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3040 E. Fountain Blvd. Apt 101
Colorado Springs
Colorado 80910
November 1, 1974

SXM

NOV 4 1974

RECEIVED

Mr. J. K. Jones
Essex International
1704 W. Grant Rd.
Tucson
Arizona 85705

Dear Mr. Jones:

Enclosed with this letter is a detailed geologic map of the Copper Hill property. Duval finally sent it to me. Since I haven't hear from you I presume you still have some interest in examining this prospect.

Duval also sent me 12 other maps mostly on geochemisty. One rock chip. one soil and one pinion nedles. If these would be of interest to you I can perhaps get copies made and sent to you.

In studying the air and core hole data I think that the air drilling could miss a mineable area. Their air drilling seemed to usually show less Cu. values than the core. A overall difference of 20 or 30 hundredths would make the difference in a low grade leaching deposit.

It looks to me as tho there coulb be a low grade deposit near and around DDH # 1. Perhaps over to R.P. # 23. However I believe the greater potential of this deposit lies in exploring away from the extensivly drilled area. As I said before there is a 4 mile trend running N.E. from the Copper Hill with copper shows along it. More exploring can be done along this trend.

If you need additional data please contact me and I will get it to you quickly.

Sincerly

Alfred J. Straughan

P.S. I will be on the property on Nov 8th with another company perhaps I could show it to you the day before or day after. This providing snow don't come befoe then.

GEOLOGY - ASSAY COMPOSITE DRILL

M 355 (Rev 5/68)

JECT Copper Hill

START 6/24/73 COMPL. 7/14/73

D HOLE No. 1

T.D. 470 DRILLED BY: McPherson

RD.: N 10,003.5 E 9946.0 EL. 7514 (?) by hand level (barometric datum) BRG. — INCL. V LOCATION 50 ft W of Champion Shaft

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	MOLYBDENITE	Chrysocolla	Malachite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS oz/T Cu	AS Cu	Mo	Ag	Au	% U	Graph. rx	ore
0-11.0	09					2					.5									.5	2	<1	0	.35		mod bkn 4-8 fracs/ft most @ 30 deg to core axis some @ 60	hard mod gy micaceous grst, mass grx vn @ 0 of 9.5. chrys, mal tr, lamp tr, op tr en fracs w/ minor dists.	89	RI	8201	0-10		.95	.85		.55	.010				
						.5					.8									1	2	<1		.5		mod bkn to mod mass bedding @ 60° to core slip @ 25 : 45°	as above mal=chrys.	74	✓	02	20		1.00	.95		.71					
						.5					.1									1.5	1/2	1-2		.5			trg cp @ 21-23, lamp? chrys on frac @ 23	93	✓	03	30		1.73	1.61		2.64	.023		.002		
											1									1	4	3		.7		bkn @ 30		89	✓	04	40		1.60	1.41		1.64					
						.5																				4 fracs/ft most @ 10 of 90° to core, some @ 60		93	✓	05	50		.33	.28		.45	.006				
											1										1	1.5		.2		2-3 ft/ft @ 65 deg. (bedding?)	as above, chrys & lamp edite incr, cutting Fe ox rslts.	92	✓	85%	60		.95	.88		.04					
										2	2	1									1	3		.7		5-6 fr/ft @ 70-80° to core, some @ 20.		97	✓	07	70		1.01	.95		.41					
											2									1	<1	3½		.8		1-2 ft/ft @ 45°	olive grn Cu ox tr	95	✓	08	80		.37	.33		.52					
																					<1	1½		.35		mod mass 3-6 fracs/ft	cp tr 82-83 after cct(?)	93	✓	09	90		.81	.52		1.75					
						1/2					1/2									1/2	1	1		.3		1 in gg @ 90 @ 60°	as above but csc gr, poorly sorted Cu clays(?), lamp, chrys	100	✓	10	100		.03	.03		.03	.007		.001		
											1										tr	tr		.15		mod bkn 2-5/ft @ 30° & 50°														
											1									?	1/4	1/2		.2		bdg @ 60°. 1-3 fr/ft. @ 10°, 30°, 80°	as above but becoming dk gy @ bott.	89	✓	2511	110		.05	.04		.07					
																				1/2	1/2	1+		.2		mod bkn 3-6 fr/ft. Aiasbr III @ 40°	as above: dk-mod gy poorly sorted csc gr gtzt. apple-grn chrys(?)	91	✓	12	120		.08	.08		.19					
110-249											2													.5		strong fr @ 30° bkg		90 100	✓	13	130		.57	.54		.58					
																								.55				93	✓	14	140		.10	.10		.03					
																								.25				87	✓	15	150		.06	.06		.06	.003				
																								.13				100	✓	8516	160		.10	.09		.16			mix-up on fracs by drillers 16 ft. Adjusted by RL		
																					1/2	1/4	.25				75	✓	17	170		.29	.26		.25					
												3+												.25			as above but becoming more mass. fewer min'd fracs.	100	✓	18	180		.33	.31		.26					
																								.15		bdg @ 80° to core		97	✓	19	190		.13	.08		.12					
																								.1			dk gy	100	✓	20	200		.13	.10		.10	.002				
																								.3		bdg @ 40° fracs @ 30 & 50. 1 to 3/ft.	grx vn @ 208. doubtful cct @ 203, 208.	100	✓	5521	210		.33	.17		.27					
																								.3		1-2 fr/ft		100	✓	22	220		.55	.35		.46					
																				.1	1/2	1/4		.4		same.	as above. min'n spotty but high grade locally. mal tr @ 224	100	✓	23	230		.26	.14		.30					
												1												.8		1-4 fr/ft, most @ 90, some 45° f/ft 236-237	chrys/mal ratio incr.	98	✓	24	240		.27	.26		.16					
												2								?							strong min'n u/thrvy lamp 240-243	100	✓	25	250		.40	.31		.42	.006				
												tr									1/4	—	2	1.3		mod bkn 2-6 fr/ft														

Estimate amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale generally from ...logy to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

PROJECT Copper Hill

START 6/24/73 COMPL. 7/14/73

D D HOLE No. 1

COORD.: N 10,003.5 E 9946.0 EL. 7514 (?) BRG. — INCL. V LOCATION 50 ft W of Champion Shaft T.D. 470 DRILLED BY: Peterson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BOLTWOODITE~~ Cu pyrite	malachite	Chrysocolla	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	oz/Ton ~~Gold~~		% U	Graph. rx	core
249-253	oq																			1				1.8		bkn 5-6 fr/ft	med gy to blk qtzt w/ kyanite layers 1/16 - 1/2" apart @ 70° to core, poor	94	RA	8526	250-260		.37	.35		.07					
253-260	oq										1/2									1	?	4		1.5		bkn 3-4 fr/ft @ 45° & 80°	med gy qtzt, chrys, lamp, cp on fracs @ 10°, 5° & 80° to core 253-257	98	✓	27	270		.47	.46		.09					
260-292																								.9		mod mass 260-279 3 fr/ft	diss sul casts (v. sm.) @ 265 & qtz vn @ 263.	89 ~~89~~	✓	28	280		.50	.47		.56					
	oq					5				1	1/3									2	?	2		.75		badly bkn		78 ~~80~~	✓	29	290		.13	.12		.02					
292 to ~~[illegible]~~	oq																							.7		~~[illegible]~~ bkn 4-10 fr/ft bdg (fol?) @ 75° to core	qtz vn 290-292, ~~[illegible]~~ gry & grn std musc ++, qtz vn 299-300.	89	✓	30	300		.02	.02		.01	.003				
~~[illegible]~~ 330																								.6		mod bkn. 3-5 fr/ft bdg @ 10° to cor 301-305	as above w/ some ky layers.	81	✓	8531	310		.02	.02		.03					
																								.3		mod mass		99	✓	32	320		.03	.03		.03					
330-356	oq					2				?	1/2								?	1/2		tr		.2		alt mass & bkn	med gy fbrt grn mic. qtzt w/ tiny ky bands qtz vn 324-326, & @ 328.	73	✓	33	330		.01	.01		.02					
																								.15		bkn 10-100 fr/ft	qtz vn 335-339, much brt grn mica (ser) pseudo-Cu. Cuox as cp	85	✓	34	340		.01	.01		.01	.005		.001		
																								.4		fol @ 60°. mod mass 2-3 fr/ft. on fol & 70° & 50°	in vn & fts & diss., some on fol & x-cutting fol. pass andalusite sch @ 348?	100	✓	35	350		.05	.05		.05	.004				
356-400	oq									?	1									2		1/2		.7		mod mass - mass 3 to 1/2 fr/ft. bdg @ 40°	med gy qtzt w/ cp, chrys & lamp on fracs hvy cp @ 354-358.	100*	✓	35 36	360		.06	.06		.02		← Error in log: depth detects			
																				tr		1		.1		do.	qtz vn @ 361 (?) conglomerat. c 366-374. chrys & lamp on fr.	100*		37	370		.03	.03		.01			here 5'-0" is really 367.		
																				?		1		.05		do.	ky @ 376	100*		38	380		.03	.03		.04			Sample added between 360 &		
																				?		1		.1		do.		100*		39	390		.04	.04		.01	←		390 by R.H.P. 7/13/73		
																						1		.05		do.	as above but becoming dk gy. sub-cgl @ 399.	99		40	400		.04	.03		.02					
400-470	oq									1/2	1								?	?				tr		fol/bdg @ 50°, mod mass 2-4 fr/ft @ 50° & 70°	3 in ky sch @ 402. rest is poorly sorted dk gy qtzt, slightly conglomerat.	100		8541	410		.03	.02		.02					
																				?				.05		mod mass - mod bkn 1-6 fr/ft, most @ 70-80° (bdg)	pink Cu-brg min on fracs, poss cupriferous limonite?	93		42	420		.01	.01		.01					
																								.1		as above, fr @ 65° to core.		77		43	430		.01	.01		.01					
																								.05		bdg/fol @ 40°. mod mass 1/2 - 4 fr/ft	ky sch (fol @ 35°) @ 440	96		44	440		.01	.01		.01					
																			?					tr				90		45	450		.01	<.01		.01					
																			?					tr				91		46	460		.01	<.01		.01					
																			?					.05			qtz vn @ 466. Incr ky below	99		47	470		.01	<.01		.01					

Note: Selected amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./in.). Geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet ___ of ___

PROJECT: Copper Hill

START: 7/20/73 COMPL.: 7/25/73

D D HOLE No.: 2

COORD.: N ~~[illegible]~~ 10,000 E 11,793 EL. ___ BRG. ___ INCL. V LOCATION: W. edge of Wyble Quarry (Wilson Mine)

T.D.: 226 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~ ~~Lepidite~~ Chrysocolla	Malachite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au ~~Mo~~	Ag	Cu eq.			Graph. rx	ore
0-20	09			1							1/2									1/2	1/2	1		.4		mod mass - mod bkn 1/2-5 fr/ft @ 20° & 70° bdg @ 80°	med-dk gy Ortega Quartzite, med gr well sorted, f black bands (bedding?) chrys, az, cp, mal on fr & blebs on bdg. Good az @ 10, cp @ 13.	88	RA	95 98	10		.39		.009	.12					
																								.5				95		49	20		.61			.60					
20-48	09			1/2							2									1/2	tr	tr		.25		23 above. bkn @ 30.	Hy speckled (arkosic?) qtzt, v. little grn Cu ox - cp, lamp mainly.	98		50	30		.04			.06					
				1							2									1	2	2		.2		bdg @ 40°		90		51	40		.13			.05					
48-75	09			1/2							1 1/2									3	2	2		.6			str cp 45-48 (w/az, mal & chrys) med gy ky qtzt, hily frac but not	93		52	50		1.07		.009	1.03					
											1									tr	1	tr		.10		mass: f/r -2 fr/ft @ 50° & 70° to core.	bkn.	98		85 53	60		.11			.11					
																								.05		mod bkn 4-6 fr/ft @ 80 & 60°.		95		54	70		.05			.03					
75-136	09			tr							1/2									1/2	tr	-		.05		mod mass [illegible] fr/ft	slightly micaceous lt gy, qtzt w/ blk bands (bdg) @ 50° to core, rare chrys, minor lamp & cp on fr.	98		55	80		.02			.03	-				
																								.03		mass 2 fr: bkn @ 84 & 87, bdg @ 40°, str fr @ 60°		97		56	90		.01			.02					
																								.02		mass 1/2-2 fr/ft. bdg @ 65-90° to core.		95		57	100		.02		.003	0.03					
																								.05		mod bkn 1-3 fr/ft @ 50 & 65. bdg @ 50°	cp & lamp tr @ 106-110	95		85 58	110		.02			.08					
																								.01		Mod mass, bkn 113-115 bdg @ 85. str x-bdg		99		59	120		.01			<.02					
																								tr		mod mass - mod bkn 2-3 fr/ft @ 45° & 75°. bio band on bdg @ 75°		98		60	130		.01			<.02					
136-170	09			tr							1									?	1			.01		as above	dk gy & blk banded bio qtzt, v wk chrys, lamp & cp(?) on fracs.	91		61	140		.03			.03					
																								.tr		mod mass 1-3 fr/ft @ 70° ± to core, bdg/fol @ 75°		100		62	150		.02			.08					
																								.05		bkn 158-163 mod mass 1-4 fr/ft	chrys, lamp & cp 158-163 (on fr.)	96		85 63	160		.03			.04					
170-215	09			tr							1/4									?	1/4	1/2	-	.07		min fr @ 10-50°	mod gy poorly sorted arkosic bio qtzt. wk chrys, lamp & cp on fr.	92		64	170		.04			.02					
																								.01		mod mass 1-2 fr/ft		93		65	180		.06			.01					
																				?				.05				98		66	190		.04			.01					
																								.01			1 ft cuttings from old hole(?) @ 191.	82		67	200		.04			.02					
																								.08			str chrys 208-212	100		85 68	210		.50			.06					
215-226	09																							.05		mod mass 1-1 1/2 fr/ft bkn @ 213.	banded blk & wh conglomeratic bio qtzt, tr chrys @ 223, chrys & cp @ 225.	100		69	220		.07			.03					
												.02		mass 3/4-1 fr/ft.		92		85 70	226		.02			.03					

Geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

PROJECT: Copper Hill

START: 9/1/73 COMPL.: 9/3/73

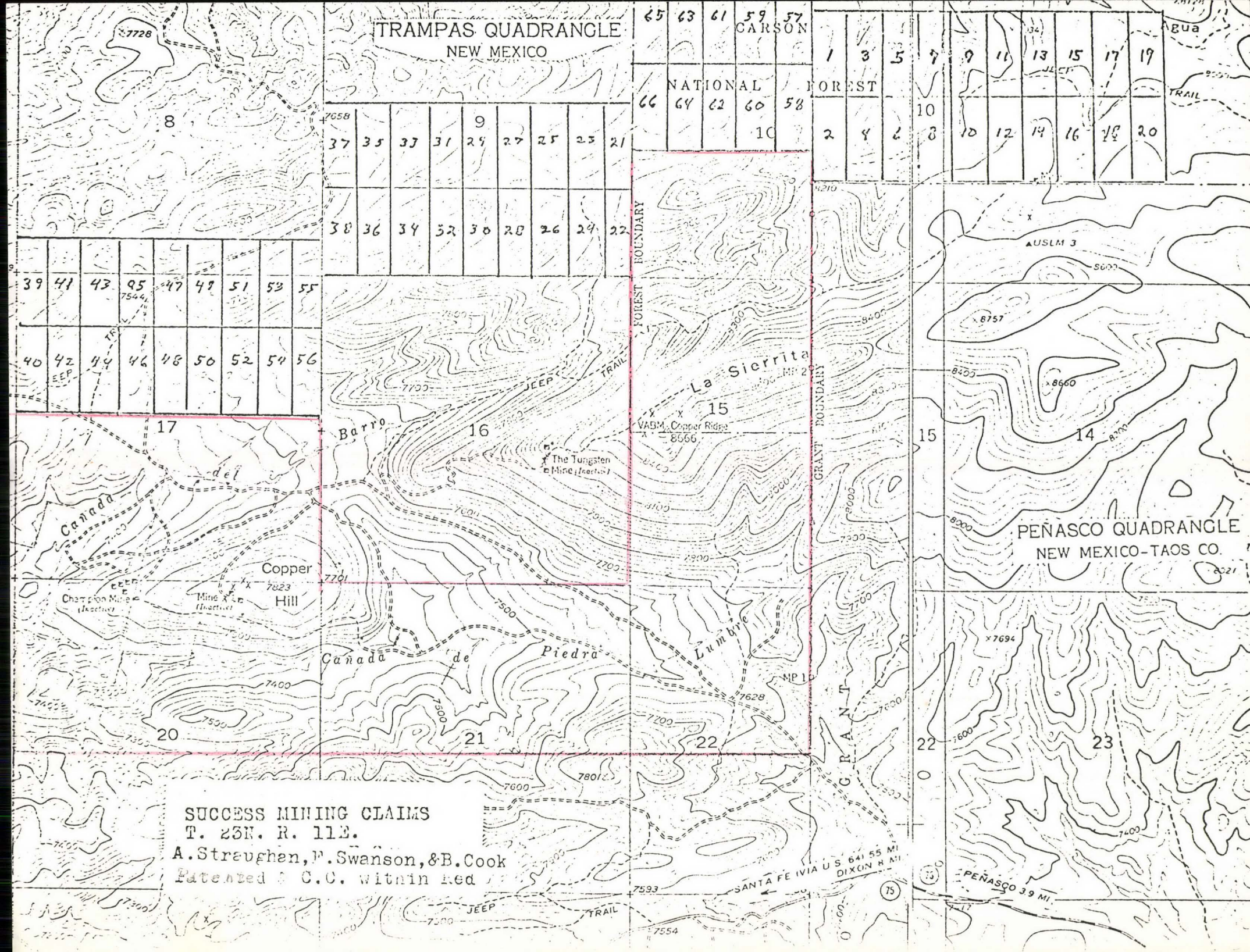
RP D HOLE No.: 3

COORD.: N 10,087 E 11,743 EL. 7699 BRG. — INCL. V LOCATION: 100ft N30W of DDH 2 (W. edge of road N of quarry)

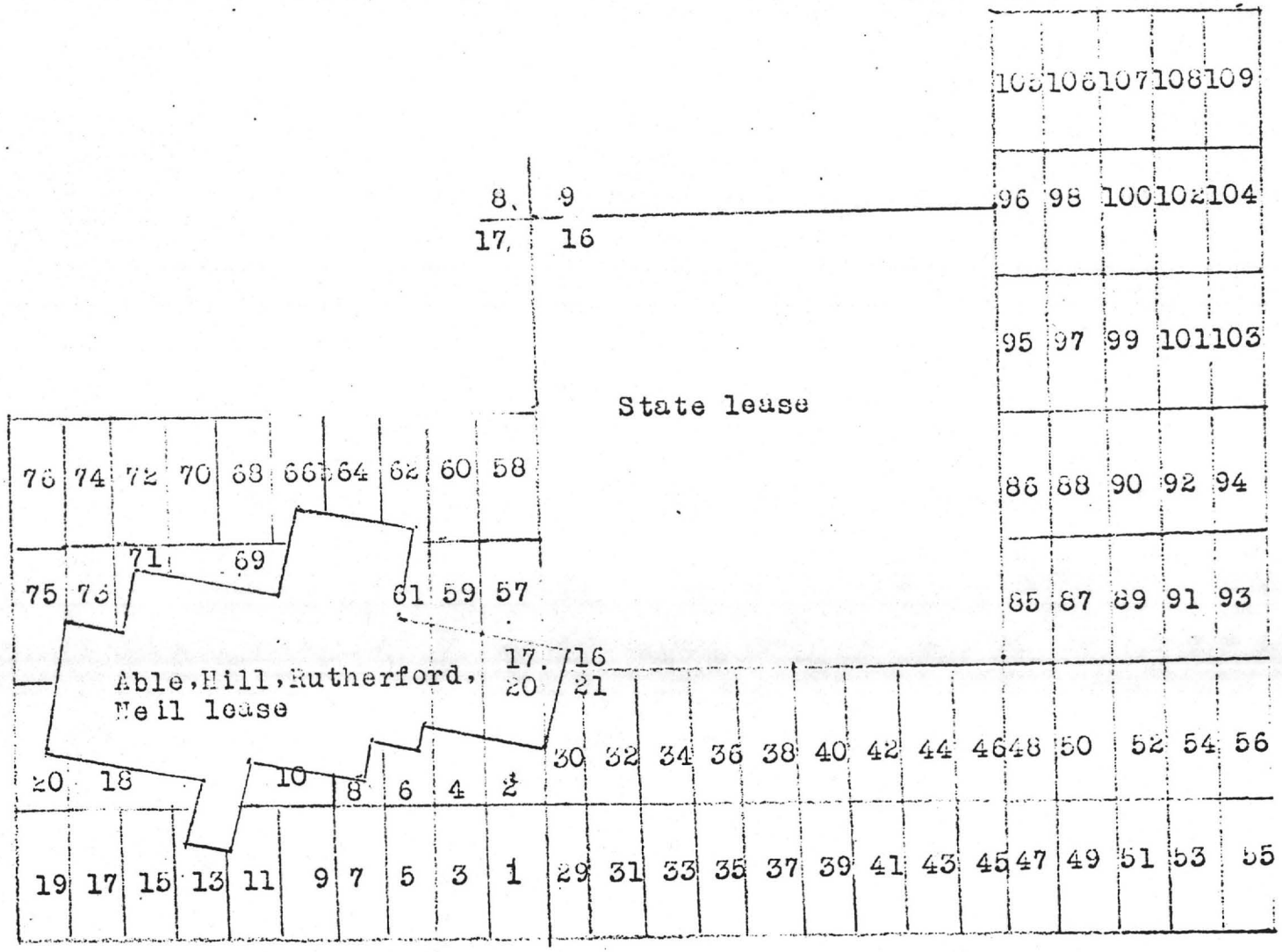
T.D. 168 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	BORNITE / Chrysocolla	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	cre
0-10	oq										6									2		.1			Soil, Cu bearing float brn musc, schistose qtzt	2 3/4 in. bit	RP	86 78	10		.08			ND					
10-30	oq									3	6											tr			tan schistose musc qtzt (prob metacgl) w/ hbl alt to lim.		✓	79	20		.03			ND					
										3	5									1		.1					✓	80	30		.13			ND					
30-50	oq									1	2								?	1		.5			wh-lt gy & blk banded ky qtzt		✓	81	40		.42			.03					
										1	2											.25			(hole caving, questionable sample)		✓	82	50		.18			.06					
50-60	oq									2	5								?	5		.5			brn & wh micaceous schistose qtzt		✓	86 83	60	.4	.37			.09					
60-150	oq									2	4									3		.3			wh-lt gy vit qtzt, some blk bands.		✓	84	70		.38			.29					
										1	3								1	5		.7					✓	85	80	1	2.50			.85					
											2									3		.3					✓	86	90	.4	.56			1.11					
											1								1/2	1/2		.2					✓	87	100	100 1/2	.48			.35					
											1								1	1/2		.2					✓	86 88	110		.29			.09					
											1								1	1/2		.5					✓	89	120		.98			1.11					
											2								?	2		.1					✓	90	130		.24			.38					
											1									1		.08					✓	91	140		.09			.20					
											1									1		.05					✓	92	150		.11			.12					
150-168	oq										1									1		.1			lt-med gy blk-banded ky qtzt		✓	96 95	160		.25			.15					
											1									1		.02						94	168 ~~170~~		.05			.03					
																									(Hole caving, stuck rods, abandoned at 168ft.)														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (left, right); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.



SUCCESS MINING CLAIMS
T. 23N. R. 11E.
A.Straughan, F.Swanson, &B.Cook
Patented & C.C. within Red



C.C. Claim Group
T. 23 N. R. 11 E.
Taos County
New Mexico

Boyce Cook, Frank Swanson
and Alfred Straughan owners.

October 1, 1974

Mr. Alfred J. Straughan
3040 E. Fountain Blvd. - Apt. 101
Colorado Springs, Colorado 80910

Dear Mr. Straughan:

The information you sent on your Copper Hill property near Penasco, New Mexico is very interesting and certainly appears to justify a closer look by Essex. We would like to see all the data you have as soon as possible.

A map showing drill hole locations will be essential, and perhaps you can have Duval prepare one to be picked up by us in Tucson.

I am going to be in Utah for about a week but would like to review your data when I return in order to be able to make a trip to the area before the snow falls.

Very truly yours,

J.K. Jones
Chief Geologist

ESSEX INTERNATIONAL, INC.

JKJ:td

3040 E. Fountain Blvd Apt 101
Colorado Springs
Colorado 80910
September 25, 1974

SXM

Ken Jones for Lecture Left

SEP 27 1974

RECEIVED

Mr. Paul Eimon
Essex International
1704 W. Grant Rd.
Tucson, Ariz. 85705

Dear Mr. Eimon:

I am at this time presenting to your company a property that I think has a lot of merit. For the past three years this property has been under option to the Duval Corp. but it was returned to us last month. They drilled 23 R.P. holes and 9 D.D. holes. Their interpretation of the data is that the orebody would not be large enough for their company. The size I believe is larger than they think as their drilling was limited by their budget. Their project geologist Mr. Robert Metz mentioned that it was hard to get money for exploration. I presume he wished to go on with the project.

Due to the cost of reproduction I am sending only a couple of the drill logs and two maps showing location of the prospect. If you become seriously interested I can get you more data. Duval did not give me maps with drill holes plotted so any estimate of the known tonnage would be hard to do. The core is avaliable for your examination in a locked building at the prospect.

For geology of the area see a paper by Arthur Montgomery, "Precambrian Geology of the Picuris Range" Bulletin 30 of the New Mexico Bureau of Mines 1953. Also see "The Ore Deposits of New Mexico by Waldemar Lindgrenn 1910. U.S.G.S. Prof. Paper 68 p. 89 to 91.

I would appreciate hearing as to any interest your company may br may not have in this prospect. Please contact me in the near future as snow hampers showing this prospect after the end of October.

Sincerly

Alfred J. Straughan

Alfred J. Straughan

3040 E. Fountain Blvd. Apt. 101
Colorado Springs
Colorado 80910
October 5, 1974

SXM
OCT 7 1974
RECEIVED

Mr. J.K. Jones
Essex International Inc.
1704 W. Grant Rd.
Tucson, Arizona 85705

Dear Mr. Jones:

Thanks for your letter of the 1st regarding our Copper Hill property in New Mexico. I will enclose with this letter all of the data I have received from Duval. It consists of logs on all of the holes they drilled. I still have no geologic map from Duval. I have not got the holes plotted on a map you can do that from the coordinate at the top of each log. The tie of the coridnate is the N.E. corner of the Champion shaft. I will enclose with the Duval work a map made of of data from Bear Creeks 1969 drilling. The Champion shaft shows on this also on the Trampas quadrangle.

In regards to having Duval work up a drill site map for you to pick us the answer is no. I got a letter from Bob Mets of Duval yesterday saying he is not allowed to release anything but recorded data. He says he will get a geologic map to me in about two weeks which will cover their work. So for the present I am sending you what I have from Duval. There are other companies looking at this property and they are working with the same data I am sending you.

I hope the enclosed data helps you to make decision to option this excellent copper property. If you decide to examin the prospect on the ground one of us can possibly be there to show you around. My partner Boyce Cook is staking claims for ASRCO at Summitville he could take a day off and show you our property. Its only a 100 miles from the claims to where he is working. It 220 from here and I can drive there in four hours so I could meet you there with a little adavance notice.

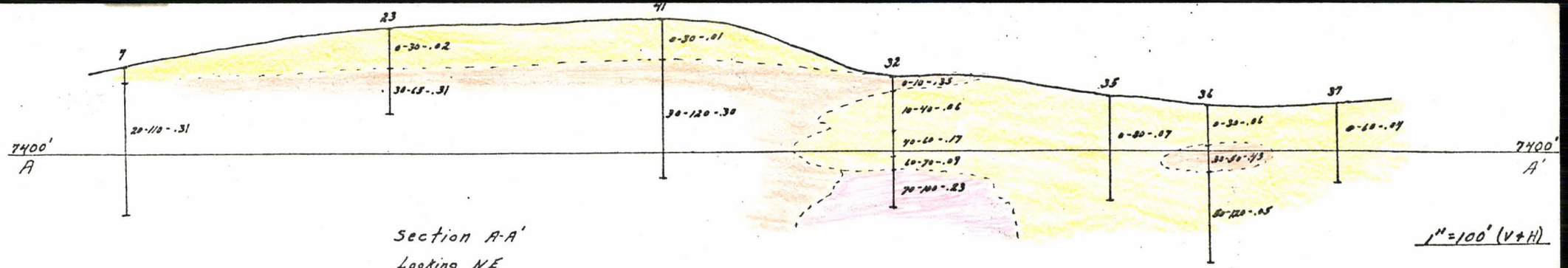
Sincerly

Alfred J. Straughan

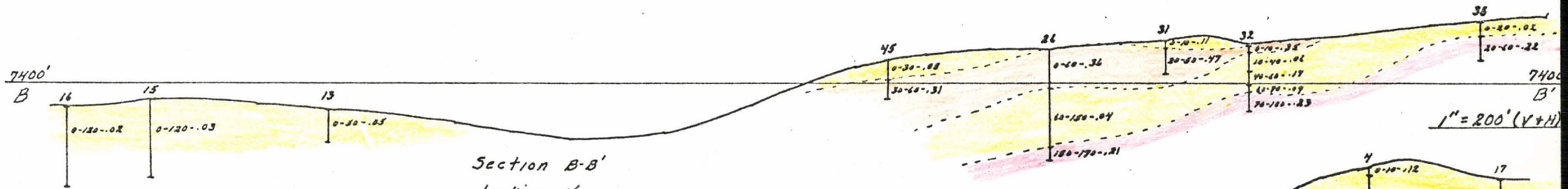
Compiled from drilling done by Bear Creek Mining in 1969

Taos County, New Mexico

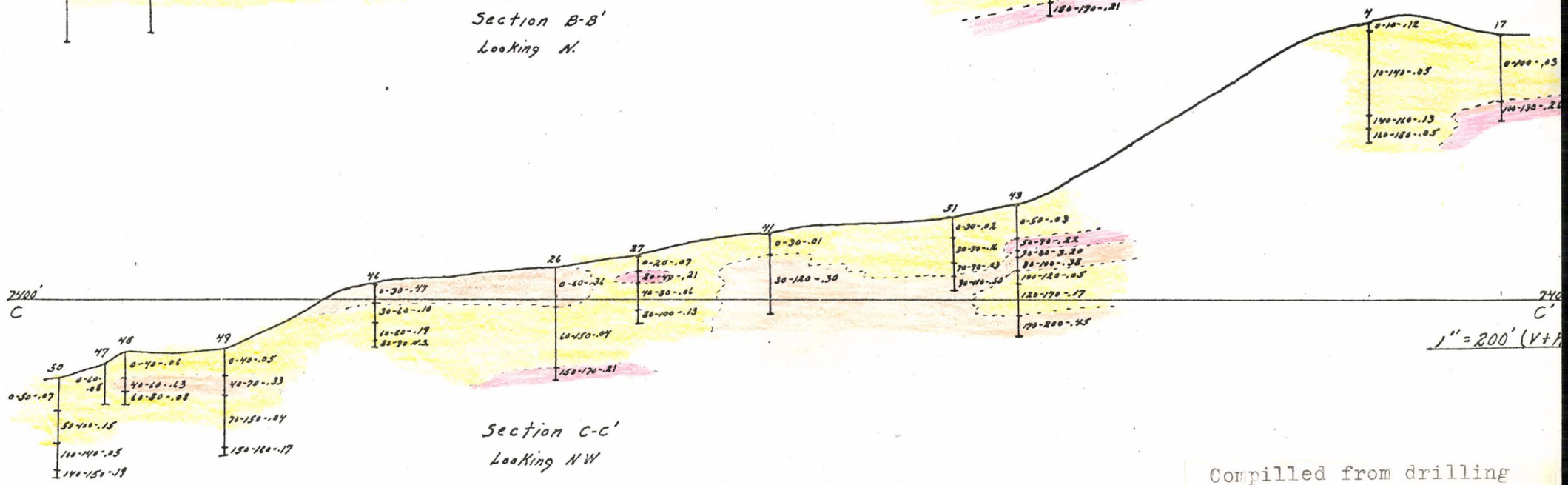
Scale: 1" = 500'



Section A-A'
Looking NE



Section B-B'
Looking N.

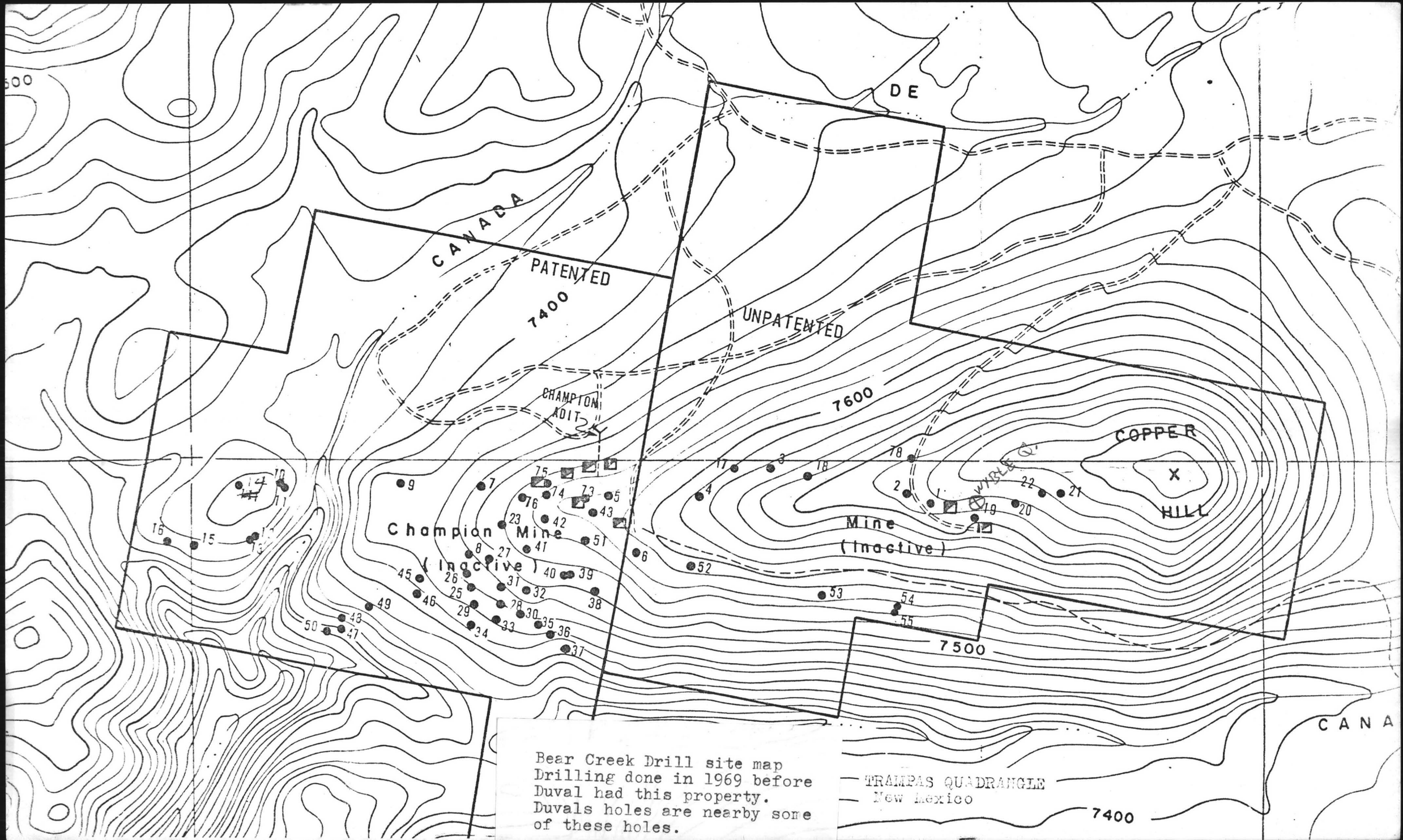


Section C-C'
Looking NW

.30% Cu. or better
.20% - .29% Cu.
Less than .20% Cu.

Compilled from drilling done by Bear Creek Mining in 1969

Taos County, New Mexico
X-Sections



Bear Creek Drill site map
Drilling done in 1969 before
Duval had this property.
Duvals holes are nearby some
of these holes.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE

PROJECT: Copper Hill

START 6/24/73 COMPL. 7/14/73

D D HOLE No. 1

COORD.: N 10,003.5 E 9946.0 EL. 7514 (?) by hand level (barometric datum) BRG. — INCL. ✓ LOCATION 50 ft W of Champion Shaft

T.D. 470 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	NON-SULFIDE COPPER MINERALS	malachite	chrysocolla	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag oz/T	Au oz/T Cu-eq.		% U	Graph. rx	ore
0-110	09					2					.5									.5	2	<1	0	.35		mod bkn 4-8 fracs/ft most @ 30 deg to core axis some @ 60	hard med gy micaceous qtzt, mass qtz vn @ 0 of 9.5. chrys, mal^d, lamp^m, op^m on fracs w/ minor diss.	89	RM	8501	0-10		.95	.85		.55	.010					
						.5					.5									1	2	<1		.5		mod bkn to mod mass bedding @ 60° to core	As above mal=chrys.	74	✓	02	20		1.00	.95		.71							
						.5					.1									1.5	1/2	1-2		.5		slip @ 25-45°	hvy cp @ 21-23, lamp/chrys on frac @ 23	93	✓	03	30		1.73	1.61		2.64	.023		.002				
																												89	✓	04	40		1.60	1.41		1.64							
						.5					1									1	4	3		.9		bkn @ 30																	
											1										1	1.5		.2		4 fracs/ft. most @ 10 of 90° to core, some @ 60		93	✓	05	50		.33	.28		.45	.006						
										2	2	1									1	3		.7		2-3 fr/ft. @ 65 deg. (bedding?)	as above, chrys & lamp edite incr, cutting Fe ox rnlts.	92	✓	8506	60		.95	.88		.04							
											2									1	<1	2½		.8		5-6 fr/ft @ 70-80° to core, some @ 20.		97	✓	07	70		1.01	.95		.41							
																					<1	1½		.35		1-2 fr/ft @ 45°	olive grn Cu ox^tt	95	✓	08	80		.37	.33		.52							
						½					½									½	1	1		.3		mod mass 3-6 fracs/ft 1 in 99 @ 90 @ 60°	cp^tt 82-83 after cct(?)	93	✓	09	90		.81	.52		1.75							
											1											tr	tr	.15		mod bkn 2-5/ft @ 30 & 50°	as above but csc gr, poorly sorted Cu clays(?), lamp, chrys	100	✓	10	100		.03	.03		.03	.007		.001				
											1									?	¼	½		.2		bdg @ 60°. 1-3 fr/ft. @ 10°, 30°, 80°	as above but becoming dk gy @ bott.	89	✓	8511	110		.05	.04		.07							
110-249											2									½	½	1+		.2		mod bkn 3-6 fr/ft. 4 in str 111 @ 40°	as above: dk-mod gy poorly sorted csc gr qtzt. appk-grn chrys(?)	91	✓	12	120		.08	.08		.19							
																								.5		strong fr @ 30° bkn		90	✓	13	130		.57	.54		.58							
																								.55				93	✓	14	140		.10	.10		.03							
																								.25				87	✓	15	150		.06	.06		.06	.003						
																								.13				100	✓	8516	160		.10	.09		.16				mix-up on footage by drillers 160-180 Adjusted by RH & RG.			
												3+										½	1+	.25				75	✓	17	170		.29	.26		.25							
																								.25			as above but becoming more mass. fewer min'd fracs.	100	✓	18	180		.33	.31		.26							
																								.15		bdg @ 80° to core		97	✓	19	190		.13	.08		.12							
																								.1			dk gy	100	✓	20	200		.13	.10		.10	.002						
																								.3		bdg @ 40°. fracs @ 30 & 50°. 1-3 fr/ft.	1" qtz vn @ 208, doubtful cct @ 205, 208.	100	✓	8521	210		.33	.17		.27							
																								.3		1-2 fr/ft		100	✓	22	220		.55	.35		.46							
												1								.1	½	¼		.4		same.	as above. minin spotty but high grade locally. mal & cp^tt @ 224	100	✓	23	230		.26	.14		.30							
												2							?					.8		1-4 fr/ft, most @ 90, some 45°. f/p 236-237	chrys/mal ratio incr.	98	✓	24	240		.27	.26		.16							
												tr									¼	-	2	1.3		mod bkn 2-6 fr/ft	strong minin w/ hvy lamp 240-243	100	✓	25	250		.40	.31		.42	.006						

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 4 of —

PROJECT Copper Hill

START 6/24/73 COMPL. 7/14/73

D HOLE No. 1

COORD.: N 10,003.5 E 9946.0 EL. 7514 (?) BRG. — INCL. V LOCATION 50 ft W of Champion Shaft T.D. 470 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BORNITE~~	~~COVELLITE~~ malachite	chrysocolla	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	oz/Tn Au ~~Geol.~~		% U	Graph. rx	ore
248-253	oq																				1			1.8		bkn 5-6 fr/ft	med gy to blk qtzt w/ kyanite layers 1/16 - 1/2 apart @ 70° to core, poor	94	RM	8526	250-260		.37	.35		.07					
253-260	oq										1 1/2										1	?	4	1.5		bkn 3-4 fr/ft @ 45° & 80°	med gy qtzt, chrys, lamp, cp on fracs @ 10°, 5°, & 80° to core 253-257	98	✓	27	270		.47	.46		.09					
260-282																								.9		mod mass 260-279 3 fr/ft	diss sul cons (v. sm.) @ 265 & qtz vn @ 263.	89	✓	28	280		.50	.47		.56					
	oq					5				1	1 1/3										2	?	2	.15		badly bkn		78	✓	29	290		.13	.12		.02					
282-290	oq																							.7		bkn 4-10 fr/ft bdg (fol?) @ 75° to core	qtz vn 290-292, mult gy musc qtz & musc, qtz vn 299-300.	89	✓	30	300		.02	.02		.01	.003				
290-310																								.6		mod bkn. 8 fr/ft 1/2 gy @ 10° to cor 301-305	as above w/ some ky layers.	91	✓	9531	310		.02	.02		.03					
																								.3		mod mass		99	✓	32	320		.03	.03		.03					
330-356	oq					2				?	1 1/2								?	1/2		tr		.2		alt mass & bkn	med gy fbr grn mic. qtzt w/ fry ky bands, qtz vn 324-326, & 328.	73	✓	33	330		.01	.01		.02					
																								.15		bkn 10-100 fr/ft	qtz vn 335-339, much wt grn mica (ser) pseudo-Cu. Cuox as cp	85	✓	34	340		.01	.01		.01	.005		.001		
																								.4		fol @ 60°. mod mass 2-3 fr/ft. on fol & 30° & 50°	in vn/fts & diss., some on fol & x-cutting fol. pass andalusite sch @ 348?	100	✓	35	350		.05	.05		.05	.004				
356-460	oq									?	1										2		1 1/2	.7		mod mass - mass 3 to 1/2 fr/ft. bdg @ 40°	med gy qtzt w/ cp, chrys & lamp on fracs hvy cp @ 354-358.	100*	✓	35 36	360		.06	.06		.02		Error in log depth detected			
																					tr		1	.1		do.	qtz vn @ 361 (?) conglomerat. c 368-374. chrys & lamp on fr.	100*		37	370		.03	.03		.01		here 363 is real 347.			
																					?		1	.05		do.	ky @ 376	100*		38	380		.03	.03		.04		Samples adjust between 360 & 390 by R.H.J. 7/13/73			
																					?		1	.1		do.		100*		39	390		.04	.04		.01					
																							1	.05		do.	as above but becoming dk gy. sub-% cgl @ 399.	99		40	400		.04	.03		.02					
400-470	oq									1/2	1								?	?				tr		fol/bdg @ 50°, mod mass 2-4 fr/ft @ 50° & 70°	3 in ky sch @ 402. rest is poorly sorted dk gy qtzt, slightly conglomeratic	100		8541	410		.03	.02		.02					
																					?			.05		mod mass - mod bkg 1-6 fr/ft, most @ 70-80° (bdg)	pink Cu-brg min on fracs, poss cupriferous limonite?	93		42	420		.01	.01		.01					
																								.1		as above, fr @ 65° to core.		77		43	430		.01	.01		.01					
																								.05		bdg/fol @ 40°. mod mass 1 1/2 - 4 fr/ft	ky sch (fol @ 35°) @ 440	96		44	440		.01	.01		.01					
																			?					tr				90		45	450		.01	<.01		.01					
																			?					tr				91		46	460		.01	<.01		.01					
																			?					.05			qtz vn @ 466. Incr ky below	99		47	470		.01	<.01		.01					

Note: relative amounts of alteration minerals are indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10 ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT: Copper Hill

START 7/20/73 COMPL. 7/25/73

D D HOLE No. 2

COORD.: N 10,000 E 11,793 EL. ____ BRG. ____ INCL. V LOCATION W. edge of Wyble Quarry (Wilson Mine)

T.D. 226 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	Chrysocolla	malachite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au	Ag	Cu eq.			Graph. rx	ore
0-20	og			1							1/2									1/2	1/2	1		.4		mod mass - mod bkn 1/2-5 fr/ft @ 20° & 70° bdg @ 80° ±	med-dk gy Ortega Quartzite, med gr well sorted, f black bands (bedding?) chrys, az, cp, mal on fr & blebs on bdg. Good az @ 10, cp @ 13.	88	RM	85 48	10		.39		.009	.12					
																								.5				95		49	20		.61			.60					
20-48	og			1/2							2									1/2	tr	tr		.25		as above. bkn @ 30.	lt gy speckled (arkosic?) qtzt, v. little grn Cu ox - cp, lamp mainly.	98		50	30		.04			.06					
				1							2									3/4	2	2		.2		bdg @ 40°		90		51	40		.13			.05					
48-75	og			1/2							1/2									3	2	2		.6			str cp 45-48 (w/az, mal & chrys) med gy ky qtzt, hily fracs but not	93		52	50		1.07		.009	1.03					
											1									tr	1	tr		.10		mass: 1/2-2 fr/ft @ 50° & 70° ± to core.	bkn.	98		85 53	60		.11			.11					
																								.05		modden 4-6 fr/ft @ 80° & 60°.	slightly micaceous	95		54	70		.05			.03					
75-136	og			tr							1/2									1/2	tr	-		.05		mod mass, 2-3 fr/ft.	lt gy, qtzt w/blk bands (bdg) @ 50° to core rare chrys, minor lamp & cp on fr.	98		55	80		.02			.03					
																								.03		mass exc. bkn @ 84 & 87, bdg @ 40°, str fr @ 60°		97		56	90		.01			.02					
																								.02		mass 1/2-2 fr/ft. bdg @ 65-90° to core.		95		57	100		.02		.003	.03					
																								.05		mod bkn 1-3 fr/ft @ 50° & 65°. bdg (?) @ 50°	cp & lamp ++ @ 106-110	95		85 58	110		.02			.03					
																								.01		mod mass, bkn 112-113 bdg @ 85. str x-bdg		99		59	120		.01			<.02					
																								tr		mod mass - mod bkn, 2-3 fr/ft @ 40° & 75°: bio bands ok bdg @ 75°		98		60	130		.01			<.02					
136-170	og			tr							1									?	.1			.01		as above	dk gy & blk banded bio qtzt, v wk chrys, lamp & cp(?) on fracs.	91		61	140		.03			.03					
																								.tr		mod mass 1-2 fr/ft @ 70° ± to core, bdg/fol @ 75°		100		62	150		.02			.08					
																								.05		bkn 158-163 mod mass 1-4 fr/ft	chrys, lamp & cp 158-163 (on fr.)	96		85 63	160		.03			.04					
170-215	og			tr							1/4									?	1/4	1/2	-	.07		min fr @ 10-30°	med gy poorly sorted arkosic bio qtzt. wk chrys, lamp & cp on fr.	92		64	170		.04			.02					
																								.01		mod mass 1-2 fr/ft		93		65	180		.06			.01					
																				?				.05				98		66	190		.04			.01					
																								.01			1 ft cuttings from old hole(?) @ 191.	82		67	200		.04			.02					
																								.08			str chrys 208-212	100		85 68	210		.50			.06					
215-226	og																							.05		mod mass 1-1 1/2 fr/ft bkn @ 213.	banded blk & wh conglomeratic bio qtzt, tr chrys @ 223, chrys & cp @ 225.	100		69	220		.07			.03					
												.02		mass 3/4-1 fr/ft.		92		85 70	226		.02			.03					

Note: estimate amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10= very large amount. Assay code to scale vertically (10 = 1 mm), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 7/26/73 COMPL. 7/29/73 D D HOLE No. 3

COORD.: N 9930 E 11,912 EL. ____ BRG. ____ INCL. ✓ LOCATION SE of Wyble Quarry (6 Ft) T.D. 60 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BORNITE~~ Chrysocolla	malachite	VOL- % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au ~~Mo~~	Ag	Cu eq.			Graph. rx	ore
0-20	09										3									3	3			.9		0-3 mod mass, 1½-3 ft/ft @ 10 of 80°. 3-16 bkn	lt-med gy wit qtzt, blk (bio) bands on bdg @ 50° to core. str cp & chrys 4-9. Surface mud on frac.	81	RM	35 71	0-10		.63		.005	.23					
											3									3	3			.8		16-20 mod bkn 4-6 ft/ft @ 60-75° to core.		83	✓	72	20		.30			.12					
20-26	09										2									4	5			1.2		mod mass 2-4 ft/ft @ 45 & 75.	blk wit qtzt chrysotil veins & on fr. cpt @ 25	97	✓	73	30		1.10			.75					
26-32											2									½	1			.9		mod mass 1-3 ft/ft. bdg bkn 30½-32.	med-dk gy qtzt, pass meta gray wacke @ 50. chrys on fr.	90	✓	74	40		.35			.58					
32-50	09										2									½	1			.5		mod mass 1-4 ft/ft. @ 20 & 85°	dk gy & wh spotted, poorly sorted qtzt w/ ky (?) & chrys on v. small fr. bdg @ 70°.	91	✓	75	50		.03		.010	.03					
50-60	09										1½									1	¼			.1		Mod mass. 1-3 ft/ft	as above w/ cp; chrys = bdg @ 60° to core, changing to 45° @ bot. V. hard drilling.	95	✓	76	60 pack		.02			.03					

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10 ft. = 1 in.), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 8/3/73 COMPL. 8/9/73 DD HOLE No. 4

COORD.: N 9693 E 9328 EL. BRG. INCL. ✓ LOCATION Near BCMC PD Hole 8 T.D. 203 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYSPUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	chrysocolla	lampadite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au ~~Mo~~	Ag	Cu eq.			Graph. rx	ore
0-13 (?)	Qal																							—			Soil & qtz blders	0	AI											
13-24	09									3	2													tr		badly bkn, caving bdg/fol @ 65° to cor	mod gy poorly sorted ky, mose qtzt hem'c lim & Mn ox on fracs. Poss sulfosc	57°	✓	85 27	13-20		.01		.003	<.03				
24-43	09									3	2													tr		fol @ 10°, flattening to 40° @ 35± badly bkn	musc-andalusite sch, poss meta-cgl.? ig(?) pebble @ 36, other pebbles up to 3 in.	57	✓	78	20-30		.02			<.03				
43-50	09																							tr		Mod bkn 4-6 fr/ft @ 20 & 80°, some @ 70.	v. sericitic 38-43 w/Cu ox 42-43.	70	✓	79	40		.06			<.03				
	09									1	1									2	4	1-2		1.5		badly bkn 40-43, 45-47 rest: 1-3 fr/ft @ 40 & 77	med-dk gy poorly sorted micaceous qtzt. chrys, cp & lamp on fracs.	74	✓	80	50		.52		.012	<.03				
50-128	09									1	1									1-2	3	2		1.2		bdg/fol indestinct, poss 70°. mod-mass - mod bkn 2-3 fr/ft.	med-gy poorly sorted ky qtzt.	64	✓	85 81	60	.22	.34			.09				
																								1.5		mod mass - bkn 3/4-10 fr/ft		82	✓	82	70		.25			.21		.12		
																				3	1	1		.8		mod bkn 4-10 fr/ft @ 70 & 80°. fol/bdg @ 65.		72	✓	83	80		.28			.15				
																				1/2	3	2		.85		do.		81	✓	84	90		.38			.23				
																								.75		mod mass 3/4-2 fr/ft @ 50, 70, 80°.	poss BET @ 99.	93	✓	85	100		.31		.002	.38				
																				4	1	1		.75		as above, but bkn @ 105, 109		90	✓	85 86	110		.19			.12				
																				1	.1	.1		.25		mass - mod mass 1/4-2 1/2 fr/ft		86	✓	87	120		.08			.09				
128-132																								.5		mod mass 2-4 fr/ft @ 70 & 80. fol @ 80° bkn @ 123.	as above but rich in muscovite & bio (also ky, qtzt), schistose	93	✓	88	130		.17			.15				
132-137										1										.1	tr	-		.02		bdg @ 70°. mod mass 1/4-3 fr/ft @ 70 & 50°.	metaconglomerate: rnd to subrd pebbles of qtzt & sch, poss some granite? in qtz-musc sch matrix w/ tr fel, sec, lesser poss gar. musc-ky (grn)-qtz vn @ 137.	95	✓	89	140		.03			.03				
137-173										3										? tr	tr	tr		.02		mod mass exc bkn @ 141-144, 147-148 fol/bdg @ 60°.	med gr. med gy poorly sorted ky qtzt w/ musc; occ chrys on frac.	77	✓	90	150		.02		.001	.03				
																								.02		mod mass 148-161 1-2 fr/ft @ 40, 60, 75°.	becomes very micaceous 159-162 Some grn ser.	73		85 91	160		.03			.03				
										5	1										1/4	.1		.01		badly bkn 161-170 >100 fr/ft.	tr chrys @ 172	70		92	170		.09							
173-183				1						3	4									?				.02		mod bkn 4-20 fr/ft @ 15 & 90°.	med gy poorly sorted conglomeratic qtzt.	79		93	180		.01							
183-203				?						2	3									?				tr		mod mass - mod bkn 3-10 fr/ft @ 60 & 15°.	lt-med gy, musc (bio) ky qtzt med grn bdg @ 65° to core	73		94	190		.01							
																								tr				69		95	200		.01							
																								tr				50		85 96	203		.01							

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 8/9/73 COMPL. 8/16/73 D D HOLE No. 5

COORD.: N 9546.0 E 9826.5 EL. 7479± BRG. — INCL. ✓ LOCATION 450 ft SW of Champion Shaft T.D. 202 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BORNITE~~	chrysocolla	malachite	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au	Ag	Cu eq.			Graph. rx	ore
0-11	09																			1/2	3	1/2		.7		mod mass 1-2 fr/ft @ 30 ∠ 85°	med to dk gy mic qtzt cgl, pebbles up to 1½ in. musc^tt @ 9-10.	76	RA	85 97	0-10		.60		.006	.16					
11-47	09																				2	?		.3		mod mass - mod bkn 1 in br @ 17 @ 20°	med-dk gy banded qtzt (meta gray-wacke in part?)	94	✓	98	20		.21			.07					
																					1			.1		bkn		70	✓	99	30		.06			.03					
																								.2		mod bkn 2-5 fr/ft @ 60, 80°. bkn 34-35. fol @ 70±		75	✓	86 00	40		.28			.16					
47-81	09																							.03		mod bkn 3-5 fr/ft @ 70°. fol @ 40°	wk to mod gy qtzt (ky 47-48), and sch 53-54. sporadic chrys & lamp	91	✓	86 01	50		.03		.008					
											1/2										.1			.02		mod bkn - bkn. fol @ 70°.	2 in bio incl @ 56.	77	✓	86 02	60		.06							
																								.02		bkn 00-66. 66-70 mod mass - mod bkn 3/4-6 fr/ft. fol @ 70°		70	✓	03	70		.03 ~~.20~~			~~.06~~					
																								.1		mod mass - mod bkn 2-3 fr/ft @ 50 to 70.	incr ky layers, az, chrys, cp @ 71	70	✓	04	80	160/15	.20 ~~.07~~			.06					
81-129	09									2	3										?			tr		fol @ 50-70°. bkn.	rd-brn & dk gra mic sch, porphyroblastic, changing to meta breccia @ 91	89	✓	05	90		.07 ~~.02~~								
																								.02		mod mass 1-4 fr/ft. fol @ 55°	sporty chrys.	92	✓	06	100		.02 ~~.03~~		.010						
																								.01		do.		92	✓	86 07	110		.03								
																								tr		do. fr @ 70 & 25° to core fol @ 70°.		95	✓	08	120		.02								
129-202	09																			?				.01		do. bkn 127-128.	green sch 126-129, poss some Cu ox?	89	✓	09	[illegible]		.01								
																								tr		mod bkn to 139. mass 139-193.	med-dk gy & blk banded poorly sorted qtzt, some ky	84	✓	10	[illegible]		.01								
										3	2									2	1	?		.05		mod mass - mod bkn 3/4-5 fr/ft.	cp-chrys vn 149-151 @ 8° to core	88	✓	11	150		.56			.34					
										3	2									2	1	?		.08		do.		90	✓	86 12	160		.19								
										3	2	0												.01		bkn 160-165, badly bkn 165-171	as above, lim & MnOx on fr.	66	✓	86 13	170		.01								
																								tr		bkn 6-10 fr/ft pdg @ 70° (?)		53	✓	14	180		.01								
																										mod mass - badly bkn		86	✓	15	190		.01								
																												83	✓	86 16	202		.01								

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10 ft./line); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of ___

PROJECT: Copper Hill

START: 8/17/73 COMPL.: 8/23/73

D HOLE No.: 6

COORD.: N 9653 E 10,040 EL. ___ BRG. ___ INCL. V LOCATION: 340 ft S of Champion Shaft T.D. 260' DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~ ~~azurite~~ chrysocolla	lampadite	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Au	Ag	Cu eq.	% U		Graph. rx	ore
0-2½	Qal																						Nil		mod bkn 2½-5 mod mass 5-10, 2 fr/ft @ 30, 45 & 80° + core.		83	RI	86 17	2½-10		<.01								
2½-32	bg									3	5												Nil		mass ≤1 fr/ft @ 45, 75 fol @ 45°	bra-ol gy poorly sorted med-csc gr micaceous qtzt. str goe str. (from mafics?)	92	✓	18	20		<.01								
																							tr		mod mass 20-23, 2-3 fr/ft. str steep shr zn 22	4 in pebble @ 25	94	✓	19	30		.01								
32-56	bg										.1									½	4	1	.7		35 bkn 35-37. mod bkn 37-40	med-dk gy banded f.g. vitreous qtzt. chrys, lamp, cp, & mal ≡ on fr.	88	✓	20	40		.55	.51		.12					
																							.6		bkn 40-42, mod bkn 42-44 bdg(?) @ 40°		83	✓	21	50		.34	.30	.006	.10					
56-90	bg																			3	5	3/4	1.0		bkn 49-51, rare mod mass - mod bkn 2-5 fr/ft @ 75° (fol.)	med-dk gy & brn banded mic ky qtzt, poorly sorted, chrys, lamp, cp, mal on fr.	87	✓	86 22	60		(1.94 ch) 2.18	1.91		1.60					
																					.1		.02		mod mass, 1.5-2 fr/ft on fol @ 60°.	as above but sparse minzn.	93	✓	23	70		.21	.18		.32					
																					¢		.5		mod mass 70-76, fr @ 15 & 60°. mod bkn 75-84 2-10 fr/ft @ 25°	v. micaceous after 76, minzn incr.	92	✓	24	80		.52	.47		.22					
																							.7		do. fol @ 50°		80	✓	25	90		.27	.23		.06					
90-260						2					1										.1	.05	.05		mod mass 1-3 fr/ft @ 55 & 20°. fol @ 50°	med-dk gy poorly sorted med-csc g. banded ky qtzt	87	✓	26	100		.03		.008						
																							.05		mod mass - mass ½-2 fr/ft		98	✓	86 27	110		.01								
																							.1		mod bkn - mod mass 53-73 fr/ft @ 50, 70 bdg(?) @ 60° steepening to 45°		88	✓	28	120		.01								
																							.15		mod mass, fr @ 15, 30, 70°		90	✓	29	130		.02								
																							.1		mod mass 130-136 mod bkn 136-140, fr @ 60, 25°		95	✓	30	140		<.01								
																							.08		mass - mod mass ½-2 fr/ft @ 80, 20 & 10°		95	✓	31	150		.01		.004			Nil			
																							.02		do. some @ 66°		80	✓	86 32	160		.02								
																							.01		mass, ½ - 3/4 fr/ft @ 80° bdg(?) @ 80°	becoming conglomeratic in places	91	✓	33	170		.02								
																							.05		do. some @ 60°		98	✓	34	180		.10								
																							.02		do., exc. bkn 182-187 mod bkn 187-190, fol @ 25°		95	✓	35	190		.03								
																							.01		mass, exc bkn 191-193, 197-199, fol @ 60°		99	✓	36	200		.04								
																							.05		mod mass, 2 fr/ft @ 25, 55, 90° bdg(?) @ 80-85°		95	✓	86 37	210		.07								
																							.02		do. bkn 214-216 @ 5°		93	✓	38	220		.03								
																							.02		mass 220-228, mod bkn 228-230 @ 85° (sfr/ft)		90	✓	39	230		.02								
																							.04		mod mass - mod bkn 3/4-3 fr/ft @ 70, 90, 35, & 5°		98	✓	40	240		.08								
																							.02		mass ¾ - 1½ fr/ft @ 60, 85°. bdg/fr @ 60°		93	✓	41	250		.04								
																							tr				96		86 42	260		.01								

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FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 2

PROJECT: COPPER HILL

START: 4/10/74 COMPL.: 5/3/74

D D HOLE No.: 7

COORD.: N ~~9347~~ 19351 E ~~8606~~ 8746 EL. 7384 BRG. – INCL. V LOCATION

T.D. 531 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	MOLYBDENITE or sadite	malachite	chrysocolla	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
0-9	over-burden																									all angles from horizontal	0-9: overburden, including qtzt boulders with Cu ox.		F												
9-20	qtzt										4									?			0	tr		fol @ 30° 5-7 fract/ft	qtzt with zones of andalusite to 15'. Fe ox on fract.	90		803 604	9-20		.02								
20-30	qtzt										5									?	tr			tr		5-10 fract/ft, gen @ 30 + 90	mostly, massive qtzt, 1 ft of andalusite - musc. sch. some zones of green sericite (?)	100		805	30		.02								
30-40	qtzt schist										5													tr		10-12 fract/ft @ 0, 90 fol @ 30°	becomes musc qtzt @ 24, grading to biot - garnet - musc. qtzt.	100		806	40		.02								
40-50	schist to qtzt										4													tr		fol @ 45-60 fract @ 90	43-47 musc. schist below 47 - qtzt.	75		807	50		.02								
50-60	qtzt schist										4													tr		fol @ 45-60 3-4 fract/ft, 11 fol	qtzt with andalusite, some section schistose with musc and/or biot	100		808	60		.02								
60-70	qtzt schist										3									?				tr		fol @ 30-60 3-5 fract/ft, most ∥ fol	qtzt with musc, some andalusite - some breccia (?) qtzt.	100		809	70		.02								
70-80	qtzt schist										4													tr		fol @ 45-60 4-5 fract/ft	qtzt with musc., some schistose	95		810	80		.02								
80-90	qtzt schist										3									tr	tr	1/4		.05		fol @ 20-60 5-6 fract/ft	qtzt with musc. No core recovered 87-89, Cu increases @ 89	50		811	90	16	.47			.04					
90-100	qtzt schist										4									1/4	1	1		.3		fol @ 45-70 4-6 fract/ft	Cu zone 89-98, qtzt with musc, some zones of biot, Hem after pyrite (?) disseminated.	100		812	100	30	.68			.04					
100-110	qtzt										2									tr	1/4	1/10		.05		5-6 fract/ft @ 60°	Mostly qtzt - lower in musc. pea-green Cu on fract.	95		810	110		.20			.10					
110-120	"										2									tr	1/4	1/10		.05		3-4 fract/ft @ 45, 60, 70	Light blue Cu (?) mineral on some fract. Seri with mala, pea-green Cu on some fract. qtzt, little musc	100		811	120		.07								
120-130	"										3									1/10	1/2	1/4		.1		6-7 fract/ft @ 45, 70, 85	Cu zone: 121-123 below 123: qtzt with seri, some fe	100		812	130		.05								
130-140	"										3									tr		tr		tr		3-6 fract/ft @ 20, 45, 70, 90	vitreous qtzt (as above), limonite on fract.	95		813	140		.02			.04					
140-150	"										2									1/10	1/3	1/3		.1		4-7 fract/ft fol @ 60-70	qtzt as above, green sericite Cu zone: 148-150.	100		814	150		.10			.04					
150-160	"										2									1/10	1/2	2/3		.15		3-5 fract/ft @ 30, 60, 80	weak Cu on fract with sericite pea-green Cu malachite, pale blue Cu	100		815	160		.08			.06					
160-170	"										2									tr	1/3	2/3		.1		4-10 fract/ft @ 45, 60, 80	qtzt with green sericite on fract, sometimes with Cu + lim. Lim also diss.	100		816	170		.07			.04					
170-180	"										2									tr	tr	1/4		.02		3-5 fract/ft @ 45, 60, fol ~ 60	as above, Cu weaker below 165 v. wk below 170	100		817	180		.02								
180-190	"										2											tr		tr		1-5 fract/ft @ 20, 60, 80, 60° ∥ fol	vitreous qtzt, a few fract with some sericite, lim, tr of Cu	100		818	190		.01								
190-200	"										2											1/10		.01		4-7 fract/ft @ 20, 60, 70, 80, 90	as above, more fract with green sericite, slightly more Cu	100		819	200		.02								
200-210	"										3									tr		1/10		.01		3-4 fract/ft @ 60, 70, 80, 90	as above	100		820	210		.02								
210-220	"										1									1/10	1/1	2/3		.1		4-6 fract/ft @ 60, 70, 90	more iron staining. Qtzt more vitreous (vein qtz?)	90		821	220		.09								
220-230	"										3									1/10	1/3	3/4		.15		4-6 fract/ft @ 60, 90	qtzt. Numerous fract with Cu including chrys, mala, blue + pea-green	100		822	230		.13								
230-240	"										3									1/10	1/1	2/3		.1		4-10 fract/ft @ 30, 60, 70, Fe ~ 30°	as above	100		823	240		.06								
240-250	"										2									1/3	2/3	1/2		.15		5-8 fract/ft	as above, Cu is very spotty	100		824	250		.04								

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FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet ___ of ___

PROJECT COPPER HILL START 4/9/74 COMPL. 5/3/74 D D HOLE No. 7

COORD.: N 9917 E 9696 EL. 7384 BRG. ___ INCL. V LOCATION ___ T.D. 531 DRILLED BY: Mt. Moran

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	~~CHALCOPYRITE~~	py : cpy (cc)	CHALCOCITE	MOLYBDENITE	WULFENITE	CHALCOPYRITE	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
250-260	qtzt										2									1/10	1/3	1/3	0	.08		3-6 fract/ft @ 30, 45, 60, 90. Fr @ 60	as above, Cu is very spotty, mostly on vertical fract.	100	E	103-825	260		.03								
260-270	"										2									1/10	1/5	1/4		.05		3-6 fract/ft @ 45, 60, 80	as above. qtzt has mottled appearance caused by unknown mineral	100		826	270		.02								
270-280	"										2									1/10	1/2	1/3		.1		fol 60-70, 3-7 fract/ft @ 60, 70	as above	98		827	280		.18								
280-290	"										2									1/10	1/5	1/4		.05		4-7 fract/ft @ 20, 30, 60, 70, 80	qtzt, as above	80		828	290		.04								
290-300	"										2									1/5	1/3	1/3		.1		4-10 fract/ft @ 20, 30, 60, 70, 80, 90	qtzt, as above. Most Cu oxide on 70-90 fract. Sericite on others	100		829	300		.05								
300-310	"										1									1/5	1/3	1		.2		4-10 fract/ft @ 20, 30, 50, 70, 90	as above. Increase in Cu	100		830	310		.03								
310-320	"										2									1/2	1/3	2/3		.2		4-bx fract/ft @ 30, 60, 90	bx 313-314 with Cu oxides	100		831	320		.03								
320-330	"										2									1/5	1/3	1		.2		5-20 fract/ft @ 30, 60, 75, 90	vitreous qtzt with most Cu on fract. Some disseminated lim.	100		832	330		.02								
330-340	"										2									1/5	1/3	1 1/2		.3		5-20 fract/ft	qtz vein 335-336½. Join lower Cu, their is qtzt	100		833	340		.08								
340-350	"										2									1/3	1/3	2/3		.2		5-30 fract/ft @ 30, 60, 90	sericitic qtzt, strongly fract with Cu, some sericite on fract	85		834	350		.01								
350-360	"										2									2/3	1/3	1/2		.2		5-30 fract/ft @ 60, 70, 80	qtz vein @ 356 qtzt less sericitic	100		835	360		.13								
360-370	"										2									1/3	1/5	1		.25		8-15 fract/ft @ 10, 60, 80	qtzt with Cu, sometimes sericite on fract. Lim, some Cu as also disseminated	100		836	370		.07								
370-380	"										2									1/3	1/5	1 1/2		.30		7-15 fract/ft @ 10, 30, 60, 70, 80	373-375 qtz vein with Cu. Similar to Cu content of qtzt.	100		837	380		.06								
380-390	"										3									1/2	1/3	3		.60		7-100 fract/ft @ 10, 50, 60, 70, 80	Very strong Cu, mostly pale green & with blue chrys, or lamp.	100		838	390		.32			tr					
390-400	"					·											~~tr~~	~~?~~		1		3	?	.30		10-20 fr/ft	wh-lt gy med-gr vit qtzt, some ser & folds(?) clasts, occ blk bands (bdg?)	100	V	839	400		.17								
400-432	09					1-2					1/2						tr	?		1		3	?	.35		bdg/fol @ 35 deg to core 2-10 fr/ft @ 10, 80, 25 deg	poss minute cct after py (.05 mm) diss in qtzt.	88	R1	103 840	410		.07								
						1/2					1/2							?		1		2	?	.25		1-5 fr/ft @ 70, 90, 25, 50 deg.		100		841	420		.05								
						1-2					1											1-2		.15		slip on sch @ 424 w/ chrys tt	As above, but more arkosic(?) 1 in chlt sch @ 422, 424, some X-bdg.	96		842	430		.02								
432-470	09					1					1 1/2						1/2			1/2		1 1/2		.25		bdg/fol @ 25 deg. 1-4 fr/ft @ 15, 25, 80 deg.	med-cse gr poorly sorted wh-gy musc qtz w/ blk bands. chrys on fracs & in musc blebs.	90		843	440		.09								
						—					2											1/2-1		.1		bdg @ 25. 1-2 fr/ft @ 35, 25, 80	as above. str X-bdg @ 445.	97		844	450		.03								
						1/2					2						1/4					3	tr	.3		bdg @ 25-35. ½-4 fr/ft @ 5, 30, 70, 85		92		103 845	460		.09								
						1/2					2-3						tr			1/4	1/4	2		.15		do.	poss huebnerite diss in qtz @ 463? ½-1 in chlt sch on bdg @ 467, 470	98		846	470		.10								
470-531	09										1/2						tr					1	tr	.08		bdg @ 40-50 (to core) 1-3 fr/ft @ 60, 85, 10.	med-cse gr musc lt gy blk banded, poorly sorted musc qtzt (arkosic?), some x-bdg	86		847	480		.07								
						1					1/4-1/2						1				1/2	1/2		.12		bdg same. 3/4-2 fr/ft @ 45, 15, 70.	as above. cp blebs in 1-in. qtz vn @ 481.	100		848	490		.25								
																					1/2	tr		.05		6-in. bkn zone @ 492.		92	V	849	500		.10								

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet ___ of ___

PROJECT: Copper Hill

START: 4/9/74 COMPL.: 5/3/74

DD HOLE No.: 7

COORD.: N 9917 E 9696 EL. 7384 BRG. - INCL. V LOCATION: ____ T.D. 531 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	~~COPPER PYRITE~~	py : cpy (cc)	CHALCOCITE	~~NATIVE COPPER~~	MALACHITE	CHRYSOCOLLA	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo		Cu eq.			Graph. rx		ore
	09										½						½				1	tr		.08		Ldg @ 40-50 deg to core 3/4-2 Fr/ft @ 45,15,70	cp & mal in 1/4-in. VR @ 50Z.	94	RM	103 850	510		.06									
											½										½	tr		.05		do.		94	↓	851	520		.05									
531											½										?	tr	tr	.01		3/4-3 Fr/ft @ 30,15,70. Vtn @ 530.	cgl bands 527-531.	95	↓	103 852	531		.06									

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT: COPPER HILL

START: 5/6/74 COMPL.: 5/20/74 D D HOLE No.: 8

COORD.: N 10 697 E 9346 EL. 7350 BRG. — INCL. V LOCATION — T.D. 471' DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	MOLYBDENITE	Malachite	VOL.% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo		Cu eq.			Graph. rx	ore
																									angles measured to horizontal															
0-12	Qal																									0-12: overburden		F												
12-20	Rl?																									12-166: rotary drill														
20-30																									1: tr	muscovite-biotite														
30-40																									2: tr. ½	andalusite schist (R-1,														
40-50																									3: ½ - 2	maybe R-2)														
50-60																									4: 2-5	Qtz veins at 149-152														
60-70																									5: 5-10	(trace cpy + py) and														
70-80																									6: 10-20	165-166 (trace malachite														
80-90																									7: 20-40															
90-100																									8: 40-60															
100-110																									9: 60-80															
110-120																									10: 80-100															
120-130																																								
130-140																																								
140-150						4										tr	tr						tr																	
150-166						½										tr	tr				tr		tr						103 503	150-166		<.01								
166-170	R-1										2														main fol @ 20-30 1-2 fract/ft	Muse. biot. schist, a few fract with limonite	80													
170-180	Muse-biot.										2														main fol 20-50 3-5 fract/ft	Spotty andalusite, scattered chl after biotite	95		504			<.01								
180-190	Schist										2														fol 40-60 1-6 fract/ft, many ∥ to fol	Spotty andalusite, less schistose	100													
190-200											2														fol 40-60 3-5 fract/ft	Spotty andalusite, some chl	90													
200-210						2					2					tr?					tr		tr		fol 30-40 1-2 fract/ft	201½-206½: Qtz veins + stringers, mostly w chl bio, musc	100		505			<.01								
210-220											2														fol 50-60 1-6 fract/ft, most ∥ fol	Muse-biot. schist with garnet	95													
220-230											2														3-6 fract/ft, most ∥ fol @ 40-50		85													
230-240											2														fol 50-60 3-4 fract/ft	garnet stronger, biotite weaker	95													
240-250											3														3-6 fract/ft fol @ 60	st. chl after biot.	100													

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./1in.), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet ___ of ___

PROJECT: COPPER HILL

START: 5/6/74 COMPL.: 5/20/74 D D HOLE No.: 8

COORD.: N 10607 E 9346 EL. 73.50 BRG. ___ INCL. V LOCATION ___ T.D. 474' DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	~~pyrite (tot)~~ Cu pyrite	CHALCOCITE	MOLYBDENITE CHRYS.	malachite	lampadite	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
250-260	R-1					5					2										tr			tr		fol 50-60 some 3-5 fract/ft, 11 fol	256-7: Qtz. vein, trace malachite (pro-green Cu)	100	F	103 856	250-260		<.01								
260-270	mus-biot										3										tr			tr		fol 20, 70, 40 3-20 fract/ft	263-2: Qtz vein in mus., some malachite (pro-green Cu), st.	90		857	270		.02								
270-280	schist					4					3															fol 40-50 11-15 fract/ft	fracture zone: schist about vein with qtz. Fe staining.	100													
280-290	—										4							1/20	1/20		1/10	1/10		.03		fol 45 1-20 fract/ft	275: Qtz vein. Some disp. hematite & sphalerite	100		858	280-290		.04								
290-300	Ortho					7					2							1/20		1/4	1/2	1/4		.15		~50 fract/ft	285: Schist, heavy siliceous. 288: Orthoqtz qtzt-lilac gray	100		859	300		.12								•
300-310	qtzt					7					2							tr		tr	1/5	1/3		.05		~50 fract/ft	292-293: Qtz vein. Malachite, sericite, chrysocolla, lampadite	100		860	310		.02								
310-320						5					2					tr		tr			1/5	1/5	1/4	.05		fract @ 20, 80, 45 5-15 fract/ft	qtz. bl. w/ Cu on fractures. Cuprite appears to be discom.	100		861	320		.06								
320-330						2					3							1/20			1/5	1/2	1/10	.10		10-50 fract/ft @ 20, 80, 50	Some disp. Cu in qtz veins. 320-310: Cu mostly lampadite. Some disp. mala, chrys. in lim.	95		862	330		.19								•
330-340						2					3							1/10		1/20	1/3	1/4		.10		10-50 fract/ft	less sericite. 337-338: Qtz vein.	90		863	340		.13								•
340-350	Ortho					3					3							tr			1/5	1/2	1/4	.15		100+ fract/ft	340-35: Rock more fractured, Fe ox. increase. 350-35: Increase in lamp. cuprite	100		864	350		.14								•
350-360	qtzt					3					2							tr			1/10	1/4	1/4	.05		fract @ 80, 45	decrease in chrys., mala. Some biotite in qtzt. 354-356: Increase in green sericite	98		865	360		.03								
360-370						3					2							tr			1/20	1/10	1/10	.03		10-25 fract/ft @ 15, 30, 60. fol @ 45	on fractures. 350-370: St. green seri. on fract.	100		866	370		.03								
370-380						5					2										1/20	1/10	1/10	.03		10 fract/ft @ 45, 60, 90, 10	370-375: green seri. on fract. usually with mala. Cu. Cu better when sericite decreases.	95		867	380		.04								
380-390						4					2										1/5	1/5	1/10	.05		10 fract/ft @ 30, 60	380-390: decrease in green sericite. 380-390: Cu increases below 385'	100		868	390		.05 .38								
390-400	Ortho					2					2							tr			2/3	1/2	1/3	.15		10-20 fract/ft @ 70, 90, 30, 20 fol @ 20	St. chrys., mala, lampadite on steep fractures	100		869	400		.38			tr					⁂
400-410	qtzt					7					2										1/5	1/3	1/5	.10		15 fract/ft @ 80, 60, 45	Qtz veins: 406-408: no Cu. 409: some Cu on fract.	100		870	410		.04								
410-420						5					2										1/4	3/4	1/5	.30		10-30 fract/ft @ 90, 80, 60	St. chrys., mala on steep fract.	100		871	420		.21			tr					⁂
420-430						5					1										1/3	1/4	1/5	.08		8-15 fract/ft @ 45, 80, 60	Sharp decrease in Cu below 425 — fewer steep fract.	100		872	430		.08								
430-440						3					1										1/10	1/10	1/20	.03		1-6 fract/ft @ 45, 80, 20 fol @ 45	low Cu except on one steep fract @ 431	100		873	440		.01								
440-450	Ortho					6					2										1/4	1/3	1/10	.10		5-20 fract/ft @ 80, 30, 60, 10	best Cu on steep fract.	100		874	450		.03								
450-460	qtzt					5					2										1/10	1/2	1/10	.02		3-15 fract/ft @ 45, 90, 60 fol @ 45		100		875	460		.03								
460-470						3					1							tr			1/5	1/5	1/10	.05		5-15 fract/ft 45, 80, 60	most Cu on steep fractures	100		876	470		.02								
470-474						4					1										1/10	1/5	1/10	.05		5-15 fract/ft 60, 80, 45	tourmaline (?) in qtz vein	100		877	474		.04								
																											bottom of hole - 474'													

Rx: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex: 1= trace, 10= very large amount. Assay data to scale vertically (10ft./line), lithology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

PROJECT: Copper Hill

START: 6 May 1974 COMPL.: 20 May 1974 D D HOLE No.: 8

COORD.: N 10697 E 9346 EL. 7350 BRG. — INCL.: -90° LOCATION — T.D. 474' DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	MOLYBDENITE	Malachite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo		Cu eq.			Graph. rx	ore
																									X's measured to horizontal			JF											
0-12	Qal																									0-12: Overburden													
12-20	R1																									12-166: rotary drill													
20-30																									1: tr	muscovite-biotite-													
30-40																									2: tr-½	andalusite schist (R-1,													
40-50																									3: ½-2	? R-2)													
50-60																									4: 2-5														
60-70																									5: 5-10														
70-80																									6: 10-20														
80-90																									7: 20-40														
90-100																									8: 40-60														
100-110																									9: 60-80														
110-120																									10: 80-100														
120-130																																							
130-140																																							
140-150						4										tr	tr						tr																
150-160						6										tr	tr			tr			tr						103 853	150-166		<.01							
166	R1 R-1 muscov. biotite schist											2													main fol @ 20-30 1-2 fract/ft	Muscovite-biotite schist few fract w/ limonite	80													
170-180												2													main fol 20-50 3-5 fract/ft	Spotty andalusite, scattered chl. after biotite	95		854	170-180		<.01							
180-190												2													fol 40-60 many ll 4-6 fract/ft to fol	Spotty andalusite, less schistose	100													
190-200												2													fol 40-60 3-5 fract/ft	Spotty andalusite, some chl.	90													
200-210						0a						2					tr?			tr			tr		fol 30-40 1-2 fract/ft.	201½-206½: qtz veins & stringers usually w/ chl. bio. musc	100		855			<.01							
210-220												2													fol 50-60 most 5-6 fract/ft fol	Musc-biot schist w/ garnet	95													
220-230												2													3-6 fract/ft, most 4 fol @ 40-50		85													
230-240												2													fol 50-60 3-4 fract/ft	garnet stronger, biotite weaker	95													
240-250												3													3-6 fract/ft fol @ 60	St. chl after bio.	100													

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68) GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 2 of 2

PROJECT: Copper Hill

START: 6 May 1974 COMPL.: 20 May 1974 D D HOLE No. 8

COORD.: N 10697 E 9346 EL. 7350 BRG. — INCL. -90° LOCATION — T.D. 474' DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	Cuprite	CHALCOCITE	MOLYBDENITE	MALACITE	LAMPADITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx		ore
250-260	R-1					5					2										tr			tr		fol 50-60 Some 11 fol 3-5 Fract/ft	256-257: Qtz Vein, tr malacite (pea-green Cu)	100	JE	103 856	250-260		<.01									
260-270	musc. bio.										3										tr			tr		fol 20,70,40 3-20 Fract/ft	263-265: Qtz Vein w/musc. Some malacite (pea-green Cu) st.	90		857	260-270		.02									
270-280	Schist					4					3															fol 40-50 4-15 Fract/ft	Fracturing of schist abt. Vein w/st. Fe staining	100														
288											4							1/20		1/20	1/10	1/10		.03		fol @ 45 1-20 Fract/ft	275: Qtz Vein Some dissem hematite & garnet	100		858	280-290		.04									
290-300	Ortega qtzt.					7					2							1/20		1/4	1/2	1/4		.15		~50 fract/ft	285: schist more sil 288: Ortega qtzt - Lt grey	100		859	290-300		.12									
300-310						7					2							tr		tr	1/5	1/3		.05		~50 Fract/ft	292-295 Qtz Vein, Malacite, Sericite Chrysocolla, Lampedite	100		860	300-310		.02									
310-320						5					2					tr		tr		1/5	1/5	1/4		.05		Fract @ 20,80,45 5-15 Fr/ft.	pale blue Cu on fracts, Cuprite tends to be dissem.	100		861	310-320		.06									
320-330						2					3							1/20		1/5	1/2	1/10		.10		10-50 Fr/ft @ 20,80,50	Some dissem Cu in Qtz Veins. 300-310 Cu mostly lampadite, Some dissem, malacite chrys, w/lim. Less sericite	95		862	320-330		.19									
330-340						2					3							1/10		1/20	1/3	1/4		.10		10-50 Fr/ft.	307-309: Qtz Vein 320-330: rock more fracted. FeO$_x$ Increase	90		863	330-340		.13									
340-350						3					3							tr		1/5	1/2	1/4		.15		100+ Fr/ft	330-340 (?) Increase Lamp, Cuprite Decrease Chrys, mal, Some bio in qtzt. 340-350: + green sericite on fracts.	100		864	340-350		.14									
350-360						3					2							tr		1/10	1/4	1/4		.05		Fract @ 80,45	350-360: st. green seri. on fracts.	98		865	350-360		.03									
360-370						3					2							tr		1/20	1/10	1/10		.03		10-25 Fr/ft @ 45,30,60 fol @ 45	360-370: st green seri on fracts, usually w/weak cu; Cu better when sericite decreases.	100		866	360-370		.03									
370-380						5					2									1/20	1/10	1/10		.03		10 Fract/ft @ 45,60,90,10	370-380: - green sericite	95		867	370-380		.01									
380-390						4					2									1/5	1/5	1/10		.05		10 Fr/ft @ 30,60	380-390: Cu + below 385':	100		868	380-390		.05									
390-400						2					2							tr		2/3	1/2	1/3		.15		10-20 Fr/ft @ 70,90,30,20 fol @ 20	St. Chrys, mal, Lamp on steep fracts.	100		869	390-400		.38			tr						
400-410						7					2									1/5	1/3	1/5		.10		15 Fr/ft @ 80,60,45	Qtz Veins: 406-408: No Cu 409: Some Cu on Fract.	100		870	400-410	30/.21	.04									
410-420						5					2									1/4	3/4	1/5		.30		10-30 Fract/ft @ 90,80,60	St. Chrys, mal, on steep fracts.	100		871	410-420		.21			tr						
420-430						5					1									1/3	1/4	1/5		.08		8-15 Fr/ft @ 45,80,60	Sharp decrease in Cu below 425 fewer steep fracts.	100		872	420-430		.08									
430-440						3					1									1/10	1/15	1/20		.03		1-6 Fracts/ft @ 45,80,20 fol @ 45	low Cu except on steep fract @ 431	100		873	430-440		.01									
440-450						6					2									1/4	1/3	1/10		.10		5-20 Fr/ft @ 80,30,60,10	best Cu On Steep Fract.	100		874	440-450		.03									
450-460						5					2									1/10	1/20	1/10		.02		3-15 Fr/ft @ 45,40,60 fol @ 45		100		875	450-460		.03									
460-470						3					1							tr		1/5	1/5	1/10		.05		5-15 Fr/ft 45,80,60	most Cu On Steep Fractures	100		876	460-470		.02									
470-474						4					1									1/10	1/5	1/10		.05		5-15 Fr/ft 60,80,45	tourmaline (?) in Qtz. Vein	100		103 877	470-474		.04									
																											Bottom of hole - 474'														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68) GEOLOGY - ASSAY COMPUTATION

PROJECT COPPER HILL START 5/22/74 COMPL. 6/3/74 D D HOLE No. 9

COORD.: N 10,697 E 10,146 EL. 7406 BRG. — INCL. V LOCATION 346' N of RP-11 T.D. 493 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	~~pyrrhotite~~ chrysocolla	CHALCOCITE	MOLYBDENITE	lemonite to malachite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo		Cu eq.			Graph. rx		ore
																									all angles from horizontal																
0-16	over-burden																									0-16: overburder															
																										16-20: R-1, rotary drilled															
16-20	musc.-biot. schist																								1-3 fract/ft @ 60, 90. fol @ 70	R-1, muscovite-biotite schist, thin limonite coating fracts.	100	E	103, 878	20-30		.02									
20-30											2														1-6 fract/ft @ 60, 45 fol @ 70	dissem bolbs of chl.	100														
30-40											3														2-7 fract/ft @ 60, 70, 90. fol @ 60	44: Qtz vein, musc on fract	100		103, 880	44		.01									
40-50						5					4														2-7 fract/ft @ 70, 50, 60 fol @ 60		100		879	50-60		<.01									
50-60											3														2-5 fract/ft @ 50, 60, 70 fol @ 50		100														
60-70											2														1-4 fract/ft @ 70, 50, 90 fol @ 50		100														
70-80											3														2-5 fract/ft @ 90, 70 fol @ 45	80: strong limonite on fract.	100														
80-90											3														3-10 fract/ft @ 60, 45, 70 fol @ 45	97, 100: strongly fract., fault gouge	100														
90-100											4														2-6 fract/ft @ 60, 70 fol @ 45		100		881			<.01									
100-110											4														5-10 fract/ft @ 45, 60, 20 fol @ 50		100														
110-120											4														7-10 fract/ft @ 60 70, 45, 30, 10 fol @ 60	many fract ∥ to foliation	100														
120-130											4														6-20 fract/ft @ 45, 60, 20, 70 fol @ 60	135-139: strong fracturing 136, 139: fault gouge	98														
130-140											3														6-15 fract/ft @ 60, 45, 70 fol @ 60	143: fault gouge	97														
140-150											3														6-15 fract/ft @ 60, 10, 45 fol @ 60	most fract ∥ to foliation scattered andalusite (?)	85		882			<.01									
150-160											3														1-5 fract/ft @ 45 fol @ 45	161-162: qtzose bed rock less fractured, stronger	100														
160-170											1														2-5 fract/ft @ 45 fol @ 45	scattered garnet fract ∥ to foliation	100														
170-180											2														2-7 fract/ft @ 45, 80, 60 fol @ 45		100														
180-190											2														4-10 fract/ft @ 30, 45 fol @ 45	schist becoming more qtzose, some green sericite. 206-207: Qtz	95														
190-200											2														2-6 fract/ft @ 60, 45, 80 fol @ 45	vein with trace of copper. less biotite in schist below 207.	93		883			.01									
200-210	qtzose musc. schist					6					3												tr		3-10 fract/ft @ 45, 60, 30 fol @ 45	Mixed schist, qtzt, qtz veins. Small amt. of gra-green Cu.	90		884			.01									
210-220						4					2								tr		1/20	tr	.01		3-10 fract/ft @ 90, 80, 20, 30, 45, 60 fol @ 45	218: Orange qtzt - light grey to white, a few fract w lim. Some dissem lim w trace Cu. Trace lamp. on fract	100		885			.01									
220-230	white to grey qtzt					5					2								tr		1/20		.01		1-10 fract/ft @ 45, 70	Some intervals of chl schist.	100		886			<.01									
230-240											3								tr		1/10		.02		2-10 fract/ft @ 90, 45, 10, 60 fol @ 45	Dark qtzt with spotted appearance Fract w white clay, some also w musc.	100		887			<.01									
240-250						5															1/20	tr	.01																		

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10 = 1 inch). Geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

PROJECT COPPER HILL START 5/22/74 COMPL. 6/3/74 D D HOLE No. 9

COORD.: N ____ E ____ EL. 7406 BRG. ____ INCL. V LOCATION ____ T.D. 493 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	~~pyrrhotite~~ lampadite	CHALCOCITE	~~MOLYBDENITE~~ Cuprite	chrysocolla	malachite	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx		ore
250-260	white to					4					5							tr						tr		2-6 frac/ft @ 50,10 fol @ 30	White qtzt w bands of biot. qtzt. 252-258: dk qtzt w patches of red, brown, green, black - less fractured	100	J	103, 888			<.01								
260-270	gray qtzt										5							tr						tr		5-25 frac/ft @ 30, 45,60,70 fol @ 30	and mineralized. Rock more schistose, most frac ∥ fol.	100		889			.03								
270-280											5							1/20			tr			.01		10-30 frac/ft @ 30, 45,70 fol @ 30	265: rock very fractured, dk qtzt. 269-273: poor core recovery.	78		890			.05								
280-290						4					5							tr				1/20		.01		1-5 frac/ft @ 60, 20,45	below 276: rock more schistose, green sericite. Dissem goe. + tr malachite(?), lamp	100		891			.02								
290-300						3					4							1/20				tr		.01		1-7 frac/ft @ 45, 90	on frax. Some chl + green sericite. Green sericite on frax with lim.	100		892			.01								
300-310						3					5							1/20				tr		.01		1-5 frac/ft @ 80,30, 45	Strong green sericite - on frax + dissem Dissem. lim	100		893			.02								
310-320						3					4							1/10						.02		0-8 frac/ft @ 30, 80,45	increase in frax w. lim - sericite - lampadite	100		894			.01								
320-330						6					3							1/20				1/10		.03		1-5 frac/ft @ 70, 30	light green Cu (?) - some maybe sericite - begins @ 328, light blue Cu @ 330.	100		895			.01								
330-340						8					2							tr			tr	1/10		.02		0-5 frac/ft @ 45	332-336: qtz vein w green sericite and light green Cu.	100		896			.01								
340-350						8					3							1/20				1/10		.03		0-10 frac/ft @ 90,70,45	343-348: qtz vein w. sericite + muscovite - some pale gr. Cu + lamp.	100		897			.02								
350-360						2					2							1/20			1/10	1/20		.04		2-10 frac/ft @ 70, 10,60,30,45 fol @ 45	first good chrys on frac @ 252.	100		898			.02								
360-370						7					1							1/20			1/5	1/5		.07		1-10 frac/ft @ 85, 45,70	Cu as chrys, mala, pale gr Cu ox, some lamp.	100		899			.03								
370-380						3					2							1/20			tr	tr		.01		2-8 frac/ft @ 45, 30	no steep frax. (mislatch)	70		900			.01								
380-390						2					1							1/10			1/10	1/10		.04		1-5 frac/ft @ 45,30, 60,90,70 fol @ 45	Cu increases when steep frax. reappear @ 387.	85		901			.03								
390-400											1							1/20			1/10	1/3		.07		1-7 fract/ft @ 30, 70,90,80	Strong mala on steep frac. Qtz, wk Cu on frac @ 398	100		902			.23		.03						
400-410						3					2							tr			tr	1/2		.08		0-8 frac/ft @ 45, 70,30 fol @ 40	mala, pale gr Cu on frax, usually w lim, small amt dissem Cu w lim.	100		903			.02								
410-420						4					3							1/10			1/3	1/3		.10		5-10 frac/ft @ 80, 60,30,90	more variety of Cu minerals (pale blue, bright gr., chrys.)	100		904			.06								
420-430											2							1/20			1/5	1/3		.08		1-10 frac/ft @ 90, 70,45,10 fol @ 40	grey qtzt	100		905	430		.03								
430-440						7					3							1/20			2/3	1/3		.15		3-15 frac/ft @ 20, 30,70,45 fol @ 45	437: very strong chrys + mala in breccia in qtz vein.	100		906	[illegible]		.66		.08						
440-450						2					2							tr		tr?	1/20	1/10		.05		1-20 frac/ft @ 70, 30 fol @ 30	white qtzt, not strongly fractured	100		907	[illegible]	[illegible]	.03								
450-460						6					3							1/10			2/3	1/3		.15		1-20 frac/ft @ 80, 60,20,45.	451-452: strongly fractured qtz vein with chrys, mala, lamp.	100		908	[illegible]	[illegible]	.28		.04						
460-470											2							1/20			1/20	1/10		.03		1-10 frac/ft @ 10, 30,45,80.	Cu decreases below 461.	100		909			.01								
470-480											2							tr			1/10	1/10		.05		1-15 frac/ft @ 45,60,10,70	Cu increases below 478	100		910			.02								
480-490											2							1/20			1/10	1/5		.08		1-10 frac/ft @ 85, 30,60 fol @ 30	Areas of strong dissem lim with some Cu.	100		911			.12								
490-493											3							tr			1/20	1/10		.05		5-20 frac/ft @ 10, 20,30,60,80.		100		912			.07								

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 8/30/73 COMPL. 8/31/73 RP D HOLE No. 1

COORD.: N 10,087 E 11,843 EL. 7715 BRG. — INCL. V LOCATION Site 19, NE of Wyble Quarry (100ft N30E from DDH 2) T.D. 150 DRILLED BY: McPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	~~MALACHITE~~ ~~CHALCOCITE~~	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	Chrysocolla	Lampadite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
0-10	09																				3			.6		—	Vitreous (wh-med gy & tan) qtzt, partly micaceous (musc & bio)	3" bit	RM	86.43	0-10		(.19) .22			.17					
10-80	09										2									1/2	2			.2			wh-med gy vit qtzt		✓	44	20		(.15) .13			.20					
																				?	1			.1					✓	45	30		(.09) .08			.15					
											1										3			.3			softer than above		✓	46	40	.21	(.21) .23			(.13) .20					
											1									2	4			.7					✓	47	50	.21-.35	(.39) .29			(.20) .35					
																				1	1			.1					✓	86/48	60		(.03) .03			.15					
											2									1	2			.3					✓	49	70		(.06) .05			.17					
											2						?			2	4			.7			same w/ some musc sch frags.		✓	50	80		(.58) .64			(.11) .20					
80-90	09										1						1?			1	3			.3			med-gy to blk qtzt, some musc sch		✓	51	90		.10			.17					
90-130	09										1						1?			?	2			.2			wh-lt gy mic qtzt, vitreous, hnbl & /or bio bands (poss tml?)		✓	52	100		.16			.26					
											2										1			.08			also kg (?)		✓	86/53	110		.22			.35					
											1 1/2						?				1			.05					v	54	120		.09			.26					
											2										1			.02					✓	55	130		.06			.20					
130-150	09										2 1/2										tr			tr			med-dk gy vit ky qtzt, prob lt & dk banded		✓	56	140		.05			.15					
																								tr					✓	86/57	150		.03			.12					
																											Bit plugged, lost air. Gave up hole at 150. RG														
																																	(.xx) = assays by Southwestern Assayers et al - Tucson							
																																	Others by J.D.S., Duval Field Lab.							

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 8/31/73 COMPL. 9/1/73 RP D HOLE No. 2

COORD.: N 10,000 E 11,894 EL. 7733 BRG. — INCL. V LOCATION 100ft E of DDH 2 (site 20) T.D. 200 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	~~CHALCOPYRITE~~	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	Chrysocolla	Jamesonite	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/t Ag	Cu eq.			Graph. rx		ore
0-30	oq									1	2						?				1			.02			wh-lt gy vit qtzt, prob blk banded, some ky	3 in. bit	R1	86 58	10		.04			.17						
										1	2-3									?	3			.2					✓	59	20		.24			.35						
										?	2									1-2	4			.55				↓	✓	60	30		.08			.20						
30-50	oq										1-2						1-½			1-½	7			1.0			minor azurite. Med-dk gy qtzt.	2¾ 4 in.	✓	61	40		.32 (.26)			.58						
																								1.5					✓	62	50		.31 (.33)			.23						
50-80	oq										3						?		?		1		?	.2			wh-lt gy & tan ky qtzt		✓	86 63	60		.04			.15						
											3										tr			.05					✓	64	70		.02			.09						
											3										tr			.02					✓	65	80		.03			.12						
80-170	oq										3										1			.1			as above but slightly micaceous		✓	66	90		.03			.12						
											3										1			.1					✓	67	100		.16			.20						
										1	2									?	tr			.02					✓	86 68	110		.03			.12						
											2										tr			.01					✓	69	120		.04									
											1													nil					✓	70	130		.04									
											1													nil					✓	71	140		.02									
											1-2										1			.02					✓	72	150		.18									
											1-2													tr					✓	86 73	160		.06									
											5								?		tr			tr			goe-hem vn w/ox py casts, poss gct?, Au?, in 15-20% of sample		✓	74	170		.08									
170-200	oq									½	1-2										?			tr			wh vit qtzt, blk bands, minor ky		✓	75	180		.02									
										1	2										tr			tr					✓	76	190		.01									
											1													Nil						86 77	200		.02									

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/1/73 COMPL. 9/3/73 RP D HOLE No. 3

COORD.: N 10,087 E 11,743 EL. 7699 BRG. — INCL. V LOCATION 100ft N30W of DDH 2 (W. edge of road N of quarry) T.D. 168 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	Chrysocolla	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
0-10	oq										6										2		.1			Soil, Cu bearing float brn musc, schistose qtzt	2 3/4 in. bit	RP	86 78	10		.08			ND				
10-30	oq									3	6												tr			Tan schistose musc qtzt (prob metacg) w/hbl alt to tim.		✓	79	20		.03			ND				
										3	5										1		.1					✓	80	30		.13			ND				
30-50	oq									1	2									?	4		.5			Wh-lt gy & blk banded ky qtzt		✓	81	40		.42			.03				
										1	2										3		.25			(hole caving, questionable sample)		✓	82	50		.18			.06				
50-60	oq									2	5									?	5		.5			brn & wh micaceous schistose qtzt		✓	86 83	60	.4	.37			.09				
60-150	oq									2	4										3		.3			wh-lt gy vit qtzt, some blk bands.		✓	84	70		.38			.29				
										1	3									1	5		.7					✓	85	80	1	2.50			.85				
											2										3		.3					✓	86	90	100/164	.56			1.11				
											1									1/1	1/2		.2					✓	87	100		.48			.35				
											1									1	1/2		.2					✓	86 88	110		.29			.09				
											1									1	4/5		.5					✓	89	120		.98			1.11				
											2									?	2		.1					✓	90	130		.24			.38				
											1										1		.08					✓	91	140		.09			.20				
											1										1		.05					✓	92	150		.11			.12				
150-168	oq										1										1		.1			lt-med gy blk-banded ky qtzt		✓	86 93	160		.25			.15				
											1										1		.02						94	168 ~~170~~		.05			.03				
																										(Hole caving, stuck rods, abandoned at 168ft.)														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10= very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of ___

PROJECT Copper Hill START 9/3/73 COMPL. 9/3/73 RP D HOLE No. 4

COORD.: N 10,000 E 11,693 EL. 7707 BRG. ___ INCL. V LOCATION 100 ft W of DDH2 T.D. 90 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~	chrysocolla		VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo		Cu eq.			Graph. rx		ore
0-30	09									3	5													Nil		—	rd-brn mic schistose qtzt, hndl alt to hem.	3/4 in. bit	RP	86 95	10		.01									
										3	5													Nil					✓	96	20		.02									
										3	5													Nil					✓	97	30		.03									
30-40	09									2	4										?			tr			wh vit qtzt & tan schistose qtzt as above.		✓	98	40		.06									
										1	2										1/2			.02			↑		✓	99	50		.25									
40-90	09										1										tr			.01			wh-med gg vit kg qtzt partly micaceous		✓	87 00	60		.09									
				1							1										tr			.01					✓	01	70		.11									
										1/2	1/2										tr			.01					✓	02	80		.03									
										1/2	2										tr			.01					✓	87 03	90		.02									

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill

START 9/4/73 COMPL. 9/4/73

RP D HOLE No. 5

COORD.: N 9826 E 11,893 EL. 7709 BRG. S 50E INCL. -87 LOCATION S. end of quarry, 200 ft 530E of DDH 2 T.D. 30 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~ ~~AZURITE~~	Chrysocolla	caprite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag oz/T	Cu eq.			Graph. rx	ore
0-10	Qd																							No sample			Dump - set 6ft casing	3 1/2" bit	RM	~~07~~ 04	–		–			—					
10-	Qg			4							2										1			.03			wh-med gy qtzt - poor sample recovery.	2 3/4" bit	✓	87 04	10-20		.25			.06					
				5							3										1			.05			poor recovery		✓	05	30		.14			.03					
																											Problem w/excessive cave & hanging up on casing. Abandoned hole @30.														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/4/73 COMPL. 9/5/73 RP D HOLE No. 54

COORD.: N 9852 E 11,900 EL. 7709 BRG. — INCL. V LOCATION 80'S of DDH 3 T.D. 70 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	Cuprite	Chrysocolla	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx		ore
2-70											1													Nil			Hgg-blk kg qtzt w/brn mic zones.		P RA	80 06	2-10	-.08	.02			.03						
											2											1		.05						87 07	20		.22			.04						
											1-2											1		.08						08	30	-.75	.41			.06						
				3							4										1/4	1		.08						09	40		.31			.06						
				R							3											2		.1						10	50	40	2.05			.15						
				?							1									?		1		.02						87 11	60		.08			.03						
				2							1-2									?		1/2		.01			tr azurite very poor sample recovery - 20-30% rods sticking, abandoned hole.			12	70		.03			ND						

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10= very large amount. Assay data to scale vertically (10ft./line); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/5/73 COMPL. 9/5/73 RP D HOLE No. 6

COORD.: N 9913 E 11,843 EL. 7703 BRG. — INCL. V LOCATION 100 ft SE of DDH 2 T.D. 50 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~ ~~MALACHITE~~ cuprite	chrysocolla	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
0-6	Qd																									Fill & rock shattered by blasting, set 3 ft casing	3 1/2" bit	RM	—	—	50	—	—		—					
6-20	Qd																			?	·	10	1.5			wh-med gy qtzt, ky	2 3/4" bit	✓	87 13	6-10	1'	1.60			3.03					
											2										1.5	5	.5					✓	14	20		.95			.76					
20-40	Qd										1/2											tr	.01			lt gy & blk banded v/f ky qtzt		✓	15	30	1.50'	.15			.12					
											2									tr		2	.25					✓	16	40		.27			.03					
40-50	Qd									5	7											1	.03			wh qtzt & rd brn musc schist	↓	✓	87 17	50		.21			.06					
																										Rods sticking, bit chewed up. Abandoned hole.														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10 ft./line). Geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill

START 9/12/73 COMPL. 9/12/73

RP D HOLE No. 7

COORD.: N 9913 E 11,743 EL. 7700 BRG. — INCL. V LOCATION 100 ft 330W of DDZ

T.D. 70 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BISMUTHINITE~~	Chrysocolla	cuprite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	Graph. ore
0-3	Qd																							1			f.ill. No sample	2¾ in bit		1											
3-30	Qd			2/3							2/3										4	?		1.0			wh & blk banded vit qtzt, brn clayey mat'l.		Rd	87/18	3-10	7.16	.79			.16					
				2							2/3										5	1		1.5			no return 19-20.		✓	19	20	R7/63	.87			.23					
				4							5										1/2			.3					✓	20	30		.28			.09					
30-40	Qd			2							4										tr			.05			med gy & blk vit qtzt.		✓	21	40		.07			.03					
40-70	Qd										2										tr			.06			med gy & blk vit ky qtzt		✓	87/22	50		.03			ND					
											2/3										tr			.05					✓	23	60		.03			.01					
										1/3											tr			.03					✓	24	70		.05			.03					

: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale on right.

ogy to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/14/73 COMP. 9/15/73 RP D HOLE No. 8

COORD.: N 10,174 E 11,693 EL. 7345 BRG. - INCL. V LOCATION 200ft N30W of DD2. T.D. 190 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~	Chrysocolla	Cuprite	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% ~~Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag	Cu eq.			Graph. rx	ore
1-30	09			2-3						4	6													Nil			pd, brn, o/grn & wh banded mic (musc) qtzt, mafics alt to hem.	~~50~~ in bit	RJ	87 25	1-10		.02			N.D.					
				2						4	6													Nil					✓	26	20		.03			N.D.					
				2						4	6													Nil			as above w/some bio & grn ser.		✓	27	30		.12			.01					
30-190	09			?							1/4-1										1			.07			wb-stgy vit Kq qtzt, some musc		✓	28	40		.16			.06					•
				2							2										1	?		.1					✓	29	50		.07			.17					
				1						1	2/3										4	1/2		.6				2¾ in bit	✓	87 30	60		.52			.50					
				1							1/2									?	1/2	?		.03					✓	31	70		.05			.06					
											1										1/2	?		.05			tr azurite		✓	32	80		.11			.06					
											1										1/2			.02					✓	33	90		.06			.06					
				1/2-1							2									?	1			.2					✓	34	100		.09			.04					
				1							2									?	tr			.01			poss bucbarite?		✓	87 35	110		.09			.06					
				1						1	2										1	?		.05			tr azurite		✓	36	120		.08			.06					
				1							1/2-2									tr	1/2-2	1/4		.15					✓	37	130		.08			.09					
											1									?	1/2-1	?		.1					✓	38	140		.06			.12					
				1/2						1	3										1	3		.4					✓	39	150		.18			.06					•
				1/2							2/3										4			.15					✓	87 40	160		.17			.03					•
				1							1										1?	3		.3					✓	41	170		.07			.03					
				1/2							1/2										1/2			.03					✓	42	180		.07			.03					
											1/2-1										.1			.01			poor sample return, rods stuck — abandoned hole.		✓	43	190		.04			ND					

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line). geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

PROJECT: Copper Hill

START: 9/16/73 COMPL.: 9/16/73 RP D HOLE No.: 9

COORD.: N 10,004 E 10,346 EL. 7535 BRG. — INCL. V LOCATION: 400 ft E of DD H-1 T.D. 130 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~ ~~AZURITE~~	chrysocolla	cuprite	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS: Cu	AS Cu	Mo	Ag (oz/T)	Cu eq.			Graph: rx	ore
1-20	09			3							4													Nil			Hgy & blk banded, (f brn) hy musc (poss bio) qtzt	2 3/4 ik. 6.4	RA	87 44	1-10		.002			N.D.					
				3							4													Nil					✓	45	20		.006			.03					
20-40	09			2							5													Nil			blk vit qtzt w/ wh & brn bands		✓	46	30		.009			N.D.					
				2							3-4													Nil					✓	47	40		.007			N.D					
40-60	09			1-2							3													Nil			dk gy - blk & tan musc, hy qtzt (soft)		✓	48	50		.012			N.D.					
				1-2							3								?1	?1				tr					✓	57 49	60		.06			.03					
60-80	09			1							3													Nil			Wh-lt gy & tan strd vit hy qtzt		✓	50	70		.03			.03					
				1/2-1							3-4								?1	1				.05					✓	51	80		.04			.03					
80-130	09			1/2							1													Nil			v. poor sample recovery (~~[illegible]~~) wh-lt musc qtzt		✓	52	90		.05			.03					
																								—			no recovery until end of run @ 110 (10-~~[illegible]~~% recovery)		✓	87 53	—	.35-.64				(.61 ck) .64					
											1									2				.2			"		✓	87 53	90-110	20.35	.45								
																								.1			v. poor return 5-10% recovery		✓	54	120		.14			(.35 ck) .23					
																								.05			v. fine. v poor recovery: 3-5%. (Abandoned hole due to poor sample recovery)	↓	✓	55	130		.06			.09					

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT: Copper Hill

START: 9/17/73 COMPL.: 9/17/73

RP D HOLE No.: 10

COORD.: N 10,004 E 10,146 EL. 7528 BRG. - INCL. √ LOCATION: 200ft E of DDH-1 T.D. 180 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~BOLTWOODITE~~ ~~NATIVE COPPER~~ CHRYSOCOLLA	COVELLITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% ~~Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
2-20	09			4							5										1/4		.03			wh qtzt & tan clayey (mic?) qtzt (0-2 gal)	2¾" bit	RJ	87 56	2-10	.12	.13			.12					
				4							4										1		.1					✓	57	20		.33			.06					
20-70	09			2							2										1		.1			lt gy & blk banded vit qtzt, some tan clayey zones		✓	58	30	.31	.15			.03					
				2							1-2										6		1.54			(some lampadite)		✓	59	40	30/.31	.45			.26					
				1-2							½-1										4		.8			do.		✓	60	50		.13			.09					
				1-2																	1		.1			do. grn musc.		✓	87 61	60		.08			.03					
–				1							1									?	1		.1			tr lamp.		✓	62	70		.08			.03					
70-140	09			1							1-2									?	1½		.2			wh vit kg-musc qtzt, some blk band-ing.		✓	63	80		.05		.16	.03					
				2							3									?	1½		.2					✓	64	90		.11	.23		.06					
				1-2							2-3								?	?	1		.1					✓	65	100		.12			.03					
											1									?	.1		.03			(Dust from top of sampler - outside - assays 0.34% Cu) →		✓	87 66	110	.25	.10			.17					
				1							4										5	tr	1.0					✓	67	120		.78			.82					
				2							6										8	1	2.5					✓	68	130	.63	.54			.20					
				1-2							5										5	1	1.0					✓	69	140	30/.63	.57			.15					
140-172	09			1-2						5	10									?	1		.1			rd-brn & wh limonitic mic qtzt Poor recovery (70-80%)		✓	70	150		.12			.03					
																										No recovery		✓	–	160		~~.54~~								
				1-2						1	4									?	tr		.01			tml, grn musc 15% ± recovery		✓	87 71	170		.07			.03					
172-180	09										½												.03			wh tml musc qtzt			72	180		.08			.03					
																										(Abandoned hole due to poor sample recovery.)														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/18/73 COMPL. 9/18/73 RP D HOLE No. 11

COORD.: N 10,351 E 10,146 EL. 7451 BRG. — INCL. V LOCATION 400ft N 30E of DDH-1 T.D. 130 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	CHRYSOCOLLA	CUPRITE	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag oz/T	Cu eq.			Graph. rx	ore
2-42±	~~09~~ or R1?				high ✓						1-2													Nil			It gy musc ky qtzt (poss Qal ??) or qtz ser schist, v fg. sample	0-2 3½in bit	RM	87 73	2-10		.003			ND					
					✓						1-2													Nil				2-7½ 2¾in	✓	74	20		.003			ND					
					✓						1-2													Nil			(prob Rg schist)	bit	✓	75	30		.004			ND					
					✓						2													tr?					✓	76	40		.004			ND					
42±-130	09									1	4									½				.1			wh-ltgy vit qtzt, some grn musc		✓	77	50		.10			.06					
										?	2-3								?	5				.7					✓	87 78	60		.34			.03					
											2								?	2				.1			more musc.		✓	79	70		.05			.03					
											1-2								?	1				.05					✓	80	80		.08			.06					
											1-2									2				.15					✓	81	90		.24	.13	.09	.29					
											1								?	¼				.02					✓	82	100		.09			.09					
											¼								tr	¼				.03			(tmlt f lamp)		✓	87 83	110		.06			.06					
											2								tr	1				.1					✓	84	120		.10			.12					
											2-3								tr	5				.4				↓	✓	85	130		.14			.03					
																											Rods stuck during bit change, caving; abandoned hole														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/26/73 COMPL. 9/27/73 RP D HOLE No. 12

COORD.: N 10,351 E 9746 EL. 7429 BRG. — INCL. V LOCATION 400ft N30W of PDH-1 T.D. 100 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	CHRYSOCOLLA	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% ~~Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag oz/Ton	Cu eq.			Graph. rx	ore
0-26	Qal																							Nil			caliche conglomerate	0-6: 3¾" bit	RA	-	-										
																								✓				6-23¼" bit	✓	87 86	10-20		.01			.03					
26-40	Qal or ? Qg ?			2-3						1-2	3													✓			wh-lt gy qtzt (vit), some rd-brn qtzt (pass Qal bldrs) harder drilling		✓	87	30		.01			.03					
				1						1	2													✓			(some sch, rd qtzt, much caliche: either Qal or contaminated sample)		✓	88	40		.01			.03					
40-60	RI			2							2													✓			qtz mica (musc+bio) sch, some qtzt?		✓	89	50		.004			ND					
				1							2-3										?			tr					✓	87 90	60		.04			ND					
60-100	RI/Qg										1-2									?	1-2			.06			5-10% dilution, caving from 26 ft. Changing to wh & lt gy, some brn vit qtzt.		✓	91	70		.16			.03					
	Qg			1							3									?	1-2			.05			5-10% dil, caving		✓	92	80	.38	.16		.01	.03					
				2-3							3									?	6			.8			do. (some lamp)		✓	93	90		.52			.20					
				4							3										2-3			.15			do.		✓	94	100		.04			.03					
																											Could not re-enter hole on 9/27, caving & blocking @ 28. Abandoned hole due to caving & diluted samples. RA															

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1=trace, 10=very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/27/73 COMPL. 9/27/73 RP D HOLE No. 13

COORD.: N 9687 E 9434 EL. 7441 BRG. - INCL. V LOCATION 100 ft E of DDH4 T.D. 120 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~	CHRYSOCOLLA	COPRITE	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% ~~Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx		ore
0 - 120	09			2/3							1										tr			.01-			It-med gy vit ky musc qtzt, some run-brn goe-stnd qtzt.	2 3/4 in bit	RM	87 95	0-10		.07			.06						
				1-2							3										tr			tr					✓	96	20		.06			.03						
											2										1			.02					✓	97	30		.08			.03						
										1	3-5										2	1		.2					✓	98	40		.12			.03						
										1	4										1-2	1		.15					✓	99	50	.15	.22			.12						
											2										1			.05					✓	88 00	60		.14			.06						
											1-2										1/2			.03					✓	01	70		.08			.06						
										1	3										1			.08					✓	02	80	.40-.7	.52			.35						
										1	2										1/2			.05					✓	03	90		.10			.06						
										1-2	3-4										1			.1					✓	04	100		.18			.03						
										1/2	10										.1			.01					✓	88 05	110		.05			.03						
										1-3	10+													Nil					✓	06	120		.02			.03						

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/28/73 COMPL. 9/28/73 RP D HOLE No. 14

COORD.: N 9690 E 9228 EL. 7416 BRG. — INCL. V LOCATION 100 ft W of DDH 4 T.D. 100 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~ ~~MALACHITE~~ GYPSOCOLLA	CUPRITE	VOL.-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx		ore
0-6	Qal																						NS.				0-6 5¾" bit	RI					—			—						
6-30	qq(?)										2									1			.03			It-med gy f tan qtzt (musc, kyanite) some Qal contam.	6-100 2¾"	✓	88 07	6-10		.15			.06						
										1-½	2-3							?	?	2-3	1		.12				bit	✓	08	10-20		.21			.15						
											2									.5	1		.02			(increasing musc.)		✓	09	30		.10			.09						
30-60	qq										4-5												tr			lt gy f tan (goe-stained) ky musc qtzt & schistose (musc) qtzt.		✓	10	40		.04			.03						
										1/2	5												Nil					✓	88 11	50		.02	.16	.11	.03						
										1	3-4								?	5			.3			(some lamp.)		✓	12	60		.39			.35						
60-90	qq									1	2-3									5			.5					✓	13	70		.33			.15						
~~60~~										1-2	4-5									3			.25			med gy f blk qtzt, musc schistose qtzt		✓	14	80		.18			.15						
										1	3									3			.15			v. poor sample recovery, coming from higher in hole?		✓	15	90		.08			.09						
90-100	qq										1/2									1/2			.05			20% or less sample recovery, mostly f.g. musc sch & qtzt as above.		✓	88 16	100		.14			.06						
																										Hole abandoned @ 100 ft. due to poor sample recovery & contamination from cave. RI															

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10ft./line); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/28/73 COMPL. 9/29/73 RP D HOLE No. 15

COORD.: N 9306 E 9746 EL. 7419 BRG. — INCL. V LOCATION 200 ft W of dump on S. Champion Main workings. T.D. 150 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~	BHPX SECOLIA	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	Ag oz/T	Cu eq.			Graph. rx	ore
0-1	Qal		•	2-3							5																	0'11:3¼ bit 1-bot.	RP	88 17	1-10		.02			ND					
1-20	09			2-3						4-5											3			.15			med gy & tan poorly sorted ky musc qtzt	20'4 in. bit	✓	18	20		.17			.01					
20-100	09			5							3										1-2			.1			dk gy-blk & tan qtzt (musc & ky)		✓	19	30		.14			.03					
				2							3										3	½		.3					✓	20	40		.53			.32					
											1-2									1	1-2			.1					✓	21	50		.07			.03					
											3-4									?	1			.05					✓	88 22	60		.05			.01					
										4	3										½			.03			(some grn ser)		✓	23	70		.08			.03					
											2-3										1			.06			(tr lamp)		✓	24	80		.09			.03					
										1?	5										¼			.02					✓	25	90		.08			.09					
											5-6										1			.02			(tr grn ser)		✓	26	100		.01			.03					
100-150	09									1-2	6													tr			wh-lt gy & blk (banded?) & brn ky musc qtzt		✓	88 27	110		.01			.03					
										1	5													Nil			(v. f.g. sample - dust)		✓	28	120		.005			.03					
										2	4										?			.01			do.		✓	29	130		.006			.03					
											3-4										tr			.01			do., slow penetration, drill malfunction?		✓	30	140		.02			.03					
											3										-			tr			do. "	↓	✓	31	150		.04			.03					
																											Abandoned hole @ 150.														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex.: 1-2 = not very high amount, 8-9 = very high amount. Assay data, if any, may be shown on geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 9/30/73 COMPL. 9/30/73 RP D HOLE No. 16

COORD.: N 9307 E 9946 EL. 7418 BRG. ___ INCL. ✓ LOCATION at toe of dump, E side S. Champion workings. T.D. 80 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~	CHRYSOCOLLA	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
0-3	QAl			5							10													Nil			prn qtz musc bio sch	0-3: 3½ in pit	A	88	3-									
3-27½	R,(?)																													32	10		.02			.06					
				2/3							5													Nil				3-bot. 2¾ in. pit	✓	33	20		.01			.03					
27½-30	R/09			2							5								?	.1				.02			wh fgn vit qtzt, some musc?, fky.		✓	34	30		.04			.03					
30-80	09			5							3								?	B	tr			.1			As above w/some mica sch.		✓	35	40		.46			.38					
				3							2								?	?	3	tr		.2					✓	36	50		.14			.12					
				2							2										5	tr		.6			As above w/o sch.		✓	88/37	60	30½	.20			.12					
				1							2										1			.1					✓	38	70		.05			.06					
											1½										½			.07			No sample return 76-80		✓	39	76 ~~80~~		.06			.06					
																											Recovered later: Mica sch (bio & musc)														
																											Abandoned hole @ 80 ft; no return			39½	76-80		.14			.06					
																											caving, rods sticking														

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1 = trace, 10 = very large amount. Assay data to scale vertically (10:1 / line); geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 10/1/73 COMPL. 10/1/73 RP D HOLE No. 17

COORD.: N 9653 E 9746 EL. 7477 BRG. — INCL. V LOCATION 400ft. S30W of DDH-1 T.D. 100 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~ ~~MALACHITE~~ CHRYSOCOLLA	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx		ore
0-3 ft	Qal																										0-3		88													
3-20	09									20	10												Nil			rd hematitic mic qtzt	3½ in bit	fd	40	3-10		.05			.03					
										20	10												Nil				3-bot. 3¾ in bit	V	41	10-20		.04			.03					
20-30	09									15	8									tr			tr			as above mixed w/ wh musc sch & wh & grn qtzt		V	42	30		.06			.03					
30-50	09									3-4	5+									1.0	1		1.0			wh-lt gy/vit qtzt		V	43	40		1.45			.47					
										3	8									2			0.1			more rd than above		V	44	50		.05			ND					
50-60	09									10	15									tr			tr			rd brn mic qtzt		V	88 45	60		.04			.03					
60-70	09										1-2												Nil			wh Pg. musc and(or ky?) sch		V	46	70		.02			.03					
70-100	09									10	15												Nil			rd brn mic schistose qtzt		V	47	80		.04			.03					
										6	10									tr			.01					V	48	90		.02			.03					
										2	10									tr			.01					V	49	100		.03			.03					

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex.: 1= trace, 10= very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 10/1/73 COMPL. 10/2/73 RP D HOLE No. 18

COORD.: N 9650 E 10,242 EL. 7525 BRG. — INCL. ✓ LOCATION NE of DDH 6 T.D. 120 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE~~	CHRYSOCOLLA	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
0-50	og										5													Nil			It gy, blk & tan (goe-stnd) musc ky qtzt	2 3/4 in bit	RA	88 50	0-10		.02								
											10													Nil			brn & blk ky qtzt			✓	51	20		.04								
											8													Nil						✓	52	30		.05 ~~.004~~								
											3													Nil						✓	53	40		.02 ~~.004~~								
										1	5									tr				.02						✓	54	50		.01 ~~.005~~								
50-60	og									3	10													tr			tan-rd brn mic ky qtzt			✓	88 55	60		.02 ~~.002~~								
60-80	og									10	15													Nil			rd hematitic mic schistose qtzt			✓	56	70		0.01								
										12	15													Nil						✓	57	80		.02								
80-120	og									½	7													Nil			It gy & tan (goe-stnd) vit ky qtzt			✓	58	90		.01								
											5									.1				.03						✓	59	100		.03								
										½	3									½				.1						✓	88 60	110		.25 ~~.002~~								
											3									.1				.04						✓	61	120		.12								

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./line), geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

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GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

PROJECT Copper Hill START 10/2/73 COMPL. 10/3/73 RP D HOLE No. 19

COORD.: N 10,004 E 9546 EL. 7457 BRG. — INCL. V LOCATION 400 ft W of DDH-1 T.D. 200 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MOLYBDENITE~~ ~~ASSAYS~~ CHALCOCITE	COVERITE	VOL-% SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	~~% Core Rec.~~	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
1-200	Qg			5							3									2			.15			wh-lt gy & tan musc'y qtzt some blk bands. (bio?)	0-1.3' inbit 1-bot 2 3/4' bit	Al	88 62	1-10		.42			.09					
				3							2									1/2 5			.5					✓	63	20		.60			.17					
				1/2							2									1/2 5			.5			(tr musc sch)		✓	64	30		.26			.12					
				1/2							1/2									2 10			.8			"		✓	65	40		.78			.70					
				2							1									1/2 10			1.0					✓	66	50		.81			.61					
				2/3							3									1/2 10			1.0					✓	88 67	60		.64			.23					
											2									? 8			.7					✓	68	70		.36			.35					
											2									9			.9					✓	69	80		.51			.32					
											8									? 3/4			.3					✓	70	90		.06			.06					
											10									2/3			.2					✓	71	100		.26			.32					
											1/2									? 1/2			.04					✓	88 72	110		.13			.15					
											1									1			.1					✓	73	120		.11			.09					
				2							10									8/10	1		.8					✓	74	130		.35			.17					
											1/2									? 6			.5					✓	75	140	.32	.34			.55					
				3							1/2									3			.2					✓	76	150		.26			.35					
											1									? 1+			.06					✓	88 77	160		.11			.15					
											1									2	.1		.2					✓	78	170	.41	1.05			1.17					
											3									7			.6					✓	79	180	199	.56			.23					
											1									2/3			.3					✓	80	190		.11			.06					
				2							3									10			.8				✓		81	200		.54			.44					

Note: relative amounts of alteration minerals indicated by numbers 1 through 10. Ex. 1= trace, 10 = very large amount. Assay data to scale vertically (10ft./line). Geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

FORM 355 (Rev 5/68)

GEOLOGY - ASSAY COMPOSITE DRILL HOLE LOG

Sheet 1 of 1

PROJECT Copper Hill START 10/7/73 COMPL. 10/8/73 RP D HOLE No. 23

COORD.: N 10,093 E 9796 -9846 EL. 7477 BRG. - INCL. V LOCATION 90ft± N & 150ft± W of Champion Shaft T.D. 194 DRILLED BY: MacPherson

Depth	ROCK TYPE	EPIDOTE, etc.	CHLORITE	CLAY	SERICITE	QUARTZ VEINS	SILICIFICATION	BIOTITE	ORTHOCLASE	HEMATITE	GOETHITE	JAROSITE	ANHYDRITE	GYPSUM	CALCITE	PYRITE	CHALCOPYRITE	py : cpy (cc)	CHALCOCITE	~~MALACHITE AZURITE CHRYSOCOLLA~~	CUPRITE	VOL. % SULFIDES	Est. % Cu	Est. % Mo	STRUCTURAL FEATURES	DESCRIPTION	% Core Rec.	LOGGED BY	Sample No.	SAMPLE DEPTH	SAMPLE ELEV.	ASSAYS Cu	AS Cu	Mo	oz/T Ag	Cu eq.			Graph. rx	ore
0-60	oq			½		2					3									2			.2			Wh/lt gy vit ky qtzt, some Fe ox vns	3 inbit	RL	89 12	0-10		.16			.12					'
						1					2									½			.08					✓	13	20		.19			.17					
											¼									4			.3					✓	14	30		.12			.03					
						½					1									5			.5					✓	15	40	.40	.19			.12					
											1									2			.2					✓	16	50		.12			.06					
											3									7			.8					✓	89 17	60	-	.38			.20					
60-140	oq										1									10			.9			Wh, blk banded vit ky qtzt		✓	18	70	.38	.27			.12					
											1									8			.7					✓	19	80		.18			.12					
					5						2-3									15			2.0			(Some grn qtzt, f.g., softer) (ol grn cuttings)		✓	20	90	160	5.85			4.61					
											10									8			.7			(some lamp)		✓	21	100		.79			.32					
											6									4			.3			"		✓	89 22	110	.52	.20			.06					
											½									½			.03					✓	23	120	-	.05			.06					
											2-4								?	? 3			.3			(minor lamp)		✓	24	130	110/.78	.14			.06					
											3									3			.3			caving		✓	25	140		.36			.17					
140-194	oq										3									2-3			.3			Wh vit musc ky qtzt, some cave		✓	26	150		.08			.06					
				3							5								?	9			.6			"		✓	89 27	160		.28			.06					
											1-2									3			.25			"		✓	28	170		.16			.06					
											½									1			.1					✓	29	180		.13			.06					
											½									½			.05					✓	30	190		.07			.06					
											¼									tr								✓	31	194		.05			.12					
																										Stopped hole @ 194, bit worn out. RL														

Note: relative amounts of alteration minerals indicated by number: 1 trace, 10 = very large amount. Assay code to scale vertically (not to geology to scale as changes appear. Standard abbreviations to be used for rock type and descriptive portions whenever possible.

DDH-8
DDH-9
DDH-7
RP-12
RP-11
OXIDE KING M.S.
Sunset
3ft caliche bed above schist
No Outcrops
10,000 N
RP-19
PDH-7
PDH-23
PDH-42
PDH-43
PDH-41
PDH 517
PDH-6
RP-9
RP-10
DAISY
RP-14
DDH 4
RP-13
PDH 45
RP-17
RP-18
DDH 6
PDH 39
PDH 5
CHAMPION
OXIDE KING
LIZZIE
SHINER
CHIPMONK
LIZZIE
RP-8
RP-3
RP-4
RP-7
RP-1
RP-2
RP-6
RP-5A
DDH-2
QUARRY FLOOR
PDH-22
PDH 21
PDH 20
MAGPIE
BLUE JAY
10,000 N
no outcrop

Copper Hill Prospect

DUVAL CORPORATION—EXPLORATION DEPT.	STATE New Mexico
CHAMPION MINE AREA	COUNTY Taos
TYPE DETAILED GEOLOGIC MAP	TOWNSHIP & RANGE
DATA BY RAM / DRAWN BY RAM, TLM / DATE 10/1/74	MAP NO. B-4008
100 0 100 200 300 SCALE 1" = 100 feet	PLATE NO.