GM 47942

DRILL HOLE RECORD, JOUVAL PROPERTY

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Drill Hole Record

Cominco

Property	JOUVAL	District	EASTERN	Hole No.	JV-88-12			Claim	388649-2		
Commenced	FEBRUARY 12, 1988	Location	VALRENNES TWP., QUEBEC	Tests at	125 m, 261 m	Hor. Comp.	185.0 m	T Brg.	035°		
Completed	FEBRUARY 17, 1988	Core Size	BQ	Corr. Dip	45°, 39°	Vert. Comp.	183.0 m	Collar Dip	-50°		
Co-ordinates	L 48W, 0+40N			True Brg.	035°	Logged by	DWM	Elev.			
Objective	To investigate two EM conductive anomalies for Au mineralization.			% Recov.	99%	Date	Feb. 19, 1988	Length	261 m		
								Hole No.		Sheet	

~~Feet~~/Metres From	To	Description	sample number	interval		Analysis Au (ppb)	WRA
0.0	22.5	Overburden (CASING PULLED)					
22.5	65.85	PLAGIOCLASE-PHYRIC METADACITE					
		Grey, moderately foliated to brecciform plagioclase-phyric metadacite.	11001	22.5	24.5	110	103 ppb / 7.7 m
		Bears between 3-10% medium to coarse grained, flattened and elongate to equant white	11002	24.5	26.0	105	
		plagioclase phenocrysts. Contains very common irregular septate patches and lenses	11003	26.0	28.2	95	
		of black argillitic material, in the form of thin anastomosing seams and irregular	11004	28.2	29.4	<10	
		"stylolitic" seams, ranging to thicker (ca. 10 cm wide) brecciform lenses with	11005	29.4	31.1	<10	
		cm-scale elongate fragments of grey dacite (well developed at 33.9-34.1 m and	11006	31.1	32.9	10	
		38.2-38.3 m). The dacite is generally weakly calcareous although moderately	11007	32.9	35.0	18	
		calcerous where coarse patches of pyrite are developed. The rock is weakly to moderately	11008	35.0	36.8	10	
		mineralized with common coarse to medium grained pyrite patches distributed sporadically	11009	36.8	38.8	16	
		throughout the section, particularly below 28.2 m, with overall estimated 5% pyrite.	11010	38.8	41.0	<10	
		Near-massive pyrite developed (ca. 40-50%) between 28.2-29.4 m. Pyrite is generally	11011	41.0	43.0	<10	
		developed in irregular to crudely planar zones surrounded by or associated with calcite-	11012	43.0	44.9	<10	
		quartz masses and veins, commonly subparallel with foliation. Minor very narrow (0.5	11013	44.9	47.0	<10	
		cm wide) calcite-quartz veins 20-30° to core axis between 37-38.5 m.	11014	47.0	49.0	35	
		Foliation inclined (w.r.t. core axis) 30-45° at 24.5 m	11015	49.0	51.0	<10	
		53° at 38.5 m	11016	51.0	53.0	<10	
		51° at 41.7 m	11017	53.0	55.0	10	
		50° at 46.4 m	~~11018~~	~~55.0~~	~~57.0~~	~~<10~~	
		45° at 60.9 m	~~11019~~	~~57.0~~	~~59.0~~	~~<10~~	

D.W. Moore

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					JV-88-12	2

Feet/Metres From	To	Description	sample number	interval		Analysis Au
			11020	59.0	61.0	<10
		Possible relatively fine quartz eyes 1 mm wide at 61.2-.3m	11021	61.0	62.7	<10
		100% recovery	11022	62.7	64.5	<10
			11023	64.5	65.85	<10
65.85	78.25	DARK PYRITIC CHERT				
		Dark grey to black, very fine grained, massive to vaguely finely laminated chert with	11024	65.85	68.0	<10
		about 25% overall pyrite in the form of irregular band-like masses and patches, and	11025	68.0	69.5	<10
		common ovoid to circular nodules (1 mm - 1 cm wide) showing concentric and radial growth	11026	69.5	71.0	<10
		patterns (variety: marcasite ?). As in above unit, pyrite concentrations are enveloped	11027	71.0	73.0	<10
		or associated with subordinate late quartz (without calcite). Numerous irregular and	11028	73.0	75.0	<10
		discontinuous stringers and veinlets of quartz transect the dark chert and pyritic	11029	75.0	76.7	<10
		masses. Quartz commonly forms pressure shadows adjacent to pyrite nodules. Minor	11030	76.7	78.25	<10
		lens of grey plagioclase-phyric dacite 5 cm wide at 67.4 m. Notable				
		development of quartz masses at 74.0-74.1 m, 74.4-74.5 m, and 77.4-77.6 m. Sections of				
		near massive pyrite (50-85%) occur at 69.1-.9 m, 70.2-70.6 m, 70.95-71.1 m, 71.35-72.05 m,				
		72.6-73.4 m, 74.4-75.0 m, 75.8-76.25 m, 77.2-77.3 m, and 77.65-78.25 m. Foliation 46°				
		to core axis at 70.0 m. 100% core recovery.				
78.25	78.9	GREYWACKE AND ARGILLITE				
		78.25-78.5 Pebbly metagraywacke Light grey,	11031	78.25	78.9	<10
		fine to medium grained fragmental wacke with flattened elongate light				

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Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		creamy grey felsic metavolcanic fragments and black tabular				
		argillitic/shaly rip-up clasts all generally 0.25-1.5 cm long, and local				
		(epiclastic?) fine quartz eyes (1%). Certain local felsic fragments are completely				
		sericitized and druzzy pea green-brown.				
		78.5-78.9 Grey interlayered fine grained greywacke and subordinate thin				
		dark argillite/shale laminae and anastomosing seams. Upper				
		contact is irregular and truncated by above unit which includes shaly				
		rip-up clasts similar to layers in this sequence suggesting top direction				
		is uphole. Equivocal fining direction. Foliation 55° at 78.6 m. Minor				
		0.5 cm wide quartz-pyrite seam parallel to foliation.				
78.9	86.25	Pyritic . fragmental dacite and minor chert. Medium to light grey,	11032	78.9	81.0	20
		well foliated, fragmental to plagioclase-phyric . dacite	11033	81.0	83.0	15
		Contains common, narrow (5.0-20.0 cm wide), darker grey chert layers	11034	83.0	85.0	10
		(at 81.8-81.85, 82.0-82.2, 84.4-84.5). General texture characterized by				
		highly flattened lenses of . dacite interleaved with very				
		narrow (less than 1 to 3 mm wide), anastomosing seams composed of darker				
		grey siliceous material. Possible fine quartz eyes at 81.0-81.3 m. The				
		rock is sporadically silicified and heavily pyritic in zones (estimated				
		overall 10-15%) throughout section that carry abundant coarsely nodular				

Drill Hole Record

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Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 88-12 | Sheet 4

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		or patchy to near-massive pyrite. Sulphides occur within and are				
		associated with a lesser amount of quartz in foliation parallel veins and				
		vein-bands generally 2-20 cm wide. They form between 20-50% coarse blocky				
		patches with quartz pressure shadows and medium grained disseminations with				
		quartz pressure shadows concentrated in layers with quartz. Grades into				
		lower porphyritic zone 85.0-86.25 m: Medium grey, well foliated	11035	85.0	86.25	<10
		plagioclase-phyric metadacite containing about 15% highly flattened white				
		plagioclase phenocrysts. Foliation 45° to core axis at 80.7 m, 40° at				
		85.6, 45° at 86 m. Common dark grey very thin argillitic filaments.				
86.25	93.6	DARK, QUARTZ-VEINED AND PYRITIC CHERT (MAIN CONDUCTOR)				
		Dark grey very fine grained massive chert; heavily pyritic with overall about 20%	11036	86.25	87.5	<10
		pyrite. Pyrite generally forms coarse blocky patches and circular to ovoid nodules	11037	87.5	89.0	<10
		(with concentric and radial growth patterns) and near-massive intersections containing	11038	89.0	90.5	<10
		about 75% pyrite over widths between 0.2-1.4 m (at 86.7-88.0 m, 89.3-89.8 m, 90.5-90.7	11039	90.5	92.0	<10
		m, 91.25-91.5 m and particularly 92.15-93.5 m with about 75-80% py). Associated with	11040	92.0	93.6	<10
		white bull quartz 86.25-865 and 87.0-87.2 m containing menanteritic green alteration				
		post-dating quartz. Minor felsic metavolcanic lenses, most notably at 86.7-86.6 m (as				
		in above unit). Foliation approx. 46° to core axis at 88.5 m. Common quartz pressure				

Drill Hole Record

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Completed	Core Size	Corr. Dip	Vert. Comp.
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Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-12	Sheet 5

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
		shadows and rims to nodular pyrite and tensional veinlets disrupting more massive									
		pyrite. Contains possible fine to medium grained isolated quartz beads at 89.0-89.1 m.									
		Discontinuous quartz masses are inclined at about 60° (at low angle to foliation) and									
		35° (at high angle to foliation), implying a reticulate vein array formed late in									
		penetrative deformation post-dating main pyrite development. In and around the near									
		massive pyritic section at base of unit (92.15-93.5 m) quartz masses (including									
		veinlets and pressure shadows) bear accessory calcite, and fine vuggy pits are									
		developed, commonly with limonitic stains. Some quartz at base displays fibrous comb-									
		structure. 10 cm of very dark and well foliated chert at base of lowest pyritic									
		section. Foliation 50° to core axis at 93.6 m.									
93.6	119.25	PEBBLY GREYWACKE									
		Grey, relatively homogeneous medium to fine grained, foliated non-calcareous inequigranular	11041	93.6	96.0	<10					
		wacke bearing 2-3% dispersed medium grained quartz grains	11042	96.0	98.0	<10					
		(eyes) and between 0-10% light grey to white vague feldspthic clasts (particularly									
		99.2-100.6). Minor 3 cm wide dark grey chert layer at 93.9 m. Contains sporadic	11043	112.8	113.7	<10		X			
		(less than 1-2%) very small tabular to blocky shaly/argillitic lithic fragments lying	11044	117.0	119.25	<10					
		parallel to foliation, distributed throughout, and quite common near upper contact.									
		Foliation 46° to c.a. at 101.6 m. Contains common narrow zones bearing wispy and									
		anastomosing carbonaceous/graphitic argillitic seams and layers than penetrate the									
		foliation of host wacke and ~~locally include fragments of the latter~~. Commonly of									

Drill Hole Record

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Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-12 | Sheet 6

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		stylolitic form transgressing foliation with septate margins 102.2-102.5, 105.2-105.5				
		and 111.5-112.0. Foliation 57-65° to c.a. at 112. Very minor, narrow (less than 1 cm				
		wide) quartz veins 55° to c.a. and at moderate angle to foliation. Isoclinal folding of				
		lithic fragments and shaly layers evident between 110-112 m. Brecciform 111.5-112.0,				
		117.0-119.25. Abundant anastomosing and stylolitic seams and filaments. 2-5%				
		disseminated pyrite at 119.6 and 120.0 m.				
119.25	123.2	Dark grey plagioclase-phyric and/or fragmental carbonaceous (?) and silicified fmv (as				
		above, silicified) with lighter grey patchy masses and lenses of greywacke/dacite (as				
		above). 3-4% fine grained disseminated pyrite in light grey fmv at 120.9-121.0 m.				
		Common coarse pyrite patches and masses between and fine disseminations up to 7%,	11045	119.25	121.2	<10
		particularly towards contact with following unit.	11046	121.2	123.2	<10
123.2	124.5	SILICEOUS ARGILLITE/CARBONACEOUS CHERT				
		123.2-123.5 Black highly silicified argillite or carbonaceous chert. Subordinate,	11047	123.2	124.5	<10
		discontinuous highly deformed albite-quartz (± carbonate) stringers.				
		123.5-123.7 As above with abundant weakly sericitized felsic mv fragments.				
		Fragmental, pyritic, 5% py nodular and disseminated.				
		123.7-124.5 As at 123.2-123.5 m. Vague felsic fragments highly flattened.				
		Jasper/hematite seam parallel foliation over a width of 1-2 cm.				
		Foliation 60° to core axis at 123.8.				

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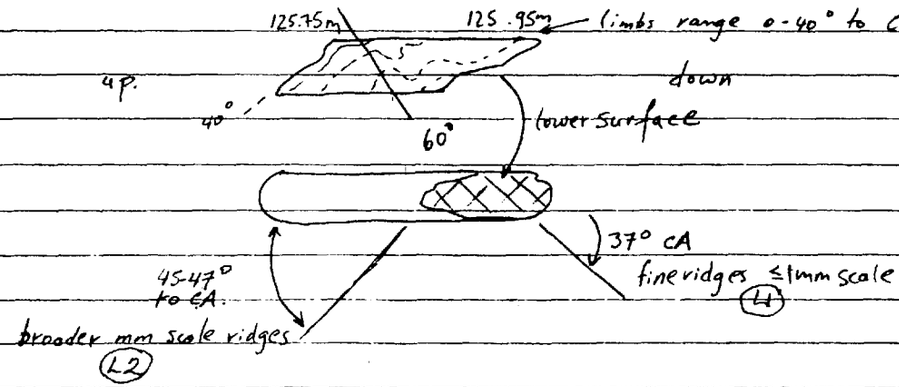
Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 88-12	Sheet

Feet/Metres From	To	Description	sample number	interval		Analysis Au
124.5	185.2	ARGILLITE AND GREYWACKE; minor BASALT				
		124.5 - ca. 129.8 Principally argillite with subordinate vague grey wacke-like lenses,	11048	124.5	126.5	<10
		locally brecciform. At 129.8 m argillite gradationally interlayered with grey	11049	126.5	128.0	20
		equigranular fine grained metawacke. Layering and foliation inclined 53° to core axis	11050	128.0	130.0	<10
		at 128.0 m. These are asymmetrically and disharmonically folded at a high angle by	11051	130.0	131.0	10
		"F2 group" folds.				
						
		2-3% py in py-qtz seams that are foliation parallel and also folded by F2 (130.0-130.7 m).				
		129.8-140.45 Equally mixed and finely interlayered (< 1 cm to 10 cm scale) dark to light grey fine grained greywacke and dark argillite. Foliation 52°	11052	131.0	133.0	<10

0.1m core loss

pyritic 0.1m core loss

Drill Hole Record

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Completed	Core Size	Corr. Dip	Vert. Comp.
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Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-12 | Sheet 8

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		to core axis at 133.0 m. Local 0.5 cm wide foliation parallel py-qtz	11053	133.0	135.1	9
		seam or bead (up to 1.0 cm). Thin ptygmatically folded quartz veins	11054	135.1	137.0	<10
		(137.8-138.1) and local thin planar veins approx. 65-70° to core axis	11055	137.0	138.5	30
		oblique to foliation. Blocky core 98-100% recovery.				
	140.45-154.3	Mainly greywacke with subordinate thin argillite layers. Foliation	11056	150.5	152.2	10
		48-50° at 142.4 m. Possibly graded down hole at 144.5 m. Contains	11057	152.2	154.3	15
		local thin discontinuous light grey/white cherty lenses at 146.7-				
		147.0 and 149.3-149.5 m. Contains small argillite lithic fragments				
		over 5 cm at upper contact. Common narrow quartz veins (30-40° to				
		core axis) in lower part below 150.5 as well as crackle veins				
		sporadically near lower contact. Trace fine pyrite.				
	154.3-158.7	Dark grey-black weakly silicified and moderately pyritized argillite with	11058	154.3	156.2	15
		subordinate silicified and pyritized wacke layers. Mainly 7-10% fine	11059	156.2	158.7	10
		grained disseminated pyrite in greywacke layers (155.7-156.0) and local				
		5% pyrite in tightly folded and disaggregated pyrite-quartz veins as well				
		as pyrite nodules enveloped or associated with marginal quartz. Axial				
		planes of tight folds lie subparallel to aver. layering. Local				
		hematitic staining in narrow zones parallel foliation. Foliation 53° to				
		core axis 158.4 m.				

Drill Hole Record

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Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 88-12 | Sheet

Feet/Metres From	To	Description	sample number	interval		Analysis Au
	158.7-168.6	Equally mixed argillite/greywacke. Locally 3-5% fine grained	11060	158.7	161.0	<10
		disseminated quartz-pyrite elongate beads at 163.1 m, 164.9 m, 166.0-	11061	161.0	163.0	<10
		166.2 (disseminated, fg), 167.3-167.5 m. Foliation and layering 45° at	11062	163.0	165.3	<10
		163.6 m. Possible plagioclase-phyric fmv (grey) at 165.3-165.8 m.	11063	163.0	165.3	<10
		Layering parallel to c.a. at 161.2-161.6 m. Tightly folded: ax. planes	11064	167.0	168.6	<10
		about 20° to core axis. Offsets of layering at low angle to these.				
		Very thin shaly layers commonly display septate margins, and wacke layers				
		show pinch and swell or brittle-ductile offsets. Locally brecciform.				
		3 possible large fmv or equigranular wacke fragments/lenses between				
		167.75-167.95 m, two or more at 168.6-168.8. Foliation partings display				
		lineations (ridges, partings) that lie subparallel to an intermediate				
		axis of the bedding plane ellipse.				
	168.6-172.1	Mainly argillite. Pyritized (2-5%) with lenticular grey siliceous beads	11065	168.6	169.4	<10
		and lenses between 168.6-169.4. Foliation 60° to core axis at 171.8.	11066	169.4	172.1	<10
		Local clusters of quartz-pyrite beads (less than 1-3 mm dim.), flattened				
		171.0-171.4 m. Local isoclinally folded narrow veinlets and layers				
		approx. 171.5 m.				
	172.1-173.3	Silicified, fleshy pink fd-qtz veined argillite + wacke, highly disrupted	11067	172.1	173.3	230
		Minor 1-2% fg py.				

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Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-12 Sheet 0

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		173.3-174.5 Silicified, brecciform wacke + argillite.	11068	173.3	174.5	50
		174.5-179.1 Wacke + argillite. Locally dark grey, cherty and fragmental and also	11069	174.5	176.9	40
		containing very small shaly lithic fragments 176.9-177.1 m. Common very	11070	176.9	179.1	120
		narrow (light brown, carb) quartz veins (less than 3 mm wide) 20° to c.a.				
		179.1-180.2 Mineralized graphitic argillite with up to 5-7% fine grained disseminated	11071	179.1	180.2	60
		pyrite + foliation parallel py-qtz seams, py-qtz flattened beads +				
		isoclinally folded veins. Foliation 45° at 179.2 m. Lineated				
		subparallel intermediate axis of bedding plane ellipse. CONDUCTOR				
		180.2-181.8 Light green silicified, irregularly quartz veined, massive, BASALT	11072	180.2	181.8	<10
		181.8-185.2 Brecciform and irregularly quartz veined (parallel to foliation)	11073	181.8	183.5	60
		graphitic argillite. Mineralized with py-qtz as at 179.1-180.2 m. CONDUCTOR	11074	183.5	185.2	60
185.2	207.05	QUARTZ-VEINED INTERMEDIATE-MAFIC AND ULTRAMAFIC METAVOLCANIC	11075	185.2	187.2	<10
		Medium to light green, brecciform to relatively massive but (± calcite) quartz veined	11076	187.2	189.0	<10
		and highly deformed intermediate to mafic metavolcanic rock. Bears ubiquitous	11077	189.0	191.0	<10
		relatively thin quartz veins (generally less than 1 cm wide) in a deformed mainly	11078	191.0	193.0	<10
		foliation-parallel vein network showing irregular and discontinuous, disruptive forms.	11079	193.0	195.0	<10

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Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-12 | Sheet 1

Feet/Metres From	To	Description	sample number	interval		Analysis Au						
		Common dark green more chloritic patches and seams. The rock is weakly calcareous	11080	195.0	196.5	<10						
		and weakly to moderately sericitized, especially where most intensely foliated as at	11081	196.5	198.0	<10						
		193.6-195.6 m. Trace disseminated pyrite local. Highly altered, sericitic and illitic	11082	198.0	200.0	<10						
		196.3-196.7 (sludge ?).	11083	200.0	202.0	<10						
		Foliation 58-60° at 190.3	11084	202.0	204.5	<10						
		30° at 195.5	11085	204.5	207.05	<10						
		35-40° at 200.0										
		45° at 206.6 m.										
		Common patchy dark talcy zones 5-20 cm.										
207.05	261.0	ULTRAMAFIC TO MAFIC METAVOLCANIC										
		Dark to light greenish grey, soapy feeling relatively massive and variably foliated	11086	207.05	209.5	<10						
		magnesite-chlorite-talc ultramafic metavolcanic (flow ?) containing approx. 5%	11087	209.5	211.5	<10						
		ubiquitous white talc-magnesite veins and seams that form an irregular reticulate	11088	211.5	214.2	<10						
		vein array, lending a brecciform appearance to the rock. Homogeneous parts appear to	11089	214.2	215.2	<10		X				
		have a massive medium to coarse grained plutonic-appearing texture defined mainly by	11090	215.2	217.0	<10						
		white magnesite crystals in a dark grey talc-rich matrix. Commonly weakly foliated	11091	217.0	218.7	<10						
		to very well foliated. Generally bears up to about 2% disseminated magnetite (detected										
		mainly by magnet) below 209.5 m. Minor 1-2 cm wide quartz vein 209.45 m. Foliation										
		55° to core axis at 208.2 m, 35° at 218.5, 33° at 221.4, 25° at 225.3. See T.S. 216.2 m										

Drill Hole Record

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Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-12	Sheet 12

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		207.05-218.7 Dark talc rock described above magnetic generally.				
		218.7-225.6 Light grey serp-magnesite-talc-chlorite rock (Mg- Thol/UMV). Relatively	11092	218.7	221.0	<10
		non-magnetic. Well foliated with interleaved narrow zones and septa of	11093	221.0	223.0	<10
		dark grey chl-talc, common talc-magnesite seams decreasing downhole;	11094	223.0	225.6	<10
		irregular veinlets. Low angle foliation common.				
		Slightly calcareous cal-magnesite seams increasing somewhat below 223m				
		downhole to veined zone.				
		225.6-228.0 Quartz veined light/medium green cate-magnesite-talc-chlorite schist.	11095	225.6	226.8	<10
		Well foliated, cut by several large white ± alb. bull quartz veins	11096	226.8	228.0	<10
		locally bearing thin pyritic films on irregular partings. Quartz veins				
		225.6-225.9, 226.0-226.1, 226.3-226.7, 227.55-227.85 m. Irregular planar				
		margins at high angle to foliation and layering and low to mod. angle to				
		core axis. Creamy white to yellowish white albite on vein rims mainly.				
		Trace fine grained cubic pyrite. Foliation 42-430:227 m.				
228.0	231.2	FELSITE DYKE				
		228.0-229.4 Upper Half	11097	228.0	229.4	300
		Weakly to moderately foliated (moderate approx. 45° to core axis) light				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-12	Sheet 13

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		drussy beige-brown pyritic quartz-feldspar fine grained felsite dyke.				
		Ubiquitous up to 10% very fine grained and fine grained pyrite trains and				
		crystal clusters (partly define irregular foliation) and disseminated				
		fine to medium grained cubes. Cut by clean albite-quartz veins less than				
		1-5 cm wide ranging between 45-80° to core axis but always at mod. to high				
		angle to foliation.				
		229.4-231.2 Lower Half	11098	229.4	231.2	100
		Grades into mottled, coarser grained and inclusion-bearing, schlieric				
		quartz-albite dyke where up to 10% overall pyrite occurs as fine grained				
		disseminated clusters replacing included dark green mv schlieren. Highly				
		irregular internal structure. Possible fuchsite alteration.				
231.2	261.0	MAFIC (MAGNESIAN) METAVOLCANIC				
		Green, well foliated and compositionally laminated (± serp. magnesite ?) talc-plag-	11099	231.2	233.0	50
		chlorite schist/metavolcanic. Relatively soft. Fine grained cubic disseminated	11100	233.0	234.85	295
		py in host rock to approx. 236 m. Quartz veined in upper part to approx 245 m.	11101	234.85	237.0	50
		Relatively wider fuchsite-bearing albite-quartz veins at:	11102	237.0	238.8	10
		233.0-234.85 (minor mv inclusions + septa)	11103	238.8	240.1	10
		Foliation 45° at 244.4 238.3-238.8 Trm-alb-qtz	11104	240.1	242.0	25

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-12	Sheet 14

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		241.0-241.6 Fuchs-alb-qtz, fine grained py?	11105	242.0	244.0	<10
		242.55-242.9	11106	244.0	246.0	<10
		243.5-243.8	11107	246.0	248.0	<10
		Foliation inclined 45° to c.a. at 244.5m, with open to tight asymmetric	11108	248.0	250.0	<10
		folds oriented 23° to c.a. at a moderate angle to foliation.	11109	250.0	252.0	<10
		Foliation 47° at 250.6, 57° at 257m, and 60° at 259.5 m.	11110	252.0	254.0	<10
			11111	254.0	256.0	<10
			11112	256.0	258.0	<10
			11113	258.0	259.5	<10
			11114	259.5	261.0	<10
261.0		EOH				

Drill Hole Record

Property	JOUVAL	District	EASTERN	Hole No.	JV-88-13		
Commenced	FEBRUARY 18, 1988	Location	VALRENNES TWP., QUEBEC	Tests at	100 m, 182 m	Hor. Comp.	130.5 m
Completed	FEBRUARY 21, 1988	Core Size	BQ	Corr. Dip	39-1/2°, 36°	Vert. Comp.	120.0 m
Co-ordinates	L 50W, 0+45S			True Brg.	035°	Logged by	DWM
Objective	To investigate an EM conductive anomaly and a felsic volcanic - metasediment contact for Au mineralization.			% Recov.	98%	Date	Feb. 24, 1988

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
388649-1	035°	-50°		182 m	JV-88-13	1

Feet/Metres From	To	Description	sample number	interval		Analysis Au (ppb)	WRA			
0.0	18.5	Overburden (CASING PULLED)								
18.5	116.1	PLAGIOCLASE-PHYRIC TO BRECCIFORM METADACITE								
		18.5-80.0 Relatively homogeneous, light grey, plagioclase-phyric to locally	11115	18.5	21.0	<10				
		massive and locally brecciform METADACITE. Commonly bears 5-10%	11116	21.0	23.0	<10				
		medium to locally coarse grained, equant to prismatic white plagioclase	11117	23.0	25.0	<10				
		phenocrysts in a fine grained, weakly foliated and weakly to moderately	11118	25.0	27.0	<10				
		calcareous quartzofeldspathic matrix. Common less than 1-2% medium to	11119	27.7	28.4	<10		X		
		fine grained dispersed pyrite cubes. Weathered and pitted between								
		38-41.7 m.								
		Weak foliation at 31.7 inclined 43° to core axis, becomes moderately	11120	38.0	41.0	<10				
		foliated below below about 45 m: 52° to core axis at 52.2 m,	11121	41.0	44.0	<10				
		55° at 55.8 m, 60° at 64.8 m, 61° at 70.6 m.	11122	44.0	46.0	<10				
		Pseudofragmental structure with irregular, calcite-quartz breccia matrix	11123	46.0	48.5	<10				
		occurs at 54.9-58.0 m (especially 56.5-58.0 m). Fragmental structure	11124	50.0	53.0	<10				
		moderately to well developed in lower part of section between 63.7-								
		80.0 m: possible debris flow?	11125	63.7	66.0	<10				
		Fine grained disseminated pyrite clusters and cubes increase in content	11126	66.0	68.0	<10				
		to about 3% towards following gradational unit, between 73.8-80.0.	11127	71.0	73.0	<10				
		Sporadic, narrow, planar ± quartz-calcite veins present throughout	~~11128~~	~~73.0~~	~~75.0~~	~~<10~~				

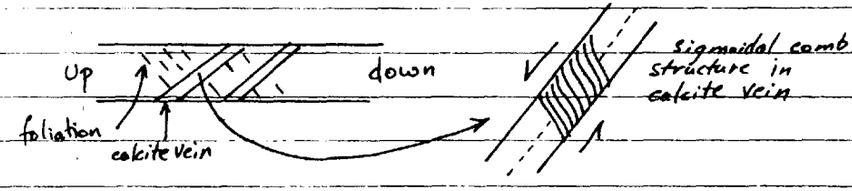
DWMoore

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-13 | Sheet 2

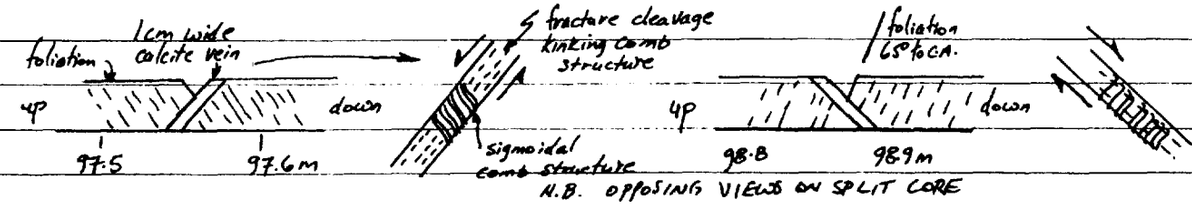
Feet/Metres From	To	Description	sample number	interval		Analysis Au		WEA			
		section: generally 0.5-1.0 cm wide, averaging 2/m (45 - 50 m) and	11129	75.0	77.0	<10					
		consistently about 43° to core axis at moderate to high angle to	11130	77.0	78.5	<10					
		foliation. Fibrous comb structure very common in calcite veins,	11131	78.5	80.0	10					
		generally with asymmetric sigmoidal growth pattern (as depicted)									
		suggesting southerly-directed thrusting along shallow (N-?) dipping									
		calcite filled fractures.									
											
		Well developed calcite veins at 46.5-47 m. Increase in the amount of									
		fine grained disseminated pyrite cubes and clusters to about 3% between									
		73.8-80.0 towards gradational contact with underlying fragmental dacite.									
		100% core recovery.									
	80.0-96.7	PYRITIC BRECCIFORM METADACITE (DEBRIS FLOW?)	11132	80.0	82.0	<10					
		Grey, fine grained and weakly to moderately foliated, plagioclase-phyric	11133	82.0	84.0	<10	0.75m rec'vd				
		to massive metadacite (as above) that is brecciform and included as	11134	84.0	86.0	<10					
		coarse irregular fragments within a ubiquitous, irregular and deformed,	11135	86.0	87.5	<10		X			
		white quartz-calcite matrix composing about 5-7% of the rock.	11136	87.5	89.5	<10					
		Sporadic but ubiquitous fine grained disseminated pyrite cubes and	~~11137~~	~~89.5~~	~~92.0~~	<10					

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		and elongate clusters comprise an estimated overall 3-5%, although	11138	92.0	94.0	<10
		locally comprise up to 10% over dm-scale intervals. Pyrite is slightly	11139	94.0	95.3	<10
		more concentrated in this section than in above unit (between	11140	95.3	96.7	<10
		73.8-80.0 m).				
		Foliation inclined 60° to core axis at 81.4 m. 94% core recovery.				
	96.7-104.05	PYRITIC AND CARBONACEOUS BRECCIFORM METADACITE (DEBRIS FLOW?)	11141	96.7	99.0	<10
		As above brecciform metadacite with rapidly gradational increase in dark	11142	99.0	101.0	<10
		grey to black carbonaceous (and siliceous ?) seams and patches, in part	11143	101.0	103.0	10
		associated with quartz-calcite brecciform matrix. Overall ca. 5% medium	11144	103.0	104.05	10
		grained patchy to disseminated pyrite, somewhat coarser and in greater				
		quantity than above brecciform metadacite. Foliation inclined 55° to				
		core axis at 97.9 m, 65° at 98.9 m. 4 x 1 cm wide light pinkish white				
		calcite veins 40-45° to core axis and moderate angle to foliation.				



Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. TV-88-13 | Sheet 4

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		104.05-105.1 CARBONACEOUS, FRAGMENTAL MAFIC METAVOLCANIC				
		Green, flattened and elongate, chloritic mafic metavolcanic fragments	11145	104.05	105.1	<10
		measuring between less than 1 - 5 cm long included within subordinate				
		dark grey, fine grained carbonaceous and calcareous (and somewhat				
		siliceous ?) matrix. Matrix contains 5% medium to fine grained				
		disseminated pyrite cubes.				
		105.1-116.1 UPPER MAIN PYRITIC ZONE: HEAVILY PYRITIC, CARBONACEOUS BRECCIFORM *TO*				
		FRAGMENTAL METADACITE				
		Marked by a further, relatively abrupt increase in pyrite content and				
		coarseness, and divided into two intervals:				
		(a) 105.1-112.3 m - BRECCIFORM METADACITE (as at 96.7-104.05 m)				
		with prominent ubiquitous, blocky ('nodular') pyrite constituting ca.	11146	105.1	107.0	<10
		7-10% overall, and associated with marginal and interstitial (+ calcite)	11147	107.0	109.0	<10
		quartz patches. The brecciform host metadacite is plagioclase-phyric	11148	109.0	111.0	<10
		near upper contact but becomes massive and equigranular between 105.6-	11149	111.0	112.3	<10
		112.3 m.				

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					JV-88-13	5

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		(b) 112.3-116.1 m - FRAGMENTAL METADACITE				
		Coarse dm-scale fragments of foliated plagioclase-phyric metadacite	11150	112.3	114.0	<10
		occurring sporadically within a now pyrite-dominated, dark grey	11151	114.0	116.1	35
		siliceous? and carbonaceous matrix. Overall ca. 10-13% coarse blocky				
		pyrite patches, although this interval contains several zones of				
		near-massive pyrite between 5-20 cm wide. Minor narrow, well foliated				
		metadacite lenses in lower 0.3 m (115.8-116.1) where a rapid gradation to				
		semi-massive pyritic zone occurs.				
116.1	118.2	SEMI-MASSSIVE PYRITIC ZONE				
		Semi-massive coarse grained and patchy or 'nodular' pyrite with interstitial quartz and	11152	116.1	118.2	1320 (1.4m recovered)
		lesser dark grey carbonaceous and siliceous matrix. Marked increase to average 60-70%				
		pyrite appears to overlap a principal lithological contact between uphole metadacite and				
		downhole clastic metasedimentary rocks, although no recognizable protolith(s) occur in				
		the zone (*possibly chert*).				
118.2	140.2	INTERLAYERED GREYWACKE AND ARGILLITIC SILTSTONE				
		Finely interlayered fine to medium grained greywacke and dark grey argillitic siltstone-	11153	118.2	119.4	300 } 216ppb / 2.95m
		argillite. Layers generally range between 0.2-1.0 cm wide and parallel the penetrative	11154	119.4	121.15	132 }
		fabric. No unequivocal facing criteria observed.				
		Upper part between 118.2-121.0 m contains 10-60 cm wide bands rich in coarse 'nodular'				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					JV-88-13	6

Feet/Metres From	To	Description	sample number	interval		Analysis Au						
		pyrite with interstitial quartz and carbonaceous material. Pyrite content in these	11155	121.15	122.25	<10		X	FP			
		bands ranges between 20-50%, although overall about 10-15%. Elsewhere in section	11156	122.25	124.0	<10						
		pyrite occurs locally as fine to medium grained cubes sporadically developed	11157	124.0	126.0	<10						
		in concentrations of less than 1% - 2%.	11158	126.0	128.0	<10						
(121.5	122.25)	FOLIATED FELDSPAR PORPHYRY	11159	135.0	137.0	<10						
		Light creamy grey to tawny grey, well foliated and homogeneous feldspar porphyry,										
		bearing about 10-15% flattened coarse white feldspar phenocrysts up to 0.5 cm long.										
		Contains about 2% fine grained disseminated pyrite. Local quartz patches. Intrusive										
		into metawacke-argillitic siltstone near contact with semi-massive pyritic zone.										
		Foliation/layering in clastic metasediments oriented										
		w.r.t. core axis 56° at 122.9 m, 53° at 128.8 m, 58° at 138.4 m. Disrupted isoclinal										
		folding occurs in lower part of section (138.2-139.6 m) with a moderately developed										
		axial planar fabric defined by thin micaceous/argillitic septa. Clastic sediments are										
		non-calcareous, although locally calcified over a width of 4 cm (125.55 m).										
140.2	182.0	COARSE GRAINED PEBBLY GREYWACKE										
		Light grey, coarse to medium grained, weakly calcareous meta-greywacke containing	11160	148.0	150.0	<10						
		ubiquitous 5% elongate and flattened lithic fragments. Fragments are composed of dark	11161	152.0	154.0	<10						
		grey shaly or argillitic rock, locally internally layered, and are tabular, angular	11162	154.0	156.2	<10						
		to subangular and up to 2-3 cm long (e.g. 153 m). White felsic fragments become common	11163	156.2	158.0	<10						

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					JV-88-13	7

Feet/Metres From	To	Description	sample number	interval		Analysis Au					
		downhole below 166.3 m (notably in horizons at 174.3-176.1 m, 176.65-181.4). Felsic	11164	173.9	176.0	<10					
		fragments are soft and scratchable with a knife, possibly carbonatized or sericitized,	11165	176.0	178.0	<10					
		and commonly display a narrow siliceous rind.	11166	178.0	180.0	<10					
		Locally finely interlayered wacke-argillitic siltstone, with common intervals of light	11167	180.0	182.0	<10					
		grey arkosic wacke (152.65-152.85; 158.6-159.0; 173.9-174.3; 175.3-175.6; and									
		176.1-176.65 m) and dark grey argillitic/shaly wacke (160.3-160.9; 161.4-161.8 and									
		161.9-162.3 m). Medium grained relatively pebble-poor wacke, otherwise similar to the									
		main unit, occurs at 163.8-166.2 and 170.3-172.1 m. An isoclinal fold of a layered									
		fragment occurs at 165 m. Foliation and apparent layering inclined, w.r.t. core axis,									
		49° at 152.7 m, 55° at 158.8 m, and 52° at 175.5 m.									
		Quartz calcite veins commonly as wide as 1-1/2 to 2 cm are sporadic throughout section,									
		inclined 20-40° to core axis and a moderately high angle to foliation. Such veins most									
		common 20-50° to core axis at 177.0-180.7, where calcite is locally concentrated along									
		vein margins.									
		Possible minor bluish-green fuchsite in calcite-quartz vein at 180.2 m.									
182.0		EOH									

Drill Hole Record

Cominco

Property	JOUVAL	District	EASTERN	Hole No.	JV-88-14		
Commenced	FEBRUARY 22, 1988	Location	VALRENNES TWP., QUEBEC	Tests at	100 m, 147 m	Hor. Comp.	109.0 m
Completed	FEBRUARY 25, 1988	Core Size	BQ	Corr. Dip	38-1/2°, 36°	Vert. Comp.	98.0 m
Co-ordinates	L 52W, 1+00N			True Brg.	035°	Logged by	DWM
Objective	To investigate an EM conductive anomaly and a metasedimentary-mafic/ultramafic metavolcanic contact for Au mineralization.			% Recov.	97%	Date	Feb. 27, 1988

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
388649-3	35°	-50°		147.3 m	JV-88-14	1

~~Feet~~/Metres From	To	Description	sample number	interval		Analysis Au (ppb)
0.0	16.0	Overburden				
16.0	78.25	CLASTIC METASEDIMENTS				
		16.0-63.8 METAGREYWACKE WITH LITHIC FRAGMENTS				
		Light grey, medium grained, unlayered and moderately foliated	11168	16.0	18.0	<10
		metagreywacke bearing about 3-5% dispersed dark grey lithic fragments	11169	18.0	20.0	<10
		and less than 7% vague pale white feldspar grains (possibly of				
		volcaniclastic origin). Lithic fragments are evenly distributed	11170	28.0	30.0	10
		throughout the entire section and are entirely of shaly or argillitic	11171	30.0	32.0	<10
		siltstone composition, generally elongate and tabular and between	11172	32.0	34.0	<10
		0.3-3.0 cm long and 0.1-0.4 cm wide, and are aligned parallel to				
		foliation. Locally fragments are subrounded and ovoid. Non-	11173	40.0	42.0	<10
		calcareous and weakly sericitized throughout. Common foliation	11174	42.0	44.0	<10
		partings displaying an elongation of lithic fragments and a weak				
		lineation on foliation plane ellipse that lies between an intermediate				
		axis and the long axis, suggesting a steep westerly true plunge (if				
		foliation if vertical). Local zones carrying relatively coarse (3-4	11175	52.0	54.0	<10
		cm long) lithic fragments as at 30.1-30.9 and 31.3-31.5 m. Ubiquitous	11176	54.0	56.0	<10
		1% fine to medium grained pyrite cubes dispersed throughout the	11177	56.0	58.0	82
		section. Deep fracture-controlled limonite staining, possibly after	11178	60.9	62.0	10
		Fe-carbonate, intense at 16.5 m, and sporadically near surface to 20.5 m.	11179	62.0	63.8	85
		Foliation inclined 48-49° to core axis at 25.9 m, 50° at 35.1 m, 51°				
		DW Moore				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-14 | Sheet 2

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		at 50.4 m. Thin section sample at 37.85 m.				
		Grades with diminishing content and size of lithic fragments to				
		relatively more massive metawacke (fragments less than .2-.3 cm long),				
		between 55.5-60.9. Between 60.9-61.3 and 61.85-62.0 occur abrupt wacke				
		zones with very numerous fragments (subconglomeratic) and very thin				
		discontinuous shaly seams, which enclose a massive, fine grained wacke				
		horizon lacking lithic fragments (61.3-61.85 m). Minor irregular narrow				
		quartz veins 55.0-55.1 m and 56.9-57.2 m, ca. 25° to core axis.				
	63.8-66.3	WELL LAYERED SHALY WACKE AND SILTSTONE				
		Interlayered dark shaly siltstone, siltstone and fine to medium grained	11180	63.8	66.3	<10
		metawacke. Contains 1-2% disseminated pyrite cubes. Foliation and mm-				
		to cm-sccale layering inclined 53-54° to core axis at 65.5 m. Weakly				
		lineated sub-parallel to intermediate axis of foliation plane ellipse.				
	66.3-74.7	MASSIVE WACKE				
		Relatively massive medium to fine grained metawacke (similar to 61.3-	11181	66.3	68.0	18
		61.85 m) with few, minute (less than 0.2 cm long) lithic fragments and	11182	68.0	70.5	<10
		local shaly/shaly siltstone interlayers (at 67.5-68.0 and 72.9-73.3 m).	11183	70.5	72.9	<10
		Grades below 71.0 m into lithic fragment-bearing wacke	11184	72.9	74.7	16
		Foliation ca. 40° to core axis at 74.4 m. Up to 2-3% fine grained pyrite				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-14 | Sheet 3

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		and pyrite clusters between 72.9-74.7 m. Grades into following quartz-				
		veined section.				
	74.7-75.85	White to light pinkish grey feldspar-quartz (FELSITE) veins and VEINED	11185	74.7	75.85	202
		METAWACKE. About 1% fine grained disseminated pyrite locally. Common				
		discontinuous dark green chloritic seams. Feldspar is locally pinkish				
		and may be K-feldspar. Main continuous quartz/felsite vein occurs at				
		75.1-75.9 m. Irregular upper and lower contacts, discordant to foliation				
		in greywacke.				
	75.85-76.3	Pyrite-bearing ARGILLITIC WACKE bearing abundant graphitic argillite	11186	75.85	78.5	2650
		filaments and lenses. About 3% medium grained pyrite clusters occur				(1.05m recovered)
		between 75.9-76.1. Quartz vein of uncertain width (5.0 cm) commences	(11186	75.85	78.5	2400 (Rerun)
		at 76.3-76.35 m. Average of Au analyses (11186) yields 2450 ppb or	(11186	75.85	78.5	2331 (XRAL 0.068 oz/t)
		.07 oz/t.				
	76.35-77.9	Core loss (mainly argillite of following unit ?)				
	77.9 -78.25	Jet black GRAPHITIC ARGILLITE: 0.35 m of sludge retrieved.				
78.25- 78.5		Silicified lime-green MAFIC METAVOLCANIC ROCK, 1-2% fine grained				
		disseminated pyrite cubes. Possibly represents upper contact of				
		mafic-ultramafic mv at 80.55 - 101.55 m with intervening felsite				
		dyke (see below).				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-14	Sheet 4
		X				

Feet/Metres From	To	Description	sample number	interval		Analysis Au
78.5	80.55	FELSITE DYKE				
		Light pinkish grey, massive, medium grained pyrite-bearing quartz-feldspar (felsite)	11187	78.5	80.55	130
		vein. Carries 2-3% fine grained disseminated pyrite cubes. Relatively homogeneous				
		texture and composition. Local fracture partings 0-15° to core axis with graphitic or				
		carbonaceous coatings. Upper contact 45° to core axis, lower contact uncertain due to				
		grinding. 100% recovered.				
80.55	101.55	MAFIC-ULTRAMAFIC METAVOLCANIC ROCK	11188	80.55	85.0	(1.7m recovered)
		Green, moderately to well foliated, medium to fine grained, ultramafic to mafic	11189	85.0	88.0	(2.25m recovered)
		metavolcanic rock - probably Mg-tholeiitic to komatiitic in composition. Dominant	11190	88.0	91.0	(2.2m recovered)
		mineralogy ± serpentine ± magnetite - talc - magnesite - chlorite. Dark green-grey	11191	91.0	93.0	10
		talcose seams common throughout, with white quartz? - magnesite segregations and	11192	93.0	95.0	<10
		veinlets. Foliation is highly irregular, generally at moderate to low angles to core	11193	95.0	97.0	<10
		axis: 20° to core axis at 91.4 m. Trace to negligible pyrite.	11194	97.0	99.0	<10
		Moderate limonitic staining (after Fe-carbonate ?) 100.5-101 m.	11195	99.0	101.55	<10
101.55	113.2	SERICITIC-FUCHSITIC AND ALBITE-QUARTZ VEINED FELSIC? METAVOLCANIC				
		Light buff- or tawny-grey, medium grained, well foliated metavolcanic rock resembling	11196	101.55	102.35	<10
		a felsic metavolcanic, but possibly representing highly altered (sericitized and	11197	102.35	103.8	<10
		carbonated) mafic metavolcanic. Pseudofragmental textures between 104.3-105.5.	11198	103.8	104.95	<10
		Prominent albite-quartz veins: (i) 102.35-103.8 m trace fine grained pyrite and	11199	104.95	106.8	<10

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-14	Sheet 5

Feet/Metres From	To	Description	sample number	interval		Analysis Au
		local limonitic staining (after Fe-carbonate ?)	11200	106.8	107.5	<10
		(ii) 106.8-107.4 m Fuchsite-bearing heavily limonitically stained (Fe-carbonate) -	11201	107.5	108.5	<10
		albite - quartz vein	11202	108.5	110.2	<10
		(iii) 108.8-109.3 m About 40-50% albite-quartz veins 3-20 cm wide occur between 108.5-	11203	110.2	111.7	<10
		112.0 m.	11204	111.7	113.2	<10
104.9	113.2	FUCHSITE ALTERATION ZONE I of host rock most evident between (a) approx. 104.9-107.7 m				
		(very intense at 106.0-106.2 and 106.6-106.8 and 107.4-107.6 m) - the latter two				
		occurring at margins of fuchsite - Fe-carbonate ? - albite - quartz vein at 106.8-107.4				
		m), and (b) 108.5-113.2 weak to moderate. Foliation inclination is variable through the				
		zone: 45° to core axis at 101.6 m, 65° at 104.4 m, 52° at 108.3 m.				
113.2	116.7	SPINIFEX-TEXTURED METAKOMATIITE				
		Grades rapidly from above altered zone at 113.2. Dark green to medium green, relatively	11205	113.2	115.0	<10
		massive and spinifex-textured to moderately foliated and lineated metakomatiite	11206	115.0	116.7	<10
		(ultramafic metavolcanic). Locally 1% medium grained pyrite cubes. Sample for thin				
		section (113.5 m).				
116.7	120.6	MAFIC TO ULTRAMAFIC METAVOLCANIC (as at 80.55-101.55 m)	11207	116.7	119.2	<10
		Gradational upper and lower contacts. Foliation 58° to core axis at 119.2 m.	11208	119.2	120.6	<10
		119.2-120.6 Weakly sericitized and possibly weakly fuchsitic.				

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-14 | Sheet 6

Feet/Metres From	To	Description	sample number	interval		Analysis Au
120.6	129.2	FUCHSITE-SERICITE ALTERATION AND QUARTZ VEINED ZONE II	11209	120.6	121.9	10
		Moderately to intensely fuchsitic to sericitic, albite-quartz-veined mafic mv (?).	11210	121.9	124.5	<10
		Silicified, deep fuchs 120.3-120.95. Deep apple green to blue-green (coloured fuchsitic) alteration	11211	124.5	126.95	27
		colouring to light tawny coloured sericitized alteration. Tawny, sericitic and	11212	126.95	129.2	25
		silicified dominant 126.95-129.2 with crackle-vein quartz (fm /?). Major quartz vein				
		120.6-121.9 with tawny silicified-sericitic blocks. Trace fine grained pyrite.				
129.2	147.3	MAFIC-ULTRAMAFIC METAVOLCANIC ROCK	11213	129.2	131.1	<10
		Well foliated and lineated, pseudofragmental to relatively massive mafic to ultramafic	11214	131.1	133.0	<10
		metavolcanic as at 80.55-101.55 m. Druzzy light brownish-green sericitized fragments	11215	133.0	135.0	33
		enclosed by talc-chlorite matrix. Common deformed quartz seams parallel foliation with	11216	135.0	137.0	<10
		local coarse quartz patches. Trace pyrite locally up to 1% 143.2-143.4 m. Foliation	11217	137.0	139.0	<10
		42° at 132.3, 40° at 137.5 m, 44° at 147.2 m.	11218	139.0	141.0	<10
			11219	141.0	143.0	<10
			11220	143.0	145.0	<10
			11221	145.0	147.3	<10
147.3		EOH				

Drill Hole Record

Property	JOUVAL	District	EASTERN	Hole No.	JV-88-15		
Commenced	MARCH 21, 1988	Location	VALRENNES TWP., QUEBEC	Tests at	100m (Acid); 167m (S.S.	Hor. Comp.	118.5m
Completed	MARCH 23, 1988	Core Size	BQ	Corr. Dip	-47°; -43.5°	Vert. Comp.	127.0m
Co-ordinates	L 52W, 0+85S			True Brg.	035°(collar): 032°(167m)	Logged by	DWM
Objective	To investigate for Au mineralization across southern conductor defining upper contact of brecciform dacites with clastic metasediments.			% Recov.	100%	Date	March 29, 1988

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
388649-1	035°	-50°		174 m	JV-88-15	1

Metres From	Metres To	Description	sample number	interval		Analysis Au (ppb)	WRA
0.0	15.5	Overburden (Casing Pulled)					
15.5	121.0	PRISTINE TO BRECCIFORM AND FRAGMENTAL PLAGIOCLASE-PHYRIC DACITE; MINOR FRAGMENTAL BASALT					
	(a)	15.5-ca. 83.5 Green to light grey-green, weakly to moderately foliated, fine grained	11464	15.5	17.5	<10	
		plagioclase-phyric dacite. Bears 3-7% medium to locally coarse grained, subhedral	11465	17.5	19.5	<10	
		plagioclase phenocrysts throughout. Relatively homogeneous. Generally with <1-2%					
		pyrite (fine grained cubes), and locally with elongate, irregular patchy aggregates	11466	34.0	35.0	<10	
		of fine grained pyrite (measuring 3-5 cm in length and 0.5-1.0 cm in width)	11467	43.0	45.0	<10	
		sporadically distributed between 10-30 cm apart: notably at 45.0-45.7 m, 53.2-56. m	11468	45.0	47.0	10	
		and 76.9-78.0 m (overall ca. 2-5% pyrite in these intervals). Slightly coarser					
		disseminated pyrite cubes (ca. 2%) occur between 62-82 m.	11469	53.0	55.0	<10	
		Foliation inclined 55° to core axis at 25.0 m and 50.0 m, 57° at 52.0 m.	11470	55.0	57.2	<10	
		Displays a vague or ghostly brecciform structure in which elongate masses of pristine					
		phyric dacite are enclosed and penetrated by faint, light coloured calcareous matrix	11471	62.0	64.0	<10	
		(≤ 5% of the rock) in the form of a variably developed., thinly branching network	11472	64.0	66.0	<10	
		displaying a weak anisotropy. Locally well developed above 70 m.	11473	66.0	68.0	<10	
		Sporadic planar discontinuous quartz-calcite veins inclined 20-40° to core axis and	11474	68.0	70.0	<10	
		oblique to fabric, commonly with white calcite-rich margins. Two 0.5-1.0 cm wide					
		calcite-quartz veins inclined 24-28° to core axis (62.0-62.2 m) with one larger	11475	76.0	78.0	<10	
		(2.5 cm wide) calcite-quartz vein inclined 30° to core axis in almost exactly the					
		opposite sense (62.3-62.5 m). Such mutually inclined veins form a reticulate array at					
		79.5 m and are apparently genetically related. DWMoore	11476	82.0	84.0	<10	

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-15 | Sheet 2

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
(b)	83.5-107.05	Mainly relatively pristine, non-brecciform plagioclase-phyric dacite	11477	88.5	91.0	<10					
		between 70.0-83.5 m, becomes gradually grey, more brecciform and	11478	91.0	92.5	<10					
		moderately to well foliated in a transitional interval between 83.5-	11479	92.5	94.2	<10					
		85.0 m (foliation shallowly inclined 28° to core axis at 84.9 m	11480	94.2	97.0	<10					
		transected by local 1 cm wide zones inclined 60° to core axis in the	11481	97.0	99.0	<10					
		same sense) and grades into a prominently brecciform plagioclase-phyric	11482	99.0	101.0	<10					
		dacite below 85.0 m. The brecciform structure becomes very well	11483	101.0	103.0	<10					
		developed and well foliated around 91.0 m. Foliation very well	11484	103.0	105.0	<10					
		developed below 103 m. Foliation in brecciform structure inclined 52°	11485	105.0	107.05	<10					
		to core axis at 95.7 m, 48° at 98.5 m and 44-45° at 106.2 m.									
		Patchy pyrite aggregates (as above) developed at 82.5-83.0 m (3-4%									
		overall), 88.6-94.2 m (overall 2-3%, particularly concentrated at									
		88.6-90.7 m with overall 7% pyrite). Between 94.2-105.9 m the brecciform									
		plag-phyric dacite contains an overall 1% pyrite in the form of very fine									
		grained disseminations and medium to coarse grained cubes, with very									
		local patchy aggregates. Highly elongate and flattened pyrite aggregates									
		(overall about 5% pyrite) with ragged, septate terminations occur between									
		105.9-106.6 m.									
(c)	107.05-109.1	Very homogeneous, grey, well foliated plagioclase-phyric dacite,	11486	107.05	109.1	<10		X			
		characterized by 10-12% coarse grained, flattened white plagioclase									
		phenocrysts (which mainly define the foliation). Relatively sharp,									

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
		concordant contacts with adjacent sub-units, although the upper contact									
		is rapidly gradational and phenocrysts in the upper 30 cm are subhedral									
		and relatively unflattened. Contains <1% fine grained disseminated									
		pyrite. Foliation 49° to core axis at 108.7 m.									
(c)	109.1-121.2	Argillitic Brecciform/Fragmental Plagioclase-Phyric Dacite									
		More intensely brecciform grey plagioclase-phyric metadacite (as above)	11487	109.1	111.0	<10					
		with between 5-10% septate black argillitic matrix. Foliated brecciform	11488	111.0	113.5	<10					
		structure as above but argillitic material forms brecciform (fragmental)	11489	113.5	115.0	<10					
		matrix in place of calcareous material. Contains common coarse	11490	115.0	116.7	<10					
		aggregates of fine grained pyrite, generally with interstitial quartz	11491	116.7	117.2	<10	(FRAG.	MMV)			
		and rims or pressure shadows of quartz (overall estimated 5-7% pyrite).	11492	117.2	119.5	<10					
		Negligible quartz-calcite veins. Foliation inclined 50° to core axis	11493	119.5	121.2	<10					
		at 120 m. Upper metre (109.1-110.0) is mainly unmineralized, fine									
		grained massive and non-porphyritic dacite which grades rapidly at about									
		110 m into the carbonaceous/argillitic brecciform dacite.									
		116.7-117.2 Narrow internal unit in the brecciform/fragmental dacite-									
		argillitic fragmental basalt, with ca. 7% pyrite-bearing argillitic									
		matrix. Elongate, subrounded to subangular fragments of fine grained,									
		massive basalt, commonly >5 cm long and display 1-2 mm wide calcareous									
		rinds. Argillitic matrix itself contains about 3-5% fine grained,									

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-15 | Sheet 4

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
		disseminated (granular to cubic) pyrite. See analysis 11491.									
121.2	126.0	CARBONACEOUS PYRITIC CHERT, SEMI-MASSIVE PYRITE									
		Dark grey/black carbonaceous (?) chert hosting coarse blocky to nodular pyrite and	11494	121.2	122.8	73					
		pyrite aggregates (with ubiquitous interstitial and rimming quartz that merges locally	11495	122.8	124.2	202					
		into a well-developed network of narrow ± buff to white carbonate-quartz veins inclined	11496	124.2	126.0	14					
		35° to core axis and at a moderately high angle to foliation and layering), mixed									
		with massive to semi-massive and coarse blocky pyrite intervals (mainly 121.2-122.8 m									
		and 124.2-126.0 m). Estimated overall ca. 30% pyrite. Dark chert in lower half of									
		interval displays local fine carbonaceous laminations with common parallel stringers of									
		fine grained pyrite as well as coarse nodular pyrite (variety marcasite, with radial									
		growth patterns). Nodules and stringers generally between 0.5-1.0 cm in diameter and									
		width, respectively.									
		Chert is locally greyer and apparently Fe-carbonatized at about 126.6-126.8 m.									
		Most of this pyritic zone is moderately to strongly conductive owing to pyrite, although									
		carbonaceous cherty material is locally graphitic, scratchable and weakly conductive,									
		especially around 12 m. Interstitial quartz between 125-126 contains numerous vugs.									
		100% recovery.									
126.0	135.2	INTERLAYERED ARGILLITE AND GREYWACKE									
		Black argillite and subordinate fine grained greywacke, finely interlayered at mm -	11497	126.0	127.2	<10					
		to cm-scale. Foliation and layering inclined 51° to core axis at 129.5 m with isoclinal									

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. JV-88-15	Sheet 5

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
		folds that plunge at a very low angle to or sub-parallel to the long axes of foliation plane ellipsoids. Foliation 49-50° to core axis at 133.5 m. Intruded by feldspar porphyry near upper contact.									
(127.2	129.2)	QUARTZ-FELDSPAR PORPHYRY/FELSITE DYKE									
		Discordant, brownish-grey, coarse to medium grained, relatively massive and unfoliated, with ca. 10% (?) vague, coarse equant feldspar crystals and 1% fine to medium grained ovoid quartz phenocrysts. Weakly to moderately sericitized and carbonatized, with <1% fine disseminated pyrite. Very common buff Fe-carbonate - quartz veining inclined 45° to core axis, apparently restricted to the dyke.	11498	127.2	129.2	<10		QFP			
			11499	129.2	131.5	<10					
135.2	167.7	LAYERED GREYWACKE									
		Mainly grey to light grey medium to fine grained greywacke with common pebbly layers, bearing dark shaly lithic fragments and local light felsic fragments (e.g. in coarse grained wacke 136.45-137.3 m, 137.3-141.3 m, 142.4-143.3 m, 148.25-148.35 m and 148.6-148.7 m (with coarse lithic fragments), 156.0-156.4 m (1-2% mg py cubes) and 166.3-167.7 m. Narrow, planar quartz-carbonate veins between 155-160 m inclined 60-80° to core axis.	11500	155.5	158.0	22					
		Foliation inclined 54° to core axis at 146.2 and 158.6 m.									

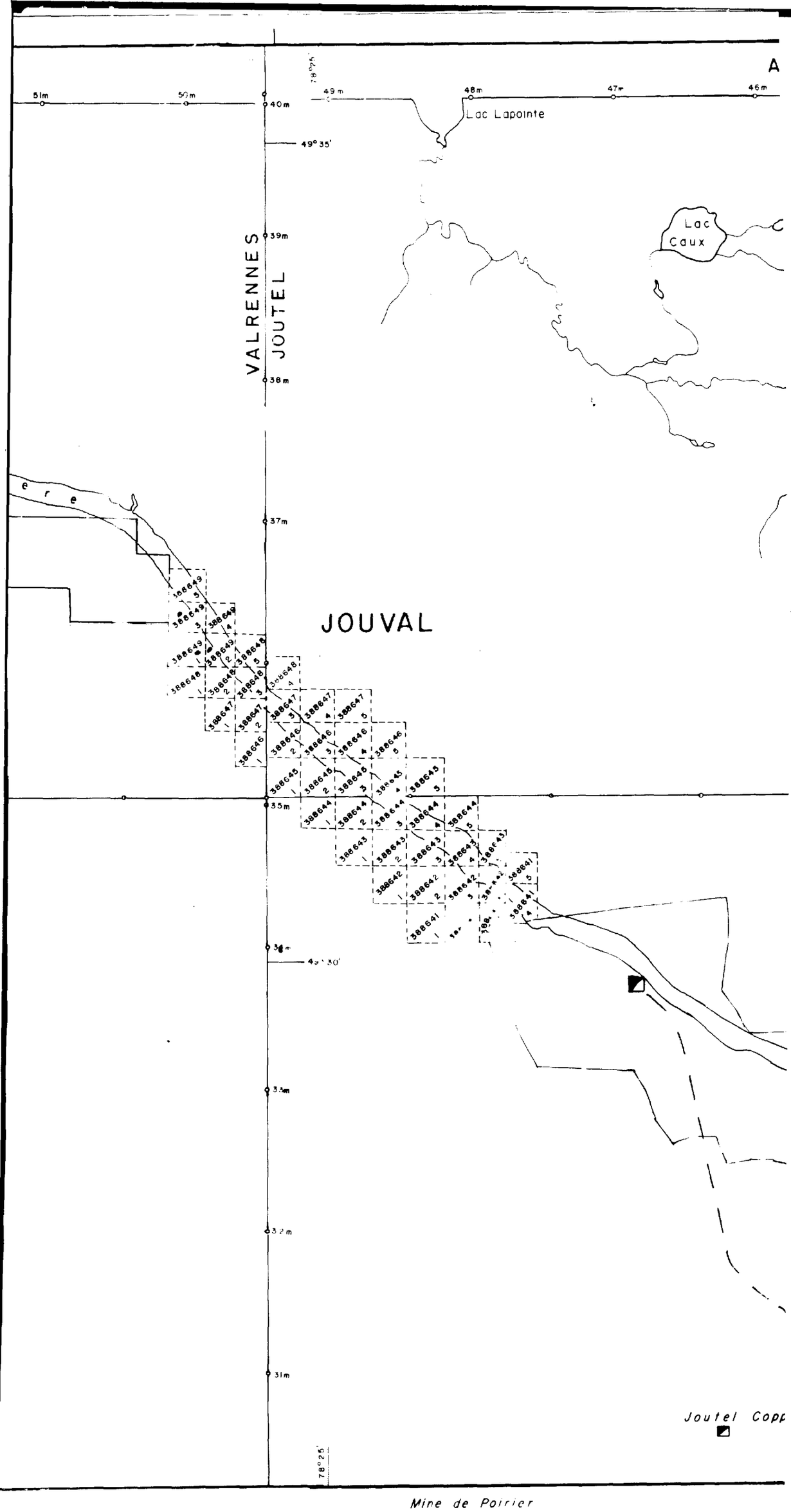
Drill Hole Record

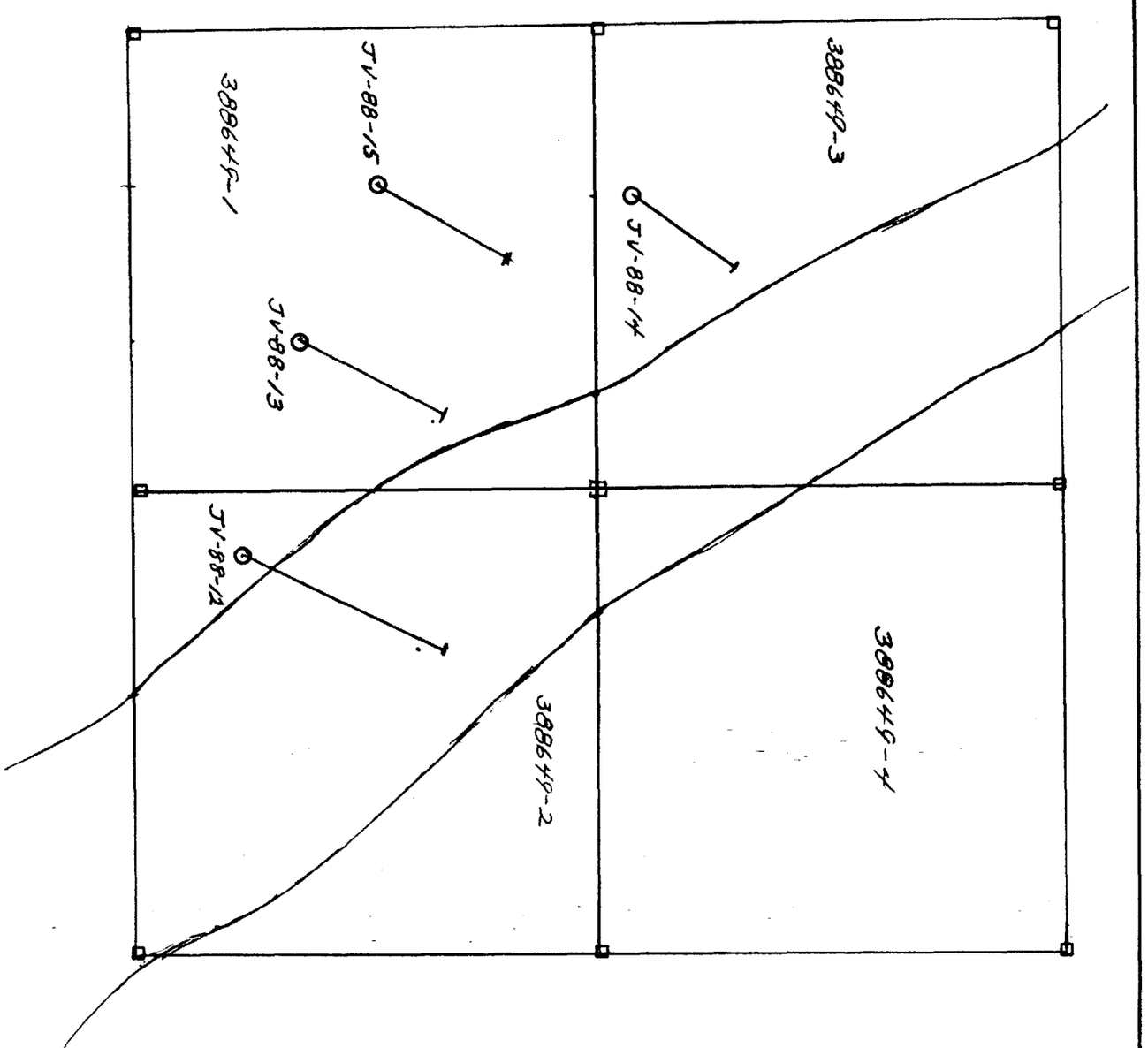
Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. JV-88-15 | Sheet 6

Feet/Metres From	To	Description	sample number	interval		Analysis Au		WRA			
167.7	170.5	INTERLAYERED ARGILLITE AND GREYWACKE									
		Similar to 126.0-135.2 m above.									
170.5	174.0	LITHIC FRAGMENT-BEARING GREYWACKE									
		Similar to pebbly (shaly fragments) layers in greywacke unit at 135.2-167.7 m.									
		Foliation inclined 55° to core axis at 172.3 m.									
	174.0	END OF HOLE									


A
51m
50m
49m
48m
47m
46m
40m
49°35'
78°25'
Lac Lapointe
Lac Caux
VALRENNES
JOUTEL
39m
38m
37m
JOUVAL
35m
49°30'
33m
32m
31m
78°25'
Joutel Copp
Mine de Poirier



Drawn by: RCL.		Traced by:	
Revised by	Date	Revised by	Date

LOCATION SKETCH FOR
DIAMOND DRILL HOLES
VA-88-12-13-14-15

Scale: 1" = 440'

Date: OCT. 19/88

Plate:

NCI - 112A - CL

210-0610