REPORT ON DIAMOND DRILLING METSANTAN 8 MINERAL CLAIM LIARD, OMINECA M.D.

9/87

R.J. JOHNSTON

LACANA MINING CORP

November, 1986

15345

SMITHERS OCCURRENCE!

86-744-15345

Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
DRILLING	$96,912.00

AUTHOR(S) R. J. JOHNSTON SIGNATURE(S)

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED Sept. 29, 1986 YEAR OF WORK 1986

PROPERTY NAME(S) METSANTAN 8

COMMODITIES PRESENT Au, Ag

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN 94E -

MINING DIVISION LIARD; OMINECA NTS 94 E/6W

LATITUDE 57°26.7' LONGITUDE 127°21.3'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

METSANTAN 1 (20 units), METSANTAN 2 (20 units), METSANTAN 3 (4 units), METSANTAN 4 (6 units), METSANTAN 5 (4 units), METSANTAN 6 (18 units), METSANTAN 7 (15 units), METSANTAN 8 (15 units), METSANTAN 9 (18 units)

OWNER(S)

(1) LACANA MINING CORPORATION (2)

MAILING ADDRESS
312 - 409 Granville St.
Vancouver, B.C. V6C 1T2

GEOLOGICAL BRANCH
ASSESSMENT REPORT

OPERATOR(S) (that is, Company paying for the work)

(1) LACANA MINING CORPORATION (2)

MAILING ADDRESS
312 - 409 Granville St.
Vancouver, B.C. V6C 1T2

15,345

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Drilling on a silica-argillic altered zone within propylitically altered Middle Jurassic Toodoggone Volcanics encountered gold values to 6.6 g/t.

REFERENCES TO PREVIOUS WORK

FILMED

(over)

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SUMMARY

During August of 1986, Lacana Mining Corporation, carried out 615.7 m of diamond drilling in 5 holes in an area near the northern boundary of the Metsantan 8 claim in the Toodoggone gold camp. The object of interest was the Patti Zone, a zone of massive silica flooding surrounded by weak-intense argillic alteration, all within a suite of andesite porphyry flows comprising part of the Jurassic Toodoggone Volcanics sequence.

The drilling encountered only local spotty precious metal values of interest, though trace element geochemistry shows anomalous As, and Sb, indicating this zone to be part of the barren silica cap overlying a possible precious metal bearing system beneath.

INTRODUCTION

Location & Access

The Metsantan 1 - 9 mineral claims form a contiguous block located on N.T.S. map-sheet 94-E/6W in north central B.C. (Fig 1). The approximate geographic coordinates for the claims are 57°25' North latitude and 127°20 West longitude.

The property covers the south and west parts of Metsantan Ridge; and is situated approximately 300 km north of Smithers which is used as the normal supply centre.

Access to the property is by fixed-wing aircraft to the Sturdee airstrip and then by helicopter 25 km north of the property. A British Columbia government order-in-council indicates future road access to the Lawyers property to be an excellent possibility.

The Lawyers deposit is located 12 km south of the Metsantan prospect. Energex's Al property, and Golden Rule's Mets property lie immediately to the north.

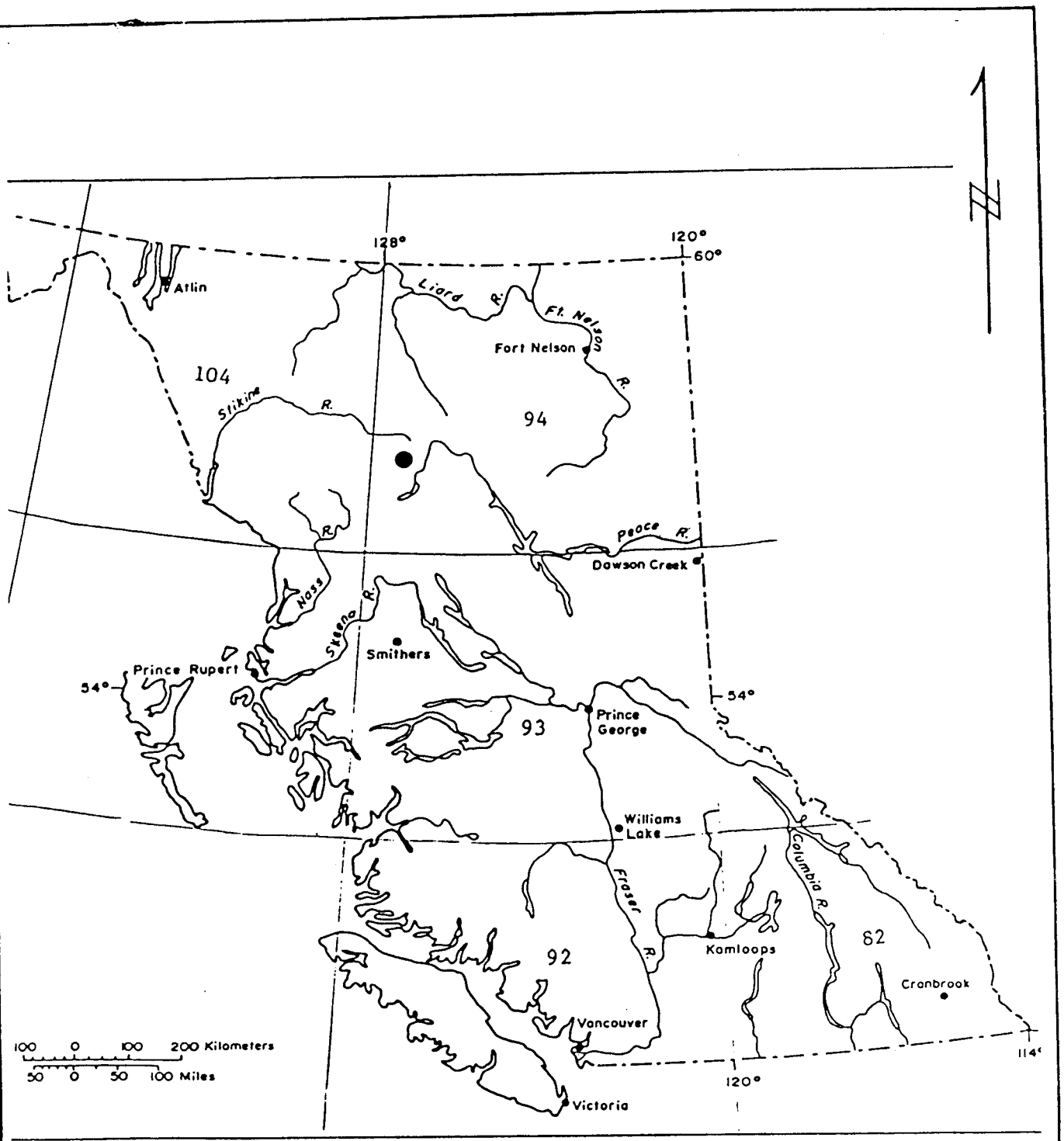
Property and Ownership

The Metsantan 1 - 9 claims (Fig 2) are currently held in two groups: the east group contains Metsantan 1, 3, 5, 6 and 9; the west group comprises Metsantan 2, 4, 7 and 8. The property is situated in the Omineca and the Liard Mining Divisions.

Claim Name	Units	Record No.
Metsantan 1	20	2623(3)
Metsantan 2	20	2624(3)
Metsantan 3	4	2961(8)
Metsantan 4	6	2960(8)
Metsantan 5	4	3228(9)
Metsantan 6	18	3663(3)
Metsantan 7	15	1815(3)
Metsantan 8	15	1816(3)
Metsantan 9	18	4224(9)
	120	

The claims are wholly owned by Canadian Minerals Joint Venture (1980) and operated by Lacana.

Metsantan 1 and 2 claims partially overstake the Mets 2 claim, which reduces the size of the Metsantan 1 and 2 by approximately 8 units. The location of the legal corner posts for the Metsantan 1, 2 3 and 4 claims and the Mets 2 claim have been established with a legal survey by Lacana. The common boundary for the Mets 2



LACANA

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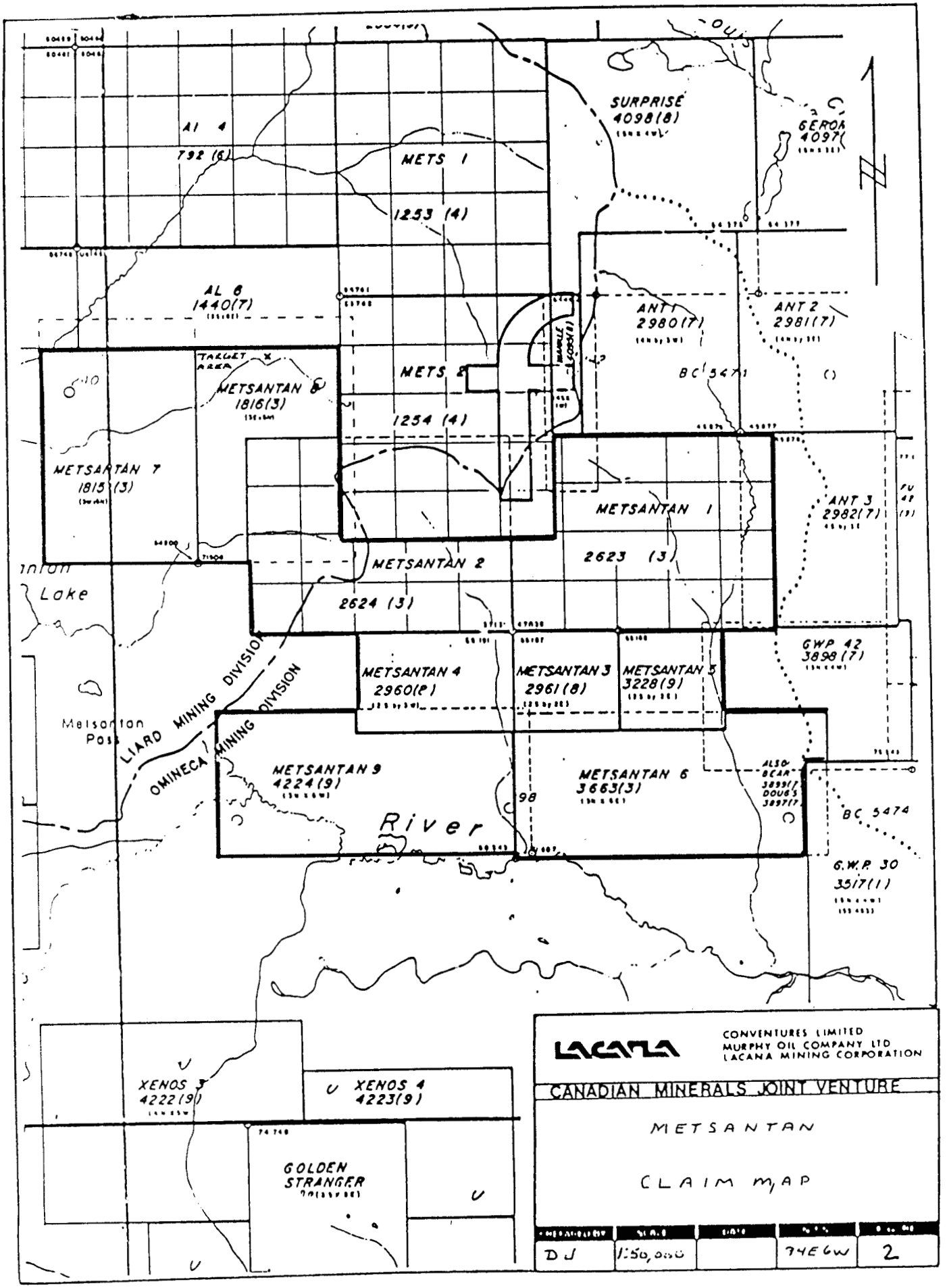
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

LOCATION MAP

PREPARED BY	SCALE	DATE	N.T.S.	FIGURE
D J	1:250,000	.86		1



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CANADIAN MINERALS JOINT VENTURE

METSANTAN

CLAIM MAP

DJ	1:50,000		74E 6W	2

and the Metsantan 1 and 2 claims have not been marked on the ground. As well, a legal survey carried out by Energex has determined the location of the Metsantan 8 - Al 6 boundary and this has been marked on the ground.

Physiography

The claims lie within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region is entirely glaciated and is characterized by wide U-shaped drift-filled major valleys and deeply-cut V-shaped upland valleys. Mountain peaks in the area average 1980 metres ASL rising fairly abruptly from the major valleys. The topography of areas underlain by Toodoggone volcanic rocks is usually considerably more subdued than areas underlain by Takla Group volcanic rocks.

The northern part of the Metsantan property is located over the south portion of Metsantan Ridge and the main peak of Metsantan Mountain. Deeply incised streams dissect Metsantan Mountain, giving rise to local relief of 600 metres on the property.

Most of the property is above treeline, with swampy, lowland growth in the extreme south and west.

History

The earliest prospecting activity in the area occurred in the 1930's when placer gold claims at Belle Creek, 15 kilometres east of Metsantan, were worked. Further exploration was carried out in the late 1960's when Kennco Exploration (Western) Ltd., Cordilleran Engineering Ltd. and Cominco Ltd. explored the area, searching for porphyry copper deposits.

In the late 1970's the recognition of the precious metal potential of the area brought about another surge of interest. The Metsantan property was originally staked in 1980 and subsequently explored by Lacana Mining Corporation on behalf of Canadian Minerals Joint Venture (1980). The early location of precious metals bearing epithermal vein systems on Metsantan 1 claim led to exploration being concentrated on this sector of the property.

Over 1000 metres of trenching and five diamond drill holes totalling 600 m were put in 1981 and 1982.

In 1985 Taiga Consultants Ltd. of Calgary on behalf of Bart Resources carried out further trenching on the Metsantan 1 claim and located further areas of interest on the Metsantan 2 and 4 claims. Bart held the claims on an option agreement from the C.M.J.V. (1980), but returned the property in 1986.

REGIONAL GEOLOGY

The recognition of the Toodoggone as a significant precious metals-epithermal camp has resulted in much work being done, mostly by B.C. Government staff. This work has shown the area to be underlain by a series of intermediate-felsic volcanic flows, tuffs, pyroclastics of Triassic-Jurassic Age.

The two dominant units are the Takla andesites of Triassic age and the Jurassic Toodoggone Volcanics, which host most of the known mineralization in the area. Abundant and varied intrusions of Jurassic Age occur throughout the area. These volcanics are overlain to the west by the Upper Cretaceous Sustut Group sediments.

PROPERTY GEOLOGY

Work by Lacana in 1981-82 and by Taiga in 1985 has shown that three subdivisions of the Toodoggone Volcanics are present on the property (Fig 4.)

Toodoggone Crystal Ash Tuffs and Flows

7 Recessive, grey, mauve, purple quartzose plagioclase crystal tuff, lapilli tuff, and breccia, with lesser agglomerate, lahar, and epiclastic beds; includes some welded tuffs and pyroxene hornblende feldspar porphyry flows which are locally dominant; some members contain no quartz; pink weathering where laumontite is abundant.

7A Epiclastic red beds - arkosic sandstone, siltstone, conglomerate, and slide debris; contains some crystal tuff.

PRELIMINARY MAP 61

GEOLOGY OF THE TOODOGGONE RIVER AREA, NTS 94E

Scale 1:50 000

L. J. DIAKOW, A. PANTELEYEV, AND T. G. SCHROETER, 1985

MINISTRY MAPPING 1971 TO 1984 MAINLY 1981–1984; ADDITIONAL SOURCES OF INFORMATION: ASSESSMENT REPORTS, GEOLOGICAL SURVEY OF CANADA OPEN FILE 483, 1977; RADIOMETRIC DATING (K-Ar) BY J. HARAKAL, THE UNIVERSITY OF BRITISH COLUMBIA

LAYERS—METSANTAN QUARTZOSE ANDESITE

3 GREEN TO GREY QUARTZOSE PYROXENE (±BIOTITE HORNBLENDE PLAGIOCLASE PORPHYRY FLOWS AND TUFFS. QUARTZ CONTENT RANGES FROM NEGLIGIBLE TO ABOUT 3 PERCENT. IN THE NORTH FLOWS PREDOMINATE WITH LOCAL FLOW BRECCIA, LAPILLI TUFF, AND RARE WELDED TUFF UNITS. TOWARD THE SOUTH ASH FLOWS ARE COMMON, INCLUDING RARE SURGE DEPOSITS. THE UNIT CONTAINS EXTENSIVE ZONES OF EPIDOTIZED, PYRITIC ROCK WITH CHARACTERISTIC SALMON, PINK, AND ORANGE PLAGIOCLASE CRYSTALS — 168 ± 6 Ma HYDROTHERMAL ADULARIA

TODOGGONE CRYSTAL ASH TUFFS AND FLOWS

7 RECESSIVE, GREY, MAUVE, PURPLE QUARTZOSE PLAGIOCLASE CRYSTAL TUFF, LAPILLI TUFF, AND BRECCIA, WITH LESSER AGGLOMERATE, LAHAR, AND EPICLASTIC BEDS; INCLUDES SOME WELDED TUFFS AND PYROXENE HORNBLENDE FELDSPAR PORPHYRY FLOWS WHICH ARE LOCALLY DOMINANT. SOME MEMBERS CONTAIN NO QUARTZ. PINK WEATHERING WHERE LAUMONTITE IS ABUNDANT

7A *EPICLASTIC RED BEDS* — ARKOSIC SANDSTONE, SILTSTONE, CONGLOMERATE, AND SLIDE DEBRIS; CONTAINS SOME CRYSTAL TUFF

TUFF PEAK FORMATION

6 PALE PURPLE, GREY, AND GREEN BIOTITE AUGITE HORNBLENDE PLAGIOCLASE PORPHYRY FLOWS; SOME AUTOBRECCIATED FLOWS. MINOR SILLS AND PLUGS. SOME CRYSTAL AND LAPILLI TUFF

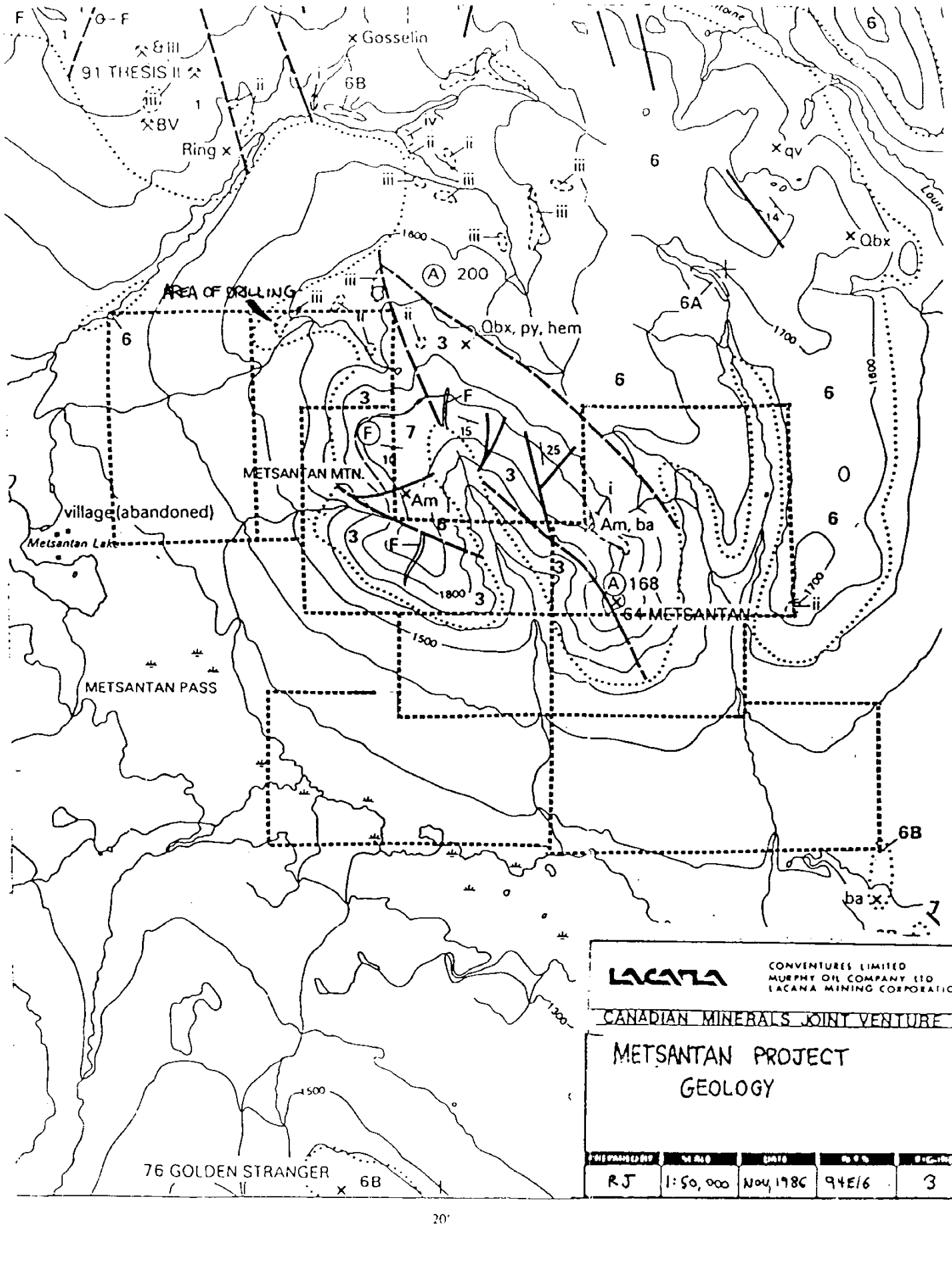
6A CONGLOMERATE OR LAHAR DERIVED FROM UNITS 6 AND 6B, WITH GRADED AND CROSSLAMINATED MUDSTONE AND SANDSTONE INTERBEDS, DEBRIS FLOWS, LAPILLI AND CRYSTAL TUFFS

6B FLOWS SIMILAR TO UNIT 6 BUT CONTAINING SPARSE ORTHOCLASE MEGACRYSTS

F FELDSPAR PORPHYRY, HORNBLENDE FELDSPAR PORPHYRY — DYKES AND PLUGS. RARE QUARTZ FELDSPAR PORPHYRY

SYMBOLS

- MINERAL OCCURRENCE (MINERAL INVENTORY FILE NUMBER) — ✖ 43
- MINERAL PROSPECT (MINERAL INVENTORY FILE NUMBER) — ✖ 34
- EXPLORATION CAMP — ⊖
- PLACER WORKINGS — ^
- PARK BOUNDARY
- ROAD
- MAIN OUTCROP AREAS
- FAULT (OBSERVED, INFERRED)
- THRUST OR REVERSE FAULT (OBSERVED, INFERRED)
- GEOLOGIC CONTACT (DEFINED, ASSUMED)
- BEDDING, LAYERING, FOLIATION (HORIZONTAL, INCLINED, VERTICAL) — +¹⁰/₁
- FOLD AXES
- FOSSIL LOCALITY (PLANT DEBRIS) — Ⓕ
- RADIOMETRIC DATE SAMPLE SITE, AGE IN Ma — Ⓐ104
- VOLCANIC VENT — o
- HYDROTHERMAL ALTERATION
  - SILICIFICATION, QUATERNARY FERRUGINOUS BRECCIA — V
  - SILICA, CLAY MINERALS ± ALUNITE, BARITE — S
  - CLAY MINERALS ± ALUNITE, SILICA, HEMATITE — P
  - GOSSAN, LIMONITIC ZONE — I



LACANA — CONVENTURES LIMITED, MURPHY OIL COMPANY LTD, LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

METSANTAN PROJECT
GEOLOGY

DRAWN BY	SCALE	DATE	N.T.S.	DRAWING
RJ	1:50,000	Nov, 1986	94E/6	3

Tuff Peak Formation

6 Pale purple, grey, green biotite augite hornblende plagioclase porphyry flows; some autobrecciated flows, minor sills and plugs; some crystal and lapilli tuff.

6A Conglomerate or lahar derived from Units 6 and 6B, with graded and crosslaminated mudstone and sandstone interbeds; debri flows, lapilli and crystal tuffs.

6B Flows similar to Unit 6 but containing sparse orthoclase metacrysts.

Lawyers-Metsantan Quartzose Andesite

3 Green to grey quartzose pyroxene(?) biotite hornblende plagioclase porphyry flows and tuffs; quartz content ranges from negligible to about 3% in the north flows predominate with local flow breccia, lapilli tuff, and rare welded tuff units; toward the south, ash flows are common, including rare surge deposits; the unit contains extensive zones of epidotized, pyritic rock with characteristic salmon, pink, and orange plagioclase crystals.

Units 7 and 3 are indicated to be present on the property in direct contact which is presumed to represent an unconformable contact. The other contacts between the above units on the property are indicated to be fault contacts.

Alteration and Mineralization

A number of zones of silica flooded andesites and dykes surrounded by varying degrees of argillic alteration occur on the Metsantan 2 and 8 claims. These "silica caps", as they are interpreted to be, are composed of fine grained, locally vuggy, massive silica. Local barite veins occur within these, trending dominantly E-W and dipping subvertically. Irregular veins of massive pyrite also occur within the zone.

Argillic alteration exists in varying degrees, from white clay on fractures, to soft, incompetent, complete clay alteration. These alteration zones lie within a larger zone of propylitically altered porphyritic andesites.

1986 WORK

In 1986 project was centred on the Patti Zone, a recently discovered zone of intense silification and argillitic alteration on the Metsantan 8 claim, just south of the AL 6 claim. Five BQ core drill holes, totalling 615.70 m were put down on this zone in August.

Core recoveries were generally in the 60-90% range. The core was removed to the Baker Mine site for logging and splitting and is stored there.

A small amount of prospecting was done in the area of drilling and a number of additional alteration zones were discovered and sampled.

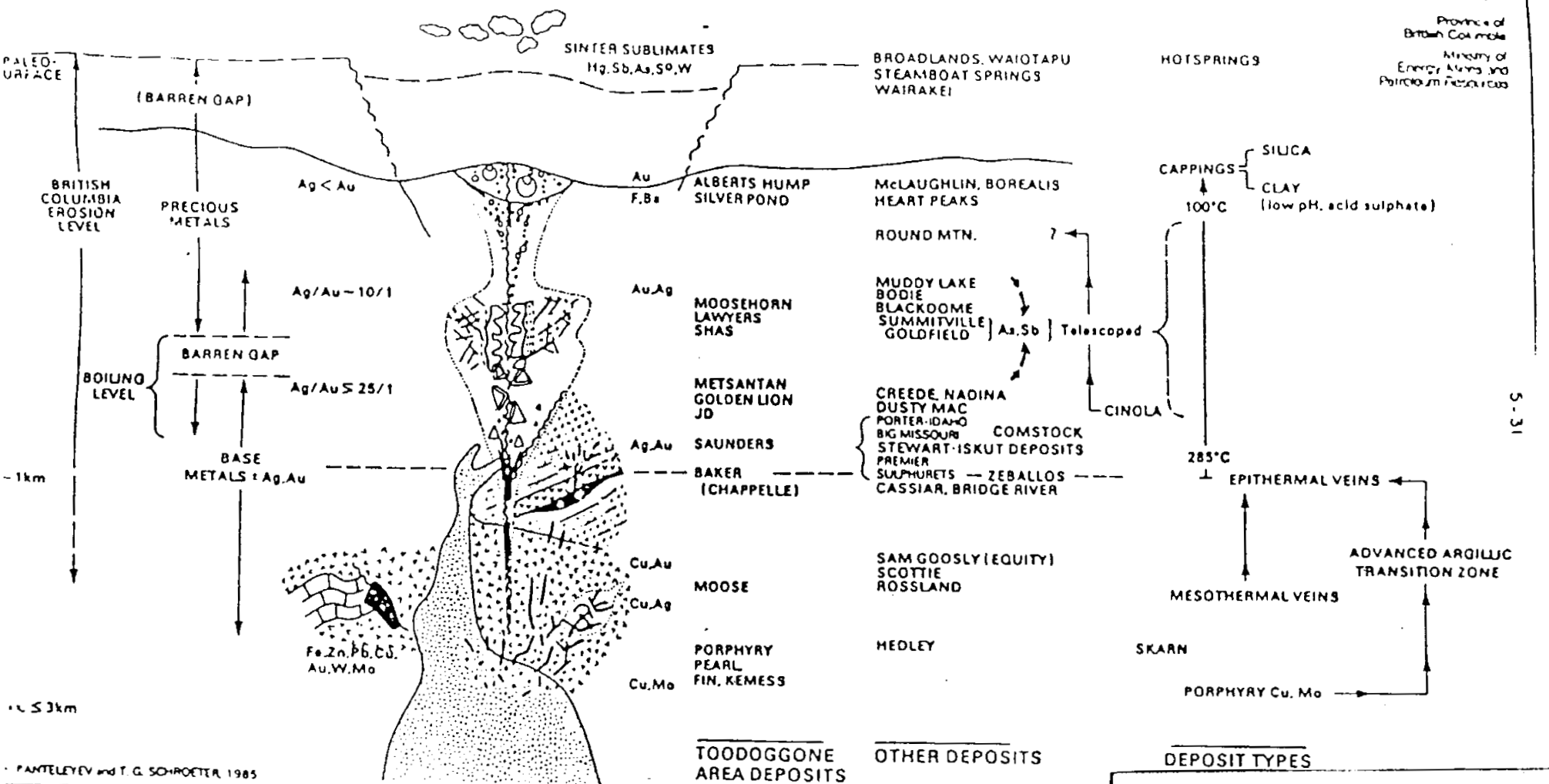
DISCUSSION

Analysis of the core shows that only local anomalous values of Au and Ag are present within the massive silica flood-argillic altered zone, and that elevated values of Cu, As and Sb are common. These physical and chemical parameters indicate that these alteration zones are part of a silica capping as shown by the "British Columbia Epithermal Model" (Pantaleyev & Schroeter, 1985) (fig 4).

It would appear then that the area for discovering possible bonanza type Au-Ag mineralization lies below these silica caps, within a depth of possibly less than 500 m. Finding the structural conduits would be the key to discovering mineralization. This would be best served by soil geochem and EM-type geophysics to discover surface expression of such, as well as detailed prospecting in order to determine alteration patterns on the property.

The Metsantan property remains an inviting target, especially in light of the recent exciting developments on the Energex and Golden Rule properties, immediately to the north.

BRITISH COLUMBIA EPITHERMAL MODEL



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CANADIAN MINERALS JOINT VENTURE

METSANTAN PROJECT

DRAWN BY	SCALE	DATE	REVISED	FIGURE
RJ		Nov, 1986		4

APPENDIX I

APPENDIX I

BREAKDOWN OF COSTS

DIAMOND DRILLING - BQ

615.7 m, in 5 holes @ $157.48/metre	$96,912.00

APPENDIX II

APPENDIX II

METHODS OF GEOCHEMICAL ANALYSIS

The samples were bagged in the field and shipped via air to Acme Analytical Laboratories Ltd. of Vancouver, B.C. The rocks were pulverized to -100 mesh. From this, a 0.500 gram sample is digested with 3 ml of 3-1-2 $HCl-HNO_3-H_2O$ at 95°C for one hour and is diluted to 10 ml with demineralized water. From this Ag is determined by Atomic Absorption and multi-element analysis is done by Inductively Coupled Argon Plasma.

Elements obtained in the ICP analysis are: Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Th, Sr, Cd, Au, Sb, Bi, V, Ca, P, Cr, Mg, Ba, Ti, B, Al, Na, K, and W.

For gold analysis, a 10.0 gram sample is ignited overnight at 600°C and is then digested in with 30 mls of hot dilute aqua regia, and 75 ml of clear solution obtained is extracted with 5 ml of Methyl Isobutyl Ketone (MIBK). Gold is determined in MIBK extract by Atomic Absorption (AA).

APPENDIX III

DRILL LOGS

LACANA MINING CORPORATION — DIAMOND DRILL RECORD — Hole #. LM-86-1 — Page 1 of 3

Property: METSANTAN — Location: PATTI ZONE — Down Hole Surveys: — Drilled By: J.T. THOMAS

Area (Map #): — Grid: — Depth: — Az: — ° Dip: — ° From-To: Aug 18, 1986

Claim #: — — ° — ° Size(s): BQ

M.D./County: LIARD — Length: 139.29 (Units: m) — ° — ° Logged By: R. J. JOHNSTON

Province: B.C. — Azimuth: 090 ° Dip Collar: -45 ° — ° — ° Signed: R.J. Johnston

Remarks:

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
0	7.01		CASING		6801	7.01	8.00	0.99		.2	27
7.01	38.70	Silicified Porphyry Flow	Lt gy, pk FG mass silica.Intense sil'n completely obliterates textures		02	-9.00		1.00		.5	42
					03	-10.00		1.00		.4	43
			, contains fine vugs V broken		04	-11.00		1.00		.7	20
			8.50 Fe cemented fractures		05	-12.00		1.00		.3	12
			21.30-22.50 " " - fault (?)		06	-13.00		1.00		.3	28
			7 → 30 pk silica		07	-14.00		1.00		.4	32
			30-38.80 gy silica		08	-16.00		2.00		.3	18
			37.23-38.71 mislatch 10% recovery		09	-17.00		1.00		.3	42
			Gradational		10	-18.00		1.00		.2	18
					11	-19.00		1.00		.1	3
38.70	55.00	Porphyritic Andesite flow	Lt gy gm w/ wh 3-5 mm felds. Minor flow bx. Local		12	-20.00		1.00		.2	5
			pk felsic (feld porphyry?)dykes, Local wh or gn		13	-21.00		1.00	.046	1.0	1070
			gypsum as vug fillings & veins		14	-22.00		1.00	.052	.7	1620
			38.70-51.0 rusty, fractured		15	-24.00		2.00		1.8	61
			45.02-45.42 lt gy sil'd zone adj to lt pk FP dyke		16	-25.00		1.00		1.2	10

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAYS Au oz/T	ASSAYS Ag ppm	ASSAYS Au ppb
38.70	55.00	Porphyritic Andesite Flow	47.52-48.00 Lt gy sil'd zone - adj to lt pk FP dike		6817	25.00	26.00	1.00		1.0	14
			49.46-50.00 " " " " " " "		18		-27.00	1.00		.9	6
			50.00-53.00 Abund wh FG gypsum bx		19		-28.00	1.00		.8	3
					20		-29.00	1.00		.3	1
55.00	139.29	Porphyritic Andesite Flow	Gy Toodoggone volc. darker than above. Local 0.1-0.5 m Mass py zones. FG-MG locally vuggy. Minor		21		-30.00	1.00		2.0	12
					22		-32.00	2.00		3.4	2
			local sil'd zones.		23		-33.00	1.00		2.6	2
			88-E.O.H. wh & gn gpy in veins & fractures		24		-34.00	1.00		2.1	4
			55.20-55.50 5% py w/local sil'n.		25		-35.00	1.00		1.3	3
			56.50 10 cm of sil'n.		26		-36.00	1.00		2.3	6
			57.50-59.15 Sin'n w/minor py.		27		-37.03	1.03		.6	10
			59.15-59.57 Mass FG py w/10 cm of sil'n		28		-40.00	1.97		.4	180
			60-64 minor sil'n		29		-42.00	2.00		.6	52
			65.7-67.0 v. soft, incomp arg alt.		30	45.02	45.42	0.40		.7	4
			72.0-81.0 VFG py, locally - 20%, grades to 1% by 84.0		31	47.52	48.00	0.48		.9	37
					32	49.46	50.00	0.54		.3	4
			84.13-85.00 Lt gy mass gyp w/local minor pk patches.		33	52.00	53.00	1.00		.9	1
					34	55.00	56.00	1.00		2.2	1
			86.0 wh gyp as fracture fillings → 2 cm		35		-57.50	1.50		1.9	68
			87.6-88.8 pk dyke (?)		36		-59.15	1.65		1.6	34
			89.10-90.0 Dyke, py at lower contact.		37		-59.67	0.52		45.7	57
			90.13-90.60 wh fg argillicalt adjacent to dyke.		38		-61.00	1.33		23.1	15
			Local anhydrite veins. Minor diss patches of FG py. Local gyp veins → 92 m		39		-63.00	2.00		13.4	6
					40		-64.00	1.00		22.4	5
			90.75-90.90 Bx zone - wh, gn gyp as matrix. Minor 2-3 mm bright red or clasts.		41	65.70	67.00	1.30		2.3	2
					42	78.00	80.00	2.00		4.5	1
			100.5 Flow bx in volc.		43		-81.00	1.00		2.4	1
			104.78-105.30 sil'd zone w/minor py.		44	84.43	85.00	0.57		6.2	1

LACANA MINING CORPORATION DIAMOND DRILL RECORD LM-86-1 Hole 1. Page 3 of 3

INTERVAL Metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
55.00	139.29	Porphyritic Andesite Flow	104.78-105.56 mass vuggy py. -106.12 mod sil'n.		6945 46	90.13-90.60 104.78-105.30		0.47 0.52		1.2 4.6	1 190
			106.50 py veins parallel to core 107.50 wh gyp bx zone.		47 48	-105.56 -106.12		0.26 0.56		16.5 1.7	330 10
			108-118 wh gyp bx zones 112.5 3 cm mass py vein 80°CA		49 50	112.00-113.00 115.10-115.82		1.00 0.72		1.0 .6	114 28
			120.5 Flow bx 115.10-115.82 Mod sil'd zone, remnant volc texture		51 52	122.15-122.40 122.89-122.95		0.25 0.06		1.2 1.2	63 250
			122.15-122.40 wh gyp bx zone. -122.95 mass py.		53 54	133.85-134.00 138.87-139.29		0.15 0.42	.192	9.7 8.3	6890 420
			126-E.O.H. local pk dykes 0.3 - 1.5 m 126.50-127.50 pk Feld porphyry dyke								
			133.85-134.00 mass py vein 30°CA. 138.87-139.29 wk-mod sil'n w/5% py.								
			END OF HOLE								

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole #. LM-86-2 Page 1 of 4

Property: METSANTAN Location PATTI ZONE Down Hole Surveys Drilled By: J.T. THOMAS

Area (Map #): Grid: Depth: Az: ° Dip: ° From-To: Aug 21 1986

Claim #: ° ° Size(s): BQ

M.D./County: LIARD Length: 124.97 (Units: m) ° ° Logged By: R.J. JOHNSTON

Province: B.C. Azimuth: 090 ° Dip Collar: -45 ° ° ° Signed:

Remarks:

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAYS Au oz/T	ASSAYS Ag ppm	ASSAYS Au ppb
0	7.0		Casing		6955	15.00	17.00	2.00		.2	3
7.0	27.5	Porphyritic Andesite	Gy,pk and w/wh felds. Locally prop alt; rd-pk groundmass w/ local ep alt felds.		56	25.00	26.50	1.50		1.0	66
			Surface oxidation on fractures → 15m 26.00-26.20 lt gy siln.		57	27.50	29.00	1.50		.6	83
			Gradational		58		-31.00	2.00		.3	78
27.50	77.33	Silicified Andesite	Mod. intense, sil'n. Gy, pk. Local wh clay on fractures w/gyp. Local minor diss py.		59		-33.00	2.00		.1	47
			27.50-36.0 Intense siln - vuggy, volc text gone 38.0 bx zone		60		-35.00	2.00		.4	61
			39.4 Irreg py veins → 2 cm 41-45 Abund vugs w/gyp xtls, also veins of mass wh gyp		61		-36.00	1.00		.2	44
			44-50 Pk dike(?) - completely sil'd		62		-37.50	1.50		.2	33
			50.0-53.5 Abrupt contact up into gy mass sil'd volc 53.5-57.0 Pk dyke?		63		-39.00	1.50		.5	32

LACANA MINING CORPORATION — DIAMOND DRILL RECORD — L,-86-2 — Hole #. — Page 2 of 4

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
27.50	77.33	Sil'd Volcs Cont'd	60-70 vugs w/ gyp alts 71-73 Mod sil'n - volc text retained		6964	39.00	40.50	1.50		1.2	43
			74.89-75.86 1-2% py & tr cp ; diss, stringers 76-77.33 weak-mod sil'n		65		-42.00	1.50		1.1	160
77.33	106.01	Porphyritic Andesite Flow	Gy. Local wh, gn gyp veins. Local minor sil'n 81.38-82.25 Mod. sil'n		66		-43.50	1.50		.3	107
			85.80-87.0 Bright red hem stringers 88.95-89.48 Sil'd zone w/2% py, bl-gy silica in		67		-45.00	1.50		.1	34
			5 mm pods 91.0 1-2 cm wh gyp veins 45°CA		68		-46.50	1.50		.1	48
			93.0 " " " 80°CA 91.50-92.65 Mod-int sil'n.Minor vuggy qtz w/cp		69		-48.00	1.50		.1	16
			93.30-97.00 Mod sil'n w/local red hem staining 95.65-96.40 1-2% patchy py		70		-49.50	1.50		.1	21
			-97.34 1% stringer py 90.0 → 100.61 V alt, mostly argillic , some sil'n		71		-51.00	1.50		.4	36
			local bx'n - gives mottled texture. 100.54 -101.19 Veinlets of mass py 20-30°CA in		72		-52.50	1.50		3.5	32
			wk sil'n Gradational		73		-54.00	1.50		2.3	5
106.01	124.97	Silicified Andesite	Intense, mass, sil'n volc tex gone. Locally vuggy. Gy pk.		74		-55.50	1.50		1.0	8
			106.01-111.92 Int sil'n. 114.0 Minor patchy py		75		-57.00	1.50		.6	19
			117.0-120.75 Mod sil'n. 117.00-117.20 Py veins		76		-58.50	1.50		2.1	20
			END OF HOLE		77		-60.00	1.50		2.3	19

LACANA MINING CORPORATION DIAMOND DRILL RECORD

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Hole 4. Page 3 of 4

INTERVAL METRES FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL Metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
					6978	60.00	-61.50	1.50		1.2	27
					79		-63.00	1.50		.7	28
					80		-64.50	1.50		.3	39
					81		-66.00	1.50		.7	35
					82		-67.50	1.50		1.3	62
					83		-69.00	1.50		.5	21
					84		-70.50	1.50		.6	23
					85		-72.00	1.50		.9	64
					86		-73.50	1.50		.9	66
					87		-74.89	1.39		.9	160
					88		-75.86	0.97		2.1	150
					89		-77.33	1.47		.4	34
					90		-78.00	0.67		2.9	30
					91	81.38	-82.25	0.87		.8	71
					92	85-95	-87.00	1.05		.4	30
					93	88.95	-89.48	0.53		1.4	200
					94	91.50	-92.65	1.15		.8	40
					95	93.30	-95.65	2.35		.6	45
					96		-96.40	0.75		.6	107
					97		-97.34	0.94		1.4	103
					98	100.54	-101.19	0.65		4.1	99
					99	106.01	-107.50	1.49		.3	21
					7000		-109.00	1.50		.1	28
					6551		-111.50	2.50		.1	15
					52		-111.92	0.42		.2	28
					53		-113.50	1.58		.5	52
					54		-115.00	1.50		.8	97
					55		-116.50	1.50		.3	54

LM-86-2

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole #. Page 4 of 4

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
					6556	106.01	-118.00	1.50		.5	57
					57		-119.50	1.50		.4	91
					58		-121.00	1.50		.4	86
					59		-122.50	1.50		.3	70
					60		-124.00	1.50		.5	108
					61		-124.95	0.95		.7	131

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole # LM-86-3 Page 1 of 3

Property: METSANTAN Location PATTI ZONE Down Hole Surveys ETCH Drilled By: J.T. THOMAS

Area (Map #): 94-E/6W Grid: Depth: - Az: ° Dip: ° From-To: Aug 23,1986

Claim #: 122.53 ° -43 ° Size(s): BQ

M.D./County: LIARD Length: 122.53 (Units: m) ° ° Logged By: R. J. JOHNSTON

Province: B.C. Azimuth: 000 ° Dip Collar: -45 ° ° ° Signed: R.J. Johnston

Remarks:

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
0	3.05		CASING		6894	5.18	7.00	1.82		.1	9
3.05	14.50	Porphyritic Andesite Flow	Toodoggone volcanics, Lt gy. Local pk hem alt w/ rd hem in stringers at low CA's. Broken w/ or		95	20.00	22.00	2.00		.3	105
					96	28.00	30.00	2.00		.6	55
			surface ox - 18m		97		-31.50	1.50		.7	85
			5.0-7.0 Mod sil'n w/ rd hem stringers & rd hem		98		-33.00	1.50		.3	54
			patches (jasper?)		99		-34.50	1.50		.4	42
			Gradational		6900		-36.00	1.50		.8	90
14.50	31.50	Argillic Alt Porph And. Flow	Local wh arg alt - consists of wh clay on fract.		01		-37.00	1.00		.2	17
			Locally intense alt; v. soft, incomp sections.		02		-38.00	1.00		.1	10
			Minor rusty ox on fractures		03		-39.00	1.00		.4	27
			20.0-22.0 Mod intense arg alt'n		04		-40.00	1.00		.4	59
			28.0-30.0 FG py on broken surface - vuggy veins		05		-41.00	1.00		.2	36
			Gradational		06		-42.00	1.00		.4	48
31.50	65.93	Silicified Porph Andesite	Mod intense sil'n volcanic tex dec w/ inc sil'n.		07		-43.00	1.00		.3	54
					08		-44.50	1.50		.5	61
			31.50-37.50 mod sil'n wh clay on broken surface		09		-45.50	1.00		1.8	110
			37.50-63.0 Int sil'n w fine ba veining		10		-46.50	1.00		1.5	55

LACANA MINING CORPORATION DIAMOND DRILL RECORD LM-86-3 Hole 1. Page 2 of 3

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
31.50	65.93	Silicified Porphy Andesite	60-90°CA. Minor gyp veining 44.50-47.61 1-5% py as veinlets, coarse FG masses		6911	46.50	47.61	1.11		1.4	460
					12		-49.00	1.39		.3	8
			Trace cp, sp VFG ga-sp in qtz 42.61 Local bl-gy (amethystine?) silica as matrix		13		-50.00	1.00		.2	7
					14		-51.00	1.00		.3	300
			w/py gyp, ba stringers & patches. 60% CA contact w/rd-pk hem alt bx'd prophyry (dyke)		15		-52.00	1.00		.2	6
					16		-53.00	1.00		.1	7
			46.0 same as above 48.0-49.0 Local 40-60°CA ba veining		17		-54.00	1.00		.2	5
					18		-55.00	1.00		.1	83
			55.60 py on 30°CA fractures 57.20 Pk (dyke?) Minor wh clay, ba veining		19		-56.00	1.00		.4	14
					20		-57.00	1.00		.3	12
			59.0-63.0 Bx'd-tectonic(?) Mod sil'n 62.10 Ba vein @ 0°CA		21		-58.00	1.00		.7	8
					22		-59.00	1.00		.3	8
			63.0-65.93 mod sil'n Gradational		23		-60.00	1.00		.3	16
					24		-61.00	1.00		.1	13
65.93	72.0	Silicified Argillic Alt	Local minor sil'n, arg alt. abund gyp veining bx'n minor py		25		-62.00	1.00		.2	15
					26		-63.00	1.00		.4	40
		Andesite	67.10 Ba veins w/ coarse xtls & local py 67.40-67.60 Int sil'n		27		-64.00	1.00		.4	55
					28		-65.93	1.93		.3	33
			67.0-69.0 Arg alt'n; dec to 72.00 71.03 Red hem stringers		29		-67.00	1.07		3.5	280
					30		-68.00	1.00		.9	89
			Gradational		31		-70.00	2.00		.2	28
					32	72.00	-74.00	2.00		.3	44
72.00	78.00	Silicified Andesite	Mod-intense sil'n w/ local py, ba stringers & gyp 76.50-76.80 Sil'd bx		33		-75.00	1.00		.5	54
					34		-76.00	1.00		.4	55
			77.0-78.00 Abund wh & gn gyp Gradational		35		-77.00	1.00		.4	53
					36		-78.00	1.00		.4	46
78.00	84.45	Porphyritic Andesite Flow	Lt gy w/ wh clay on fractures, gyp vugs & veins 80.00-84.45 Minor clay, gyp. Gradational		37		-80.00	2.00		.5	24
					38	84.45	- 86.00	1.55		.1	14

LM-86-3

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole 4. Page 3 of 3

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
84.45	117.20	Silicified Andesite	Intense vuggy. Local py on fractures. Minor local gyp veinlets		6939	86.00	88.00	2.00		.4	57
					40		-90.00	2.00		.3	36
			84.45-86.00 mod sil'n		41		-92.00	2.00		.4	50
			101.00 V vuggy w/ qtz & gyp xtls		42		-94.00	2.00		.5	54
			104.00 " " "		43		-96.00	2.00		.4	74
			107.0-108.0 Wk sil'n		44		-98.00	2.00		.1	9
			112.0-117.20 Wk sil'n w/ 5-50 cm zones of intense sil'n. Some at 90°CA.		45		-100.00	2.00		.2	6
					46		-102.00	2.00		.9	12
			Gradational		47		-104.00	2.00		.3	20
					48		-106.00	2.00		.8	44
117.20	122.53	Porphyritic Andesite Flow	Local arg alt.		49		-108.00	2.00		.8	74
			119.0 10 cm of mass soft wh clay		50		-110.00	2.00		1.2	63
			END OF HOLE		51		-112.00	2.00		.2	11
					52		-114.00	2.00		1.1	53
					53		-116.00	2.00		.7	33
					54		-118.00	2.00		.8	82
			60-90% Recovery Throughout								

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole # LM-86-4 Page 1 of 2

Property: MTSANTAN Location PATTI ZONE Down Hole Surveys ETCH Drilled By: J.T. THOMAS

Area (Map #): 94-E/6W Grid: Depth: - Az: ° Dip: ° From-To: Aug 26 /86

Claim #: 107.29 ° -45 ° Size(s): BQ

M.D./County: LIARD M.D. Length: 107.29 (Units: m) ° ° Logged By: R.J. JOHNSTON

Province: B.C. Azimuth: 180 ° Dip Collar: -45 ° ° ° Signed:

Remarks:

INTERVAL FROM	INTERVAL TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL FROM	INTERVAL TO	SAMPLE LENGTH	ASSAYS Au oz/T	ASSAYS Ag	ASSAYS Au ppb
0	3.05		CASING		6562	3.05	5.00	1.95		1.2	94
			Entire hole is v badly broken, with abund fractures running parallel to hole, much more than in other		63		-7.00	2.00		.9	61
					64		-9.00	2.00		1.2	250
			holes. Poss a major fracture system running this direction		65		-11.00	2.00		.9	40
					66		-13.00	2.00		.6	33
3.05	33.65	Silicified Andesite	Porph and flow. Intense sil'n w/ local ba veining Orange surface oxidation → 35m		67		-15.00	2.00		.4	27
					68		-17.00	2.00		.3	91
			3.05-13.0 mod sil'n		69		-20.00	3.00		1.0	210
			6.0 Abund ba veining 30°CA		70		-23.00	3.00		3.8	790
			15.0-21.0 pk dyke (?) less broken		71		-25.00	2.00		1.3	390
			21.0-23.5 Abund lim on fractures		72		-27.00	2.00		2.2	32
			27.0-29.0 Mod sil'n		73		-29.00	2.00		.4	11
			Gradational		74		-31.00	2.00		.1	13
33.65	37.50	Porph Andes. Flow	Lt gy Gradational		75		-32.00	1.00		1.0	317
					76		-33.65	1.65		.7	90
					77	37.50	39.00	1.50		2.6	64

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole 4.

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
37.50	86.90	Silicified Andesite	Intense sil'n, vuggy gy, pk. Local ba veins, ba vug fillings		6578	39.00	41.00	2.00		1.3	288
					79		43.00	2.00		1.4	9
			45.0-48.0 30°CA ba veins → 0.5 cm		80		45.00	2.00		.4	9
			46.39-46.55 Or, Ferricrete cemented crackle bx		81		46.39	1.39		.5	51
			65.55 wh clay - bleached fracture zone 20°CA		82		46.55	0.16		.3	8
			65-70 Local arg alt		83		48.00	1.45		.5	8
			Gradational		84		50.00	2.00		.4	220
					85		52.00	2.00		.1	890
86.90	107.29	Porphyritic Andesite Flow	Abund wh arg alt'n. Local mottled texture - 2-5mm		86		54.00	2.00		.3	3
			FG bk chl(?) patches & FG py in wh clay alt matrix		87		56.00	2.00		.5	520
			Gyp veining Minor local fractures w/ irradescent		88		58.00	2.00		.8	280
			mn staining		89		60.00	2.00	.062	.2	1850
			89.95-90.10 sil'n		90		62.00	2.00	.160	.5	5350
			90.10-92.03 10% recovery		91		64.00	2.00	.032	.9	1060
			104.0 wh arg alt - mottled textures		92		66.00	2.00		.8	55
					93		68.00	2.00		.2	23
					94		70.00	2.00		.8	50
			END OF HOLE		95		72.00	2.00		.4	22
					96		74.00	2.00		.5	15
					97		76.00	2.00		.5	16
			60-90% recovery throughout		98		78.00	2.00		.7	170
					99		80.00	2.00		.5	14
					6600		82.00	2.00		.5	4
					01		84.00	2.00		.3	5
					02		86.00	2.00		.3	3
					03		86.90	0.90		.4	4
					04		88.00	1.10		1.2	36
					05	89.95	90.10	0.25		.9	67
					06	103.00	105.00	2.00		.9	10

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole # LM-86-5 Page 1 of 3

Property: METSANTAN Location PATTI ZONE Down Hole Surveys ETCH Drilled By: J.T. THOMAS

Area (Map #): 94-E/6W Grid: Depth: - Az: ° Dip: ° From-To: Aug 28 1986

Claim #: 121.62 ° -48 ° Size(s): BQ

M.D./County: LIARD Length: 121.62 (Units: m) ° ° Logged By: R. J. JOHNSTON

Province: B.C. Azimuth: 225 ° Dip Collar: -45 ° ° ° Signed: R. J. [signature]

Remarks:

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
0	4.57		CASING		6855	4.57	5.50	1.93		.5	1
4.57	60.70	Porphyritic Andesite Flow	Toodoggone volcanics. Lt ty w/wh plag phenos. 1% FG diss py. Abund prop alt; salmon coloured hem		56	12.52	13.14	0.62		1.0	77
					57	18.00	19.00	1.00		.6	4
			w/local gn ep alt felds Surface ox→ 20m hem		58	21.00	23.00	2.00		.3	3
			4.80 10 cm of wk sil'n		59	55.00	55.65	0.65		.4	1
			12.52-13.14 wk sil'n		60	56.72	58.20	1.48		1.1	7
			16.0-32.0 prop alt		61		60.70	2.50		.8	63
			19.00 stringer zone sub-parallel core, of 2mm bl-gy silica veinlets		62		62.00	1.30		.7	210
					63		63.00	1.00		.4	80
			32.0-40.0 Or-bn alt'n (oxidation)		64		64.00	1.00		.1	25
			52.0-60.0 weak arg alt'n, locally intense & incomp		65		65.00	1.00		1.2	22
			55.40-55.90 Incomp, arg alt		66		66.00	1.00		.4	18
			56.72-58.20 " "		67		67.00	1.00		.2	7
			Gradational		68		68.00	1.00		.1	4
60.70	72.04	Silicified Andesite	Gy with pk dykes(?) Local ba veins. Minor VFG diss py. Local gyp veining		69		69.00	1.00		.1	5
					70		70.00	1.00		.2	3

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
60.70	72.04	Silicified Andesite	61.00 10° CA wh gyp vein - minor py 61.60 10° CA py stringers		6971 72	70.00	-71.00 -72.04	1.00 1.04		.1 .6	17 29
			62.55 1 cm vuggy wh ba vein parallel to core for 20 cm		73 74		-74.00 83.00-85.00	1.96 2.00		1.4 1.7	56 77
			63.50 Mass wh ba veins → 1 cm at various CA's 66.10 3 mm FG patches of py		75 76	87.00	-89.00 92.00-94.00	2.00 2.00		.1 .6	9 3
			67.00 Gn gyp veins 67.40 2 cm bx zone 45°CA(?) Ang pk sil'd clasts		77 78	98.29	-98.54 99.38-100.00	0.25 0.62		2.1 .4	9 40
			in dk gy sil'd matrix. VFG diss py. 69-70 vuggy sil'n		79 80		-102.00 102.50-104.24	2.00 1.74		.7 1.8	37 57
			Gradational		81 82		-107.29 -109.00	3.05 1.71		.8 2.7	36 32
72.04	92.50	Argillically Alt. Andesite	Soft pk & gy and. Locally v intense, incomp alt'n Lt gn gyp veins → 1 cm at various CA's		83 84		-110.00 -111.00	1.00 1.00		1.8 .4	39 15
			73.30 minor patchy mass py 86.00 minor gyp bx		85 86		-111.70 -113.06	0.70 1.36		1.4 3.6	54 19
			88.50 Local diss py on fractures Gradational		87 88		-114.00 -115.85	0.94 1.85		3.4 1.0	34 41
92.50	102.50	Porphyritic Andesite Flow	Lt gy Minor prop alt. Sil'd, gyp vein sections 93.0 gyp & py veining		89 90		-117.00 -118.00	1.15 1.00		1.1 1.7	33 64
			94.50 Incomp arg alt 98.00 2 cm mass py veins 50°CA(?)		91 92		-119.00 -120.00	1.00 1.00		1.3 1.8	35 24
			Gradational		93		-121.62	1.62		1.7	29
102.50	121.62	Silicified Andesite	Mod intense sil'n. Locally vuggy. Local pk (feldspar porph?) dykes.								
			104.24-107.29 10% recovery 111.70-113.06 wk sil'n								

LM-86-5

LACANA MINING CORPORATION DIAMOND DRILL RECORD Hole 1. Page 3 of 3

INTERVAL metres FROM	TO	ROCK TYPE	DESCRIPTION	PLANAR FEATURE ANGLE°	SAMPLE #	INTERVAL metres FROM	TO	SAMPLE LENGTH	ASSAYS Au oz/T	Ag ppm	Au ppb
102.50	121.62	Silicified Andesite	109.50 slickensides on core 20°CA, 70° rake 114.0-115.85 wk sil'n								
			118.50 1 cm wh ba vein 90°CA								
			END OF HOLE								

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

DATE RECEIVED: SEPT 8 1986

DATE REPORT MAILED: 13 Sept/86

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: CORE AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: B. Jaang for DEAN TOYE. CERTIFIED B.C. ASSAYER.

LACANA MINING PROJECT-TOOD FILE# 86-2525

SAMPLE#	Ag PPM	Au* PPB
6551	.1	15
6552	.2	28
6553	.5	52
6554	.8	97
6555	.3	54
6556	.5	57
6557	.4	91
6558	.4	86
6559	.3	70
6560	.5	108
6561	.7	131
6562	1.2	94
6563	.9	61
6564	1.2	250
6565	.9	40
6566	.6	33
6567	.4	27
6568	.3	91
6569	1.0	210
6570	3.8	790
6571	1.3	390
6572	2.2	32
6573	.4	11
6574	.1	13
6575	1.0	317
6576	.7	90
6577	2.6	64
6578	1.3	288
6579	1.4	9
6580	.4	9
6581	.5	51
6582	.3	8
6583	.5	8
6584	.4	220
6585	.1	890
6586	.3	3
STD C/AU-R	7.3	495

SAMPLE#	Ag PPM	Au* PPB	Au** OZ/T
6587	.5	520	-
6588	.8	280	-
6589	.2	1850	.062
6590	.5	5350	.160
6591	.9	1060	.032
6592	.8	55	-
6593	.2	23	-
6594	.8	50	-
6595	.4	22	-
6596	.5	15	-
6597	.5	16	-
6598	.7	170	-
6599	.5	14	-
6600	.5	4	-
6601	.3	5	-
6602	.3	3	-
6603	.4	4	-
6604	1.2	36	-
6605	.9	67	-
6606	.9	10	-
6868	.1	4	-
6869	.1	5	-
6870	.2	3	-
6894	.1	9	-
6895	.3	105	-
6896	.6	55	-
6897	.7	85	-
6898	.3	54	-
6899	.4	42	-
6900	.8	90	-
6912	.3	8	-
6913	.2	7	-
6914	.3	300	-
6915	.2	6	-
6916	.1	7	-
6917	.2	5	-
STD C/AU-R	7.3	515	-

SAMPLE#	Ag PPM	Au* PPB
6918	.1	83
6919	.4	14
6920	.3	12
6921	.7	8
6922	.3	8
6923	.3	16
6924	.1	13
6925	.2	15
6926	.4	40
6927	.4	55
6928	.3	33
6929	3.5	280
6930	.9	89
6931	.2	28
6932	.3	44
6933	.5	54
6934	.4	55
6935	.4	53
6936	.4	46
6937	.5	24
6938	.1	14
6939	.4	57
6940	.3	36
6941	.4	50
6942	.5	54
6943	.4	74
6944	.1	9
6945	.2	6
6946	.9	12
6947	.3	20
6948	.8	44
6949	.8	74
6950	1.2	63
6951	.2	11
6952	1.1	57
6953	.7	33
STD C/AU-R	7.2	510

SAMPLE#	Ag PPM	Au* PPB
6954	.8	82
6955	.2	3
6956	1.0	66
6957	.6	83
6958	.3	78
6959	.1	47
6960	.4	61
6961	.2	44
6962	.2	33
6963	.5	32
6964	1.2	43
6965	1.1	160
6966	.3	107
6967	.1	34
6968	.1	48
6969	.1	16
6970	.1	21
6971	.4	36
6972	3.5	32
6973	2.3	5
6974	1.0	8
6975	.6	19
6976	2.1	20
6977	2.3	19
6978	1.2	27
6979	.7	28
6980	.3	39
6981	.7	35
6982	1.3	62
6983	.5	21
6984	.6	23
6985	.9	64
6986	.9	66
6987	.9	160
6988	2.1	150
6989	.4	34
STD C/AU-R	7.3	485

SAMPLE#	Ag PPM	Au* PPB
6990	2.9	30
6991	.8	71
6992	.4	30
6993	1.4	200
6994	.8	40
6995	.6	45
6996	.6	107
6997	1.4	103
6998	4.1	99
6999	.3	21
7000	.1	28
STD C/AU-R	7.2	520

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
6901	13	34	8	1	.2	1	1	24	.63	16	5	ND	1	26	1	7	2	13	.01	.006	2	4	.01	131	.01	3	.27	.01	.01	1	17
6902	8	20	5	1	.1	1	1	32	.39	3	5	ND	1	31	1	3	2	12	.01	.007	2	4	.01	326	.01	2	.32	.01	.01	1	10
6903	29	41	6	1	.4	2	1	39	.53	15	5	ND	1	19	1	4	2	8	.01	.001	2	4	.01	190	.01	2	.15	.01	.01	1	27
6904	18	22	5	1	.4	2	1	41	.71	15	5	ND	1	16	1	2	2	10	.01	.001	2	6	.01	120	.01	2	.24	.01	.01	1	59
6905	31	46	5	1	.2	1	1	36	.57	4	5	ND	1	20	1	3	2	10	.01	.001	2	4	.01	148	.01	2	.28	.01	.01	1	36
6906	37	61	8	1	.4	2	2	23	1.31	8	5	ND	1	24	1	4	2	13	.01	.002	2	2	.01	25	.01	2	.33	.01	.01	1	48
6907	21	50	8	1	.3	1	3	21	1.08	8	5	ND	1	16	1	6	2	11	.01	.001	2	3	.01	48	.01	2	.29	.01	.01	1	54
6908	27	94	4	1	.5	2	3	23	1.84	83	5	ND	1	16	1	11	2	12	.01	.002	2	1	.01	17	.01	2	.30	.01	.01	1	61
6909	48	137	15	2	1.0	3	8	69	4.98	114	5	ND	1	23	1	16	3	14	.01	.003	2	4	.01	6	.01	2	.22	.01	.04	1	110
6910	31	241	15	8	1.5	4	8	65	6.96	264	5	ND	1	6	1	60	2	5	.01	.001	2	1	.01	4	.01	2	.05	.01	.02	1	55
6911	64	230	16	5	1.4	3	7	110	11.81	414	5	ND	1	4	1	33	2	3	.01	.001	8	3	.01	3	.01	12	.01	.02	.01	1	460
STD C/AU-R	20	59	37	137	7.2	70	29	1108	3.98	40	17	7	36	49	18	15	19	69	.48	.105	38	59	.88	182	.08	35	1.73	.09	.14	12	490

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

DATE RECEIVED: SEPT 5 1986

DATE REPORT MAILED: Sept. 13/86

GEOCHEMICAL/ASSAY CERTIFICATE

.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: CORE AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: D. Toye .DEAN TOYE. CERTIFIED B.C. ASSAYER.

LACANA MINING PROJECT-TOOD FILE # 86-2500 PAGE 1

SAMPLE#	Ag PPM	Au* PPB	Au** OZ/T
6801	.2	27	-
6802	.5	42	-
6803	.4	43	-
6804	.7	20	-
6805	.3	12	-
6806	.4	28	-
6807	.4	32	-
6808	.3	18	-
6809	.3	42	-
6810	.2	18	-
6811	.1	3	-
6812	.2	5	-
6813	1.0	1070	.046
6814	.7	1620	.052
6815	1.8	61	-
6816	1.2	10	-
6817	1.0	14	-
6818	.9	6	-
6819	.8	3	-
6820	.3	1	-
6821	2.0	12	-
6822	3.4	2	-
6823	2.6	2	-
6824	2.1	4	-
6825	1.3	3	-
6826	2.3	6	-
6827	.6	10	-
6828	.4	180	-
6829	.6	52	-
6830	.7	4	-
6831	.9	37	-
6832	.3	4	-
6833	.9	1	-
6834	2.2	1	-
6835	1.9	68	-
6836	1.6	34	-
STD C/AU-R	7.0	520	-

SAMPLE#	Ag PPM	Au* PPB	Au** OZ/T
6837	45.7	57	-
6838	23.1	15	-
6839	13.4	6	-
6840	22.4	5	-
6841	2.3	2	-
6842	4.5	1	-
6843	2.4	1	-
6844	6.2	1	-
6845	1.2	1	-
6846	4.6	190	-
6847	16.5	330	-
6848	1.7	10	-
6849	1.0	114	-
6850	.6	28	-
6851	1.2	63	-
6852	1.2	250	-
6853	9.7	6890	.192
6854	8.3	420	-
STD C/AU-0.5	7.2	495	-

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: CORE AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 5 1986 DATE REPORT MAILED: Sept 11/86 ASSAYER. D. Toye. DEAN TOYE, CERTIFIED B.C. ASSAYER.

LACANA MINING CORPORATION PROJECT = TOOD FILE # 86-2501 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
6855	1	35	114	285	.5	7	7	544	4.54	114	5	ND	4	7	2	9	3	64	.16	.094	15	6	.21	71	.01	3	.26	.02	.17	1	1
6856	4	103	362	33	1.0	7	7	89	3.54	123	5	ND	2	13	1	5	4	13	.04	.034	9	1	.03	18	.01	4	.18	.02	.18	1	77
6857	1	87	30	136	.6	10	12	1713	4.33	195	5	ND	2	35	1	6	2	63	.36	.102	16	8	1.24	12	.01	3	.38	.04	.16	1	4
6858	1	72	21	130	.3	10	10	1902	4.01	79	5	ND	4	12	1	8	2	74	.72	.099	16	10	1.42	27	.01	4	.38	.04	.17	1	3
6859	1	10	20	122	.4	7	13	2024	5.99	95	6	ND	3	6	1	8	2	46	.26	.100	12	3	.45	11	.01	3	.34	.02	.14	1	1
6860	4	27	78	38	1.1	9	14	116	3.98	231	5	ND	2	14	1	9	4	23	.22	.070	2	1	.10	11	.01	4	.43	.02	.23	1	7
6861	27	128	42	8	.8	5	9	22	3.79	107	5	ND	1	24	1	17	4	11	.01	.013	2	1	.01	8	.01	2	.31	.01	.02	1	63
6862	27	65	12	2	.7	3	8	36	3.71	49	5	ND	1	19	1	17	5	11	.01	.004	4	1	.01	8	.01	3	.18	.01	.01	1	210
6863	26	33	7	3	.4	3	3	30	1.08	36	5	ND	1	45	1	8	3	7	.01	.005	2	4	.01	26	.01	2	.22	.01	.01	1	90
6864	15	22	3	3	.1	3	2	42	.48	10	5	ND	1	39	1	7	2	11	.01	.003	2	4	.01	256	.01	2	.42	.01	.01	2	25
6865	27	493	11	37	1.2	3	5	11	3.22	164	5	ND	1	24	1	133	2	11	.01	.006	2	2	.01	11	.01	2	.35	.01	.01	2	22
6866	14	157	7	6	.4	2	2	27	.85	54	5	ND	1	30	1	41	2	10	.01	.003	2	2	.01	80	.01	2	.35	.01	.01	1	18
6867	17	186	41	14	.2	2	2	17	1.15	65	5	ND	1	50	1	65	2	14	.01	.004	2	4	.01	38	.01	2	.50	.01	.01	1	7
6871	11	57	57	2	.1	3	2	22	.97	4	5	ND	1	62	1	10	2	10	.01	.009	2	3	.01	68	.01	2	.37	.01	.01	1	17
6872	17	265	66	16	.6	4	5	28	1.15	38	5	ND	1	48	1	87	2	11	.01	.004	2	4	.01	66	.01	6	.37	.01	.01	1	29
6873	11	565	173	34	1.4	5	12	16	1.95	117	5	ND	1	35	1	186	4	17	.01	.004	2	6	.01	37	.01	5	.35	.01	.01	1	56
6874	4	45	31	2	1.7	4	17	24	2.21	11	5	ND	1	33	1	10	3	11	.01	.004	3	2	.01	17	.01	3	.28	.01	.01	1	77
6875	3	56	7	1	.1	1	2	9	.84	7	5	ND	1	76	1	5	2	12	.01	.012	2	1	.01	84	.01	2	.40	.01	.01	1	9
6876	6	113	40	3	.6	3	6	6	4.00	31	5	ND	1	66	1	27	3	14	.01	.012	3	1	.01	7	.01	4	.41	.01	.02	2	3
6877	6	44	36	1	2.1	3	18	15	11.36	73	7	ND	2	38	1	11	4	12	.01	.002	3	1	.01	3	.01	2	.29	.02	.01	1	9
6878	13	56	11	1	.4	3	3	21	1.23	27	5	ND	1	21	1	8	3	8	.01	.001	2	1	.01	51	.01	2	.19	.01	.01	1	40
6879	9	58	10	1	.7	4	6	37	1.32	9	5	ND	1	25	1	7	4	10	.01	.001	2	4	.01	27	.01	2	.27	.01	.01	1	37
6880	12	55	24	2	1.8	5	12	85	1.45	9	5	ND	1	16	1	7	5	8	.01	.003	2	5	.01	39	.01	2	.20	.01	.01	1	57
6881	32	91	34	1	.8	1	5	15	6.09	62	5	ND	1	23	1	11	7	16	.01	.003	2	1	.01	7	.01	5	.37	.01	.01	1	36
6882	10	326	38	18	2.7	2	4	14	2.76	91	5	ND	1	27	1	91	5	15	.01	.003	3	2	.01	26	.01	3	.41	.01	.01	1	32
6883	19	171	28	9	1.8	2	5	18	3.04	49	5	ND	1	19	1	53	6	12	.01	.001	2	1	.01	13	.01	5	.32	.01	.01	1	39
6884	9	36	6	1	.4	5	2	124	1.22	4	5	ND	1	6	1	7	3	4	.01	.001	2	5	.01	50	.01	2	.02	.01	.01	1	15
6885	15	42	11	1	1.4	6	4	33	2.58	22	5	ND	1	4	1	13	6	3	.01	.001	2	9	.01	11	.01	2	.03	.01	.01	1	54
6886	12	120	57	3	3.6	5	16	52	3.72	19	5	ND	1	42	1	18	7	19	.01	.005	2	1	.01	9	.01	2	.46	.01	.01	1	19
6887	18	108	69	2	3.4	6	17	46	3.14	6	6	ND	2	42	1	13	7	13	.01	.006	2	1	.01	11	.01	2	.36	.01	.01	2	34
6888	15	111	86	1	1.0	3	4	12	1.60	14	5	ND	1	63	1	6	3	19	.01	.012	3	4	.01	26	.01	2	.50	.01	.01	1	41
6889	16	80	33	1	1.1	3	5	28	1.80	9	5	ND	1	34	1	8	3	11	.01	.006	2	3	.01	18	.01	2	.31	.01	.01	1	33
6890	10	53	22	1	1.7	4	4	25	2.34	104	6	ND	1	33	1	4	6	7	.01	.005	3	4	.01	11	.01	2	.19	.01	.01	1	64
6891	6	42	15	1	1.3	5	3	76	2.65	50	5	ND	1	54	1	6	7	6	.01	.003	2	6	.01	9	.01	3	.19	.01	.01	1	35
6892	6	34	10	1	1.8	5	4	72	2.48	82	5	ND	1	9	1	5	7	2	.01	.001	2	5	.01	11	.01	2	.01	.01	.01	1	24
6893	21	56	17	1	1.7	4	5	59	5.27	181	7	ND	1	11	1	9	10	9	.01	.002	3	4	.01	5	.01	5	.02	.01	.01	1	29
STD C/AU-0.5	20	58	37	138	6.9	73	30	1161	3.82	41	15	8	37	52	19	15	19	72	.46	.110	40	61	.84	183	.09	35	1.63	.10	.14	12	515

APPENDIX V

APPENDIX V

STATEMENT OF QUALIFICATIONS

I, ROBERT J. JOHNSTON of the City of Vancouver, B.C. do hereby certify that:

1. I am a graduate of the University of Saskatchewan with a B.Sc in Geological Services, 1982.

2. I am presently employed as a geologist with Lacana Mining Corporation of 312 - 409 Granville St., Vancouver, B.C.

3. I have practiced my profession with various mining companies in B.C., Yukon, Northwest Territories and Ontario during fields seasons since 1976.

4. I personally oversaw the project on which this report is based.

DATED at Vancouver, B.C. this 27 day of NOVEMBER 1986.

APPENDIX IV

DRILL CORE ANALYSES

27 500 N

19100E

19200E

19400E

SOUTH BOUNDARY AL 6 CLAIM (ENERGEX) — SURVEYED

A2/A5 boulders

A3/A2 boulders

mixed talus

A2/A5

A5A

A2

A5A

A5A

A5A

27400 N

A7

A5/A2

A78

A2/A5

A7

A5

A5

A1?

A1?

A5

talus

A5

A2

A5

A58

A2/A5 talus / felsenmeer

A7

A7A

A7

A2

A58

A6

A7

A5/A2

A2

A2/A7

27300 N

27200 N

A5/A2

A5/A2

A2

A5

A5A

A2

A2

A2

A2

A2

A2

A2

A3

fresh talus

A5A

talus

A2

LM 86-5
-50°
121.62m

A7

A2

fresh

fresh porphyry A3

A2

A2

A2

A2

fresh to A3 feldspar - biotite porphyry

A2

A2

A5A

A2

fresh to A3

talus

LM 86-2
-45°
124.97m

A5A

LM 86-3
-45°, 122.53m

A2

LM 86-4
-45°, 107.29m

106

80

095

A5A/B

Metsantan Creek

LIMIT OF ALTERATION ?

LM86-1
-45°
139.29m

27100N

A5

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,345

LEGEND

- SUBCROP
- OUTCROP
- FRACTURE : VERTICAL, INCLINED
- FAULT

A7	SILICIFICATION WITH PYRITE
A5	SILICIFICATION
A5A	" WITH FRACTURES OR VUGS
A5B	" , MASSIVE
A3	PROPYLITIC ALTERATION
A2	ARGILLIC "
A1	SILICIFICATION — ALUNITIZATION

Geology after Energex Minerals Ltd., Nov. 1985

LACANA

CONVENTURES LIMITED
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

METSANTAN PROPERTY

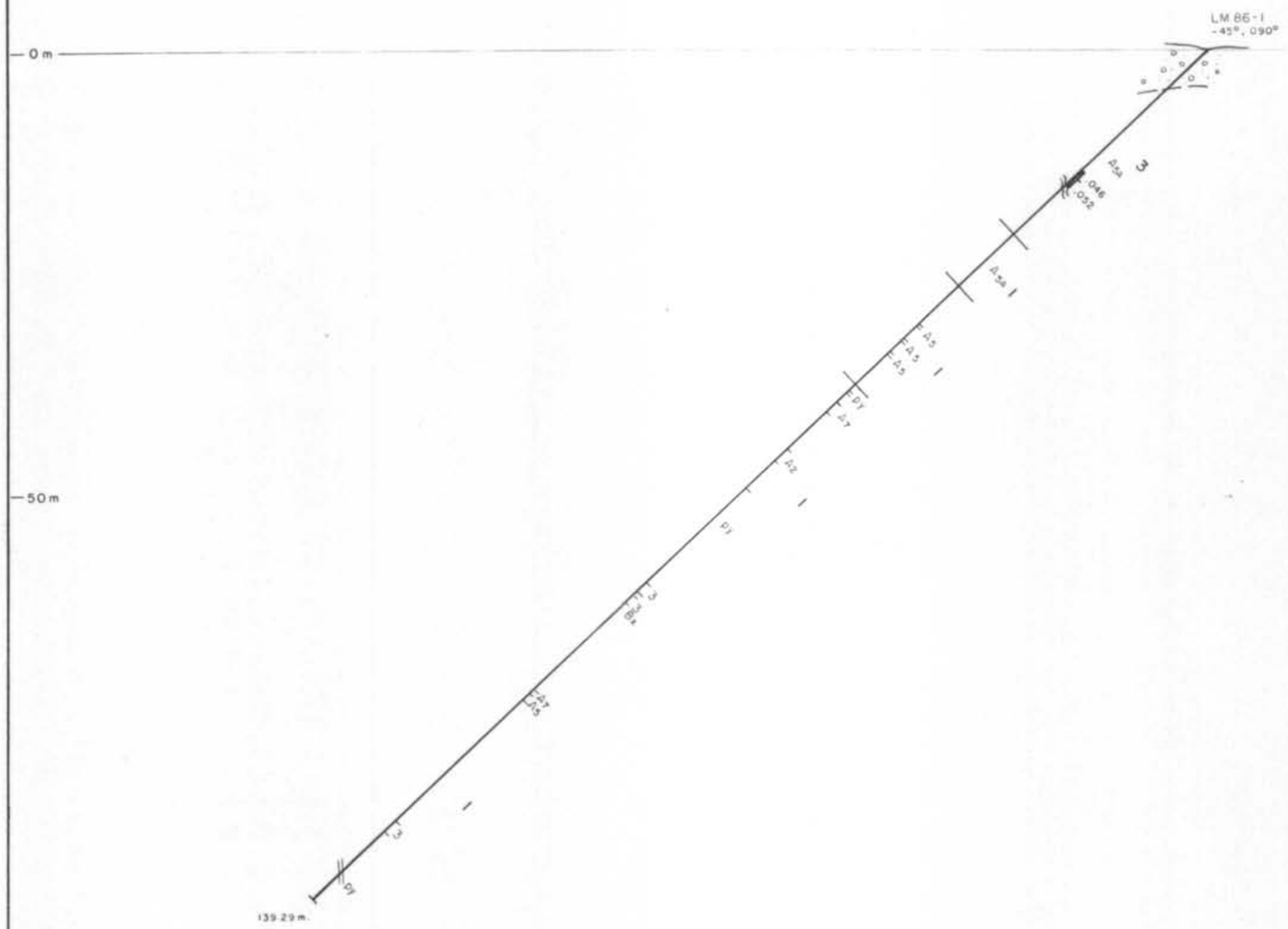
DRILL HOLE PLAN WITH GEOLOGY

PATTI ZONE

0 20 40 60 METRES

PREPARED BY	SCALE	DATE	N.T.S.	FIGURE
D.J.	1:1000	SEPT 1986	94E-6W	5

CHONG



LEGEND

3	Feldspar Porphyry Dyke
2	Massive Andesite Flow
1	Porphyritic Andesite Flow
A_7	Silicification with pyrite
A_5	"
A_{5A}	Vuggy silicification
A_3	Propylitic alteration
A_2	Argillic alteration
py	Strong pyrite
cp	Chalcopyrite
hem	Hematite
ba	Barite
ga	Galena
sp	Sphalerite
.046	Intersection oz Au/ton
	Fault

LACANA

CONVENTURES LIMITED
MURPHY OIL COMPANY LTD
LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

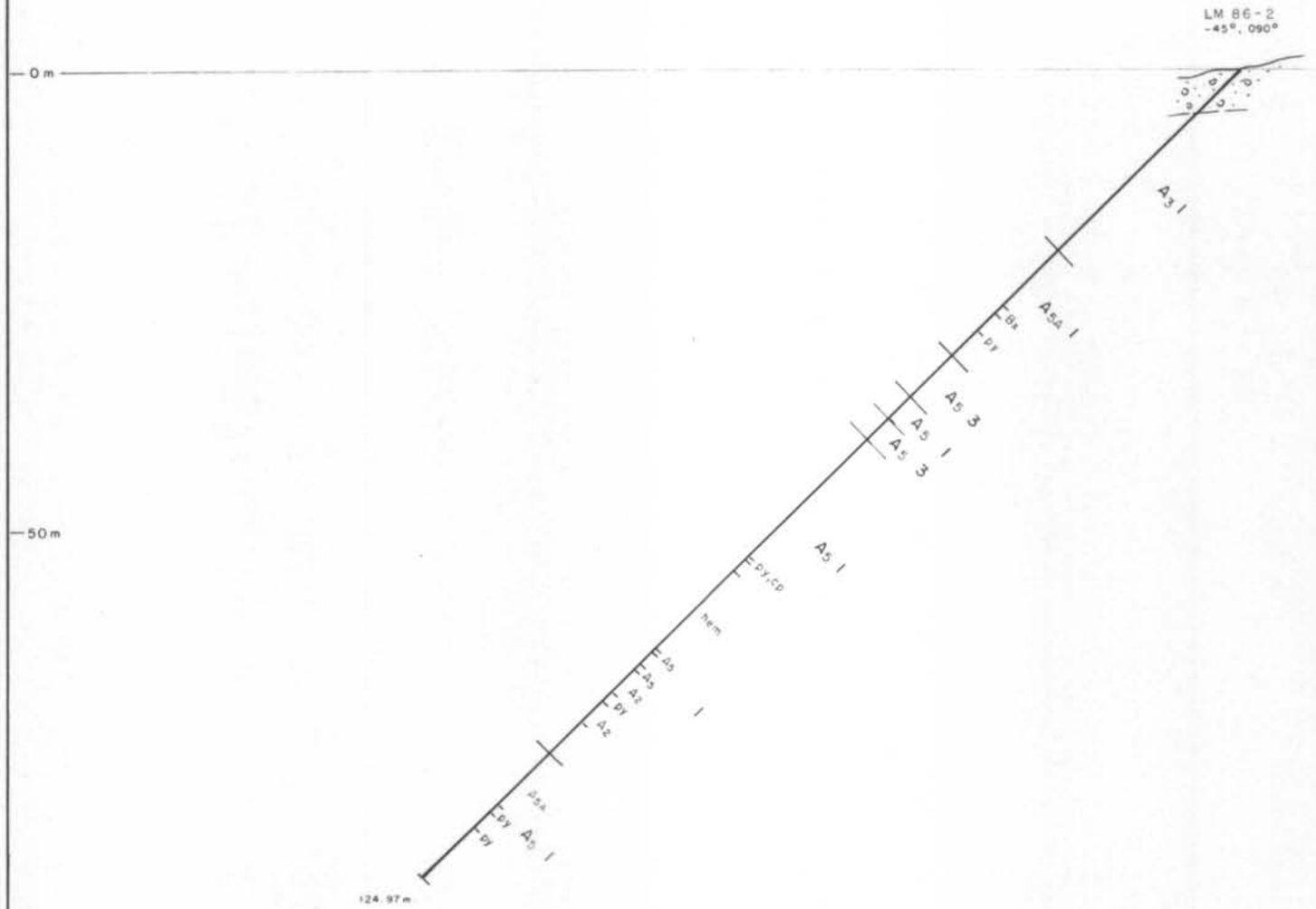
METSANTAN PROJECT

SECTION LM 86-1

0 10 20 30Metres

R.J.	1:500	NOV 1986	92E-6W	6

CHONG



LEGEND

3	Feldspar Porphyry Dyke
2	Massive Andesite Flow
1	Porphyritic Andesite Flow
A_7	Silicification with pyrite
A_5	"
A_{5A}	Vuggy silicification
A_3	Propylitic alteration
A_2	Argillic alteration
py	Strong pyrite
cp	Chalcopyrite
hem	Hematite
ba	Barite
ga	Galena
sp	Sphalerite
0.046	Intersection oz Au/ton
	Fault
ba veining	

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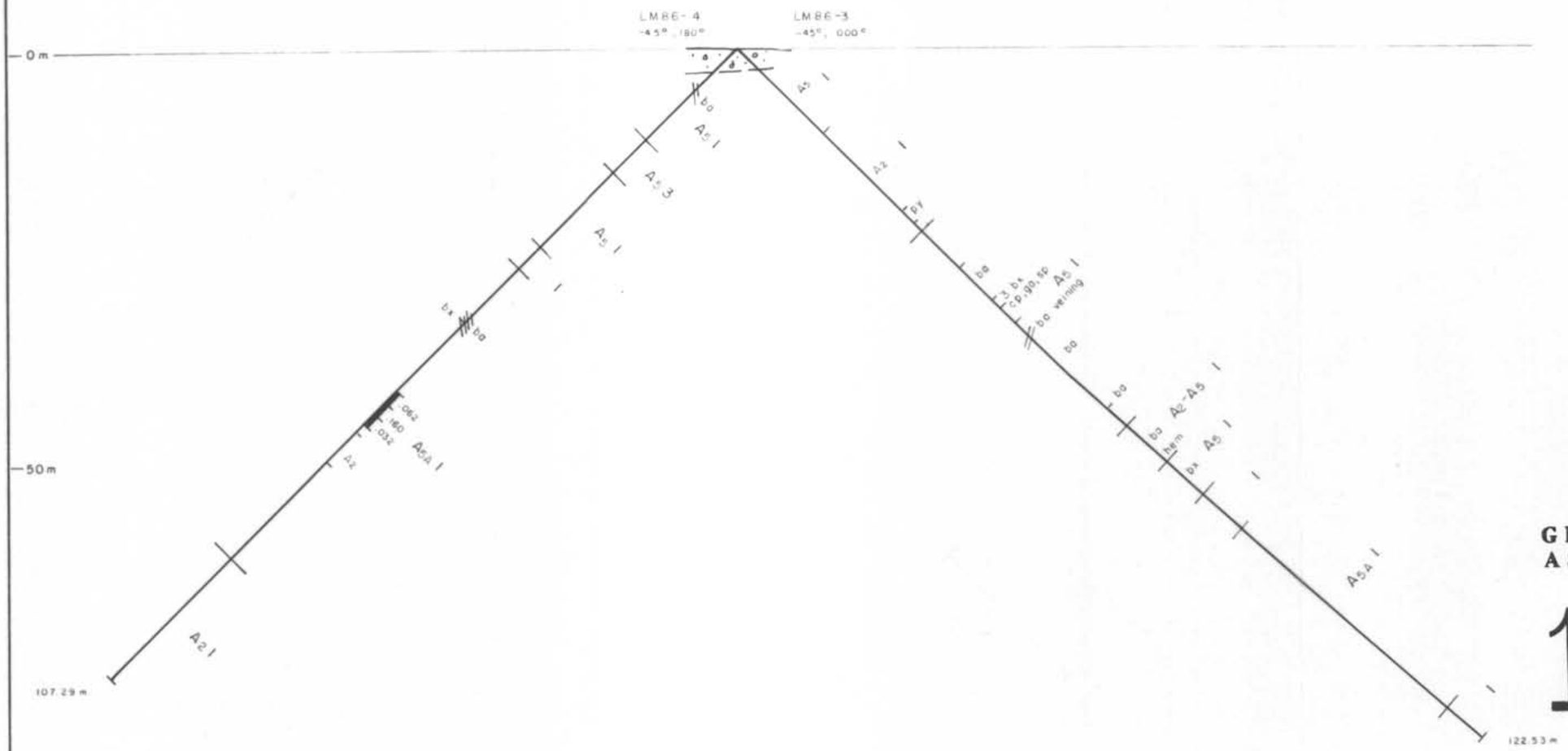
METSANTAN PROJECT

SECTION LM86-2

0 10 20 30Metres

R.J.	1:500	NOV 1986	92E-6W	7

CHONG



LEGEND

3	Feldspar Porphyry Dyke
2	Massive Andesite Flow
1	Porphyritic Andesite Flow
A_7	Silicification with pyrite
A_5	"
A_{5A}	Vuggy silicification
A_3	Propylitic alteration
A_2	Argillic alteration
py	Strong pyrite
cp	Chalcopyrite
hem	Hematite
ba	Barite
ga	Galena
sp	Sphalerite
.046	Intersection oz Au/ton
	Fault
ba veining	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,345

LACANA
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LACANA MINING CORPORATION

CANADIAN MINERALS JOINT VENTURE

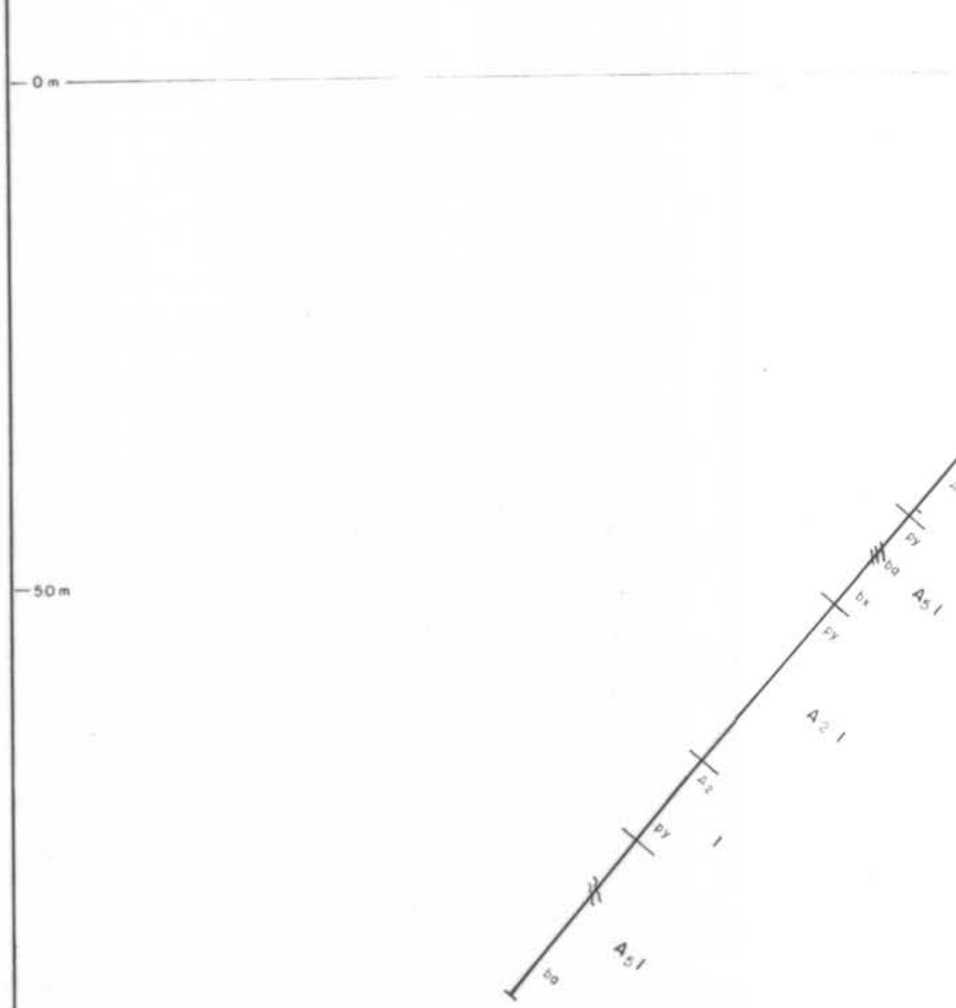
METSANTAN PROJECT

SECTION LM86-3,4

0 10 20 30Metres

R.J.	1:500	NOV. 1986	92E-6W	8

CHONG



LEGEND

3	Feldspar Porphyry Dyke
2	Massive Andesite Flow
1	Porphyritic Andesite Flow
A_7	Silicification with pyrite
A_5	"
A_{5A}	Vuggy silicification
A_3	Propylitic alteration
A_2	Argillic alteration
py	Strong pyrite
cp	Chalcopyrite
hem	Hematite
ba	Barite
ga	Galena
sp	Sphalerite
0.4g	Intersection oz Au/ton
	Fault

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,345

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CANADIAN MINERALS JOINT VENTURE

METSANTAN PROJECT

SECTION LM86-5

0 10 20 30Metres

R.J.	1:500	NOV 1986	92E-6W	9

CHONG