	-
R-30	13	34	60	17	4.1	5	1	162	1.57	864	5	ND	4	15	1	20	3	9	.03	.033	16	20	.06	53	.01	3	.37	.01	.15	1	20	-
R-31	3	41	8	29	1.0	18	2	121	1.26	25	5	ND	4	5	1	4	2	9	.07	.047	15	13	.08	47	.01	2	.51	.02	.24	1	4	-
R-32	3	43	7	22	.5	10	1	43	2.06	199	5	ND	4	5	1	5	4	20	.02	.054	13	35	.03	33	.01	4	.28	.01	.17	1	1	-
R-35	2	27	12	49	.1	10	8	194	1.84	21	5	ND	6	17	1	2	2	15	.18	.055	22	8	.24	271	.01	4	.94	.03	.29	2	2	-
R-36	1	27	7	56	.1	12	5	339	1.38	2	5	ND	5	19	1	2	2	8	.84	.038	24	10	.45	65	.01	2	.93	.04	.19	1	1	-
R-37	3	30	13	23	.1	2	1	38	1.03	1197	5	ND	8	4	1	7	3	3	.03	.022	20	6	.02	31	.01	2	.29	.01	.22	1	24	-
R-38	14	13	7	16	.2	4	1	46	.95	237	5	ND	2	4	1	3	3	3	.03	.013	6	6	.02	25	.01	2	.18	.01	.10	1	34	-
R-39	10	10	20	4	.6	2	1	37	1.14	263	5	ND	4	46	1	3	2	3	.02	.033	11	6	.01	73	.01	3	.26	.01	.18	1	150	-
R-40	9	46	55	32	1.7	8	1	85	2.01	340	5	ND	3	5	1	19	3	5	.01	.040	10	12	.02	33	.01	3	.19	.01	.14	1	12	10
R-41	2	83	17	34	4.7	11	3	116	2.35	806	5	ND	4	5	1	15	3	10	.02	.037	17	20	.05	33	.01	5	.29	.01	.15	1	18	-
R-43	3	20	12	5	3.6	3	1	40	1.09	206	5	ND	5	23	1	12	2	7	.01	.014	11	11	.01	50	.01	2	.22	.01	.18	1	26	-
R-45	26	12	10	9	1.4	5	1	61	1.05	70	5	ND	4	9	1	6	2	5	.01	.031	13	15	.02	75	.01	2	.29	.02	.19	1	1	-
R-46	2	15	7	6	2.2	6	1	41	.66	44	5	ND	4	7	1	9	3	4	.01	.020	10	13	.02	36	.01	2	.23	.01	.18	1	2	-
R-56	2	114	8	42	1.3	8	5	213	1.82	71	5	ND	3	5	1	4	2	28	.06	.036	12	22	.33	38	.01	4	.66	.01	.16	1	20	-
R-58	8	7	13	26	.3	5	1	63	2.08	140	5	ND	3	5	1	7	3	21	.02	.045	12	21	.08	21	.01	4	.44	.01	.16	1	12	-
STD C/FA-AU	22	59	35	136	7.3	72	29	1119	3.96	39	19	7	35	49	18	16	18	69	.48	.105	37	57	.88	183	.08	38	1.73	.09	.13	12	52	1300

APPENDIX IV

PETROGRAPHIC REPORT

by

J.F. Harris, PhD.

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
V0X 1J0

PHONE (604) 888-1323

Invoice #5954

September 16th, 1986

Report for: John Watkins,
JAM Geological Services,
P.O.Box 308,
ROYSTON, B.C.
V0R 2V0

Project OBOY

Samples:

15 rock samples for thin sectioning and petrographic description. Your covering letter of August 25th, refers.

Samples are numbered R-10, 11, 25, 26, 29, 31, 37, 40, 42, 44, 50, 53, 54, 55, 57.

Summary:

This suite is composed of volcanic rocks showing considerable variation in type and intensity of alteration. They are very fine-grained to glassy, sparsely porphyritic, feldspar-rich rocks which appear to contain very little primary quartz and are of andesite to latite compostion.

The fine grain size and prevalence and complexity of alteration prevent reliable estimation of the proportions of the constituent minerals. For this reason, modal percentages have been omitted from the petrographic descriptions (attached).

Textural features suggest that these rocks are mainly flows. Only R-37 shows clearly distinguishable fragmental textures.

There are two principal compositional groups in the suite. Samples R-11, 29, 40, 44 and 57 are rich in K-feldspar and are classified as latites; samples R-10, 25, 26, 31, 42, 50 and 53 have plagioclase as the dominant feldspar and are classified as andesites. Samples 54 and 55 are intermediate in this respect and have been called andesite-latites. The primary composition of R-37 is totally obscured by silicification but textural evidence (relict pumiceous features) suggest that it may be related to the latites.

The latites and andesite-latites are mostly more or less glassy. Samples R-11, 54 and 55 show flow-banding of more and less K-rich composition,whilst samples R-29, 37 and 44 include recognizable pumiceous features. Samples R-40 and 57 are the best crystallized of the latite group. The rocks of this group mostly contain sparse, small phenocrysts of plagioclase (or their altered equivalents) but mafics and opaques are rare to absent.

The andesites show varying groundmass textures. In R-10 and 31 the groundmass is cryptocrystalline to felsitic; in R-25, 50 and 53 it is trachytic; and in 26 and 42 it is a felted meshwork. They are generally sparsely microporphyritic in character, containing a few percent of small phenocrysts (up to about 2mm in size) which are recognizable as more or less intensely altered plagioclase and/or mafic silicates (chiefly pyroxene). R-10 is an exception in that it contains a considerably higher proportion of phenocrysts, of which the mafics are chiefly biotite.

Several of the andesites show obscure patchy/mottled features which may be manifestations of devitrification, auto-brecciation or magmatic/deuteric segregation related to the cooling history.

Alteration types observed in the suite include argillization, sericitization, carbonatization and silicification.

The latite group is ubiquitously affected by silicification. This ranges from wholesale pervasive impregnation and replacement via pumiceous porosity (in R-29, 37), through localized replacement via planar zones and incipient microbreccia networks, and discrete cross-cutting quartz veinlets.

Silicification was also noted, though less commonly, in the andesite group (R-31, 55).

Many of the latites show development of translucent golden-yellow to subopaque orange-brown pervasive alteration, which is tentatively identified as a product of devitrification of potassic glass. The distribution of this material is typically irregular and sometimes seems to define crypto-fragmental textures.

One sample (R-57) contains disseminated clumps of what appears to be jarosite.

In the suite at large, groundmass feldspars show sericitization in R-31, 40, 44, 50, 53, 54, 55 and 57. Carbonate development in the groundmass is more or less prominent in R-25, 26, 42, 53 and 55. Turbid brownish material which may be altered glass and/or clays was noted in significant quantities in R-10, 25, 26, 40, 42 and 44.

Phenocrysts likewise show a variety of alterations. Mafic phenocrysts (generally having the form of pyroxenes) are mainly pseudomorphed by various combinations of green, fibrous secondary biotite and/or amphibole, quartz and carbonate. R-10 and R-25 are exceptions in containing, respectively, fresh biotite and identifiable remnant pyroxene.

Plagioclase phenocrysts are, in most cases, totally replaced by sericite or sericite/carbonate. In the silicified rocks they are pseudomorphed by quartz or quartz/carbonate. Fresh or partly altered plagioclase survives in R-10, 40 and 42.

The suite is notable for the complete absence of epidote and chlorite, which are common alteration products of many andesites. Also notable, especially for such altered rocks, is the lack of disseminated sulfides.

J.F. Harris Ph.D.

Sample R-10 MICROPORPHYRITIC ANDESITE

This is a homogenous, relatively unaltered andesite, in which small, randomly oriented, euhedral phenocrysts of plagioclase and biotite make up about 30% of the rock.

The phenocrysts are mainly in the size range 0.05 - 0.5mm. A few plagioclase crystals reach as much as 1.5mm.

The plagioclase phenocrysts show partial alteration to patches of fine-grained, brown clay. The biotite (a strongly pleochroic pale brown to dark brown variety) is unaltered.

A third component consists of discrete patches of vermicular-textured brown clay. Some of these patches have characteristic pseudomorphous outlines and rims of oxide granules, and may represent totally altered mafic phenocrysts (hornblende or pyroxene). Others, of more irregular shape, are of uncertain origin.

The groundmass is an even, felsitic aggregate of plagioclase (and minor K-feldspar) of grain size 10 - 20 microns. It contains sparsely disseminated tiny equant opaques (to 0.1mm) and is rather evenly pervaded by small, diffuse flecks of the brown clay material discussed earlier. This may represent the alteration of interstitial glass or microgranular groundmass mafics.

Sample R-11 SILICIFIED FLOW-TEXTURED LATITE

This rock consists essentially of a cryptocrystalline to glassy matrix of highly potassic composition. Much of this (altered glass) is of a turbid, golden brown colour, intergrown with streaks and patches of fresher-looking, colourless material. Swarms of minute microlitic feldspars (more or less sericitized) are distinguishable within this matrix; these show a strong parallelism (flow texture) which shows divergence around the scattered phenocryst pseudomorphs.

Scattered phenocrysts, 0.5 - 2.0mm in size, show prismatic outlines but are totally altered to aggregates of granular quartz, sometimes with intergrown, extremely fine-grained sericite or clays. The larger, more blocky-shaped of these were probably plagioclase, but some were biotite - as evidenced by elongate pseudomorphs consisting of remnants of that mineral interleaved with microgranular quartz. Tiny lozenge-shaped pseudomorphs of quartz were probably amphiboles.

Trace accessories are sparsely disseminated small grains of apatite, rutile/ leucoxene and limonitized opaques.

The rock is cross-cut by well-defined, anastomosing veinlets of microgranular cherty to comb-textured quartz. Silicification also penetrates the rock as more diffuse wisps and pockets, often linking pseudomorphed phenocrysts and apparently following lines of permeability parallel to the flow banding.

Sample R-25

FLOW-TEXTURED ANDESITE

This rock is a sparsely porphyritic andesite in which the groundmass is a close-packed aggregate of feldspar microlites, 0.05 - 0.1mm, with intergrown accessory mafics and minute opaque (oxide) granules. The mafics appear to be dominantly biotite (possibly secondary) together with fine-grained carbonate and ferruginous clays.

The undulatory sub-parallelism of the plagioclase microlites defines a well-developed trachytic fabric.

Scattered euhedral phenocrysts, 0.1 - 2.0mm in size, and sometimes clumped, amount to about 3% of the total rock. They consist of colourless pyroxene, patchily altered to (and, in some cases, totally pseudomorphed by) a golden brown, fibrous secondary product (biotite and/or amphibole).

Sub-parallel, darker, more opaque wisps in the groundmass appear to represent zones of enrichment of intergranular opaques and carbonate, presumably an incipient flow differentiation.

Sample R-26 MOTTLED ANDESITE

This is another fine-grained, sparsely porphyritic andesite.

The groundmass is very similar to that of R-25 except that it displays a randomly oriented, felted fabric. It is composed of plagioclase laths, 0.05 - 0.1mm in size, with interstitial altered mafics, fine-grained carbonate and tiny opaque granules.

A striking feature of the groundmass is a pattern of circular to ovoid patches, 1 - 6mm in size and sometimes coalescing. These are sharply defined areas within which the groundmass is comparatively unaltered, as described above. The groundmass between the circular patches, though texturally unchanged (and continuous across the outlines of the patches) is overlain by a strong, diffuse speckling of brown cloudy material (clay or leucoxene?) and contains noticeably more, and coarser, carbonate.

The origin of these pools of non-alteration is unexplained.

Scattered small euhedral phenocrysts, 0.1 - 0.5mm in size and commonly clumped, are totally altered to green fibrous secondary material. This sometimes appears to be a form of biotite and sometimes a secondary amphibole. In some cases it is intergrown with carbonate and/or cherty quartz. The shapes of these pseudomorphs are strongly indicative of derivation from pyroxenes.

The distribution of the phenocrysts is independent of the pattern of alteration/non-alteration in the groundmass; in fact, some phenocrysts straddle the outlines of the circular patches.

Sample R-29 — SILICIFIED PUMICEOUS LATITE

This sample may be of related type to R-11 in that it is of potassic composition and exhibits strong silicification. Texturally, however, it is considerably different.

Instead of the compact flow-banded texture of R-11, this rock displays evidence of a spongy, pumiceous character (now totally infilled and pervasively replaced by secondary quartz).

It is of heterogenous aspect in thin section, consisting of irregular patches, pellety clumps and semi-coalescent networks of a fine-grained, felted, sericitic material, more or less intensely golden brown in colour. This is believed to represent a pumiceous aggregate of altered potassic glass. The whole is permeated by diffuse aggregates of microgranular, cherty quartz, representing the infilling and partial marginal replacement of the pumiceous porosity.

Cuspate, pellety and other typical forms of a pumiceous volcanic glass are preserved as ghost forms within the areas of pervasive silicification. Diffuse wisps of sericite within the quartz represent partial remnants of altered glass and there are also scattered, better-defined, prismatic patches of sericite which probably represent altered phenocrysts.

Mafics are apparently absent or rare (represented by empty casts or small patches of ferruginous clay). A few clumps of cubic limonite may be pseudomorphs after pyrite.

Obscure patchy structures of more or less strong brown colouration in the matrix glass may be indicative of an original fragmental nature (consistent with the pumiceous texture). This may have provided an additional avenue of permeability for the silicifying fluids, which were probably active quite early in the cooling history.

The pervasive silicification is cut by a phase of well-defined quartz fracture fillings.

Sample R-31 SILICIFIED MICROPORPHYRITIC ANDESITE

This rock has an extremely fine-grained, cryptocrystalline to felsitic groundmass which lacks feldspar microlites. Judging from the lack of cobaltinitrite stain on the chip, it consists dominantly of plagioclase.

It is pervasively altered to sericite. A patchy, pellety pattern of varying intensity of sericitization and distribution of micron-sized opaques and derived limonites probably reflects devitrification segregation in the originally glassy groundmass.

Small, totally altered phenocrysts (0.1 - 0.2mm) are comparatively abundant. These are of two kinds. The commonest are prismatic in form and composed of fine-grained brown sericite; they are probably pseudomorphs of plagioclase. The other type, which sometimes reach 0.5mm in size, are composed of mixtures of brown sericite and microgranular quartz and are rimmed by fine-grained opaques; their form suggests that they were mafic silicates, probably pyroxenes.

Quartz with associated brown, fibrous sericite/clays forms irregular, sometimes amoeboid pockets, anastomosing replacement zones and diffuse, pervasive patches throughout the groundmass. The slide is also cut by a well-defined fracture zone, partially infilled by quartz and the locus of strong clay/sericite alteration.

Sample R-37 SILICIFIED BRECCIA (TUFF?)

This sample is an aggregate of fragments (up to 15mm or more in size) of strongly altered rock of unrecognizable origin.

The fragments are all of generally similar type, differing mainly in the relative proportions of the constituents. Fragment outlines are only locally distinguishable in the slide; the cementing phase appears to be of similar composition, but perhaps more intensely silicified.

The fragments are made up of an interlocking anhedral aggregate of fine cherty quartz intergrown in various proportions with patches and networks of fine-grained sericite. The latter is often a strong golden brown colour and probably represents an altered glass (as seen in R-11 and R-29).

In part the quartz forms emulsion-like blobs in areas of golden brown sericite. Such intergrowths clearly represent silicification of pumiceous material. For the most part the silicification process has extended beyond this stage to wholesale replacement. The cherty aggregates which result retain the turbid brownish appearance and ghostly vitric-textures of the original rock.

The only other constituents are rare small limonite pseudomorphs, possibly after sulfides. Empty cubic casts (of the same origin?) are of rather common occurrence.

It is uncertain whether this rock represents the fragmentation and compaction of a previously silicified body of rock or whether the silicification affected a lapilli tuff of pumiceous fragments. The latter seems the most likely, although one might then have expected a more clear-cut and recognizable concentration of quartz as an inter-clast phase. Apparently the intensity of the process and the permeable, reactive nature of the clasts has resulted in a partial homogenization of clasts and matrix.

Sample R-40 — BRECCIATED, SILICIFIED LATITE

The character of this sample can readily be seen from examination of the stained chip. It is a fine-grained, compact, microporphyritic rock which has been complexly fractured, cemented and pervasively replaced by quartz.

The host rock consists of unaltered small phenocrysts of plagioclase, 0.1 - 0.5mm in size, in a feathery to felsitic textured groundmass of grain size 0.02 - 0.05mm, composed dominantly of K-feldspar. The groundmass is pervasively clouded by clay alteration and flecked and dusted with sericite.

Mafics are apparently absent (unless represented by empty casts, rarely with coatings of ferruginous clays) and accessories are confined to sparsely scattered clusters of minute granules of rutile.

Fracture networks in the rock are cemented by microgranular-cherty to comb-textured quartz. There is also extensive pervasive silicification in the form of small dispersed threads and pockets of quartz and diffuse areas of groundmass felsite pseudomorphed by silica.

Certain parts of the rock show strong impregnation by the golden brown clay/sericite alteration product described in previous samples of altered potassic type. The pattern of distribution of this material is obscure but looks to be, at least in part, in angular fragment-like patches (cross-cut by the silicification). Possibly the rock was originally a coarse fragmental in which the more glassy fragments show the brown alteration.

Sample R-42 MICRO-PORPHYRITIC ANDESITE WITH MOTTLED ALTERATION

The distinctive mottled appearance of the groundmass of this rock is readily observable on the stained cut-off chip under low magnification. It is seen as small rounded, often coalescent patches, 0.2 - 0.5mm in size, of a brownish material densely disseminated through a yellow-stained (potassic) matrix. The small plagioclase phenocrysts tend to be concentrated within the brownish mottles, though this is not exclusively the case.

Under the microscope the non-brown areas of the groundmass are seen to consist of minute feldspar microlites (0.01 - 0.05mm in size) in a matrix of clear, greenish glass, with a dusting of micron-sized opaques. Small porphyroblast-like patches of carbonate and clusters of extremely fine-grained sphene/leucoxene occur scattered throughout.

The brown spheroidal areas show the remarkable feature that they each extinguish optically as a continuous unit, or a relatively coarse (0.2 - 0.4mm) mosaic, despite the fact that the microlitic groundmass fabric appears to continue uninterrupted through them. They appear to be incipient porphyroblasts, probably (judging from their low relief, low birefringent nature) of alkali feldspar, equivalent in composition to the microlites-plus-glass of the rest of the groundmass.

These areas also differ in that they contain a relatively higher content of micron-sized opaques and that, instead of the transparent greenish glass of the 'normal' groundmass, they contain abundant flecks of brown, turbid (clay-rich?) material. The carbonate splashes and sphene clusters are, however, apparently absent.

This effect is thought to be a selective alteration related to a specialized form of devitrification.

The phenocrysts in this rock are subhedral-euhedral plagioclase, 0.1 - 0.5mm in size, which are relatively unaltered. Some show partial replacement by carbonate and sericite. There are also a few, often somewhat larger, which are composed of bright green secondary amphibole with lattice-like intergrowths of carbonate and cherty silica and traces of sphene; these are clearly altered mafic silicates.

Except for the mottling, the rock is homogenous and shows no veining or introduced alteration.

Sample R-44 ALTERED LATITE

This is another microporphyritic rock in which the groundmass is a cryptocrystalline aggregate of potassic felsite which shows varying degrees of alteration to brown, turbid clays and fine-grained sericite. Minute feldspar microlites are distinguishable within the turbid matrix.

The rock also contains fairly abundant clumps of small prismatic phenocrysts, 0.1 - 0.3mm in size. Most of these are almost completely altered to fine-grained sericite and minor carbonate, but are recognizable as altered plagioclase. Less common are altered mafic phenocrysts composed of fibrous green secondary amphibole and/or biotite with interlaminated wisps of sphene.

The rock is extensively and intimately silicified. This silicification is largely of diffuse, pervasive type, as networks and patches of very fine-grained cherty silica, the more extensive of which have coarser-grained cores which commonly show cuspate-shaped boundaries suggestive of control by original vescicular structures. These amygdule-like pockets sometimes have rims of colloform, sub-opaque, dark brown material. This also occurs throughout the altered rock as irregular flecks, pseudomorphs, and atoll/skeletal structures. It resembles leucoxene.

The distribution of silicification in this rock is apparently controlled by an incipient auto-brecciation (a cooling or devitrification feature?) such that it now consists of sub-rounded fragment-like patches of the original host, showing varying degrees of brown cloudy alteration, separated by networks of diffuse chertification. The latter also tends to concentrate around the clusters of altered phenocrysts.

The explanation of this as an autobrecciation effect rather than silicification of an original lithic tuff is based on the fact that the groundmass feldspar microlites show a constant sub-parallel orientation (original flow feature) throughout the rock.

Sample R-50 FLOW-TEXTURED ANDESITE

This is a very fine-grained rock in which the groundmass is composed of close-packed, tiny plagioclase microlites (0.05 - 0.1mm) with interstitial glass and/or altered mafics, carbonate and abundant minute opaque granules. The latter often coalesce to form incipient acicular/skeletal grains, separating and outlining the plagioclase microlites. They are apparently hematite (red translucent plates).

The groundmass plagioclase is partially altered to carbonate and sericite.

The rock contains scattered, small, irregular patches of carbonate and quartz which sometimes look to be filling and replacing around incipient vescicles, and sometimes (and perhaps mostly) are altered phenocrysts and phenocryst clumps. Rare pseudomorphs of euhedral form composed of cherty quartz or of secondary amphibole (altered mafics) are also seen.

A few incipient hair-line veinlets, also of quartz and carbonate (the dominant form of alteration in this rock) are also seen.

As in several other samples, a cryptic small-scale, pellety/patchy structure is apparent in the groundmass: in this case in the form of areas of noticeably different content of interstitial opaque dust.

Sample R-53 ALTERED FLOW-TEXTURED ANDESITE

This is a homogenous feldspar-rich rock composed essentially of a sub-trachytic (irregularly sub-oriented) aggregate of sericitized plagioclase laths, 0.05 - 0.1mm in size, with an interstitial phase of felsitic material, abundant carbonate and micron-sized opaque granules.

The sparsely scattered euhedral phenocrysts are 0.2 - 1.0mm in size and are pseudomorphs of mafic silicates (probably pyroxenes). They now consist of yellowish-green secondary biotite and amphibole, carbonate and traces of cherty quartz. There appear to be no feldspar phenocrysts.

The rock is cut by sparse, irregular hair-line veinlets of quartz and carbonate.

The prominent cuspate patches of unstained/unetched material visible on the cut-off chip are of cryptic origin. They are seen in the thin section to consist of sharply bounded areas in which the textural fabric of the rock is unchanged, but the sericitized plagioclase laths are set in a matrix of dark brown, translucent material (limonitic glass?).

The varying intensity of cobaltinitrite stain on the chip suggests some compositional segregation (probably in the interstitial felsitic component) parallel to the predominant flow direction as defined by microlite orientation.

Sample R-54 FLOW BANDED ANDESITE-LATITE

This rock is very similar in most respects to R-53 (q.v.).

The principal difference is that it lacks the extensive pervasive groundmass carbonate development of the previous rock.

Another difference is that the altered phenocrysts (pseudomorphed mafics) are composed dominantly of granular mosaics of quartz, only locally accompanied by minor carbonate and secondary amphibole.

A third difference is that the groundmass contains patches, networks and bands in which a greenish-brown to golden-brown sub-opaque material (altered potassic glass?) becomes more or less concentrated. These compositional segregations (of flow and incipient autobrecciation origin) are manifested on the chip by varying intensities of cobaltinitrite stain.

Sample R-55 ALTERED FLOW-BANDED ANDESITE-LATITE

From its macroscopic aspect in the stained chip this rock looks rather like a laminated ashy-tuff. However, the thin section reveals that it is another trachytic-textured flow showing rather pronounced, banded, composition/textural differentiation.

It consists essentially of a groundmass made up of strongly sericitized, small, prismatic plagioclase laths (0.05 - 0.15mm) with interstitial crypto-crystalline felsite, altered mafics and micron-sized sub-opaques.

The interstitial phase commonly shows a more or less intense turbidity so that the sub-oriented plagioclase prisms are set in a brownish, sub-opaque matrix. Locally this brown clouding grades to a golden yellow material (ferruginous sericite or jarosite?). The distribution of the normal, brown and yellow matrix types exhibits a streaky, banded or patchy, crypto-fragmental pattern (presumably that reflected by the variations in intensity of cobaltinitrite staining on the chip).

Additional heterogeneities are produced by the development of carbonate, which forms diffuse flecks, clusters of small grains and rather extensive porphyroblastic patches (incorporating groundmass microlites). This carbonate alteration also tends to concentrate in bands or lenses parallel to the general flow foliation. Carbonate also occurs in a few cross-cutting veinlets and irregular replacement zones.

The rock also shows localized development of silicification. This is developed as hairline veinlets of microgranular/cherty quartz (with carbonate) and as diffuse replacements along networks of microbrecciation within certain flow bands. The silicified material separates and outlines fragment-like patches of golden brown altered matrix.

Phenocrysts are small, sparse and totally altered. They are subhedral to euhedral in form, 0.1 - 0.5mm in size, and composed of granular quartz, brownish green secondary amphibole and carbonate, intergrown in various proportions. They are apparently altered mafics. Feldspar phenocrysts are not seen (although some of the more prismatic clumps of carbonate could possibly be of this derivation).

Sample R-57 SILICIFIED, BRECCIATED LATITE

This is another strongly silicified potassic rock of similar general appearance to samples R-11, 29 and 40. These previous samples show varying degrees of crystallinity ranging from almost completely glassy. The present sample shows the best develped crystalline fabric of them all.

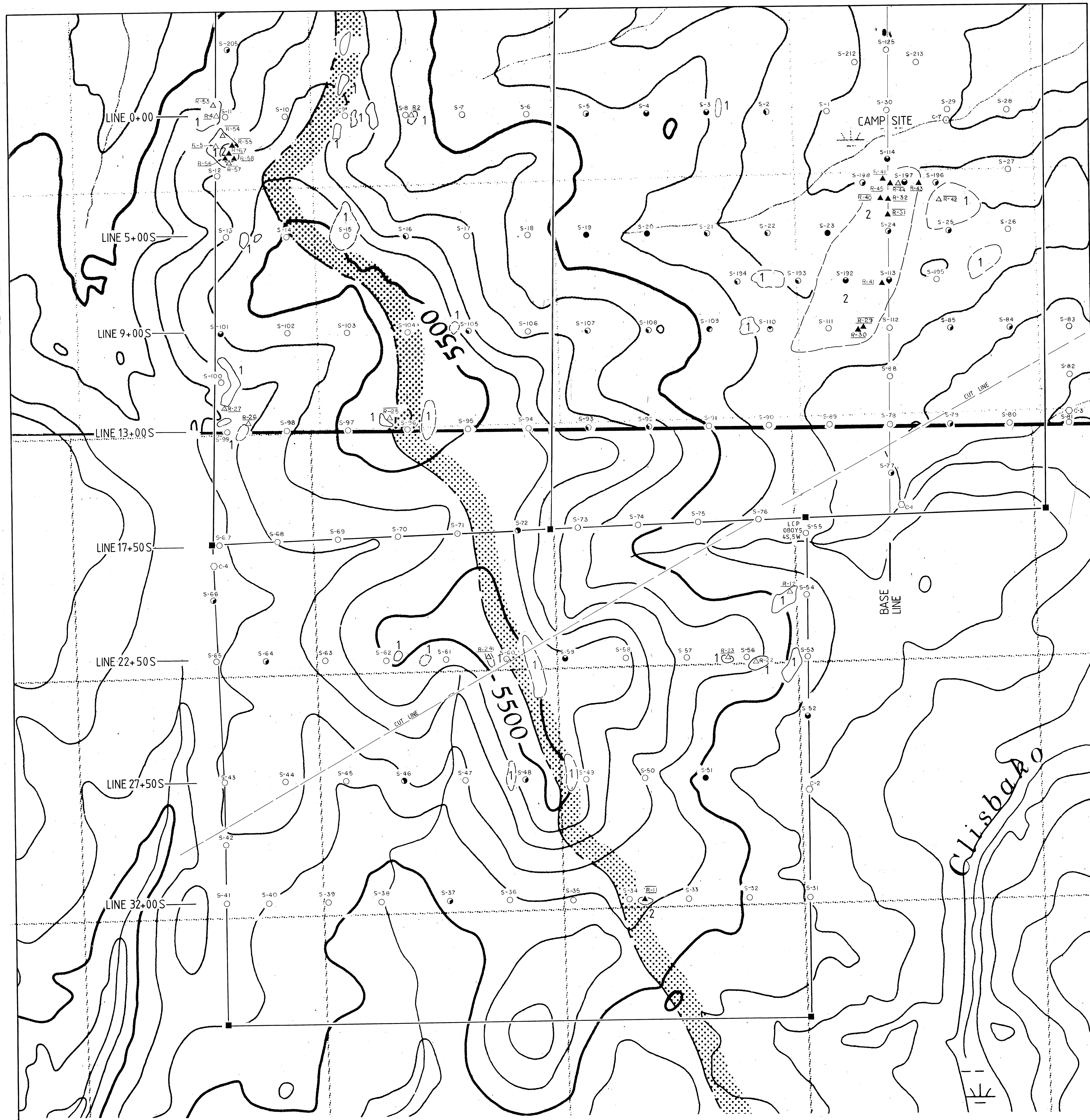
It consists essentially of an anhedral, interlocking aggregate of K-feldspar of grain size 0.05 - 0.15mm, in which grain boundaries are rather diffuse but partial, randomly oriented development of prismatic forms is discernable. Micron-sized opaques form a disseminated interstitial phase.

This aggregate shows a rather even dusting of weak, pervasive sericitization. It also contains relatively common small equant grains or clusters (to 0.1mm) of a high relief, brown mineral believed to be jarosite. Sometimes the jarosite is as coatings to cubic pits, and the latter also occur quite commonly as clean, empty cavities. The cubic form suggests the possible derivation of the jarosite and pits from the leaching of original pyrite grains (though there is no associated limonite staining).

The rock does, however, show irregular localized patches of more or less intense impregnation by structureless, golden brown to sub-opaque orange-brown alteration of similar type seen in other rocks of the suite. This is distinct from, and appears independent of, the jarosite, nor does it show any systematic relation to the silicification.

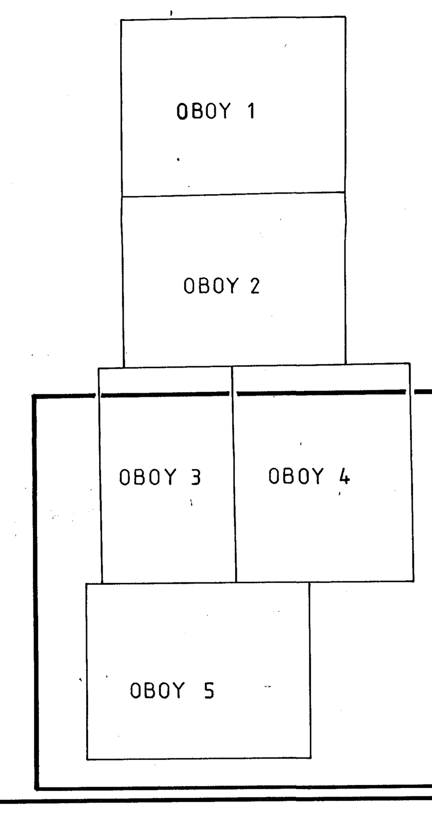
The phenocrysts present to some degree in almost all the other rocks of the suite are apparently rare to absent. A few patches associated with the silification, and now converted to granular quartz and diffuse sericite, could possibly be of this derivation.

Silicification takes the form of rather discrete bodies of vari-textured (cherty to comb-structured) quartz as irregular veinlets and networks of breccia fillings. Sometimes these contain fine-grained sericite - possibly representing assimilated host rock. Wholesale replacement of the wall rock by finely granular quartz is seen in a few localized patches, but the more pervasive style of silicification seen in some of the other rocks is absent (presumably because of the non-porous character of the host).



EXPLANATION

- GLACIAL DEBRIS
- 3 QUARTZ FELDSPAR PORPHYRY
- 2 ALTERED ANDESITE
- 1 ANDESITE
- bedrock outcrop
- subcropping rock rubble
- corner claim post
- LCP legal corner post
- 80° shear with dip
- S-7 soil sample site, sample number
- anomalous Au (>5ppb) in soil
- anomalous Ag (>0.5ppm) in soil
- anomalous As (> 20 ppm) in soil
- R-5 rock sample site, sample number
- anomalous rock sample Au(>20ppb) or Ag(>1.0ppm) or As(>100ppm)
- R-5 rock sample site with analysis
- R-5 rock sample site with petrographic description
- previous sample site
- stream silt sample site



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GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,298

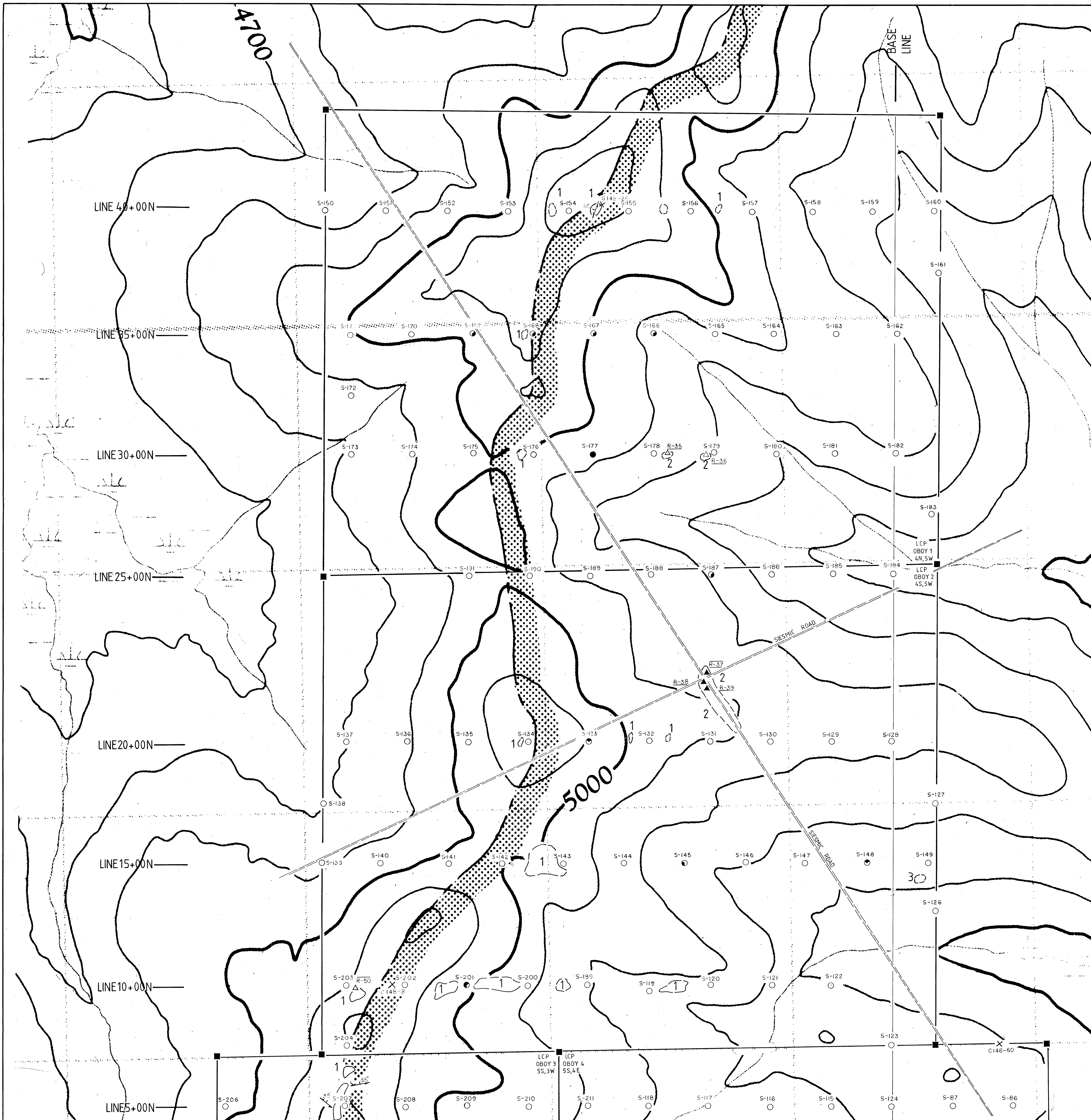
J. WATKINS

LORNEX
MINING CORPORATION LTD.

OBOY MINERAL CLAIMS
CARIBOO MINING DIVISION

MAP 1
SOUTH HALF
GEOLOGY AND SAMPLE LOCATIONS

NTS 93C/9,16	SEPT. 1986	JAM GEOLOGICAL SERVICES



EXPLANATION

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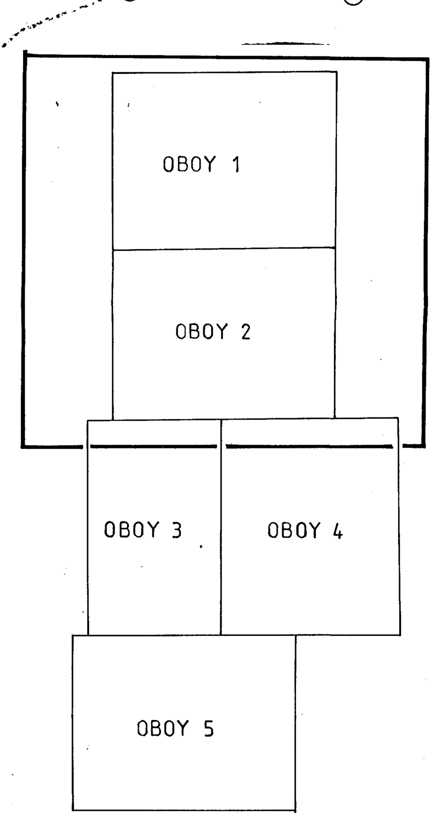
- R-5 rock sample site, sample number
- anomalous rock sample Au(>20ppb) or Ag(>1.0ppm) or As(>100ppm)
- R-5 rock sample site with analysis
- R-5 rock sample site with petrographic description
- previous sample site
- stream silt sample site



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SCALE: METERS
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CONTOUR INTERVAL: 100 FEET

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,298

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CARIBOO MINING DIVISION

MAP 2
NORTH HALF
GEOLOGY AND SAMPLE LOCATIONS

NTS 93C/9,16	SEPT. 1986	JAM GEOLOGICAL SERVICES