

molybdenum

673693

Mart Mining Co. Ltd.
Vancouver, B.C.

Summary Report

BELL CLAIM GROUP

DIAMOND DRILLING, 1968
Endako, B.C.

December 7, 1968

Robert S. Adamson

Dolmage-Campbell & Associates Ltd.

Vancouver, Canada

INTRODUCTION

From October 18, 1968 until November 12, 1968 Dolmage-Campbell & Associates Ltd., consulting geological and mining engineers, supervised a diamond drill program on behalf of Mart Mining Co. Ltd. for that company's property near Endako, B.C. The program was reconnaissance in nature, designed to establish areas of sufficient molybdenum mineralization to justify additional drilling.

Location:

The Bell claim group, consisting of 19 full sized mineral claims and one fractional claim, is located southeast of and immediately adjacent to the molybdenum mine and plant of Endako Mines Ltd. The property lies approximately 5 miles south southwest of Endako, B.C. and a mile north of the east end of Francois Lake in the Omineca mining division.

History:

The claim group was staked in 1961 and subsequently optioned by Mart Mining Co. Ltd. During the period 1961-1964 a magnetometer survey, a geochemical grid survey, and a few short pack sack drill holes were drilled on locations based on anomalies from a geochemical survey. The diamond drilling indicated overburden depths to be in excess of 100 feet, in general substantially thickening progressively easterly on the property. It was concluded that the geochemical anomalies that were drilled were caused by float debris derived from glaciation of the Endako orebody to the west.

In the late Fall of 1968 it was decided by the company to drill 6 diamond drill holes south of the 1964 drill holes to explore the now-established eastward trend of the Endako orebody. The drill holes were located in such a way as to straddle the probable eastward projection of the Endako structure.

GEOLOGICAL SETTING

The Endako Mines orebody and the adjoining Bell Claim Group are located within the northwestern-trending Topley batholith. Topley intrusives are composed of differentiated granitic rocks of Jurassic Age ranging in composition from granite to diorite.

The Endako Mines molybdenum deposit occurs as molybdenum-bearing quartz veins, stringers, veinlets and seams in a fracture system derived from the intersection of northwest and eastwest faults. In general the quartz veining strikes east-west and dips steeply south but later northeast faults have stepped the orebody in an echelon fashion to develop a west northwest strike to the orebody.

The molybdenum mineralized fracturing occurs in sufficient density so that the zone which is reasonably close to the surface can be mined economically, from an open pit; the average ore grade being 0.19% MoS₂.

1968 DIAMOND DRILL RESULTS

During the present program six diamond drill holes with total footage of 1729 feet were drilled by Canadian Longyear Ltd. using NQ wireline equipment and heavy mud throughout. The initial four holes were drilled at -65° on a bearing of north 30° east with a view to investigating the area directly on strike and southeast of the orebody of Endako Mines Ltd. The fifth hole was vertical "stepout" hole also on the projected strike extension but a further 3000 feet southeast of the initial drill holes. Hole No. 6, drilled vertically, was located close to the common boundary of the Endako Mines Ltd. and the Bell Claim Group (see Figure 1).

The appended diamond drill hole logs contain the assay results relating to the molybdenum mineralization intersected. Excepting drill hole No. 4 only the visually higher grade sections of the core were cut and assayed.

Core recovery was excellent for all holes drilled. Overburden thicknesses ranged from 26 feet in drill hole No. 6 to 123 feet in hole No. 5, the farthest hole east.

No sections of molybdenum mineralization of a sufficient grade to indicate the presence of a large tonnage, low grade, near surface orebody were intersected. Drill holes #2 and 4 intersected lengths of 50 ft. and 150 ft., respectively, of very low grade molybdenum mineralization, (0.01-0.05% Mo), with a few isolated 5 ft. sections reaching as high as 0.15%. Drill hole #3 had a few scattered low grade sections. All of the remaining holes were too barren to warrant assaying.

CONCLUSIONS

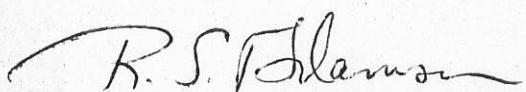
The recently concluded six hole reconnaissance diamond drill program failed to establish molybdenum mineralization of sufficient grade to indicate the presence of a large tonnage, near surface orebody.

Ten diamond drill holes drilled in 1964 and the six holes drilled during the present program, in general explored two areas; a northern one covered by Bell claims 2 and 6, and a central one covered by Bell claims 1, 3, 10 and 12. A "stepout" hole, 68-5, intersected granitic rock barren of molybdenum mineralization, in contrast to the remaining holes drilled which contained some mineralization, albeit weak. The "stepout" effectively nullifies the probability of an orebody occurring in the southeast corner of the claim block.

Therefore it remains that the sizeable areas remaining on the Bell Claim Group which have not been explored for a near surface, large tonnage, molybdenum deposit are in the general area to the northeast covered by Bell Claims 5, 7, 8, 9, 16 and 18 and the southern area covered by Bell Claims 11, 13, 15 and 19. Diamond drill exploration of these areas would be based largely on the general areal proximity of the Endako orebody and would therefore be classed as speculative exploration of the Bell Property.

No recommendations for further work are justified from the results of the 1968 diamond drilling.

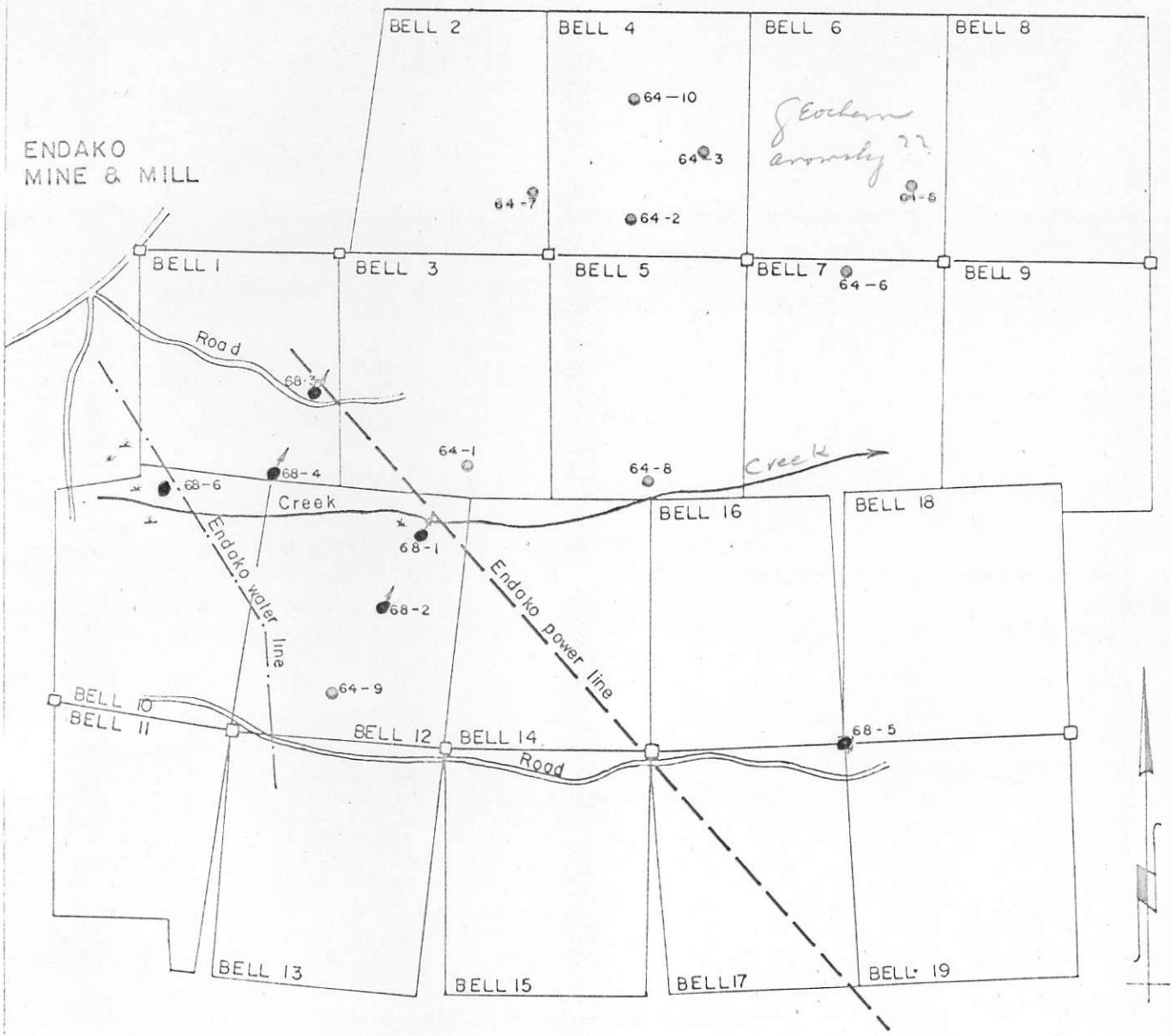
Respectfully submitted,



R.S. Adamson, P.Eng.
for Dolmage-Campbell & Associates Ltd.,
Vancouver, B.C.

APPENDIX

FIELD LOGS OF DIAMOND DRILL HOLES
(Incl. assay results)



LEGEND

68 - 3

CURRENT DRILL HOLE

64 - 5

PREVIOUS DRILL HOLE



CLAIM POST

DOLMAGE - CAMPBELL & ASSOCIATES
CONSULTANTS
VANCOUVER, CANADA

MART MINING CO. LTD.
VANCOUVER, B.C.

DIAMOND DRILLING

BELL CLAIMS

SCALE: 1" = 1000'

DEC. 1968

FIG. |

GRID _____

ENDAKO MINES LTD.

HOLE No. 1
SHEET No. 1 Of 7

LOCATION _____
ATE COLLARED Nov '68
ATE COMPLETED Nov '68

BEARING N
LENGTH 301'
DIP -65°

LATITUDE _____
DEPARTURE _____
ELEVATION _____

CORE SIZE NQ
SCALE OF LOG _____
REMARKS Bell Group

LOGGED BY AGL GDB
DATE 28-11-68

GRID _____

ENDAKO MINES LTD.

HOLE No. 1
SHEET No. 2 Of 4

GRID

ENDAKO MINES LTD.

HOLE No. 1
SHEET No. 3 Of 4

Qz.	Plag.	ROCK TYPES & ALTERATION					GRAPHIC LOG	MINERALIZATION & STRUCTURES					Remarks	Footage Blocks	Specific Gravity	RECOVERY		ASSAY RESULTS				Estimated Grade						
		K-Spar.	Mafic.	Accessories	Texture	Hardness		Rock Name/ Appearance	Rock Type Alteration Footage	< To Core Axis Structure	Width Of Vein	Mineralization/ Faulting(type)	Envelopes(type)						Weight in Grams		Sample Number		% MoS ₂					
		Core	Sludge	Core	Sludge	Core													Core	Sludge	Combined							
		W.K.	KAOLIN	ALTERED				mod. alt. 204-215'	215'		1/2" - hle	QZ2 Mo QZ2 Py		1/8" K'spar									.01					
		QUARTZ		MONZONITE						220																		
											2"	shear																
											1/2"	shear																
											1/8"	shear																
										230	hle	QZ2 Mo Py																
											1/2"	shear																
											40'	hle	QZ2 Mo															
											1/2"	shear																
										240	hle x 2	QZ2 Py (Mo) C2 shear																
											1/2"	shear																
											45" x 2	1" gg, hle	fault, QZ2															
											90'	hle	QZ2 Py Mo															
										250	1/2" gg	shear																
											25"	1/8" gg	shear															
											50"	1/8"	QZ2															
										260	60"	hle																
											70"	hle	Pof Mo QZ2 Mag (Mo)															
										270	80"	6" gg	shear															
											90	hle	QZ2 (Py) (Mo)															
										280	100"	1/4" gg	shear															
		MOD. TO INT.	KAOLIN	ALTERED	QUARTZ MONZONITE																		Tr.					

GRID _____

ENDAKO MINES LTD.

HOLE No. 1
SHEET No. 4 Of 4

GRID _____

ENDAKO MINES LTD.

HOLE No. 2
SHEET No. 1 Of _____

DATE COLLARED Nov '68
DATE COMPLETED Nov '68

BEARING N
LENGTH 296'
DIP -65°

LATITUDE _____
DEPARTURE _____
ELEVATION _____

CORE SIZE N Q
SCALE OF LOG _____
REMARKS Bell Group

LOGGED BY AGL + GDB
DATE 21-11-68

GRID _____

ENDAKO MINES LTD.

HOLE No. 2
SHEET No. 2 Of 4

GRID _____

ENDAKO MINES LTD.

HOLE No. 2
SHEET No. 3 OF 4

Qtz.	Plag.	K-Spar.	Mafic.	Accessories	Texture	Hardness	Rock Name/ Appearance	GRAPHIC LOG	MINERALIZATION & STRUCTURES						Remarks	Footage Blocks	Specific Gravity	RECOVERY		ASSAY RESULTS				Estimated Grade				
									Rock Type Alteration	Footage	< To Core Axis	Width of Vein	Mineralization/ Faulting(type)	Envelope(type)				Weight in Grams		Sample Number		% MoS ₂						
																		Core	Sludge	Core	Sludge	Core	Sludge					
							W K. Kaol. Alt'n.		70°	1/2"	hle	qtz. py. (Mo)													Tr.			
								210	80°	1/2"	hle	Qtz.																
							Intense Pitch 21 1/2° 21 1/4°		80°	1/8"	hle	Qtz. Py. Mo.													.01			
								210	80°	1/8"	hle	Qtz. (Py)																
									20°	1 1/2"	hle	Apl.																
									70°	1/4"	hle	Qtz. Py. (Mo)																
									220	80°	1/4"	hle	Qtz. Py. (Mo)															
									70°	1/2"	hle	Qtz. Py.													N.L.			
									230	90°	1/16"	hle	Qtz. Py. Mo. Cal. gg. hle Qtz. (Mo)															
									50°, 80°	1/16"	hle	Shear													.02			
									45°	1/10" gg																		
									80°	hle	Qtz														Tr.			
									90°	1/16"	hle	Qtz																
									90°	1/16"	hle	Qtz. Py. (\pm Limonite)																
									70°	1/32"	hle	Qtz. Py. (Mo)																
									250	30°	hle	Qtz. Py. (Mo)																
									20	hle	Qtz. Mo																	
									80°	1/32"	hle	Qtz. (Mo) Pol. (Mo)																
									80°	hle	Qtz. Py. (Mo)																	
									70	1/16"	hle	Qtz. Mo																
									60°	1/32" gg	hle	Qtz. Mo, Qtz. Py.																
									50°, 5°	1/16"	hle	Qtz. Mo, Qtz. Py.																
									270	60°, 5°	1/32" gg	hle	Qtz. Mo, Qtz. Py.													.10		

GRID _____

ENDAKO MINES LTD.

HOLE No. 2
SHEET No. 4 Of 4

GRID -

ENDAKO MINES LTD.

HOLE No. 3

SHEET No 1 of 4

LOCATION _____
ATE COLLARED Nov '68
ATE COMPLETED Nov '68

BEARING N
LENGTH 301'
DIP -65°

LATITUDE _____
DEPARTURE _____
ELEVATION _____

CORE SIZE NQ
SCALE OF LOG _____
REMARKS Bell Group

LOGGED BY A.G.L. + E.B.
DATE MAR. 25, 196

GRID _____

ENDAKO MINES LTD.

HOLE No. 3
SHEET No. 2 Of 4

GRID _____

ENDAKO MINES LTD.

HOLE No. 3
SHEET No. 3 Of 4

GRID

ENDAKO MINES LTD.

HOLE No. 3
SHEET No. 4 Of 4

GRID

ENDAKO MINES LTD.

HOLE No. 4
SHEET No. 1 OF 4

LOCATION _____
 DATE COLLARED Nov 1968
 DATE COMPLETED Nov 1968

BEARING N
 LENGTH 300'
 DIP -65°

LATITUDE _____
 DEPARTURE _____
 ELEVATION _____

CORE SIZE N Q
 SCALE OF LOG 10' = 1"
 REMARKS Bell Group Claims

LOGGED BY EK & AGL GDB
 DATE _____

Ort	Plag	K-Spar	Mafic	Accessories	Texture	Hardness	Rock Name/ Appearance	GRAPHIC LOG Rock Type Alteration Foliation Structure	MINERALIZATION &			STRUCTURES			Remarks	Foliation Angle	Specific Gravity	RECOVERY		ASSAY RESULTS									
									L to Core Axis	Width Of Vein	Mineralization/ Foliation type	Envelope type	Remarks	Weight in Grams	Sample Number	% MoS ₂		Estimated Grade											
																			Core		Sandus		Core	Sandus	Core		Sandus		
																			%	%	Combined	Estimated	Grade						
							overburden to																						
fresh	white mostly mottled but pink	pink biotite fresh black					46' Fresh to Weak KaoIn Alt Endako QM 6" gge at 49 1/2'	50'	55°		Shear				T slightly weathered	46										N/A			
35%	30%	30%	5%				1' Shear 54°-55°	55	80° 45°	1/8" to 1/16"	Qtz, py	" "		3/4" irreg K-Spar - not envelopes	55										0.3				
							6" gge 61 1/2-62'	60	60° 75°	1/8"	Qtz (Mo) Shear			irreg. K-Spar 1/8" to 1/2" py 1-2"	60											0.4			
							6" Shear 70 1/2-71'	70	30° 60° 45° 60°	hle	Qtz, Mo Qtz, Mn Shear				66											0.4			
							6" Shear 73-74'	70	35°	hle	Qtz, Mn Shear				71										0.6				
							Int KaoIn. Alt QM	70	20° 35° 50° 65°	1/8" to 1/2"	Qtz, Mn X 2 Qtz, py (Mo) Qtz, Mn Shear				75 1/2											0.6			
							6" gge 78 1/2-79'	80	70° 10°	1/2"	Qtz, Mn Qtz, py, Mn				81	Core Split										0.6			
							Wk - Mod KaoIn. Alt Endako QM	80	70°	1/8"	gge, soft Mn(?)			81-82 broken core and gge.	87										0.3				
							6" Shear 88'	90	25° + 80°	6" + 1/4"	Slicked shear + Qtz Mn				94										0.1				
								100	50° 25° 10° 35°	1/32"	Qtz, py, mag				99														

GRID _____

ENDAKO MINES LTD.

HOLE No. 4
SHEET No. 2 Of 4

Qtz.	Plag.	ROCK TYPES & ALTERATION				GRAPHIC LOG	MINERALIZATION & STRUCTURES				RECOVERY	ASSAY RESULTS				Estimated Grade										
		K-Spar.	Mafic.	Accessories	Texture		Rock Name/ Appearance	Rock Type Alteration Footage Structure	< To Core Axis	Width Of vein	Mineralization/ Faulting(type)	Envelope(type)	Remarks	Weight in Grams		Sample Number		% MoS ₂								
														Core	Sludge	Core	Sludge									
														%	%	Core	Sludge	Combined								
		Wk - Mod (cont)																								
		Wk - Mod (cont)					Int Kaoln Alt Endako QM	101'	15°	1/8"	slicked fracture	Inc K-Spar over 4"	Inc K-Spar over 4"	105'	15°	1/8"	mag	Qtz mag py x2 ; Qtz mag, Mo, py	.01							

GRID

ENDAKO MINES LTD.

HOLE No. 4
SHEET No. 3 Of 4

GRID -

ENDAKO MINES LTD.

HOLE No. 4
SHEET No. 4 Of 4

GRID

ENDAKO MINES LTD.

HOLE No. 5

SHEET No. 1 Of 2

DATE COLLARED Nov '68
DATE COMPLETED Nov '68

BEARING N
LENGTH 229'
DIP -65°

ATTITUDE _____
DEPARTURE _____
ELEVATION _____

CORE SIZE N Q
SCALE OF LOG _____
REMARKS Bell Group C

LOGGED BY AGL + GDB
DATE 22 - 11 - 68

GRID

ENDAKO MINES LTD.

HOLE No. 5
SHEET No. 2 Of 2

Qtz.	Plag.	ROCK TYPES & ALTERATION				GRAPHIC LOG	MINERALIZATION & STRUCTURES			Remarks	RECOVERY		ASSAY RESULTS				Estimated Grade	
		K-Spar.	Mafic.	Accessories	Texture		Rock Name/ Appearance	Rock Type Alteration	Footage	Width Of Vein	Mineralization/ Faulting(type)	Envelope(type)	Footage Blocks	Specific Gravity	Weight in Grams	Sample Number	% MoS ₂	
		Core	Sludge	Core	Sludge		Core	Sludge	Core	Sludge	Core	Sludge	Core	Sludge	Core	Sludge	Combined	
							V. WK KAOLIN ALTERED ENDAKO QUARTZ MONZONITE 189'		10°	1"	Apl.							NIL
									25°	2" gg	Shear							
							190		35°	6" gg	Apl. - Shear							
							INTENSE KAOLIN ALTERED QUARTZ MONZONITE MOD. TO INT. 198'		20°	1/8" c"	QTZ Py Apl.							NIL
									35°	1/8"	Apl. Apl.							
							ALTERED QUARTZ MONZONITE MOD. KALIN 209'		40°	1" gg	Shear							NIL
									70°	1/8" gg	QTZ Py Shear	1" K'SPAR						
							Fault V. WK 217 1/2' - 218'		80°	1" gg + hle	Shear + hle crushed Py							NIL
							ALTERED Q.M. Fault 127'		90°	1" gg	Fault							NIL
									10°	1" gg	7.5" Shear							
									45°	2" gg	Fault							
							END OF HOLE 229'		73°	1" gg	Shear							
									70°	2" gg	Fault							
									230	1" gg								
										240'								
										250'								

GRID _____

ENDAKO MINES LTD.

HOLE No. 6
SHEET No. 1 Of 5

LOCATION _____
EYE COLLARED Nov '68
DATE COMPLETED Nov '68

BEARING N
LENGTH 300'
DIP - 65°

LATITUDE _____
DEPARTURE _____
ELEVATION _____

CORE SIZE NQ
SCALE OF LOG _____
REMARKS Bell Group

LOGGED BY AGL 9 GDB
DATE 27 - 11 - 68
Claims

GRID

ENDAKO MINES LTD.

HOLE No. 6
SHEET No. 2 Of 5

GRID _____

ENDAKO MINES LTD.

HOLE No. 6
SHEET No. 3 Of 5

GRID _____

ENDAKO MINES LTD.

HOLE No. 6
SHEET No. 4 Of 5

ROCK TYPES & ALTERATION								GRAPHIC LOG	MINERALIZATION & STRUCTURES	RECOVERY	ASSAY RESULTS														
Qtz.	Plagi.	K-Spar.	Mafic.	Accessories	Texture	Hardness	Rock Name/ Appearance				Core	Sludge	Core	Sludge	Estimated Grade										
											%	%	Core	Sludge											
		*					MOD. KAOLIN ALTERED QUARTZ MONZONITE	intense alt. 221 223	228		75°	3" gg	fault									.02			
							WK. MOD. KAOLIN ALTERED QUARTZ MONZONITE	intense alt. 235 238	240		75° 70° 80° 45° 70° 70°	1/16" gg 1" gg 1/8" gg	shear shear shear		2" K'spar								NIL		
								intense alt. 241 242	250		75° 70° 80°	1/8" gg	gr2 Mo shear										.01		
								intense alt. 245 248	260		75° 70° 80° 75°	1/16" gg 1/4" gg 1/16"	gr2 Mo gr2 Mo gr2 mag (Mo)		1/4" K'spar									.03	
									270		70°	1/4" gg	shear											NIL	
									280		75° 70° 80° 85°	1/2" x 3 1" h/c 1" h/c 1" h/c 1" h/c	gr2 mag x 3 shear gr2 Mo, Pol. Mo, Py Mo (Mo) gr2 Mo gr2 Mo		1/4" K'spar (so)										.05
								intense alt. 286 287	290		70° 45°	1/4" gg 1/4" gg	shear + gr2, cal. gr2 Mo shear											.02	

HOLE No. 6
SHEET No. 5 Of 5

GRID _____

ENDAKO MINES LTD.