Appendix III

Drill Hole Log

Book 4 of 4

CL96-90 to CL96-126

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-90

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-90	Date Completed:		Geotech by: MBW
LENGTH: 89.75	Core Diam: NQII		

Collar Location

Latitude:	2125.72
Departure:	1974.00
Elevation:	1431.83

S U M M A R Y

0.00-40.07	volcaniclastics **
40.07-42.00	Semi-massive hematite *
42.00-89.92	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	79.00	-85.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	40.07	volcaniclastics	48310	1.00-2.00	1.00	0.005		26.0	82.0		46.0	
		Redish-green, heterolithic, stringers	48311	2.00-3.00	1.00	0.005		33.0	99.0	20.0	44.0	
		hematite stringers 45°:cleavage, foliation 45°	48312	3.00-4.00	1.00	0.005		26.0	47.0		50.0	
		Frs=6/m :Vns =15/m	48313	4.00-5.00	1.00	0.010		37.0	205.0	40.0	52.0	
		Moderate SI patches	48314	5.00-6.00	1.00	0.005		37.0	284.0	35.0	56.0	
		Strong CL pervasive	48315	6.00-7.00	1.00	0.005		25.0	113.0		68.0	
		Moderate KS pervasive	48316	7.00-8.00	1.00	0.015		29.0	160.0		58.0	
		Moderate EP microveins	48317	8.00-9.00	1.00	0.005		32.0	91.0		69.0	
		Moderate HE stockwork	48318	9.00-10.00	1.00	0.040	0.20	74.0	191.0	20.0	65.0	
		Moderate PY microveins	48319	10.00-11.00	1.00	0.080	0.60	31.0	210.0	15.0	67.0	
		Weak QV microveins	48320	11.00-12.00	1.00	0.030	1.20	30.0	115.0		63.0	
		Moderate QC microveins	48321	12.00-13.00	1.00	0.005		49.0	235.0		148.0	
		Variably chlorite/hematite altered. MINERALIZATION- 2	48322	13.00-14.00	1.00	0.100		33.0	306.0		77.0	
		to 3% local abundant pyrite along veinlets.	48323	14.00-15.00	1.00	0.010		29.0	137.0		56.0	
<0.00-40.07>		Weak MT vein	48324	15.00-16.00	1.00	0.005		29.0	108.0		70.0	
		MINERALIZATION- 2 to 3% local abundant pyrite along	48325	16.00-17.00	1.00	0.015		28.0	185.0		62.0	
		veinlets.	48326	17.00-18.00	1.00	0.045		45.0	432.0		71.0	
<4.00-5.70>		Broken Core										
		Stockwork, Brecciated										
		Broken core, vuggy limonite on fractures.										
<5.70-24.00>		Chlorite Streaming	48327	18.00-19.00	1.00	0.055		52.0	228.0		82.0	
		Stringers, stockwork	48328	19.00-20.00	1.00	0.040		52.0	236.0		92.0	
		Moderate SI patches	48329	20.00-21.00	1.00	0.020		43.0	280.0		85.0	
		Intense CL pervasive	48330	21.00-22.00	1.00	0.015		49.0	268.0		66.0	
		Moderate KS pervasive	48331	22.00-23.00	1.00	0.005		48.0	141.0		57.0	
		Strong HE stockwork	48332	23.00-24.00	1.00	0.005		40.0	80.0		57.0	2.0
		Moderate PY microveins										
		Moderate QC microveins										
		Strongly chlorite/hematite altered with intense										
		chlorite, lcoally vuggy along calcite veins.										
<10.60-11.40>		Strong MT patches										
		MINERALIZATION- 4% pyrite as veinlets and patches.										
<10.60-11.40>		QUARTZ-CALCITE VEINS										
		Brecciated										
		Numerous pink calcite veinlets at 0.0 to 40.07m., loca										
		intense pink K-spar alteration. MINERALIZATION- 4%										
		pyrite as veinlets and patches.										
40.07	42.00	Semi-massive hematite	48333	24.00-25.00	1.00	0.005		36.0	132.0		54.0	
		Blackish-red, stringers, wispy	48334	25.00-26.00	1.00	0.010		29.0	115.0		47.0	
		hematite stringers 45°:Chlorite 45°	48335	26.00-27.00	1.00	0.005		43.0	218.0	20.0	58.0	10.0

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Frs=3/m :Vns =50/m	48336	27.00-28.00	1.00	0.050		103.0	325.0	70.0	84.0	4.0
		Moderate SI patches	48337	28.00-29.00	1.00	0.005		29.0	609.0		59.0	
		Intense CL pervasive	48338	29.00-30.00	1.00	0.005		63.0	154.0	50.0	63.0	4.0
		Moderate MT patches	48339	30.00-31.00	1.00	0.005		76.0	1200.0	20.0	61.0	4.0
		Strong KS pervasive	48340	31.00-32.00	1.00	0.005		92.0	1043.0	35.0	75.0	4.0
		Intense HE stringer	48341	32.00-33.00	1.00	0.005		254.0	549.0	100.0	178.0	2.0
		Strong PY vein	48342	33.00-34.00	1.00	0.005		732.0	239.0	510.0	424.0	2.0
		Weak QV microveins	48343	34.00-35.00	1.00	0.005		344.0	149.0	190.0	361.0	10.0
		Moderate QC microveins	48344	35.00-36.00	1.00	0.080		66.0	117.0	25.0	351.0	8.0
		H zone, stringer zone with abundant black chlorite	48345	36.00-37.00	1.00	0.010		42.0	60.0	60.0	399.0	12.0
		veinlets, some patches of green chlorite.	48346	37.00-38.00	1.00	0.210		84.0	60.0	80.0	602.0	10.0
		MINERALIZATION- 7% coarsed veined pyrite, trace	48347	38.00-39.00	1.00	0.750		90.0	76.0	105.0	228.0	6.0
		chalcopyrite, 2% magnetite patches. Local vuggy	48348	39.00-40.07	1.07	0.010		109.0	1965.0	85.0	86.0	6.0
		calcite veinlets generally along core axis,	48349	40.07-40.50	0.43	1.630	0.60	125.0	1527.0	150.0	90.0	12.0
		laminations, vuggy.	48350	40.50-41.00	0.50	0.635		97.0	79.0	85.0	123.0	10.0
	<40.07-42.00>	?? MT vein	48351	41.00-41.50	0.50	0.160		59.0	938.0	65.0	93.0	8.0
		MINERALIZATION- 7% coarse veined pyrite, traces	48352	41.50-42.00	0.50	0.215	0.80	92.0	1082.0	15.0	112.0	14.0
		chalcopyrite, 2% magnetite patches. Local vuggy										
		calcite veinlets generally along core axis.										
	<40.07-40.08>	massive hematite										
		Veined										
		Massive hematite vein.										
	<41.85-41.95>	pyrite vein or veinlet										
		Strong MT patches										
		Abundant magnetite.										
42.00	89.92	volcaniclastics	48353	42.00-43.00	1.00	0.025	0.60	37.0	1555.0	15.0	91.0	8.0
		Greenish-red, heterolithic, stockwork	48354	43.00-44.00	1.00	0.045	1.00	49.0	1970.0	105.0	107.0	14.0
		cleavage, foliation 90°:Chlorite 45°	48355	44.00-45.00	1.00	0.005		29.0	765.0	20.0	67.0	6.0
		Frs=6/m :Vns =10/m	48356	45.00-46.00	1.00	0.005		417.0	465.0	400.0	150.0	10.0
		Moderate SI patches	48357	46.00-47.00	1.00	0.005		155.0	137.0	60.0	109.0	10.0
		Strong CL pervasive	48358	47.00-48.00	1.00	0.005		100.0	322.0	15.0	92.0	10.0
		Strong KS pervasive	48359	48.00-49.00	1.00	0.005		39.0	229.0	15.0	81.0	18.0
		Weak HE stockwork	48360	49.00-50.00	1.00	0.005		42.0	207.0	35.0	78.0	18.0
		Moderate PY microveins	48361	50.00-51.00	1.00	0.015		40.0	181.0	35.0	63.0	16.0
		Weak QV microveins										
		Moderate QC microveins										
		Generally dense, weakly chloritite/hematite altered,										
		mottled, vuggy.										
	<77.72-81.00>	rubbly fault zone										
		Abundant limonite on fractured surfaces, minor gouge.										
	<81.00-84.00>	volcaniclastics										

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Redish-green, stockwork, heterolithic										
		cleavage, foliation 10°:cleavage, foliation 45°										
		Frs=5/m :Vns =25/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS pervasive										
		Strong HE stockwork										
		Weak PY disseminated										
		Moderate QC microveins										
		Strong calcite stockwork, brecciated in appearance, wispy.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-91

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-91	Date Completed:		Geotech by: MBW
LENGTH: 18.29	Core Diam: NQII		

Collar Location

Latitude:	2047.90
Departure:	1989.93
Elevation:	1398.22

S U M M A R Y

0.00-1.50	volcaniclastics
1.50-9.80	Semi-massive hematite **
9.80-18.29	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	263.00	-45.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	1.50	volcaniclastics	48363	0.00-1.00	1.00	0.105		45.0	254.0		93.0	
		Redish-green, heterolithic, stockwork	48364	1.00-1.50	0.50	0.095		112.0	210.0		83.0	
		Frs=6/m :Vns =25/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS pervasive										
		Strong HE stockwork										
		Moderate QV vein										
		Weak QC microveins										
		Vuggy section from surface weathering, hematite stringers.										
1.50	9.80	Semi-massive hematite	48365	1.50-2.00	0.50	0.045		112.0	193.0		76.0	
		Blackish-red, stockwork, stringers	48366	2.00-2.50	0.50	0.755	0.20	105.0	110.0		64.0	
		vein 45°	48367	2.50-3.00	0.50	4.540		131.0	149.0		76.0	
		Moderate SI patches	48368	3.00-3.50	0.50	37.700	3.00	52.0	263.0		106.0	
		Intense CL pervasive	48369	3.50-4.00	0.50	25.520	1.20	34.0	246.0		103.0	
		Moderate MT patches	48370	4.00-4.50	0.50	40.600	0.80	66.0	357.0	55.0	102.0	6.0
		Strong KS pervasive	48371	4.50-5.00	0.50	4.470		46.0	207.0	20.0	141.0	
		Intense HE stockwork	48372	5.00-5.50	0.50	28.220	1.40	32.0	133.0	25.0	60.0	8.0
		Strong SE vein	48373	5.50-6.00	0.50	16.420		46.0	200.0	45.0	111.0	10.0
		Moderate QC microveins	48374	6.00-6.50	0.50	1.750		69.0	305.0	25.0	128.0	14.0
		H zone semi-massive to massive hematite stringers and	48375	6.50-7.00	0.50	6.820		50.0	252.0	15.0	75.0	18.0
		veins in highly chloritized, locally silicified and	48376	7.00-7.50	0.50	0.920		117.0	232.0	40.0	198.0	
		K-spar altered zone, local patches of coarse green	48377	7.50-8.00	0.50	1.630		267.0	303.0	85.0	375.0	
		crystalline chlorite, strong chlorite streaming	48378	8.00-8.50	0.50	1.650		144.0	191.0	25.0	352.0	
		throughout. MINERALIZATION- trace chalcopyrite, 1 to	48379	8.50-9.00	0.50	1.420	7.40	48.0	3966.0		381.0	
		2% magnetite.	48380	9.00-9.80	0.80	0.150	13.00	49.0	7419.0		261.0	
	<1.50-9.80>	MINERALIZATION- trace chalcopyrite, 1 to 2% magnetite.										
	<1.95-2.05>	hematite specularite vein										
		Veined										
		Intense HE vein										
		Intense SE vein										
		Hematite with specularite and chlorite in calcite vein.										
	<4.10-4.40>	massive hematite										
		Veined										
		Intense CL stringer										
		Intense MT pervasive										
		Intense HE massive										
		Dark red black with fine calcite veinlets.										
	<4.40-4.50>	spec/calcite/chlorite vein										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Veined										
		Intense CL stringer										
		Intense MT pervasive										
		Intense SE vein										
		About 50% specularite in chlorite/calcite veins.										
	<5.80-5.90>	massive hematite										
		Veined										
		Intense CL stringer										
		Intense HE massive										
		Moderate SE microveins										
		Massive hematite veins, strong chlorite stringers, strong pervasive magnetite, strong specularite veining.										
	<7.00-7.80>	MINERALIZATION- fine grained sparks of chalcopyrite throughout especially at 3.90m., 0.5% chalcopyrite, 2 to 3% magnetite, 7% specularite.										
	<7.00-7.80>	Semi-massive hematite										
		Veined										
		Moderate SI patches										
		Strong CL microveins										
		Moderate MT pervasive										
		Moderate KS pervasive										
		Intense HE stringer										
		Weak SE microveins										
		At 9.50 to 9.75m., local strong malachite on fracture.										
		MINERALIZATION- fine grained sparks of chalcopyrite throughout especially at 3.90m., 0.5% chalcopyrite, 2 to 3% magnetite, 7% specularite.										
9.80	18.29	volcaniclastics	48381	9.80-11.00	1.20	0.035		28.0	271.0		114.0	
		Green, Brecciated	48382	11.00-12.00	1.00	1.760	0.40	38.0	573.0		137.0	
		Frs=8/m :Vns =5/m	48383	12.00-13.00	1.00	9.350	1.60	38.0	415.0		305.0	18.0
		Weak SI patches	48384	13.00-14.00	1.00	0.060		38.0	198.0	20.0	96.0	
		Moderate CL pervasive	48385	14.00-15.00	1.00	0.055		36.0	429.0		75.0	4.0
		Moderate KS pervasive	59335	15.00-16.00	1.00	0.130	0.40	31.0	1373.0	20.0	71.0	14.0
		Weak HE stockwork	59336	16.00-16.90	0.90	9.810	5.20	61.0	4808.0	85.0	60.0	40.0
		Strong PY vein	48386	16.90-18.00	1.10	11.670	5.40	92.0	2314.0	95.0	141.0	
		Moderate QC microveins	59337	18.00-18.24	0.24	0.180	0.40	45.0	1073.0	25.0	87.0	12.0
		Coarse grained pyrite veinlets along 2m. of lower contact.										
	<11.00-11.10>	Hematite chlorite calcite vein										
		Veined										
		vein 90°										

FROM TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Hematite/calcite/chlorite vein at 90 degrees.										
<11.40-11.45>	MINERALIZATION- pyrite vein.										
<11.40-11.45>	pyrite vein or veinlet MINERALIZATION- pyrite vein.										
<12.19-12.40>	Hematite chlorite calcite vein Veined Hematite/calcite/chlorite vein.										
<12.40-13.00>	Broken Core Broken core.										
<15.10-18.29>	rubbly fault zone Green, gouge fault/gouge 0°:hematite stringers 45° Frs=70/m Zone has abundant gouge, local very limonitic.										
<17.90-18.00>	Semi-massive hematite Stockwork Intense HE stockwork Semi-massive, strong stockwork hematite.										
(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-92

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-92	Date Completed:		Geotech by: MBW
LENGTH: 25.91	Core Diam: NQII		

Collar Location

Latitude:	2047.97
Departure:	1990.52
Elevation:	1398.22

S U M M A R Y

0.00-2.65	volcaniclastics
2.65-12.40	Semi-massive hematite
12.40-25.91	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	262.00	-55.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	2.65	volcaniclastics	48387	0.00-1.00	1.00	0.005		58.0	308.0		122.0	18.0
		Redish-green, heterolithic, stockwork	48388	1.00-2.00	1.00	0.010	0.20	38.0	244.0		86.0	22.0
		hematite stringers 35°:cleavage, foliation 45°	48389	2.00-2.65	0.65	0.025		30.0	87.0		55.0	12.0
		Frs=3/m :Vns =40/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS pervasive										
		Strong HE stockwork										
		Strong QC microveins										
		Mottled green red, very strong calcite stockwork.										
2.65	12.40	Semi-massive hematite	48390	2.65-3.00	0.35	0.080		252.0	133.0	15.0	80.0	14.0
		Blackish-red, stockwork, stringers	48391	3.00-3.50	0.50	0.015		76.0	345.0		75.0	14.0
		hematite stringers 20°:Chlorite 45°	48392	3.50-4.00	0.50	2.810		123.0	111.0		115.0	20.0
		Frs=3/m :Vns =50/m	48393	4.00-4.50	0.50	0.320		156.0	164.0		102.0	30.0
		Moderate SI patches	48394	4.50-5.00	0.50	0.020		92.0	91.0		96.0	24.0
		Intense CL pervasive	48395	5.00-5.50	0.50	4.770		83.0	209.0		77.0	24.0
		Moderate MT microveins	48396	5.50-6.00	0.50	0.090		199.0	152.0	25.0	136.0	26.0
		Strong KS pervasive	48397	6.00-6.50	0.50	0.350		154.0	143.0	45.0	109.0	18.0
		Intense HE stockwork	48398	6.50-7.00	0.50	9.300		86.0	108.0	75.0	109.0	20.0
		Weak SE microveins	48399	7.00-7.50	0.50	2.540		106.0	70.0	35.0	127.0	16.0
		Moderate QC microveins	48400	7.50-8.00	0.50	2.750		175.0	109.0	65.0	181.0	24.0
		H zone of hematite stringers, calcite/chlorite	48401	8.00-8.50	0.50	5.540	3.80	209.0	3481.0	105.0	167.0	38.0
		veinlets, rare magnetite veinlets, traces chalcopyrite	48402	8.50-9.00	0.50	33.220	1.00	162.0	254.0	40.0	146.0	22.0
		with local pyrite intense K-spar alteration, intense	48403	9.00-9.50	0.50	0.225		83.0	90.0		95.0	26.0
		chlorite streaming.	48404	9.50-10.00	0.50	0.165		84.0	62.0		71.0	22.0
	<2.65-2.70>	massive hematite										
		Veined										
		Massive hematite vein.										
	<4.05-4.50>	Semi-massive hematite										
		Veined										
		Semi-massive hematite vein.										
	<7.30-8.10>	Hematite chlorite calcite vein										
		Veined										
		Hematite/calcite/chlorite vein.										
	<8.10-8.70>	Semi-massive hematite										
		Veined										
		Semi-massive hematite vein.										
12.40	25.91	volcaniclastics	48405	10.00-10.50	0.50	0.145	4.00	61.0	3119.0		61.0	18.0
		Redish-green, heterolithic, stockwork	48406	10.50-11.00	0.50	29.180	10.20	70.0	7092.0		63.0	18.0
		stockwork 30°:cleavage, foliation 45°	48407	11.00-11.50	0.50	0.105		51.0	531.0		61.0	20.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Frs=3/m :Vns =25/m	48408	11.50-12.40	0.90	0.380		38.0	227.0		54.0	134.0
		Moderate SI patches	48409	12.40-13.00	0.60	0.015		37.0	351.0		84.0	38.0
		Strong CL pervasive	48410	13.00-14.00	1.00	0.015		29.0	157.0		71.0	26.0
		Moderate KS pervasive	48411	14.00-15.00	1.00	0.020		38.0	285.0		74.0	22.0
		Moderate HE stockwork	48412	15.00-16.00	1.00	0.030		36.0	191.0		117.0	24.0
		Moderate PY disseminated	48413	16.00-17.00	1.00	0.170		36.0	341.0	10.0	113.0	38.0
		Strong QC microveins	48414	17.00-18.00	1.00	0.015		47.0	357.0	5.0	100.0	42.0
		Highly crackled with abundant calcite in fractures,	48415	18.00-19.00	1.00	1.440	0.40	39.0	421.0	10.0	68.0	12.0
		mottled red arsenopyrite, wispy.	48416	19.00-20.00	1.00	0.005	1.00	21.0	850.0		91.0	40.0
<23.02-23.30>		Chlorite Streaming	48417	20.00-21.00	1.00	0.005	3.60	31.0	1940.0		84.0	12.0
		Brecciated, concretionary	48418	21.00-22.00	1.00	0.005		31.0	221.0		74.0	10.0
		Weak PY disseminated	48419	22.00-23.00	1.00	0.005		31.0	264.0		71.0	
		Coarse breccia with black chlorite between fractures,										
		rusty in fractures.										
<25.90-25.91>		?? MT vein	48420	23.00-24.00	1.00	0.010		36.0	259.0	35.0	73.0	10.0
		MINERALIZATION- pyrite vein.	48421	24.00-25.00	1.00	0.005		34.0	202.0	25.0	84.0	10.0
<25.90-25.91>		pyrite vein or veinlet	48422	25.00-25.91	0.91	0.040		36.0	107.0	80.0	65.0	28.0
		Veined										
		MINERALIZATION- pyrite vein.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-93

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-93	Date Completed:		Geotech by: MBW
LENGTH: 38.10	Core Diam: NQII		

Collar Location

Latitude:	2048.04
Departure:	1990.91
Elevation:	1398.35

S U M M A R Y

0.00-7.95	volcaniclastics
7.95-20.60	Semi-massive hematite *****
20.60-35.50	volcaniclastics
35.50-38.10	ANDESITE

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	276.00	-63.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	7.95	volcaniclastics	48423	0.00-1.00	1.00	0.045		64.0	167.0		106.0	10.0
		Redish-green, wispy, stockwork	48424	1.00-2.00	1.00	0.005		45.0	181.0		96.0	2.0
		hematite vein 35°:cleavage, foliation 55°	48425	2.00-3.00	1.00	0.175		49.0	92.0		57.0	4.0
		Frs=6/m :Vns =30/m	48426	3.00-4.00	1.00	0.015		73.0	151.0		72.0	4.0
		Moderate SI patches	48427	4.00-5.00	1.00	0.005		21.0	815.0		39.0	2.0
		Strong CL vein	48428	5.00-6.00	1.00	0.010		26.0	473.0		49.0	
		Strong KS pervasive	48429	6.00-7.00	1.00	0.005		18.0	447.0		38.0	2.0
		Strong HE stockwork	48430	7.00-7.95	0.95	0.105		24.0	909.0		45.0	4.0
		Weak SE microveins										
		Strong QC microveins										
		Abundant narrow chlorite veinlets some associated with										
		calcite veinlets, same as massive coarse grained green										
		chlorite, some chlorite as patches, local strong										
		K-spar alteration, mottled, veined, stringers.										
	<2.10-2.20>	Hematite chlorite calcite vein										
		Veined										
		Intense CL vein										
		Strong HE vein										
		Intense QC vein										
		Hematite/calcite/chlorite vein. Coarse patches of										
		green chlorite along vein.										
7.95	20.60	Semi-massive hematite	48431	7.95-8.40	0.45	0.630		102.0	108.0	25.0	66.0	8.0
		Fine grained, blackish-red, veined, wispy	48432	8.40-9.00	0.60	6.240		103.0	155.0	20.0	59.0	12.0
		hematite vein 35°:cleavage, foliation 55°	48433	9.00-9.50	0.50	4.370		159.0	335.0		76.0	8.0
		Frs=7/m :Vns =55/m	48434	9.50-10.00	0.50	2.650	1.00	137.0	2668.0		91.0	6.0
		Strong SI patches	48435	10.00-10.50	0.50	0.010	0.60	66.0	2182.0		104.0	4.0
		Intense CL pervasive	48436	10.50-11.00	0.50	0.005	0.60	63.0	1675.0		138.0	6.0
		Moderate MT patches	48437	11.00-11.50	0.50	0.025	2.60	89.0	4525.0		151.0	4.0
		Strong KS pervasive	48438	11.50-12.00	0.50	0.055	6.00	65.0	8231.0		121.0	4.0
		Intense HE stockwork	48439	12.00-12.50	0.50	0.005	7.80	82.0			185.0	
		Strong SE microveins	48440	12.50-13.00	0.50	0.015		269.0	285.0	55.0	364.0	10.0
		Strong QC microveins	48441	13.00-13.50	0.50	3.640	5.80	431.0	7689.0	315.0	358.0	6.0
		H zone, veins of massive hematite in a highly	48442	13.50-14.00	0.50	27.080	7.00	582.0	6954.0	410.0	426.0	6.0
		chloritized zone, strong calcite/chlorite veining,	48443	14.00-14.82	0.82	0.305		486.0	387.0	280.0	263.0	
		veins of K-spar alteration, highly fractured giving	48444	14.82-15.28	0.46	123.000	5.60	103.0	520.0	85.0	88.0	34.0
		boxwork texture, stringers, stockwork. MINERALIZATION-	48445	15.28-16.00	0.72	0.225		155.0	456.0	25.0	158.0	
		3% magnetite.	48446	16.00-16.50	0.50	0.125	0.40	98.0	2233.0		175.0	34.0
	<7.95-20.60>	MINERALIZATION- 3% magnetite.	48447	16.50-17.00	0.50	2.180	4.20	75.0		10.0	121.0	46.0
	<8.50-8.70>	Semi-massive hematite										
		Veined										
		hematite vein 30°										
		Moderate MT patches										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Intense HE vein Weak SE microveins Semi-massive hematite vein at 30 degrees, moderate to strong patchy magnetite, weak to moderate specularite microvein.										
<12.40-13.30>	hematite specularite vein Fine grained, redish-white, veined, mottled Intense SI pervasive Strong CL pervasive Weak MT patches Intense KS pervasive Moderate HE stockwork Strong SE microveins Strong QV vein Highly silicified, mottled with quartz/calcite/specularite veinlets to 10% of section. MINERALIZATION- 5% specularite, fine grained visible gold.										
<14.82-15.28>	% Visible gold - fine grained MINERALIZATION- 5% specularite, fine grained visible gold.										
<18.95-19.50>	MINERALIZATION- 4% pyrite.	48448	17.00-17.50	0.50	2.710		64.0	496.0		92.0	2.0
<18.95-19.50>	Hematite chlorite calcite vein	48449	17.50-18.00	0.50	0.045		58.0	1673.0		99.0	4.0
	Fine grained, redish-green, veined, stringers	48450	18.00-18.50	0.50	0.075	0.40	154.0	1782.0	70.0	155.0	10.0
	hematite vein 45°	48451	18.50-19.00	0.50	0.105		1088.0	676.0	1100.0	430.0	6.0
	Strong SI patches	48452	19.00-19.50	0.50	11.160	1.40	245.0	391.0	300.0	431.0	16.0
	Intense CL pervasive Intense KS pervasive Strong HE stockwork Moderate PY blebs Weak QC microveins Strong chlorite streaming, coarse pyrite as blebs. MINERALIZATION- 4% pyrite.										
<19.50-19.90>	MINERALIZATION- 40% pyrite.										
<19.50-19.90>	sulphide-hematite vein Medium grained, greenish-yellow, veined Weak SI patches Intense CL pervasive Weak MT patches Weak KS pervasive Strong HE blebs										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Intense PY blebs Weak QC microveins Coarse blebs of pyrite in totally chlorite altered zone. MINERALIZATION- 40% pyrite.										
	<19.90-20.60>	MINERALIZATION- 7% pyrite.	48453	19.50-20.00	0.50	8.510	2.00	180.0	1267.0	1730.0	363.0	66.0
	<19.90-20.60>	Semi-massive hematite Fine grained, redish-white, veined, mottled Intense SI pervasive Strong CL pervasive Intense HE stockwork Weak SE microveins Moderate PY patches Strong QC microveins Mottled red white, highly silicified, brecciated with patches of coarse pyrite. MINERALIZATION- 7% pyrite.	48454	20.00-20.60	0.60	12.490	3.20	156.0	622.0	200.0	186.0	42.0
20.60	35.50	volcaniclastics	48455	20.60-21.00	0.40	0.125	0.60	119.0	1586.0	125.0	282.0	28.0
		Fine grained, redish-green, heterolithic, stockwork	48456	21.00-22.00	1.00	2.440	0.60	86.0	888.0	100.0	72.0	92.0
		hematite stringers 35°:cleavage, foliation 55°	48457	22.00-23.00	1.00	0.240	0.60	79.0	2336.0	85.0	51.0	8.0
		Frs=9/m :Vns =30/m	48458	23.00-24.00	1.00	1.210		46.0	711.0	5.0	53.0	4.0
		Moderate SI patches	48459	24.00-25.00	1.00	0.080	2.20	33.0	3456.0		48.0	6.0
		Strong CL pervasive	48460	25.00-26.00	1.00	0.480		42.0	858.0		48.0	6.0
		Moderate KS pervasive	48461	26.00-27.00	1.00	0.005		31.0	225.0		41.0	12.0
		Moderate HE stockwork	48462	27.00-28.00	1.00	8.730	0.60	85.0	338.0	55.0	185.0	10.0
		Moderate PY blebs	48463	28.00-29.00	1.00	0.010	0.40	30.0	627.0		82.0	8.0
		Moderate QC microveins	48464	29.00-30.00	1.00	0.010		28.0	507.0		58.0	6.0
		Variably hematite altered, local strong chlorite	48465	30.00-31.00	1.00	1.300		31.0	154.0	10.0	52.0	14.0
		streaming, occasional patches of bleb pyrite,	48466	31.00-32.00	1.00	0.155		24.0	159.0		52.0	6.0
		occasional pink calcite veinlets. Wispy, veined, brecciated, mottled textures.										
	<22.90-24.00>	Chlorite Streaming Laminated, veined hematite stringers 35°:cleavage, foliation 55° Moderate SI patches Intense CL pervasive Strong HE stockwork Moderate PY blebs										
	<27.35-27.60>	Semi-massive hematite Fine grained, redish-white, veined hematite stringers 30° Intense SI patches Intense CL pervasive Intense HE stockwork										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak QC microveins Strongly silicified K-spar altered with hematite veinlets.										
35.50	38.10	ANDESITE Fine grained, green, porphyritic cleavage, foliation 35° Frs=2/m Weak QC microveins Medium grained subhedral and anhedral phenocrysts in a fine grained groundmass, feldspar about 25%, contact with HFBx is at 15 degrees, minor recrystalization, contact growth of small feldspar phenos.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-94

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-94	Date Completed:		Geotech by: MBW
LENGTH: 65.84	Core Diam: NQII		

Collar Location

Latitude:	2048.03
Departure:	1991.25
Elevation:	1398.37

S U M M A R Y

0.00-32.75	volcaniclastics
32.75-43.87	ANDESITE
43.87-50.60	volcaniclastics
50.60-56.16	Semi-massive hematite
56.16-61.10	ANDESITE
61.10-61.60	volcaniclastics
61.60-61.75	ANDESITE
61.75-65.84	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	256.00	-75.00	

HOLE: CL96-94

HOMESTAKE MINING COMPANY - Clone

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	32.75	volcaniclastics	48467	0.00-1.00	1.00	0.010		10.0	19.0		40.0	6.0
		Fine grained, redish-green, stockwork, heterolithic	48468	1.00-2.00	1.00	0.005		10.0	78.0		54.0	10.0
		hematite vein 45°:cleavage, foliation 45°	48469	2.00-3.00	1.00	0.005		10.0	44.0		44.0	8.0
		Frs=8/m :Vns =30/m	48470	3.00-4.00	1.00	0.005		10.0	17.0		44.0	8.0
		Moderate SI patches	48471	4.00-5.00	1.00	0.050		24.0	70.0	5.0	88.0	6.0
		Strong CL pervasive	48472	5.00-6.00	1.00	0.005		13.0	116.0	10.0	90.0	6.0
		Strong KS pervasive	48473	6.00-7.00	1.00	0.005		11.0	120.0		92.0	6.0
		Strong HE stockwork	48474	7.00-8.00	1.00	0.005		11.0	152.0		66.0	8.0
		Moderate PY disseminated	48475	8.00-9.00	1.00	0.015		11.0	22.0		60.0	10.0
		Strong QC microveins	48476	9.00-10.00	1.00	0.005		15.0	13.0		73.0	6.0
		Variably hematite and chlorite altered, generally	48477	10.00-11.00	1.00	0.005		26.0	34.0		95.0	6.0
		strong calcite stockwork in several areas. Mottled,	48478	11.00-12.00	1.00	0.005		14.0	38.0		92.0	8.0
		wispy textures.	48479	12.00-13.00	1.00	0.005		10.0	71.0		93.0	8.0
	<4.30-4.35>	Hematite chlorite calcite vein										
		vein 55°										
		Strong CL vein										
		Hematite/calcite/chlorite vein at 55 degrees, moderate										
		to strong chlorite.										
	<4.90-4.95>	vein 30°										
		Strong CL vein										
		Highly weathered along vein, abundant limonite.										
	<6.35-6.46>	Broken Core										
		Broken core.										
	<13.20-13.41>	Broken core.										
32.75	43.87	ANDESITE	48480	13.00-14.00	1.00	0.010		13.0	17.0		133.0	6.0
		Porphyritic	48481	14.00-15.00	1.00	0.005		15.0	77.0		73.0	6.0
		Weak QC microveins	48482	15.00-16.00	1.00	0.865		23.0	477.0		109.0	6.0
		Same description as CL96-93, upper contact broken and	48483	16.00-17.00	1.00	0.010		19.0	49.0		89.0	6.0
		rusty at bottom contact shows chill margin.	48484	17.00-18.00	1.00	0.020		10.0	43.0		42.0	4.0
43.87	50.60	volcaniclastics	48485	18.00-19.00	1.00	0.005		12.0	123.0		35.0	6.0
		Fine grained, redish-green, heterolithic, stockwork	48486	19.00-20.00	1.00	0.010		12.0	50.0		25.0	6.0
		hematite stringers 20°:cleavage, foliation 45°	48487	20.00-21.00	1.00	0.065		29.0	106.0		50.0	8.0
		Frs=15/m :Vns =35/m	48488	21.00-22.00	1.00	0.010		26.0	96.0		35.0	6.0
		Moderate SI patches	48489	22.00-23.00	1.00	0.120		27.0	99.0		42.0	12.0
		Strong CL pervasive	48490	23.00-24.00	1.00	0.100		28.0	81.0		52.0	
		Moderate KS pervasive	48491	24.00-25.00	1.00	0.010		32.0	172.0		53.0	4.0
		Moderate PY patches	48492	25.00-26.00	1.00	0.005		28.0	74.0		51.0	
		Strong QC microveins	48493	26.00-27.00	1.00	0.325		36.0	136.0		72.0	
		Abundant recrystalization, highly fractured with	48494	27.00-28.00	1.00	0.415		46.0	131.0		45.0	2.0
		calcite along fractures. Mottled, veined textures.	48495	28.00-29.00	1.00	0.005		33.0	1043.0		32.0	4.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<44.20-44.35>		Hematite/pyrite/calcite vein	48496	29.00-30.00	1.00	0.010		31.0	115.0		39.0	4.0
		vein 45°	48497	30.00-31.00	1.00	0.010		32.0	337.0		45.0	4.0
		Strong PY patches	48498	31.00-32.00	1.00	0.005		34.0	1164.0		58.0	4.0
		Intense QC vein	48499	32.00-33.00	1.00	0.005	0.60	39.0	1396.0		100.0	4.0
		Hematite/pyrite/calcite vein at 45 degrees, moderate	48500	33.00-34.00	1.00	0.165	0.80	60.0	973.0	10.0	282.0	10.0
		to strong patchy pyrite, moderate to strong										
		quartz/calcite vein.										
50.60	56.16	Semi-massive hematite	48501	43.87-45.00	1.13	0.005		40.0	144.0	10.0	41.0	4.0
		Blackish-red, veined	48502	45.00-46.00	1.00	0.005		36.0	104.0	15.0	49.0	8.0
		hematite stringers 45°:cleavage, foliation 0°	48503	46.00-47.00	1.00	0.010		44.0	149.0	20.0	47.0	10.0
		Frs=7/m :Vns =50/m	48504	47.00-48.00	1.00	0.005		39.0	175.0		40.0	14.0
		Moderate SI patches	48505	48.00-49.00	1.00	0.005		26.0	134.0		39.0	2.0
		Strong CL pervasive	48506	49.00-50.00	1.00	0.010		27.0	62.0	15.0	59.0	
		Strong KS pervasive	48507	50.00-50.60	0.60	0.025		62.0	943.0	10.0	87.0	
		Intense HE stockwork	48508	50.60-51.00	0.40	3.070		166.0	788.0	85.0	104.0	
		Moderate QC microveins	48509	51.00-51.50	0.50	0.740		356.0	243.0	295.0	117.0	
		H zone, strong hematite/chlorite alteration, narrow	48510	51.50-52.00	0.50	0.295		130.0	208.0	30.0	124.0	
		massive hematite veins at 52.48 to 52.50m.	48511	52.00-52.50	0.50	0.305		191.0	132.0	110.0	168.0	
<55.24-55.80>		massive hematite	48512	52.50-53.00	0.50	2.790		382.0	142.0	345.0	167.0	
		Blackish-red, veined	48513	53.00-53.50	0.50	0.110		323.0	60.0	210.0	180.0	
		hematite stringers 45°:cleavage, foliation 0°	48514	53.50-54.00	0.50	0.115	1.40	276.0	607.0	155.0	152.0	
		Intense HE stockwork	48515	54.00-54.50	0.50	0.095		71.0	296.0		100.0	
		Highly broken.	48516	54.50-55.24	0.74	1.340		295.0	174.0	200.0	150.0	
56.16	61.10	ANDESITE	48517	55.24-55.80	0.56	2.040	0.80	102.0	361.0	10.0	200.0	2.0
		Porphyritic	48518	55.80-56.16	0.36	0.580		91.0	114.0	10.0	162.0	2.0
		cleavage, foliation 0°										
		Moderate QC microveins										
61.10	61.60	volcaniclastics										
		Fine grained, redish-green, mottled, wispy										
		Moderate SI patches										
		Strong CL pervasive										
		Strong KS pervasive										
		Moderate HE stockwork										
		Weak QC microveins										
		Highly chloritic.										
61.60	61.75	ANDESITE										
		Porphyritic										
		Weak QC microveins										
61.75	65.84	volcaniclastics										
		Fine grained, green, laminated, mottled										

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Chlorite 45°:cleavage, foliation 35°										
		Frs=9/m										
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Weak HE microveins										
		Weak PY disseminated										
		Strongly chloritic, minor diabase stringer at 64.05m.										
		MINERALIZATION- 1% fine grained pyrite.										
		(eoh)										

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-95

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-95	Date Completed:		Geotech by: MBW
LENGTH: 105.46	Core Diam: NQII		

Collar Location

Latitude:	2048.05
Departure:	1991.49
Elevation:	1398.31

SUMMARY

0.00-33.75	volcaniclastics
33.75-45.05	ANDESITE
45.05-60.27	volcaniclastics
60.27-63.00	ANDESITE
63.00-81.50	volcaniclastics
81.50-90.00	tuff *
90.00-91.90	sulphide-hematite vein *
91.90-105.46	volcaniclastics **

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	249.00	-85.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	33.75	volcaniclastics Fine grained, redish-green, wispy, stockwork cleavage, foliation 5°:cleavage, foliation 45° Frs=8/m :Vns =20/m Moderate SI patches Strong CL pervasive Strong KS pervasive Moderate HE stockwork Moderate QC microveins Mottled red green, locally indication, a pseudo breccia, wispy chlorite and hematite at 5 to 10 degrees to core axis, generally weak calcite stockwork. Heterolithic, mottled textures.										
<10.01-10.05>		Hematite chlorite calcite vein Banded green white hematite/calcite/chlorite vein.										
33.75	45.05	ANDESITE Gray, porphyritic cleavage, foliation 10° Frs=2/m Weak QC microveins Same as diabase dyke in CL96-94, 35.50 to 38.10m.										
<44.50-45.00>		Broken Core Broken core.										
45.05	60.27	volcaniclastics Fine grained, redish-green, stockwork, heterolithic cleavage, foliation 45°:hematite stringers 10° Frs=8/m :Vns =10/m Strong SI patches Strong CL pervasive Strong KS pervasive Moderate HE stockwork Moderate PY disseminated Moderate QC microveins Generally patchy hematite alteration, as well as patchy chlorite alteration, present as fine grained wispy stringers, rock appears strongly K-spar altered. Mottled texture.										
<60.00-60.15>		rubbly fault zone Gouge										
60.27	63.00	ANDESITE										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Fine grained, gray, fragmental										
		Frs=2/m										
		Gray, dense.										
<61.00-61.70>		Broken Core										
		Broken core.										
63.00	81.50	volcaniclastics										
		Fine grained, green, heterolithic, stockwork										
		cleavage, foliation 90°:cleavage, foliation 10°										
		Frs=12/m :Vns =5/m										
		Strong SI patches										
		Strong CL pervasive										
		Strong KS pervasive										
		Moderate HE stockwork										
		Weak PY disseminated										
		Moderate QC microveins										
		Strongly K-spar altered, local weal hematite										
		alteration, some fine calcite/chlorite veinlets at 50										
		degrees to core axis.										
<63.50-64.70>		Broken Core										
		Highly broken, limonite on fractures.										
<65.40-74.00>		volcaniclastics										
		Fine grained, gray, vuggy										
		Frs=15/m										
		Highly fractures, abundant vugs, limonite along										
		fractures and vugs.										
<76.20-81.50>		Fine grained, redish-tan, wispy										
		Strong SI patches										
		Moderate CL pervasive										
		Intense KS pervasive										
		Weak PY disseminated										
		Moderate QC microveins										
		Strongly fractured, altered with minor										
		calcite/chlorite veinlets.										
81.50	90.00	tuff	48519	81.50-82.00	0.50	0.010		7.0	8.0	30.0	138.0	4.0
		Medium grained, green, clastic, laminated	48520	82.00-83.00	1.00	0.035	0.20	18.0	87.0	25.0	55.0	12.0
		cleavage, foliation 45°:vein 15°	48521	83.00-84.00	1.00	0.965	0.60	105.0	331.0	105.0	64.0	4.0
		Frs=9/m	48522	84.00-85.00	1.00	0.300	0.20	137.0	205.0	145.0	76.0	4.0
		Weak SI patches	48523	85.00-86.00	1.00	0.005		29.0	100.0	25.0	47.0	8.0
		Strong CL pervasive	48524	86.00-87.00	1.00	0.020		19.0	146.0	20.0	40.0	6.0
		Weak KS pervasive	48525	87.00-88.00	1.00	0.080		33.0	121.0	35.0	39.0	4.0
		Weak HE stockwork	48526	88.00-89.00	1.00	0.165		48.0	207.0	60.0	124.0	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate PY disseminated	48527	89.00-90.00	1.00	0.105		125.0	246.0	225.0	88.0	
		Moderate QC microveins										
		Large generally rounded clasts in a chlorite rich groundmass, minor hematite, many chlorite eispy stringers. MINERALIZATION- 1% pyrite both disseminated and along ?? fractures.										
		<81.50-90.00>MINERALIZATION- 1% pyrite both disseminated and along ?? fractures.										
		<82.10-82.15> shear zone Chlorite rusty.										
90.00	91.90	sulphide-hematite vein	48528	90.00-91.00	1.00	19.620	4.20	1915.0	5772.0		80.0	38.0
		Redish-yellow, massive										
		vein 10°:fracturing 15°										
		Frs=8/m										
		Strong SI patches										
		Intense CL pervasive										
		Intense MT vein										
		Intense HE vein										
		Intense PY vein										
		Massive sulphide/hematite zone with late fractures filled with marcasite (bright yellow crystalline). MINERALIZATION- 30% pyrite, 20% arsenopyrite, 10% magnetite, 2% marcasite.										
		<90.00-91.90>MINERALIZATION- 30% pyrite, 20% arsenopyrite, 10% magnetite, 2% marcasite.										
91.90	105.46	volcaniclastics	48529	91.00-92.00	1.00	19.240	3.80	2439.0	6663.0		80.0	20.0
		Fine grained, green, heterolithic	48530	92.00-93.00	1.00	6.340	4.60	767.0	4452.0	3990.0	59.0	16.0
		cleavage, foliation 45°:cleavage, foliation 15°	48531	93.00-94.00	1.00	0.070	0.40	96.0	123.0	170.0	43.0	2.0
		Frs=9/m	48532	94.00-95.00	1.00	0.295	0.40	371.0	228.0	1445.0	61.0	4.0
		Moderate SI patches	48533	95.00-96.00	1.00	3.870	3.40	566.0	1165.0	6180.0	46.0	14.0
		Strong CL pervasive	48534	96.00-97.00	1.00	0.090		16.0	107.0	50.0	33.0	6.0
		Moderate KS pervasive	48535	97.00-98.00	1.00	0.160	0.60	55.0	161.0	85.0	52.0	24.0
		Strong PY vein										
		Moderate QC microveins										
		<92.71-92.93>MINERALIZATION- 60% pyrite, 5% arsenopyrite, 5% magnetite.										
		<92.71-92.93> sulphide-hematite vein Fine grained, yellowish-red, massive Strong SI patches Moderate MT patches										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Strong HE vein Intense PY vein Massive sulphide/hematite vein. MINERALIZATION- 60% pyrite, 5% arsenopyrite, 5% magnetite.										
<95.05-95.52>	MINERALIZATION- 70% pyrite, 5% arsenopyrite.										
<95.05-95.52>	sulphide-hematite vein Fine grained, yellowish-red, veined vein 15° Weak SI patches Moderate HE patches Intense PY vein Weak QC microveins MINERALIZATION- 70% pyrite, 5% arsenopyrite.										
<97.80-97.95>	Hematite chlorite calcite vein Fine grained, whiteish-green, veined Intense CL vein White green Hematite/calcite/chlorite vein.										
(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-96

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-96	Date Completed:		Geotech by: MBW
LENGTH: 71.93	Core Diam: NQII		

Collar Location

Latitude:	1908.22
Departure:	1941.15
Elevation:	1347.42

S U M M A R Y

0.00-71.93	volcaniclastics ********

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	240.00	-44.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	71.93	volcaniclastics	48536	1.00-2.00	1.00	0.135	0.40	22.0	40.0	155.0	67.0	20.0
		Green, fragmental, veined	48537	2.00-3.00	1.00	0.655	1.40	58.0	101.0	845.0	92.0	28.0
		cleavage, foliation 45°:foliated 45°	48538	3.00-4.00	1.00	0.715		14.0	26.0	25.0	86.0	20.0
		Frs=8/m :Vns =9/m	48539	4.00-5.00	1.00	0.060		13.0	20.0	30.0	66.0	12.0
		Moderate SI patches	48540	5.00-6.00	1.00	0.125	1.20	22.0	114.0	85.0	70.0	20.0
		Moderate CL pervasive	48541	6.00-7.00	1.00	0.130	1.00	25.0	186.0	125.0	63.0	18.0
		Moderate MS pervasive	48542	7.00-8.00	1.00	0.280	0.80	27.0	247.0	140.0	75.0	20.0
		Strong KS pervasive	48543	8.00-9.00	1.00	0.445	0.80	115.0	270.0	1270.0	60.0	22.0
		Moderate PY vein	48544	9.00-10.00	1.00	0.170	0.80	86.0	189.0	775.0	93.0	22.0
		Moderate QC microveins	48545	10.00-11.00	1.00	0.025	0.40	17.0	110.0	75.0	46.0	16.0
		Variably sericite altered, moderate calcite veinlets,	48546	11.00-12.00	1.00	0.020	0.60	18.0	156.0	5.0	54.0	16.0
		stockwork, poorly sirted with fragments ranging from	48547	12.00-13.00	1.00	0.165	0.40	31.0	147.0	325.0	75.0	18.0
		2cm. down to fine sand size. MINERALIZATION- 2%	48548	13.00-14.00	1.00	0.010		31.0	123.0	60.0	51.0	18.0
		pyrite.	48549	14.00-15.00	1.00	0.015		24.0	106.0	45.0	50.0	18.0
<0.00-71.93>		.2% arsenopyrite - local	48550	15.00-16.00	1.00	0.140	0.60	19.0	186.0	90.0	141.0	26.0
		MINERALIZATION- 2% pyrite, sparse local arsenopyrite.	48551	16.00-17.00	1.00	0.900	0.40	12.0	127.0	25.0	46.0	28.0
<8.50-8.60>		MINERALIZATION- 7% pyrite.										
<8.50-8.60>		volcaniclastics										
		Veined										
		Moderate PY wispy										
		Narrow pyrite rich stringer zone. MINERALIZATION- 7%										
		pyrite.										
<15.00-16.80>		MINERALIZATION- 7% pyrite.										
<15.00-16.80>		volcaniclastics										
		Veined										
		Moderate PY stringer										
		Narrow pyrite stringer bearing zone. MINERALIZATION-										
		7% pyrite.										
<17.00-20.00>		Intense MT disseminated	48552	17.00-18.00	1.00	0.080		14.0	88.0	450.0	45.0	18.0
		MINERALIZATION- 5% pyrite as veinlets less	48553	18.00-19.00	1.00	0.015		18.0	42.0	15.0	44.0	26.0
		disseminated grains and veinlets.	48554	19.00-20.00	1.00	0.020		18.0	67.0	15.0	42.0	24.0
<17.00-20.00>		volcaniclastics										
		Veined										
		vein 45°:vein 80°										
		Frs=6/m										
		Moderate PY vein										
		Sparse quartz/pyrite veinlets less than 1cm. in width.										
		MINERALIZATION- 5% pyrite as disseminated grains and										
		veinlets.										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<20.80-21.00>	Broken Core	48555	20.00-21.00	1.00	0.060		16.0	59.0	250.0	50.0	24.0
	Highly broken, limonite on fractures.										
<23.50-26.00>	MINERALIZATION- 3% pyrite.	48556	21.00-22.00	1.00	0.055	0.40	28.0	104.0	905.0	52.0	28.0
<23.50-26.00>	volcaniclastics	48557	22.00-23.00	1.00	0.090		35.0	80.0	215.0	43.0	22.0
	Moderate CL wispy	48558	23.00-24.00	1.00	3.580	2.60	760.0	187.0	8945.0	70.0	76.0
	Moderate PY microveins	48559	24.00-25.00	1.00	0.710	0.60	71.0	116.0	925.0	59.0	28.0
	Wispy black chlorite stringers, locally silicified,	48560	25.00-26.00	1.00	0.570	0.20	23.0	129.0	100.0	59.0	26.0
	fine graine pyrite veinlets alogn chlorite.										
	MINERALIZATION- 3% pyrite.										
<38.40-38.50>	Broken Core	48561	26.00-27.00	1.00	0.720		31.0	178.0	120.0	60.0	28.0
	Broken core.	48562	27.00-28.00	1.00	0.130		27.0	112.0	155.0	43.0	22.0
<44.30-44.40>	Broken core.	48563	28.00-29.00	1.00	0.095		25.0	78.0	110.0	32.0	22.0
<45.50-49.50>	Moderate KS microveins	48564	29.00-30.00	1.00	0.025		25.0	69.0	190.0	39.0	26.0
	Moderate QV microveins	48565	30.00-31.00	1.00	0.050		29.0	97.0	645.0	45.0	24.0
	Strong epidote veinlets and quartz to 5mm.	48566	31.00-32.00	1.00	0.040		31.0	139.0	90.0	53.0	26.0
<49.00-49.30>	Broken Core										
	Broken core.										
<52.90-54.70>	MINERALIZATION- 3% pyrite, 1% arsenopyrite, 0.2%	48567	49.00-50.00	1.00	0.025		27.0	61.0	35.0	45.0	24.0
	chalcopyrite.	48568	50.00-51.00	1.00	0.035		30.0	105.0	35.0	43.0	22.0
<52.90-54.70>	Quartz/chlorite vein	48569	51.00-52.00	1.00	0.020		21.0	92.0	15.0	43.0	18.0
	Fine grained, whiteish-green, foliated	48570	52.00-53.00	1.00	0.210		51.0	138.0	395.0	60.0	32.0
	vein 45°	48571	53.00-54.00	1.00	0.050		38.0	35.0	220.0	55.0	18.0
	Frs=3/m :Vns =8/m										
	Intense SI pervasive										
	Intense CL pervasive										
	Strong KS pervasive										
	Moderate PY patches										
	Intense QV vein										
	Black chlorite wisps and veinlets in green to white										
	silicified zone, minor coarse blebs of arsenopyrite,										
	trace chalcopyrite, minor fracture filled pyrite.										
	MINERALIZATION- 3% pyrite, 1% arsenopyrite, 0.2%										
	chalcopyrite.										
<52.94-52.96>	MINERALIZATION- 30% pyrite, 10% arsenopyrite.										
<52.94-52.96>	pyrite vein or veinlet										
	Veined										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Narrow vein with pyrite, arsenopyrite. MINERALIZATION- 30% pyrite, 10% arsenopyrite.										
<55.50-57.00>		Limonite on fractures.	48572	54.00-55.00	1.00	0.045		57.0	92.0	440.0	55.0	18.0
<57.20-57.30>		MINERALIZATION- 50% pyrite, 5% arsenopyrite.	48573	55.00-56.00	1.00	0.010		25.0	26.0	35.0	35.0	16.0
<57.20-57.30>		pyrite vein or veinlet	48574	56.00-57.00	1.00	0.030		28.0	75.0	50.0	42.0	18.0
		Veined										
		Strong PY microveins										
		3 to 4 fine grained pyrite/arsenopyrite veinlets forming 50% of interval. MINERALIZATION- 50% pyrite, 5% arsenopyrite.										
<67.30-67.50>		calcite vein	48575	57.00-58.00	1.00	2.460	0.40	68.0	176.0	650.0	40.0	22.0
		Veined, vuggy	48576	58.00-59.00	1.00	0.115		23.0	52.0	60.0	39.0	22.0
		Intense CV vein	48577	59.00-60.00	1.00	0.800		48.0	145.0	60.0	36.0	20.0
		Vuggy.	48578	60.00-61.00	1.00	0.045	0.40	22.0	66.0	20.0	59.0	20.0
<67.50-71.50>		volcaniclastics	48579	61.00-62.00	1.00	0.030		24.0	78.0	20.0	37.0	20.0
		Vuggy	48580	62.00-63.00	1.00	0.025		26.0	81.0	15.0	43.0	22.0
		Limonite on fractures.	48581	63.00-64.00	1.00	0.020		28.0	91.0	10.0	45.0	24.0
<70.00-70.10>		calcite vein	48582	64.00-65.00	1.00	0.030		35.0	140.0	10.0	48.0	24.0
		Veined	48583	65.00-66.00	1.00	0.025		28.0	56.0	5.0	53.0	22.0
		Intense CV laminations	48584	66.00-67.00	1.00	0.005		28.0	82.0	5.0	49.0	22.0
		Calcite vein.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY

DRILL HOLE LOG

CL96-97

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-97	Date Completed:		Geotech by: MBW
LENGTH: 76.20	Core Diam: NQII		

Collar Location

Latitude:	1908.40
Departure:	1941.45
Elevation:	1347.40

S U M M A R Y

0.00-13.20	volcaniclastics *
13.20-15.03	mudstone
15.03-47.10	volcaniclastics *
47.10-67.50	Pyroxene porphry
67.50-76.26	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	240.00	-54.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	13.20	volcaniclastics	48585	1.00-2.00	1.00	0.010		11.0	3.0	75.0	56.0	16.0
		Green, fragmental, mottled	48586	2.00-3.00	1.00	0.125		13.0	17.0	75.0	62.0	26.0
		cleavage, foliation 35°:cleavage, foliation 70°	48587	3.00-4.00	1.00	0.125	0.40	21.0	35.0	185.0	77.0	24.0
		Frs=5/m :Vns =6/m	48588	4.00-5.00	1.00	0.270	0.40	29.0	38.0	180.0	71.0	22.0
		Strong SI patches	48589	5.00-6.00	1.00	0.005		14.0	6.0	15.0	69.0	16.0
		Moderate CL pervasive	48590	6.00-7.00	1.00	0.225	0.40	16.0	24.0	55.0	68.0	18.0
		Moderate MS pervasive	48591	7.00-8.00	1.00	0.140	0.60	29.0	80.0	210.0	63.0	20.0
		Strong KS pervasive	48592	8.00-9.00	1.00	0.175	0.40	28.0	77.0	825.0	46.0	18.0
		Weak PY disseminated	48593	9.00-10.00	1.00	0.080	0.40	22.0	118.0	155.0	42.0	22.0
		Moderate QV vein	48594	10.00-11.00	1.00	0.995	1.00	209.0	135.0	2175.0	84.0	26.0
		Moderate QC microveins	48595	11.00-12.00	1.00	0.280	0.40	64.0	125.0	430.0	102.0	40.0
		Poorly sorted volcanic breccia, fragments range in	48596	12.00-13.00	1.00	0.060	0.60	24.0	119.0	120.0	96.0	22.0
		size from 4cm. to fine grained minor wispy black										
		chlorite. MINERALIZATION- 1 to 2% disseminated pyrite,										
		0.5% minor blebs arsenopyrite at 11.90m.										
	<0.00-13.20>	Trace MT disseminated										
		.5% arsenopyrite - blebs										
		MINERALIZATION- 1 to 2% disseminated pyrite, 0.5%										
		minor bleb arsenopyrite at 11.90m.										
13.20	15.03	mudstone										
		Black, bedded										
		bedding 35°										
		Weak PY disseminated										
		Weak QC microveins										
		Thinly bedded with individual bedding 1 to 2cm.,										
		limonitic along fractures, minor graphite.										
15.03	47.10	volcaniclastics	48597	15.00-16.00	1.00	0.050		29.0	111.0	40.0	67.0	28.0
		Green, fragmental, mottled	48598	16.00-17.00	1.00	0.020		27.0	61.0	30.0	72.0	28.0
		cleavage, foliation 15°:cleavage, foliation 65°	48599	17.00-18.00	1.00	0.020		28.0	100.0	80.0	58.0	30.0
		Frs=5/m :Vns =6/m	48600	18.00-19.00	1.00	0.015		26.0	69.0	65.0	58.0	28.0
		Strong SI patches	48601	19.00-20.00	1.00	0.015		25.0	47.0	125.0	53.0	28.0
		Moderate CL pervasive	48602	20.00-21.00	1.00	0.045		14.0	108.0	90.0	38.0	20.0
		Moderate MS pervasive	48603	21.00-22.00	1.00	0.050		28.0	121.0	405.0	45.0	28.0
		Strong KS pervasive	48604	22.00-23.00	1.00	0.015		23.0	107.0	45.0	46.0	30.0
		Moderate PY wispy	48605	23.00-24.00	1.00	0.045		23.0	60.0	20.0	35.0	6.0
		Moderate QC microveins	48606	24.00-25.00	1.00	0.370	1.80	26.0	292.0	250.0	54.0	46.0
		Strongly crackled with calcite filling along	48607	25.00-26.00	1.00	0.025		20.0	81.0	30.0	58.0	20.0
		fractures, local sparse wispy pyrite, local limonite	48608	26.00-27.00	1.00	0.010	0.60	25.0	196.0	105.0	58.0	22.0
		on fractures.	48609	27.00-28.00	1.00	0.055	0.40	23.0	134.0	95.0	55.0	20.0
	<25.55-25.60>	calcite vein										
		Veined										
		Intense CV vein										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Calcite vein.										
		<33.40-37.00>MINERALIZATION- 5% pyrite.	48610	28.00-29.00	1.00	0.040		25.0	167.0	60.0	32.0	10.0
		<33.40-37.00> volcaniclastics	48611	29.00-30.00	1.00	0.115		30.0	181.0	110.0	29.0	14.0
		Wispy, mottled	48612	30.00-31.00	1.00	0.080		26.0	129.0	180.0	34.0	12.0
		Strong PY wispy	48613	31.00-32.00	1.00	0.045		30.0	93.0	545.0	29.0	12.0
		Intense QV microveins	48614	32.00-33.00	1.00	0.080		27.0	146.0	155.0	28.0	10.0
		Strong calcite veining black chlorite as wisps with	48615	33.00-34.00	1.00	0.060		25.0	90.0	55.0	35.0	10.0
		local abundant pyrite. MINERALIZATION- 5% pyrite.	48616	34.00-35.00	1.00	0.045		23.0	68.0	80.0	35.0	10.0
		<35.36-38.44> Broken Core	48617	35.00-36.00	1.00	0.060		23.0	71.0	110.0	43.0	12.0
		Gouge	48618	36.00-37.00	1.00	0.045	0.40	23.0	107.0	115.0	40.0	14.0
		Gouge at 38m., rest of section is highly broken and	48619	37.00-38.00	1.00	0.005		25.0	72.0	55.0	47.0	10.0
		strongly limonitic.										
		<41.00-42.40>Limonite on fractures.	48620	38.00-39.00	1.00	0.030		26.0	116.0	135.0	53.0	12.0
		<44.40-46.00>Highly chloritic.	48621	39.00-40.00	1.00	0.050		29.0	149.0	75.0	45.0	10.0
47.10	67.50	Pyroxene porphry	48622	47.00-48.00	1.00	0.010		25.0	97.0	15.0	49.0	
		Fine grained, green, porphyritic	48623	48.00-49.00	1.00	0.005		31.0	84.0	20.0	47.0	10.0
		vein 80°:cleavage, foliation 75°	48624	49.00-50.00	1.00	0.005		33.0	103.0	20.0	49.0	10.0
		Frs=4/m	48625	50.00-51.00	1.00	0.005		33.0	134.0	5.0	50.0	16.0
		Weak SI patches	48626	51.00-52.00	1.00	0.010		29.0	93.0	15.0	51.0	14.0
		Weak CL pervasive	48627	52.00-53.00	1.00	0.010		32.0	168.0	20.0	47.0	14.0
		Weak KS pervasive										
		Strong EP microveins										
		Moderate PY patches										
		Strong QV microveins										
		Weak QC microveins										
		Dark gray, with abundant quartz/epidote veinlets,										
		patchy pyrite. Rock.										
67.50	76.26	volcaniclastics										
		Green, mottled										
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Moderate PY disseminated										
		Moderate QC microveins										
		Bottom contact is bleached light gray from the contact										
		to 71.13m.										
		<71.93-71.97> calcite vein										
		Calcite vein.										

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-98

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-98	Date Completed:		Geotech by: MBW
LENGTH: 109.42	Core Diam: NQII		

Collar Location

Latitude:	1908.56
Departure:	1941.68
Elevation:	1347.32

SUMMARY

0.00-13.63	volcaniclastics **
13.63-19.10	mudstone
19.10-20.41	volcaniclastics *
20.41-27.43	volcaniclastics *
27.43-48.92	volcaniclastics *
48.92-66.07	gabbro *
66.07-69.06	volcaniclastics
69.06-79.95	gabbro *
79.95-86.10	volcaniclastics *
86.10-99.00	gabbro *
99.00-109.42	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	240.00	-64.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	13.63	volcaniclastics	48628	2.00-3.00	1.00	0.010		8.0	15.0	45.0	38.0	22.0
		Green, fragmental	48629	3.00-4.00	1.00	0.015		20.0	32.0	135.0	46.0	20.0
		qz-carb veining 55°:cleavage, foliation 30°	48630	4.00-5.50	1.50	0.305		15.0	31.0	15.0	53.0	10.0
		Frs=7/m :Vns =20/m	48631	5.50-6.50	1.00	0.105		39.0	28.0	130.0	86.0	10.0
		Weak SI matrix	48632	6.50-7.50	1.00	0.430		26.0	78.0	90.0	68.0	10.0
		Weak CL matrix	48633	7.50-8.50	1.00	0.035		18.0	83.0	130.0	46.0	12.0
		Trace CB macroveins	48634	8.50-9.45	0.95	0.040	0.40	26.0	96.0	590.0	67.0	12.0
		Heterolithic fragmental containing predominantly	48635	9.45-10.45	1.00	5.110	1.00	237.0	114.0	6040.0	93.0	14.0
		K-spar altered clasts, 5mm. to 5cm. long, irregular	48636	10.45-12.00	1.55	0.580		16.0	96.0	40.0	55.0	10.0
		and subrounded. Moderate foliation. ALTERATION- weak	48637	12.00-13.00	1.00	0.495	0.80	12.0	50.0	15.0	66.0	10.0
		calcite and silica slteration of the matrix, with										
		moderate quartz/carbonate veining whick is relativley										
		planar, but locally fractured. Broken core.										
		MINERALIZATION- trace disseminated pyrite, patchy in										
		occurance, well mineralized section nested below.										
	<0.00-13.63>	?? MT disseminated										
		MINERALIZATION- trace disseminated pyrite, patchy in										
		occurance, well mineralized section nested below.										
	<9.43-10.48>	Trace MT disseminated										
		1 % arsenopyrite - foliated										
		MINERALIZAATION- patches of pyrite and arsenopyrite up										
		to 8cm. long are aligned with foliation. Disseminated										
		pyrite blebs are also strong out along foliation, 1 to										
		2% pyrite, 1% arsenopyrite.										
	<9.43-10.48>	volcaniclastics										
		Dark green, fragmental										
		cleavage, foliation 50°										
		Frs=3/m :Vns =2/m										
		Weak PY clasts										
		Mineralized interval: strongly chlorite altered matrix										
		with a well developed foliation with which the clasts										
		are aligned. MINERALIZATION- patches of pyrite and										
		arsenopyrite up to 8cm. long are aligned with										
		foliation. Disseminated pyrite blebs are also strong										
		out along foliation, 1 to 2% pyrite, 1% arsenopyrite.										
13.63	17.11	mudstone	48638	13.00-14.00	1.00	1.020	0.40	25.0	109.0	30.0	80.0	10.0
		Aphanitic, blueish-black, fragmental, foliated										
		cleavage, foliation 45°										
		Moderate MS patches										
		Moderately to strongly foliated mudstone containing										
		broken and flattened light gray volcanic? clasts upper										
		and lower contacts are parallel to foliation, up to										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		30cm. thick beds of mafic tuff locally. ALTERATION- beige, stringy masses of sericite parallels foliation. Especially concentrated towards the lower contact. Weak quartz/carbonate occur in rare veins.										
	<16.65-17.11>	Aphanitic, brown, broken Broken core oxidized on and haloing fracture planes. Fractures are irregular in orientation.										
19.10	20.41	volcaniclastics Green, foliated cleavage, foliation 40°:qz-carb veining 25° Trace PY disseminated Indistinct upper contact with sericite alteration obscuring its true position. Very difficult to tell if this rock is a true breccia or a pseudo breccia with stockwork alteration leaving clast like unaltered patches. ALTERATION- black chlorite as thin stringers wraps about the clasts. Moderate quartz/carbonate veining slightly irregular in form. MINERALIZATION- less than 1% disseminated pyrite throughout.	48639	19.00-20.00	1.00	0.045		23.0	96.0	95.0	41.0	10.0
	<19.10-20.41>	?? MT disseminated MINERALIZATION- less than 1% disseminated pyrite throughout.										
20.41	27.43	volcaniclastics Fine grained, pale gray, fragmental qz-carb veining 45° Frs=3/m :Vns =10/m Intense KS matrix Trace PY microveins Intense PR disseminated Trace QC macroveins 5 % pyrrhotite - disseminated Fragmental whose texture has largely been overprinted and obscured by alteration, as a result, it has a massive appearance. ALTERATION- strong K spar alteration gives the rock a light gray colour. Rare veinlets of chlorite, weak quartz/carbonate veins in conjugate stes. MINERALIZATION- fine stringers of pyrite containing a very fine grained brassy mineral (pyrrhotite?) in very minor quantities (magnetic).	48640	20.00-21.00	1.00	0.010		22.0	82.0	315.0	46.0	2.0
			48641	21.00-22.00	1.00	0.005		11.0	26.0	95.0	33.0	
			48642	22.00-23.00	1.00	0.005		11.0	74.0	45.0	53.0	4.0
			48643	23.00-24.00	1.00	0.005		12.0	70.0	85.0	40.0	4.0
			48644	24.00-25.00	1.00	0.005		14.0	41.0	570.0	27.0	2.0
			48645	25.00-26.00	1.00	0.010		9.0	37.0	35.0	32.0	4.0
			48646	26.00-27.00	1.00	0.010		17.0	45.0	455.0	31.0	6.0
	<20.41-27.43>	?? MT stringer MINERALIZATION- fine stringers of pyrite containing very fine grained brassy mineral (pyrrhotite?) in very										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		minor quantities (magnetic).										
27.43	48.92	volcaniclastics	48647	27.00-28.00	1.00	0.100	2.20	24.0	170.0	130.0	55.0	124.0
		Green, fragmental	48648	28.00-29.00	1.00	0.060		26.0	224.0	90.0	60.0	8.0
		qz-carb veining 40°:cleavage, foliation 30°	48649	29.00-30.00	1.00	0.020		22.0	78.0	150.0	47.0	6.0
		Frs=3/m :Vns =12/m	48650	30.00-31.00	1.00	0.065		27.0	126.0	75.0	35.0	8.0
		Weak CL microveins	48651	31.00-32.00	1.00	0.120		27.0	154.0	40.0	72.0	10.0
		Trace KS matrix	48652	32.00-33.00	1.00	0.150		21.0	124.0	70.0	56.0	12.0
		Trace PY disseminated	48653	35.00-36.00	1.00	0.090		27.0	115.0	160.0	64.0	8.0
		Trace QC macroveins	48654	38.00-39.00	1.00	0.035		33.0	69.0	55.0	77.0	10.0
		HFBx?? Moderately foliated, clasts are difficult to	48655	39.00-40.00	1.00	0.015		31.0	97.0	100.0	76.0	8.0
		discern as their composition is close to that of the	48656	40.00-41.00	1.00	0.015		34.0	140.0	55.0	74.0	10.0
		matrix, clast size is predominantly <1cm., although	48657	41.00-42.00	1.00	0.015		33.0	100.0	75.0	104.0	10.0
		clasts up to 2cm. are seen. They are subrounded and	48658	43.00-44.00	1.00	0.030		34.0	96.0	120.0	107.0	12.0
		deformed by the foliation. ALTERATION- weak K spar										
		alteration, patchy, weak chlorite alteration of the										
		matrix as well as in thin veinlets parallel to										
		foliation. Moderate quartz/carbonate veins, irregular										
		in form but reasonably consistant in orientation.										
		MINERALIZATION- disseminated pyrite throughout or as										
		thin stringers less than 1% overall.										
	<27.43-48.92>	?? MT disseminated										
		MINERALIZATION- disseminated pyrite throughout or as										
		thin stringers less than 1% overall.										
	<29.43-29.75>	volcaniclastics										
		Brown, broken										
		Frs=50/m										
		Broken oxidized zone with rubble fragments less than										
		1cm. across.										
	<33.42-33.78>	Frs=50/m										
		Broken and oxidized.										
	<41.09-42.93>	Frs=50/m										
		Broken and oxidized. Geometric fragments in places cut										
		by more than one joint set.										
48.92	66.07	gabbro	48659	54.00-55.00	1.00	0.010		40.0	220.0	35.0	60.0	12.0
		Fine grained, green, porphyritic	48660	55.00-56.00	1.00	0.005		37.0	118.0	35.0	67.0	14.0
		qz-carb veining 40°:contact 60°	48661	56.00-57.00	1.00	0.005		28.0	77.0	30.0	65.0	14.0
		Frs=2/m :Vns =14/m	48662	57.00-58.00	1.00	0.010		29.0	91.0	30.0	76.0	12.0
		Trace SI macroveins										
		Weak CL matrix										
		Trace CB macroveins										
		Trace PY disseminated										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak QC macroveins Dark green very mafic looking rock with patches of pyroxene crystals within a massive matrix, pyroxenes have mostly been replaced by chlorite. Lower contact measured. ALTERATION- apple green epidote occurs as hairline wispy veins or as patches. Moderate chlorite alteration of the matrix. Irregular quartz/cabonate veining. MINERALIZATION- fine and blebby pyrite disseminated throughout to 1%.										
<48.92-66.07>		Trace MT blebs MINERALIZATION- fine and blebby pyrite disseminated throughout to 1%.										
<63.40-64.22>		gabbro Fine grained, brownish-green, porphyritic, broken fracturing 5°:fracturing 75° Frs=15/m Fractured core broken parallel to core axis.										
66.07	69.06	volcaniclastics Green, fragmental qz-carb veining 55°:fracturing 12° Frs=5/m :Vns =8/m Intense KS matrix Sharp upper contact, core is more broken than the previous interval, moderate K spar alteration gives the rock a lighter appearance, and makes the texture granular. However fragments can still be seen in places, even if they are somewhat cryptic.										
69.06	79.95	gabbro Fine grained, dark green, porphyritic, massive qz-carb veining 65° Frs=4/m :Vns =4/m Trace SI macroveins Weak CL matrix Trace CB macroveins Strong PY disseminated Porphrytic to massive. Pyroxene phenocrysts are not seen everywhere, and when they are absent the rock is massive. ALTERATION- pervasive chlorite alteration of the matrix, with black chlorite present as veins up to 5mm. thick. Epidote is also present in hairline veins as well as patches up to 1cm. in diameter. Weak quartz/carbonate veining. MINERALIZATION- trace disseminated pyrite.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<69.06-79.95> ?? MT disseminated MINERALIZATION- trace disseminated pyrite.										
		<77.04-78.70> gabbro Fine grained, broken Frs=20/m As above but broken core and slightly rusty.										
79.95	86.10	volcaniclastics Fine grained, green, fragmental, foliated cleavage, foliation 60°:qz-carb veining 60° Frs=6/m :Vns =20/m Trace CL matrix Trace CB microveins Trace KS patches ?? PY disseminated Trace QC microveins Chloritized fragmental. Almost impossible to see fragments due to alteration and probably the clasts have a similar composition to that of the matrix. Veining oarallels weak to moderate foliation. ALTERATION- chlorite uniform along the interval, K spar is patchy and relatively unimportant. MINERALIZATION- trace disseminated pyrite, gradational upper and lower contacts.										
		<79.95-86.10> ?? MT fine grained MINERALIZATION- trace fine grained disseminated pyrite, gradational upper and lower contacts.										
86.10	99.00	gabbro Fine grained, dark green, porphyritic, massive qz-carb veining 60° Frs=3/m :Vns =20/m Weak CL matrix Trace PY disseminated Weak QC microveins Very hard to tell where the contacts of this unit lie. Moderate chloritic alteration has created a homogenous massive texture, with local pyroxene porphrytic texture remaining. Moderate quartz/carbonate veining consistantly oriented (as measured). MINERALIZATION- disseminated pyrite throughout with fine veinlets and pyrite stringers. Also patches smaller than or equal to 2cm. across. Pyrite stringers make up a weak stockwork on areas of stronger mineralization, 93.75	48663	86.00-87.00	1.00	0.015		30.0	132.0	30.0	58.0	14.0
			48664	87.00-88.00	1.00	0.030		37.0	194.0	40.0	61.0	16.0
			48665	88.00-89.00	1.00	0.010		31.0	150.0	15.0	51.0	14.0
			48666	89.00-90.00	1.00	0.010		34.0	125.0	5.0	69.0	14.0
			48667	90.00-91.00	1.00	0.005		29.0	92.0	10.0	69.0	14.0
			48668	91.00-92.00	1.00	0.005		31.0	93.0	20.0	98.0	16.0
			48669	92.00-93.00	1.00	0.010		38.0	188.0	20.0	58.0	14.0
			48670	93.00-94.00	1.00	1.290		43.0	200.0	1010.0	84.0	14.0
			48671	94.00-95.00	1.00	0.075		31.0	110.0	815.0	69.0	18.0
			48672	95.00-96.00	1.00	0.010		23.0	51.0	30.0	68.0	16.0
			48673	96.00-97.00	1.00	0.005		27.0	98.0	30.0	79.0	14.0
			48674	97.00-98.00	1.00	0.010		32.0	103.0	35.0	67.0	16.0
			48675	98.00-99.00	1.00	0.010		29.0	139.0	15.0	47.0	4.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		to 93.79m. quartz/carbonate vein with 10% pyrite blebs, vein at 45 degrees to core axis. Overall 1% pyrite.										
		<86.10-99.00> Trace MT disseminated MINERALIZATION- disseminated pyrite throughout with fine veinlets and pyrite stringers. Also patches smaller than or equal to 2cm. across. Pyrite stringers make up a weak stockwork in areas of stronger mineralization. 93.75 to 93.79m. quartz/carbonate vein with 10% pyrite blebs, vein at 45 degrees to core axis. Overall 1% pyrite.										
99.00	109.42	volcaniclastics	48676	99.00-100.00	1.00	0.015		30.0	177.0	85.0	39.0	6.0
		Fine grained, green, fragmental	48677	100.00-101.00	1.00	0.015		29.0	197.0	35.0	39.0	10.0
		qz-carb veining 58°	48678	101.00-102.00	1.00	0.005		38.0	274.0	85.0	37.0	8.0
		Frs=3/m :Vns =15/m	48679	102.00-103.00	1.00	0.005		40.0	245.0	75.0	44.0	12.0
		Weak CL matrix	48680	103.00-104.00	1.00	0.005		32.0	126.0	15.0	44.0	12.0
		Trace KS patches	48681	104.00-105.00	1.00	0.010		36.0	135.0	25.0	66.0	12.0
		Trace PY microveins	48682	105.00-106.00	1.00	0.005		30.0	67.0	5.0	67.0	12.0
		Trace QC macroveins	48683	106.00-107.00	1.00	0.005		33.0	110.0	15.0	56.0	14.0
		Similar to previously described. Quartz/carbonate	48684	107.00-108.00	1.00	0.005		34.0	105.0	10.0	68.0	16.0
		veining is very regular in orientation and may	48685	108.00-109.00	1.00	0.010		1.0	2.0		2.0	2.0
		represent foliation?? ALTERATION- chlorite dominates	48686	109.00-109.42	0.42	0.010		29.0	129.0	45.0	41.0	14.0
		the alteration with patchy K spar. MINERALIZATION- thin pyrite stringers occur throughout the entire interval. Their orientation is irregular. Pyrite is also disseminated as blebs which are locally concentrated in patches smaller than or equal to 5cm. across. Possible fine grained arsenopyrite is disseminated with the pyrite. 1 to 2% pyrite, <1% arsenopyrite.										
		<99.00-109.42> Trace MT disseminated 1 % arsenopyrite - fine grained MINERALIZATION- thin pyrite stringers occur throughout the entire interval. Their orientation is irregular. Pyrite is also disseminated as blebs which are locally concentrated in patches smaller than or equal to 5cm. across. Possible fine grained arsenopyrite is disseminated with the pyrite. 1 to 2% pyrite, <1% arsenopyrite.										
		<107.93-109.42> volcaniclastics Pale green, fragmental Frs=4/m :Vns =10/m Weak KS matrix										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Trace PY disseminated Trace QC macroveins More K spar altered section of the fragmental, otherwise similar to previous.										
	(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-99

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-99	Date Completed:		Geotech by: MBW
LENGTH: 106.58	Core Diam: NQII		

Collar Location

Latitude:	1908.64
Departure:	1941.88
Elevation:	1347.24

SUMMARY

0.00-29.30	volcaniclastics ***
29.30-30.00	mudstone
30.00-58.50	volcaniclastics **
58.50-106.58	gabbro

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	236.00	-74.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	29.30	volcaniclastics	48687	3.00-4.00	1.00	0.005		13.0	25.0	50.0	73.0	18.0
		Fine grained, green, heterolithic, veined	48688	4.00-5.00	1.00	0.010		31.0	41.0	210.0	53.0	22.0
		fracturing 10°:vein 45°	48689	5.00-6.00	1.00	0.015		17.0	42.0	70.0	55.0	22.0
		Frs=9/m :Vns =4/m	48690	6.00-7.00	1.00	0.035		23.0	158.0	95.0	133.0	18.0
		Strong SI pervasive	48691	7.00-8.00	1.00	0.030		46.0	127.0	55.0	73.0	26.0
		Moderate CL pervasive	48692	8.00-9.00	1.00	0.015		44.0	98.0	50.0	47.0	26.0
		Strong MS pervasive	48693	9.00-10.00	1.00	0.155		49.0	179.0	235.0	81.0	60.0
		Strong KS pervasive	48694	10.00-11.00	1.00	2.260	2.40	105.0	226.0	3710.0	512.0	210.0
		Moderate PY microveins	48695	11.00-12.00	1.00	0.580	0.40	57.0	141.0	925.0	83.0	18.0
		Weak QV vein	48696	12.00-13.00	1.00	0.215	0.20	15.0	75.0	195.0	46.0	10.0
		Weak QC microveins	48697	13.00-14.00	1.00	0.065		26.0	89.0	2120.0	52.0	10.0
		Highly silicified with gray white boundary from 4 to	48698	14.00-15.00	1.00	0.530	0.40	42.0	121.0	550.0	69.0	28.0
		6m., weak calcite stockwork, pyrite mainly occurs as	48699	15.00-16.00	1.00	0.345	0.40	36.0	112.0	330.0	68.0	18.0
		1cm. semi-massive veinlets. MINERALIZATION- trace	48700	16.00-17.00	1.00	0.060	0.20	23.0	108.0	85.0	47.0	8.0
		chalcopyrite at 6.20m., pyrite to 2%, trace of	48701	17.00-18.00	1.00	0.655	0.60	114.0	158.0	1360.0	75.0	12.0
		arsenopyrite.	48702	18.00-19.00	1.00	0.010	0.20	21.0	147.0	10.0	86.0	26.0
	<0.00-29.30>	MINERALIZATION- trace chalcopyrite at 6.20m., pyrite										
		to 2%, trace of arsenopyrite.										
	<9.95-9.97>	pyrite vein or veinlet										
		Veined										
		Intense PY vein										
		1cm. pyrite vein.										
	<10.00-11.00>	Broken Core										
		Highly limonitic with 1cm. of limonitic wall.										
	<11.20-11.35>	MINERALIZATION- 8 to 9% pyrite, 0.5% arsenopyrite.										
	<11.20-11.35>	semi-massive sulphides										
		Strong PY vein										
		Stringers of pyrite with minor coarse blebs with										
		arsenopyrite. MINERALIZATION- 8 to 9% pyrite, 0.5%										
		arsenopyrite.										
	<12.40-12.60>	MINERALIZATION- 4% pyrite.										
	<12.40-12.60>	volcaniclastics										
		Strong PY patches										
		Patches of pyrite in intensely K spar altered rock.										
		MINERALIZATION- 4% pyrite.										
	<15.50-23.00>	bedding 35°										
		Frs=3/m										
		Moderate SI pervasive										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak CL pervasive Strong MS pervasive Moderate KS pervasive Moderate PY disseminated Section shows a lack of calcite veining, strongly sericite latered with remnant bedding at 35 degrees to core axis, finer grained argillite bands in section with coarse clastic volcanic clasts range from angular to 3 to 5cm. down to sand size clasts vary from argillaceous to feldspar porphyry types.										
29.30	30.00	mudstone Fine grained, black, bedded bedding 45° Frs=2/m :Vns =2/m Weak SI patches Weak MS pervasive Weak KS pervasive Weak PY disseminated Weak QC vein Black argilliceous horizon with coarse grained clasts of breccia, crenulated calcite veins up to 5%.										
30.00	58.50	volcaniclastics Fine grained, green, mottled, veined fracturing 0°:fracturing 35° Frs=5/m Moderate SI patches Moderate CL pervasive Moderate MS pervasive Moderate KS pervasive Weak PY disseminated Moderate QC vein Mottled green rock with local 1 to 2cm. calcite veins at 35 degrees to core axis, heterolithic texture. MINERALIZATION- 4% pyrite.	48703	34.00-35.00	1.00	0.005		24.0	108.0	85.0	57.0	10.0
			48704	35.00-36.00	1.00	0.010	0.40	27.0	125.0	190.0	45.0	24.0
			48705	36.00-37.00	1.00	0.040	0.20	27.0	137.0	225.0	46.0	16.0
			48706	37.00-38.00	1.00	0.035		26.0	126.0	220.0	43.0	14.0
			48707	38.00-39.00	1.00	0.015		28.0	111.0	150.0	40.0	12.0
			48708	39.00-40.00	1.00	0.005		33.0	112.0	140.0	65.0	8.0
			48709	40.00-41.00	1.00	0.010		46.0	92.0	105.0	74.0	18.0
			48710	41.00-42.00	1.00	0.005		32.0	103.0	65.0	80.0	10.0
			48711	42.00-43.00	1.00	0.005		38.0	92.0	75.0	80.0	8.0
			48712	43.00-44.00	1.00	0.005		34.0	124.0	210.0	61.0	12.0
			48713	44.00-45.00	1.00	0.005		29.0	78.0	60.0	66.0	10.0
			48714	45.00-46.00	1.00	0.005		29.0	119.0	80.0	65.0	10.0
			48715	46.00-47.00	1.00	0.005		32.0	110.0	40.0	70.0	12.0
<30.00-58.50>		MINERALIZATION- 4% pyrite.	48716	47.00-48.00	1.00	0.005		25.0	78.0	55.0	67.0	10.0
<34.00-39.00>		Broken Core Vuggy Highly broken section with vugs along fractures, limonite on fractures.										
<45.00-54.00>		MINERALIZATION- 6% pyrite.	48717	48.00-49.00	1.00	0.005		27.0	93.0	65.0	72.0	12.0
<45.00-54.00>		volcaniclastics	48718	49.00-50.00	1.00	0.010		39.0	117.0	70.0	82.0	12.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate PY fracture fill	48719	50.00-51.00	1.00	0.005		31.0	93.0	65.0	57.0	12.0
		Section contains fine fracture filling of pyrite	48720	51.00-52.00	1.00	0.005		32.0	97.0	65.0	59.0	12.0
		throughout. MINERALIZATION- 6% pyrite.	48721	52.00-53.00	1.00	0.025		41.0	153.0	150.0	81.0	16.0
	<51.50-54.00>	Broken Core	48722	53.00-54.00	1.00	0.010		43.0	149.0	140.0	98.0	20.0
		fracturing 5°:fracturing 35°										
		Highly fractured with limonite on fractures.										
58.50	106.58	gabbro	48723	81.00-82.00	1.00	0.005		22.0	88.0	70.0	44.0	12.0
		Fine grained, green, porphyritic	48724	95.00-96.00	1.00	0.005		24.0	104.0	85.0	40.0	12.0
		cleavage, foliation 45°:fracturing 35°										
		Frs=4/m										
		Weak SI patches										
		Moderate CL pervasive										
		Weak KS pervasive										
		Moderate EP patches										
		Weak PY disseminated										
		Weak QV vein										
		Strong QC microveins										
		Dark coloured with indistinct contact with upper										
		volcanic, near contact rock shows little interval										
		structures from 72m., rock shows abundant anhedral										
		feldspar crystals, rock is distinct due to the										
		presence of epidote, both as patchy and as										
		quartz/epidote veinlets, strong calcite stockwork.										
	<75.90-76.20>	calcite vein										
		Veined										
		vein 35°										
		Calcite vein at 35 degrees.										
	<81.00-81.90>	vein 0°:vein 35°										
		Strong PY microveins										
		Fine wispy pyrite veinlets to 30% of 81.53 to 81.63m.										
	<86.50-87.00>	Broken Core										
	<90.10-90.12>	QUARTZ-CALCITE VEINS										
		Strong EP microveins										
		Abundant epidote.										
	<95.10-95.20>	Moderate PY microveins										
		Abundant fine grained pyrite veinlet in quartz/calcite										
		vein.										
	<102.50-102.55>	calcite vein										
		Pink coloured.										

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-100

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-100	Date Completed:		Geotech by: MBW
LENGTH: 154.23	Core Diam: NQII		

Collar Location

Latitude:	1908.76
Departure:	1942.03
Elevation:	1347.19

SUMMARY

0.00-47.95	volcaniclastics ****
47.95-50.59	semi-massive sulphides *
50.59-53.85	volcaniclastics **
53.85-106.60	volcaniclastics
106.60-154.23	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	233.00	-85.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	47.95	volcaniclastics	48725	2.00-3.00	1.00	0.065		13.0	51.0	35.0	58.0	14.0
		Fine grained, gray, heterolithic, mottled	48726	3.00-4.00	1.00	0.805	0.40	20.0	102.0	55.0	75.0	16.0
		cleavage, foliation 45°:fracturing 45°	48727	4.00-5.00	1.00	0.105		24.0	58.0	75.0	80.0	14.0
		Frs=4/m :Vns =5/m	48728	5.00-6.00	1.00	0.250		12.0	63.0	30.0	75.0	10.0
		Strong SI pervasive	48729	6.00-7.00	1.00	0.005		38.0	125.0	65.0	72.0	22.0
		Moderate CL pervasive	48730	7.00-8.00	1.00	0.140		56.0	113.0	240.0	73.0	16.0
		Strong MS pervasive	48731	8.00-9.00	1.00	0.035		33.0	101.0	125.0	59.0	14.0
		Strong KS pervasive	48732	9.00-10.00	1.00	0.025		35.0	132.0	75.0	63.0	20.0
		Moderate PY microveins	48733	10.00-11.00	1.00	0.350		37.0	65.0	480.0	70.0	14.0
		Weak QV vein	48734	11.00-12.00	1.00	0.015	0.20	17.0	81.0	25.0	44.0	10.0
		Moderate QC microveins	48735	12.00-13.00	1.00	0.005		13.0	72.0	10.0	45.0	12.0
		Rock ranges from fine grained to aphanitic to a coarse	48736	13.00-14.00	1.00	0.075	0.40	56.0	97.0	500.0	44.0	26.0
		clastic breccia, locally very strong silicification	48737	14.00-15.00	1.00	0.725		83.0	65.0	1075.0	48.0	14.0
		and K-spar alteration, local foliation at 15 degrees	48738	15.00-16.00	1.00	0.020		21.0	70.0	200.0	47.0	14.0
		to core axis, the clasts appear to be generally	48739	16.00-17.00	1.00	0.115	0.40	23.0	140.0	195.0	57.0	16.0
		felsic. Vuggy, foliated textures.	48740	17.00-17.37	0.37	0.415	0.40	38.0	102.0	265.0	69.0	16.0
<6.95-7.35>		Broken Core										
		Vuggy										
		Vuggy texture, broken core.										
<7.35-10.00>		MINERALIZATION- 7% pyrite.										
<7.35-10.00>		volcaniclastics										
		Moderate SI patches										
		Moderate CL pervasive										
		Strong MS pervasive										
		Strong KS pervasive										
		Moderate PY microveins										
		Weak QV microveins										
		Moderate QC vein										
		Inteval has fine blue gray carbonate veins with pyrite										
		as fine grained wispy veinlets, abundant fracture										
		controlled pyrite. MINERALIZATION- 7% pyrite.										
<10.00-11.00>		Strong CL pervasive										
		Moderate PY microveins										
		Strong brecciated appearance with black chlorite										
		between clasts, minor blue gray carbonate veins with										
		wispy pyrite.										
<13.10-14.00>		foliated 35°										
		Strong PY microveins										
		Abundant pyrite as wisps along strong foliation.										
		MINERALIZATION- 6% pyrite.										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<14.20-14.25>	MINERALIZATION- 10% pyrite, 5% arsenopyrite.										
<14.20-14.25>	semi-massive sulphides Gray, veined Strong PY microveins Pyrite/arsenopyrite vein in brecciated appearance rock. MINERALIZATION- 10% pyrite, 5% arsenopyrite.										
<14.95-14.99>	pyrite vein or veinlet Veined Black chlorite and pyrite veinlets.										
<17.37-18.65>	MINERALIZATION- 7% pyrite, 2% arsenopyrite.	48741	17.37-18.00	0.63	3.180	2.40	311.0	161.0	4190.0	299.0	88.0
<17.37-18.65>	semi-massive sulphides Gray, veined Strong PY microveins Dark in appearance, strong breccia texture with patches of pyrite as well as wispy stringers, local coarse arsenopyrite blebs up to 5mm. MINERALIZATION- 7% pyrite, 2% arsenopyrite.	48742	18.00-18.65	0.65	6.310	2.20	290.0	169.0	3785.0	194.0	42.0
<20.50-22.90>	volcaniclastics Fine grained, brown, vuggy Strongly weathered with large vugs, abundant limonite in vugs, locally strong broken, some clay along fractures.	48743	18.65-19.00	0.35	0.050	0.60	15.0	93.0	20.0	48.0	12.0
		48744	19.00-20.00	1.00	0.090	0.20	29.0	97.0	150.0	58.0	16.0
		48745	20.00-21.00	1.00	0.080	0.20	17.0	87.0	40.0	44.0	14.0
		48746	21.00-22.00	1.00	0.335		17.0	70.0	125.0	53.0	16.0
<22.90-23.50>	Gray Intense SI pervasive Strong KS pervasive Strongly silicified, K-spar altered.	48747	22.00-23.00	1.00	0.200		9.0	23.0	45.0	47.0	14.0
<23.60-23.80>	Vuggy Limonite with minor vug sections, big highly broken core.										
<24.40-24.50>	Gray Intense SI pervasive Strong KS pervasive Strongly silicified, K-spar altered.	48748	23.00-24.00	1.00	0.450		14.0	32.0	340.0	45.0	14.0
<26.70-27.90>	Strongly limonite on fractures.	48749	24.00-25.00	1.00	1.580	0.20	20.0	70.0	165.0	43.0	16.0
<28.50-30.00>	MINERALIZATION- 8% pyrite.	48750	25.00-26.00	1.00	0.020		12.0	32.0	45.0	46.0	14.0
<28.50-30.00>	volcaniclastics	48751	26.00-27.00	1.00	0.010		10.0	25.0	25.0	45.0	12.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Foliated	48752	27.00-28.00	1.00	0.115		18.0	25.0	130.0	47.0	18.0
		foliated 0°	48753	28.00-29.00	1.00	0.270	0.40	29.0	149.0	170.0	55.0	26.0
		Intense MS pervasive	48754	29.00-30.00	1.00	0.030		19.0	114.0	30.0	32.0	16.0
		Strong PY wispy										
		Wispy pyrite. MINERALIZATION- 8% pyrite.										
	<36.00-36.10>	calcite vein	48755	30.00-31.00	1.00	0.010		19.0	169.0	20.0	31.0	18.0
		Green	48756	31.00-32.00	1.00	0.010		19.0	180.0	15.0	31.0	16.0
		Intense QC vein	48757	32.00-33.00	1.00	0.010		18.0	71.0	15.0	33.0	18.0
		Calcite vein.	48758	33.00-34.00	1.00	0.005		18.0	78.0	10.0	33.0	16.0
	<37.30-37.70>	Intense QC vein	48759	34.00-35.00	1.00	0.030		18.0	78.0	140.0	32.0	16.0
		Highly foliated vein, consisting of white calcite in	48760	35.00-36.00	1.00	0.025		25.0	158.0	60.0	42.0	16.0
		gray finely laminated carbonate.	48761	36.00-37.00	1.00	0.045		22.0	157.0	80.0	59.0	20.0
	<38.00-38.50>	volcaniclastics	48762	37.00-38.00	1.00	0.190	0.40	48.0	193.0	2110.0	57.0	20.0
		Vuggy										
		Limonitic on fractures, locally vuggy 2cm., calcite										
		veins at 38.5m.										
	<40.85-41.15>	Broken Core	48763	38.00-39.00	1.00	0.010		30.0	108.0	135.0	56.0	18.0
		Weak limonite, clay on fractures.	48764	39.00-40.00	1.00	0.005		30.0	98.0	35.0	76.0	20.0
	<43.00-47.95>	volcaniclastics	48765	40.00-41.00	1.00	0.010		38.0	124.0	50.0	66.0	20.0
		Strong PY microveins	48766	41.00-42.00	1.00	0.010		32.0	92.0	35.0	65.0	22.0
		Locally abundant pyrite, both as fine fracture filling	48767	42.00-43.00	1.00	0.060		31.0	102.0	25.0	65.0	18.0
		as well as disseminated grain. MINERALIZATION- 6%	48768	43.00-44.00	1.00	0.055		54.0	134.0	130.0	65.0	20.0
		pyrite.	48769	44.00-45.00	1.00	0.005		37.0	149.0	60.0	104.0	18.0
47.95	50.59	semi-massive sulphides	48770	45.00-46.00	1.00	0.005		34.0	100.0	35.0	65.0	20.0
		Medium grained, black, mottled, veined	48771	46.00-47.00	1.00	0.005		34.0	119.0	35.0	60.0	18.0
		vein 20°:vein 45°	48772	47.00-47.95	0.95	0.090		32.0	124.0	60.0	74.0	22.0
		Frs=3/m :Vns =50/m	48773	47.95-49.00	1.05	31.430	5.60	3900.0	654.0	47900.0	284.0	26.0
		Weak SI pervasive	48774	49.00-50.00	1.00	11.560	7.40	2360.0	1003.0	28400.0	475.0	1594.0
		Intense CL pervasive										
		Weak KS pervasive										
		Intense PY vein										
		Black chlorite zone with coarse grained, semi massive										
		sulphides. MINERALIZATION- 20% pyrite, 10%										
		arsenopyrite.										
	<47.95-50.59>	MINERALIZATION- 20% pyrite, 10% arsenopyrite.										
50.59	53.85	volcaniclastics	48775	50.00-51.00	1.00	0.580	3.20	57.0	896.0	440.0	242.0	100.0
		Medium grained, black, veined, mottled	48776	51.00-52.00	1.00	1.750	2.00	400.0	302.0	4910.0	153.0	80.0
		vein 45°:vein 10°	48777	52.00-53.00	1.00	0.645	2.20	200.0	361.0	2585.0	167.0	72.0
		Frs=3/m :Vns =50/m										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate SI patches										
		Intense CL pervasive										
		Strong KS pervasive										
		Intense PY vein										
		Mixed zone of highly chloritic volcanic rock with										
		veins and stringers of massive sulphide.										
		MINERALIZATION- 10% pyrite, 3% arsenopyrite.										
	<50.59-53.85>	MINERALIZATION- 10% pyrite, 3% arsenopyrite.										
	<51.50-52.20>	MINERALIZATION- 30% pyrite, 9% arsenopyrite.										
	<51.50-52.20>	semi-massive sulphides										
		Veined										
		Intense PY vein										
		Coarse grained sulphide in chlorite matrix.										
		MINERALIZATION- 30% pyrite, 9% arsenopyrite.										
	<53.00-53.85>	Strong PY wispy										
		Highly silicified with black chlorite stringers and										
		patches, local fine grained pyrite and arsenopyrite										
		with black chl.rite										
53.85	106.60	volcaniclastics	48778	53.00-54.00	1.00	0.815	1.40	203.0	52.0	3145.0	1194.0	300.0
		Fine grained, green, heterolithic, mottled	48779	54.00-55.00	1.00	0.050	0.40	18.0	98.0	130.0	50.0	12.0
		vein 50°:fracturing 50°	48780	55.00-56.00	1.00	0.035	1.20	35.0	161.0	115.0	67.0	20.0
		Frs=3/m :Vns =4/m	48781	56.00-57.00	1.00	0.055	0.60	23.0	94.0	145.0	64.0	40.0
		Moderate SI patches	48782	57.00-58.00	1.00	0.040	0.60	31.0	82.0	270.0	63.0	24.0
		Moderate CL pervasive	48783	58.00-59.00	1.00	0.360	0.80	22.0	113.0	210.0	66.0	20.0
		Moderate KS pervasive	48784	59.00-60.00	1.00	0.035		20.0	116.0	25.0	68.0	16.0
		Moderate PY wispy	48785	60.00-61.00	1.00	0.005		34.0	141.0	45.0	56.0	12.0
		Weak QV vein	48786	61.00-62.00	1.00	0.005		29.0	150.0	20.0	45.0	12.0
		Moderate QC vein	48787	62.00-63.00	1.00	0.005		33.0	115.0	35.0	51.0	12.0
		Dense, generally aphanitic in appearance, local	48788	63.00-64.00	1.00	0.055		35.0	118.0	45.0	67.0	18.0
		brecciated appearance. Wispy texture.	48789	64.00-65.00	1.00	0.010		17.0	99.0	15.0	48.0	12.0
	<83.00-83.90>	Broken Core	48790	65.00-66.00	1.00	0.010		13.0	57.0	15.0	42.0	12.0
		Weakly limonite.	48791	66.00-67.00	1.00	0.130		16.0	80.0	65.0	39.0	10.0
	<95.90-96.00>	calcite vein	48792	67.00-68.00	1.00	0.005		14.0	79.0	25.0	42.0	12.0
		Calcite vein.	48793	68.00-69.00	1.00	0.020		16.0	72.0	20.0	48.0	12.0
	<96.00-101.00>	volcaniclastics	48794	69.00-70.00	1.00	0.020		18.0	77.0	45.0	52.0	14.0
		Moderate EP microveins	48795	70.00-71.00	1.00	0.005		16.0	83.0	10.0	50.0	16.0
		Moderate QV vein	48796	71.00-72.00	1.00	0.005		16.0	86.0	15.0	49.0	14.0
		Moderate QC microveins	48797	72.00-73.00	1.00	0.050		19.0	85.0	45.0	47.0	14.0
		Local quartz/epidote veinlets.	48798	73.00-74.00	1.00	0.060		29.0	91.0	20.0	69.0	16.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<106.30-106.33>		Chlorite Streaming	48799	74.00-75.00	1.00	0.075		42.0	103.0	30.0	99.0	20.0
106.60	116.00	volcaniclastics	48800	75.00-76.00	1.00	0.015		36.0	131.0	30.0	73.0	20.0
		vein 45°:fracturing 45°	48801	76.00-77.00	1.00	2.630		38.0	133.0	70.0	96.0	22.0
		Strong quartz/calcite stockwork, 10% of rock.	48802	77.00-78.00	1.00	5.420		32.0	101.0	230.0	62.0	16.0
<108.00-116.00>		Strong PY vein	48803	107.00-108.00	1.00	0.265		30.0	212.0	120.0	66.0	16.0
		Narrow veinlets of pyrite as well as fracture filling.	48804	108.00-109.00	1.00	0.515		18.0	142.0	25.0	51.0	14.0
		MINERALIZATION- 8% pyrite.	48805	109.00-110.00	1.00	0.030		17.0	83.0	20.0	59.0	14.0
<110.10-112.00>		Broken Core	48806	110.00-111.00	1.00	0.080		26.0	194.0	30.0	53.0	18.0
		Limonite on fractures, minor clay.	48807	111.00-112.00	1.00	0.045	0.40	46.0	425.0	105.0	69.0	24.0
<110.50-110.51>		pyrite vein or veinlet										
		Pyrite veinlet with strong black chlorite.										
<149.00-149.50>		Broken Core	48808	112.00-113.00	1.00	0.060		33.0	271.0	80.0	64.0	18.0
		Weak limonite.	48809	113.00-114.00	1.00	0.055		29.0	273.0	50.0	68.0	16.0
<150.00-154.00>		volcaniclastics	48810	114.00-115.00	1.00	0.240		59.0	342.0	880.0	82.0	16.0
		Laminated	48811	115.00-116.00	1.00	0.060		38.0	360.0	80.0	67.0	14.0
		Moderate PY wispy	48812	116.00-117.00	1.00	0.005		16.0	115.0	55.0	54.0	20.0
		Wispy pyrite along laminations.	48813	150.00-151.00	1.00	0.145	1.00	33.0	96.0	45.0	108.0	26.0
(eoh)			48814	151.00-152.00	1.00	0.070	0.80	23.0	144.0	15.0	296.0	46.0
			48815	152.00-153.00	1.00	0.070	1.40	21.0	243.0	15.0	94.0	18.0
			48816	153.00-154.00	1.00	0.090	0.80	20.0	55.0	15.0	60.0	18.0

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-101

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-101	Date Completed:		Geotech by: MBW
LENGTH: 68.28	Core Diam: NQII		

Collar Location

Latitude:	1909.29
Departure:	1940.87
Elevation:	1347.81

SUMMARY

0.00-13.90	volcaniclastics **
13.90-15.54	mudstone *
15.54-22.50	volcaniclastics
22.50-23.50	mudstone *
23.50-49.60	volcaniclastics *
49.60-50.95	mudstone *
50.95-68.28	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	286.00	-44.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	13.90	volcaniclastics	48817	2.00-3.00	1.00	0.080		23.0	30.0	50.0	98.0	16.0
		Fine grained, gray, heterolithic, gouge	48818	3.00-4.00	1.00	0.105		24.0	89.0	165.0	75.0	18.0
		foliated 40°:fracturing 45°	48819	4.00-5.00	1.00	0.095		19.0	98.0	125.0	72.0	26.0
		Frs=8/m :Vns =4/m	48820	5.00-6.00	1.00	0.110	1.00	22.0	159.0	160.0	69.0	28.0
		Moderate SI pervasive	48821	6.00-7.00	1.00	2.510	2.20	74.0	235.0	795.0	97.0	96.0
		Moderate CL pervasive	48822	7.00-8.00	1.00	3.080	2.00	134.0	215.0	1885.0	297.0	106.0
		Strong MS pervasive	48823	8.00-9.00	1.00	0.715	1.00	38.0	127.0	240.0	82.0	20.0
		Strong KS pervasive	48824	9.00-10.00	1.00	0.105	0.20	63.0	117.0	565.0	70.0	14.0
		Moderate PY microveins	48825	10.00-11.00	1.00	1.720	0.60	367.0	102.0	3040.0	79.0	32.0
		Weak QV microveins	48826	11.00-12.00	1.00	0.045		20.0	181.0	30.0	51.0	20.0
		Moderate QC microveins	48827	12.00-13.00	1.00	0.030		24.0	132.0	10.0	45.0	16.0
		Locally the rock resembles a feldspar porphyry while in some sections it resembles a breccia with all similar lithology fragments, dark chlorite is present as fine wispy veinlets. Mottled, wispy, clastic, and porphyrytic textures. MINERALIZATION- 3% pyrite as fine grained veinlets parallel to foliation.										
	<0.00-13.90>	Moderate MT vein										
		MINERALIZATION- 3% pyrite as fine grained veinlets parallel to foliation.										
	<2.50-5.30>	Broken Core										
		Vuggy										
		Limonite on fractures, locally highly vuggy.										
	<6.50-8.20>	MINERALIZATION- 6% pyrite.										
	<6.50-8.20>	volcaniclastics										
		Foliated										
		Strong PY microveins										
		Abundant fine pyrite veinlets along foliation.										
		MINERALIZATION- 6% pyrite.										
	<13.60-13.90>	rubbly fault zone										
		Brecciated										
		Highly broken inot weak chips and fragments. Strongly limonitic.										
13.90	15.54	mudstone	48828	13.00-14.00	1.00	0.045		31.0	182.0	105.0	55.0	16.0
		Gray, foliated, bedded	48829	14.00-15.00	1.00	0.080		36.0	170.0	90.0	73.0	16.0
		Intense MS pervasive										
		Moderate PY microveins										
		Moderate QC microveins										
		Highly sericite altered argillite, strong calcite stockwork. Locally the argillite has been altered to a										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		gray foliated schist. MINERALIZATION- 2% pyrite along fine grained veinlets.										
		<13.90-15.54> Weak MT vein MINERALIZATION- 2% pyrite along fine grained veinlets.										
15.54	22.50	volcaniclastics	48830	15.00-16.00	1.00	0.030		36.0	197.0	135.0	87.0	18.0
		Fine grained, gray, mottled, heterolithic	48831	16.00-17.00	1.00	0.050		38.0	248.0	90.0	98.0	24.0
		fracturing 45°:cleavage, foliation 45°	48832	17.00-18.00	1.00	0.020		15.0	51.0	95.0	77.0	18.0
		Frs=15/m :Vns =4/m	48833	18.00-19.00	1.00	0.025		15.0	29.0	80.0	91.0	14.0
		Strong SI pervasive	48834	19.00-20.00	1.00	0.075		38.0	151.0	540.0	58.0	18.0
		Moderate CL pervasive	48835	20.00-21.00	1.00	0.030		15.0	59.0	890.0	35.0	12.0
		Moderate MS pervasive	48836	21.00-22.00	1.00	0.010		14.0	37.0	45.0	40.0	14.0
		Strong KS pervasive										
		Moderate PY microveins										
		Weak QV vein										
		Moderate QC microveins										
		Highly vuggy section local strong quartz veining as well as calcite. Quartz stockwork.										
		<15.54-18.90> Broken Core Limonitic on fractures.										
		<21.50-22.50>Limonite on fractures.										
22.50	23.50	mudstone	48837	22.00-23.00	1.00	0.065	0.40	24.0	105.0	540.0	94.0	62.0
		Aphanitic, black, foliated										
		foliated 45°:fracturing 55°										
		Frs=4/m :Vns =2/m										
		Weak CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Weak PY microveins										
		Moderate QC microveins										
		Contains abundant volcanic fragments up to 2cm.										
		<23.17-23.21> calcite vein Veined Caclite vein.										
		<23.25-23.30>MINERALIZATION- 15% pyrite.										
		<23.25-23.30> pyrite vein or veinlet Strong PY microveins Narrow wispy pyrite stringers. MINERALIZATION- 15% pyrite.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
23.50	49.60	volcaniclastics	48838	23.00-24.00	1.00	0.175		18.0	103.0	360.0	50.0	20.0
		Fine grained, gray, mottled, heterolithic	48839	24.00-25.00	1.00	0.010	0.40	12.0	141.0	10.0	47.0	24.0
		fracturing 85°:qz-carb veining 70°	48840	25.00-26.00	1.00	0.255		21.0	50.0	100.0	40.0	16.0
		Frs=4/m :Vns =8/m										
		Moderate SI pervasive										
		Moderate CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Moderate PY microveins										
		Weak QV microveins										
		Moderate QC microveins										
		Locally porphyritic textures as well as locally										
		breccia appearance strong, calcite stockwork some										
		crenulated, some locally offset by late fractures,										
		chlorite as fine wispy stringers.										
	<28.90-28.95>	calcite vein										
	<29.05-29.07>	MINERALIZATION- 50% pyrite.										
	<29.05-29.07>	pyrite vein or veinlet										
		Intense PY vein										
		Coarse grained pyrite alon veinlet. MINERALIZATION-										
		50% pyrite.										
	<31.30-31.60>	calcite vein										
	<32.15-33.00>	Broken Core										
		Limonitic on fractures.										
	<37.60-37.80>											
49.60	50.95	mudstone	48841	49.00-50.00	1.00	1.800	0.20	22.0	114.0	1170.0	69.0	18.0
		Black, contorted, bedded										
		bedding 15°:cleavage, foliation 45°										
		Frs=5/m										
		Strong PY microveins										
		Thick banded contorted with strong pyrite along bands.										
		MINERALIZATION- 8% pyrite.										
	<49.60-50.95>	MINERALIZATION- 8% pyrite.										
50.95	68.28	volcaniclastics	48842	50.00-51.00	1.00	0.065	0.60	24.0	67.0	155.0	51.0	14.0
		Fine grained, gray, mottled, heterolithic	48843	51.00-52.00	1.00	0.010		16.0	76.0	60.0	55.0	28.0
		fracturing 45°:qz-carb veining 45°	48844	52.00-53.00	1.00	0.275		45.0	127.0	255.0	52.0	18.0
		Frs=3/m :Vns =6/m	48845	53.00-54.00	1.00	0.035		33.0	110.0	30.0	65.0	20.0
		Moderate SI pervasive	48846	54.00-55.00	1.00	0.040		28.0	105.0	55.0	62.0	20.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Moderate CL pervasive	48847	55.00-56.00	1.00	0.010		24.0	55.0	15.0	81.0	20.0
	Moderate MS pervasive	48848	56.00-57.00	1.00	0.035		31.0	96.0	85.0	107.0	34.0
	Moderate KS pervasive	48849	57.00-58.00	1.00	0.030		27.0	97.0	25.0	98.0	22.0
	Moderate PY microveins	48850	58.00-59.00	1.00	0.025	0.20	34.0	232.0	45.0	85.0	40.0
	Weak QV microveins	48851	59.00-60.00	1.00	0.040		32.0	190.0	125.0	81.0	30.0
	Moderate QC microveins	48852	60.00-61.00	1.00	0.080	0.20	15.0	125.0	65.0	50.0	20.0
	Mottled with loally strong K-spar and silicification,	48853	61.00-62.00	1.00	0.280		29.0	192.0	470.0	63.0	22.0
	fine wispy black chlorite stringers. MINERALIZATION-	48854	62.00-63.00	1.00	0.120		35.0	90.0	410.0	98.0	28.0
	4% pyrite.	48855	63.00-64.00	1.00	1.620		33.0	80.0	1695.0	115.0	54.0
<50.95-68.28>	MINERALIZATION- 4% pyrite.	48856	64.00-65.00	1.00	0.025		15.0	48.0	30.0	69.0	20.0
<60.90-63.20>	Broken Core										
	Limonitic on fractures, local coarse grained										
	crystalline calcite on fractures.										
<65.30-65.42>	calcite vein										
	Whiteish-green										
<67.85-68.28>	Hematite chlorite calcite vein	48857	65.00-66.00	1.00	0.030		17.0	92.0	15.0	47.0	18.0
	Whiteish-green	48858	66.00-67.00	1.00	0.055		21.0	97.0	35.0	63.0	20.0
(eoh)		48859	67.00-68.28	1.28	0.050		19.0	93.0	20.0	58.0	16.0

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-102

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-102	Date Completed:		Geotech by: MBW
LENGTH: 94.18	Core Diam: NQII		

Collar Location

Latitude:	1909.24
Departure:	1941.05
Elevation:	1347.77

S U M M A R Y

0.00-12.00	volcaniclastics
12.00-16.95	mudstone *
16.95-39.90	*
39.90-42.37	gabbro *
42.37-51.15	volcaniclastics ***
51.15-52.30	mudstone *
52.30-53.05	volcaniclastics *
53.05-54.89	rubbly fault zone
54.89-94.18	gabbro *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	286.00	-54.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	12.00	volcaniclastics	48860	2.00-3.00	1.00	0.005		8.0	2.0		85.0	12.0
		Fine grained, gray, heterolithic, mottled	48861	3.00-4.00	1.00	0.085		15.0	37.0	40.0	79.0	16.0
		vein 35°:fracturing 65°	48862	4.00-5.00	1.00	0.520	0.60	23.0	76.0	135.0	77.0	18.0
		Frs=6/m :Vns =3/m	48863	5.00-6.00	1.00	11.940	1.80	64.0	119.0	800.0	90.0	16.0
		Strong SI pervasive	48864	6.00-7.00	1.00	0.565	0.40	32.0	91.0	1060.0	78.0	14.0
		Moderate CL pervasive	48865	7.00-8.00	1.00	0.640	1.00	190.0	129.0	2385.0	94.0	38.0
		Moderate MS pervasive	48866	8.00-9.00	1.00	0.170	0.40	58.0	88.0	515.0	86.0	20.0
		Strong KS pervasive	48867	9.00-10.00	1.00	1.260	0.80	162.0	122.0	2065.0	61.0	18.0
		Strong PY disseminated	48868	10.00-11.00	1.00	0.990	1.00	124.0	137.0	1690.0	85.0	22.0
		Weak QV vein	48869	11.00-12.00	1.00	0.080	0.40	24.0	142.0	80.0	100.0	18.0
		Moderate QC microveins										
		Variably silicified, K-spar altered locally strong										
		breccia (volcanic) features. MINERALIZATION- 1%										
		pyrite.										
	<4.40-5.49>	Broken Core										
		Vuggy										
		Limonite on fractures.										
	<6.00-7.00>	bedding 45°										
		Vuggy with limonite on fractures.										
	<8.20-11.30>	volcaniclastics										
		Heterolithic										
		Highly silicified, K-spar altered to pale gray patchy										
		colour.										
12.00	16.95	mudstone	48870	12.00-13.00	1.00	0.340	0.60	140.0	140.0	5205.0	104.0	18.0
		Fine grained, black, bedded	48871	13.00-14.00	1.00	0.155	0.60	35.0	126.0	400.0	102.0	18.0
		bedding 45°:fracturing 15°	48872	14.00-15.00	1.00	0.055	0.40	22.0	121.0	70.0	134.0	38.0
		Frs=10/m	48873	15.00-16.00	1.00	0.135	0.60	34.0	280.0	45.0	133.0	18.0
		Weak SI patches										
		Weak CL pervasive										
		Strong CB pervasive										
		Weak KS pervasive										
		Moderate PY microveins										
		Moderate QC microveins										
		Locally highly sericite altered argillite, loally fine										
		pyrite along bedding planes. MINERALIZATION- 5%										
		pyrite.										
	<12.00-16.95>	MINERALIZATION- 5% pyrite.										
	<13.50-14.33>	Broken Core										
		Limonitic on fractures.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	<14.60-15.20>	Limonitic on fractures.										
	<15.90-16.00>	Limonitic on fractures.										
16.95	22.00	Fine grained, gray, heterolithic, mottled	48874	16.00-17.00	1.00	0.020		24.0	96.0	55.0	76.0	18.0
		qz veining 35°:fracturing 30°	48875	17.00-18.00	1.00	0.005		23.0	96.0	65.0	66.0	6.0
		Frs=7/m :Vns =3/m	48876	18.00-19.00	1.00	0.020		48.0	244.0	135.0	45.0	6.0
		Moderate SI pervasive	48877	19.00-20.00	1.00	0.010		41.0	359.0	40.0	39.0	4.0
		Moderate CL pervasive	48878	20.00-21.00	1.00	0.005		36.0	266.0	50.0	53.0	4.0
		Moderate MS pervasive	48879	21.00-22.00	1.00	0.010		35.0	164.0	15.0	59.0	4.0
		Moderate KS pervasive	48880	22.00-23.00	1.00	0.010		28.0	42.0	10.0	101.0	6.0
		Moderate PY microveins	48881	23.00-24.00	1.00	0.015		16.0	54.0	375.0	47.0	6.0
		Weak QV microveins	48882	24.00-25.00	1.00	0.005		25.0	116.0	80.0	76.0	6.0
		Moderate QC microveins	48883	25.00-26.00	1.00	0.005		35.0	223.0	100.0	78.0	12.0
		Locally mottled dark to light gray depending on	48884	26.00-27.00	1.00	0.005		11.0	41.0	45.0	34.0	4.0
		silicification and K-spar.	48885	33.00-34.00	1.00	0.010		29.0	82.0	85.0	46.0	2.0
	<17.50-22.00>	MINERALIZATION- 6% pyrite.										
	<17.50-22.00>	volcaniclastics										
		Moderate PY microveins										
		Abundant pyrite as fine fracture fillings and as										
		coarse patches. MINERALIZATION- 6% pyrite.										
	<23.50-24.50>	Broken Core										
		Limonitic on fractures.										
	<25.20-25.25>	pyrite vein or veinlet										
		Veined, vuggy										
		Intense PY vein										
		Highly vuggy, coarse pyrite along calcite vein.										
	<25.40-26.00>	calcite vein										
		Veined										
		Intense QC vein										
		Strong calcite veining forming 50% of section.										
	<33.80-38.10>	Broken Core	48886	34.00-35.00	1.00	0.045		32.0	118.0	70.0	48.0	6.0
		Locally highly broken, limonitic on fractures.	48887	35.00-36.00	1.00	0.005		36.0	119.0	80.0	53.0	6.0
	<34.00-34.06>	calcite vein										
		Veined										
		Intense QC vein										
		Blue gray carbonate vein.										
39.90	42.37	gabbro	48888	36.00-37.00	1.00	0.010		27.0	152.0	85.0	71.0	6.0
		Fine grained, black, porphyritic	48889	37.00-38.00	1.00	0.005		24.0	97.0	50.0	60.0	2.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		cleavage, foliation 20°:fracturing 80°	48890	38.00-39.00	1.00	0.025		48.0	54.0	3865.0	61.0	4.0
		Frs=4/m :Vns =2/m	48891	39.00-40.00	1.00	0.015		49.0	107.0	1460.0	59.0	6.0
		Weak SI patches	48892	40.00-41.00	1.00	0.010		45.0	99.0	345.0	68.0	8.0
		Moderate CL pervasive	48893	41.00-42.00	1.00	0.005		34.0	95.0	25.0	85.0	6.0
		Weak KS pervasive										
		Weak EP patches										
		Moderate PY microveins										
		Moderate QC microveins										
		Mafic, top contact appears to be narrow calcite veinlet followed by 30cm. of lapilli tuff in mafic groundmass, fine epidote patches. MINERALIZATION- 6% pyrite as veinlets and patches.										
<39.90-42.37>		?? MT patches										
		MINERALIZATION- 6% pyrite as veinlets and patches./										
42.37	51.15	volcaniclastics	48894	42.00-43.00	1.00	0.635		36.0	125.0	95.0	71.0	8.0
		Fine grained, gray, heterolithic, mottled	48895	43.00-44.00	1.00	0.310		51.0	154.0	1220.0	69.0	10.0
		fracturing 75°:cleavage, foliation 45°	48896	44.00-45.00	1.00	0.060		33.0	100.0	125.0	51.0	10.0
		Frs=6/m :Vns =2/m	48897	45.00-46.00	1.00	0.150		36.0	158.0	30.0	85.0	14.0
		Moderate SI patches	48898	46.00-47.00	1.00	0.805		49.0	254.0	50.0	83.0	18.0
		Moderate CL pervasive	48899	47.00-48.00	1.00	0.055		28.0	81.0	55.0	80.0	14.0
		Moderate MS pervasive	48900	48.00-49.00	1.00	0.075		26.0	104.0	50.0	60.0	12.0
		Moderate KS pervasive	48901	49.00-50.00	1.00	0.875		26.0	146.0	95.0	47.0	12.0
		Locally intense fine calcite/quartz stockwork, local patchy silicification and K-spar alteration.	48902	50.00-51.00	1.00	0.230		34.0	71.0	360.0	66.0	18.0
		MINERALIZATION- 2% pyrite.										
<42.37-51.15>		MINERALIZATION- 2% pyrite.										
<45.00-45.42>		Broken Core										
		Limonitic on fractures.										
<46.70-46.75>		Trace MT vein										
		MINERALIZATION- 15% fine pyrite veinlets.										
<46.70-46.75>		Hornblende feldspar breccia										
		Strong PY microveins										
		MINERALIZATION- 15% fine pyrite veinlets.										
<47.90-48.46>		Broken Core										
		Limonitic on fractures.										
<49.35-49.45>		Trace MT vein										
		MINERALIZATION- 15% fine pyrite veinlets.										
<49.35-49.45>		volcaniclastics										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Strong PY microveins										
		MINERALIZATION- 15% fine pyrite veinlets.										
51.15	52.30	mudstone	48903	51.00-52.00	1.00	0.120	0.40	22.0	81.0	90.0	54.0	8.0
		Fine grained, black, foliated, bedded										
		bedding 15°:foliated 45°										
		Frs=3/m										
		Weak SI patches										
		Weak CL pervasive										
		Weak MS pervasive										
		Weak KS pervasive										
		Moderate PY microveins										
		Moderate QC vein										
		Highly foliated, strong calcite veinlets.										
		MINERALIZATION- 5% pyrite.										
<51.15-52.30>		MINERALIZATION- 5% pyrite.										
52.30	53.05	volcaniclastics	48904	52.00-53.00	1.00	0.420	0.40	71.0	184.0	1250.0	222.0	20.0
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Moderate PY microveins										
		Moderate QC microveins										
		Crackled with strong calcite veinlets along fractures.										
		MINERALIZATION- 3% pyrite.										
<52.30-53.05>		MINERALIZATION- 3% pyrite.										
<52.30-52.34>		pyrite vein or veinlet										
		Veined										
		Intense PY vein										
		Pyrite vein on argillite/breccia contact.										
53.05	54.89	rubbly fault zone	48905	53.00-54.00	1.00	0.005		33.0	96.0	30.0	64.0	10.0
		Gouge										
		Fault gouge is highly limonitic.										
54.89	94.18	gabbro	48906	54.00-55.00	1.00	0.065		32.0	111.0	160.0	44.0	10.0
		Fine grained, green, porphyritic, mottled	48907	55.00-56.00	1.00	0.050		28.0	48.0	110.0	38.0	10.0
		cleavage, foliation 45°:fracturing 45°	48908	56.00-57.00	1.00	0.005		27.0	27.0	20.0	49.0	10.0
		Frs=5/m :Vns =6/m	48909	57.00-58.00	1.00	0.015		36.0	178.0	35.0	56.0	10.0
		Moderate SI patches	48910	58.00-59.00	1.00	0.020		28.0	74.0	20.0	50.0	10.0
		Moderate CL pervasive	48911	59.00-60.00	1.00	0.030		33.0	97.0	30.0	51.0	12.0
		Moderate KS pervasive	48912	60.00-61.00	1.00	0.350		38.0	104.0	260.0	46.0	12.0
		Weak EP microveins	48913	61.00-62.00	1.00	0.075		30.0	120.0	60.0	44.0	10.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Moderate PY microveins	48914	62.00-63.00	1.00	0.025		27.0	180.0	30.0	37.0	12.0
	Weak-QV microveins	48915	63.00-64.00	1.00	0.005		22.0	99.0	30.0	39.0	10.0
	Strong QC microveins	48916	64.00-65.00	1.00	0.030		28.0	137.0	45.0	39.0	12.0
	Rock varies from fine grained mafic unit to coarse	48917	65.00-66.00	1.00	0.005		27.0	47.0	40.0	50.0	10.0
	grained porphyrytic highly crackled with very strong	48918	66.00-67.00	1.00	0.020		28.0	69.0	30.0	55.0	12.0
	calcite stockwork.	48919	67.00-68.00	1.00	0.280		25.0	118.0	25.0	54.0	12.0
<70.90-71.30>	Broken Core	48920	68.00-69.00	1.00	0.080		24.0	165.0	35.0	43.0	12.0
	Limonitic on fractures.	48921	69.00-70.00	1.00	0.070		25.0	116.0	55.0	37.0	14.0
<71.70-72.30>	MINERALIZATION- 30% pyrite, 10% arsenopyrite.	48922	70.00-71.50	1.50	0.060		29.0	136.0	45.0	44.0	16.0
<71.70-72.30>	semi-massive sulphides										
	Veined										
	Intense CL pervasive										
	Intense PY vein										
	1cm. veinlets of arsenopyrite as well as more massive,										
	5cm. pyrite/arsenopyrite vein associated with black										
	wispy chlorite veinlets, local epidote along quartz										
	veinlets. MINERALIZATION- 30% pyrite, 10%										
	arsenopyrite.										
<74.95-75.10>	calcite vein	48923	71.50-72.50	1.00	1.620	3.20	314.0	460.0	6700.0	107.0	24.0
	5% calcite veining with strong chlorite.	48924	72.50-73.00	0.50	0.375	1.00	40.0	197.0	545.0	35.0	12.0
<75.85-77.42>	Broken Core	48925	73.00-74.00	1.00	0.060		16.0	122.0	50.0	32.0	10.0
	Weakly limonitic on fractures, abundant clay and	48926	74.00-75.00	1.00	0.040		12.0	63.0	15.0	35.0	10.0
	chlorite along fracture planes.	48927	75.00-76.00	1.00	0.010		26.0	83.0	10.0	70.0	14.0
<79.40-79.50>	shear zone										
	Gouge										
	fracturing 35°										
	Abundant gouge, chloritic.										
<90.00-90.05>	calcite vein										
	Calcite vein.										
(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-103

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-103	Date Completed:		Geotech by: MBW
LENGTH: 107.29	Core Diam: NQII		

Collar Location

Latitude:	1909.19
Departure:	1941.24
Elevation:	1347.68

S U M M A R Y

0.00-15.05	volcaniclastics *
15.05-17.00	mudstone *
17.00-45.00	volcaniclastics
45.00-50.50	gabbro
50.50-55.10	volcaniclastics *
55.10-68.00	gabbro
68.00-69.00	volcaniclastics *
69.00-107.29	gabbro *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	287.00	-63.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	15.05	volcaniclastics	48928	2.00-3.00	1.00	0.005		11.0	4.0		66.0	8.0
		Fine grained, gray, mottled, heterolithic	48929	3.00-4.00	1.00	0.060		37.0	30.0	245.0	70.0	10.0
		fracturing 65°:vein 65°	48930	4.00-5.00	1.00	0.005		15.0	51.0	65.0	58.0	12.0
		Frs=9/m	48931	5.00-6.00	1.00	0.145	0.20	24.0	89.0	115.0	78.0	14.0
		Moderate SI patches	48932	6.00-7.00	1.00	0.025		13.0	26.0	55.0	79.0	10.0
		Moderate CL pervasive	48933	7.00-8.00	1.00	0.150		20.0	62.0	75.0	92.0	12.0
		Moderate MS pervasive	48934	8.00-9.00	1.00	1.660	0.80	59.0	125.0	710.0	109.0	16.0
		Moderate KS pervasive	48935	9.00-10.00	1.00	0.010		35.0	158.0	55.0	92.0	12.0
		Moderate PY microveins	48936	10.00-11.00	1.00	0.200	0.40	75.0	113.0	685.0	67.0	12.0
		Weak QV microveins	48937	11.00-12.00	1.00	0.245	0.60	57.0	139.0	840.0	78.0	16.0
		Moderate QC microveins	48938	12.00-13.00	1.00	0.170	0.80	78.0	182.0	620.0	68.0	18.0
		Locally intensely silcified, K-spar altered with	48939	13.00-14.00	1.00	0.310	1.00	95.0	191.0	850.0	68.0	16.0
		strong quartz/calcite stockwork. MINERALIZATION- 2%	48940	14.00-15.00	1.00	0.145	0.40	49.0	152.0	315.0	87.0	16.0
		pyrite.										
	<0.00-15.05>	MINERALIZATION- 2% pyrite.										
	<5.76-9.14>	Broken Core										
		fracturing 10°:fracturing 65°										
		Limonitic on fractures.										
	<9.34-9.37>	rubbly fault zone										
		Gouge										
		Broken core plus clay.										
	<10.70-10.80>	volcaniclastics										
		Vuggy										
		Rock is vuggy with minor limonite.										
	<12.90-13.21>	Broken Core										
		Vuggy										
		Locally vuggy highly broken 13.11 to 13.21m., limonite										
		on fractures.										
	<13.70-15.05>	volcaniclastics										
		Foliated										
		foliated 20°										
		Intense MS pervasive										
		Strong PY microveins										
		Highly sericitic and foliated, fine pyrite along										
		foliation.										
15.05	17.00	mudstone	48941	15.00-16.00	1.00	0.090	0.20	27.0	83.0	120.0	94.0	24.0
		Fine grained, black, bedded, foliated	48942	16.00-17.00	1.00	0.265	0.40	70.0	246.0	295.0	85.0	12.0
		bedding 45°:cleavage, foliation 15°										
		Frs=3/m										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak SI__patches										
		Weak CL pervasive										
		Moderate MS pervasive										
		Weak KS pervasive										
		Moderate QC microveins										
		Thinly banded, locally sericite altered fine pyrite										
		alogn banding. MINERALIZATION- 2% pyrite.										
<15.05-17.00>		MINERALIZATION- 2% pyrite.										
17.00	45.00	volcaniclastics	48943	17.00-18.00	1.00	0.080		30.0	120.0	60.0	60.0	16.0
		Fine grained, gray, heterolithic, mottled	48944	18.00-19.00	1.00	0.090	0.20	21.0	120.0	110.0	40.0	10.0
		fracturing 70°:cleavage, foliation 65°	48945	19.00-20.00	1.00	0.125	0.40	26.0	163.0	50.0	53.0	10.0
		Frs=9/m	48946	20.00-21.00	1.00	0.060		23.0	152.0	55.0	52.0	12.0
		Moderate SI pervasive	48947	21.00-22.00	1.00	0.030		31.0	156.0	105.0	47.0	14.0
		Moderate CL pervasive	48948	22.00-23.00	1.00	0.010		28.0	170.0	70.0	36.0	14.0
		Moderate MS pervasive	48949	23.00-24.00	1.00	0.005		28.0	123.0	25.0	48.0	14.0
		Moderate KS pervasive	48950	24.00-25.00	1.00	0.010		17.0	50.0	50.0	42.0	10.0
		Moderate PY microveins	48951	25.00-26.00	1.00	0.005		22.0	76.0	10.0	49.0	16.0
		Moderate QC microveins	48952	26.00-27.00	1.00	0.005		24.0	90.0	20.0	47.0	12.0
		Locally mottled as well as foliation (strong	48953	27.00-28.00	1.00	0.060	0.20	43.0	136.0	345.0	48.0	12.0
		sericite). MINERALIZATION- 2% pyrite.	48954	28.00-29.00	1.00	0.055		39.0	86.0	190.0	58.0	16.0
<20.00-21.95>		Broken Core										
		Vuggy										
		Fault gouge (highly limonitic) at 20.05 to 20.10m.,										
		generally limonitic on fractures, locally vuggy.										
<23.05-23.07>		calcite vein										
		Calcite vein.										
<23.90-24.50>		Strong calcite veining to 50% of interval.										
<27.23-27.28>		Broken Core										
		Highly limonitic.										
<28.15-28.30>		calcite vein										
		Highly vuggy, limonitic with calcite to 50% of										
		interval.										
<34.90-35.00>		Broken Core	48955	29.00-30.00	1.00	0.010		23.0	69.0	30.0	33.0	12.0
<37.00-37.49>			48956	30.00-31.00	1.00	0.015		29.0	111.0	85.0	38.0	16.0
<41.50-41.55>		calcite vein	48957	31.00-32.00	1.00	0.050		27.0	140.0	115.0	44.0	16.0
45.00	50.50	gabbro	48958	32.00-33.00	1.00	0.055		24.0	93.0	70.0	45.0	12.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Fine grained, green, porphyritic, Brecciated cleavage, foliation 65°:fracturing 45° Frs=6/m Weak SI patches Moderate CL pervasive Weak MS pervasive Moderate KS pervasive Moderate EP patches Moderate PY microveins Moderate QC microveins Locally brecciated appearance, distinct due to fine epidote patches throughout core, upper contact area has sparse pyroxenes, zone appears to contain inclusions of HFBx.										
50.50	55.10	volcaniclastics Fine grained, gray, foliated, heterolithic cleavage, foliation 75°:fracturing 65° Frs=6/m Moderate SI patches Moderate CL pervasive Strong MS pervasive Moderate KS pervasive Moderate PY microveins Moderate QC microveins Locally highly crenulated at 10 degrees to core axis. Strong chlorite/sericite alteration in creanulated portions. MINERALIZATION- 3% pyrite.										
<50.50-55.10>		MINERALIZATION- 3% pyrite.										
55.10	68.00	gabbro Fine grained, green, porphyritic Generally fine grained with local porphyrytic sections.	48959 48960 48961	65.00-66.00 66.00-67.00 67.00-68.00	1.00 1.00 1.00	0.015 0.045 0.060		28.0 28.0 36.0	60.0 131.0 77.0	25.0 20.0 135.0	47.0 42.0 44.0	8.0 8.0 8.0
<55.95-61.30>		Strong KS vein Strong QV vein Strong quartz/epidote veining, 5cm. vein at 55.95 to 61.3m., some of the veins are ptygnatic in appearance.										
<61.75-67.73>		gabbro Quartz/epidote veining not as strong, at 67.73m. quartz/epidote looks as if it is no longer present.										
68.00	69.00	volcaniclastics Fine grained, gray, mottled, heterolithic	48962	68.00-69.00	1.00	0.290		229.0	63.0	3615.0	48.0	12.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate SI patches										
		Strong CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Moderate PY patches										
		Strong QC microveins										
		Appears to be gray HFbx inclusion.										
		<68.15-68.30>MINERALIZATION- 30% pyrite, 15% arsenopyrite.										
		<68.15-68.30> semi-massive sulphides										
		Veined										
		Intense PY vein										
		Pyrite/arsenopyrite vein. MINERALIZATION- 30% pyrite,										
		15% arsenopyrite.										
69.00	107.29	gabbro	48963	69.00-70.00	1.00	0.020		33.0	155.0	50.0	48.0	10.0
		Fine grained, green, mottled	48964	70.00-71.00	1.00	0.010		32.0	162.0	95.0	46.0	10.0
		cleavage, foliation 45°:fracturing 65°	48965	71.00-72.00	1.00	0.015		33.0	173.0	40.0	51.0	10.0
		Frs=6/m :Vns =30/m	48966	72.00-73.00	1.00	0.010		28.0	68.0	25.0	53.0	12.0
		Weak SI patches	48967	73.00-74.00	1.00	0.005		30.0	81.0	35.0	54.0	10.0
		Moderate CL pervasive	48968	74.00-75.00	1.00	0.010		31.0	100.0	30.0	49.0	10.0
		Moderate KS pervasive	48969	75.00-76.00	1.00	0.030		35.0	102.0	265.0	51.0	12.0
		Moderate PY patches	48970	76.00-77.00	1.00	0.005		28.0	122.0	30.0	41.0	12.0
		Intense QC microveins	48971	77.00-78.00	1.00	0.035		26.0	110.0	30.0	47.0	12.0
		Highly fractures with calcite filling fractures, local	48972	78.00-79.00	1.00	0.070		37.0	140.0	235.0	119.0	16.0
		1cm. with blue gray carbonate veins.	48973	79.00-80.00	1.00	0.035		32.0	96.0	130.0	61.0	10.0
		<71.10-71.60>HFbx inclusion.										
		<84.10-84.30>MINERALIZATION- 30% pyrite, 15% arsenopyrite.	48974	80.00-81.00	1.00	0.030		32.0	121.0	25.0	59.0	14.0
		<84.10-84.30> semi-massive sulphides	48975	81.00-82.00	1.00	0.015		37.0	145.0	50.0	58.0	12.0
		Abundant pyrite/arsenopyrite veins. MINERALIZATION-	48976	82.00-83.00	1.00	0.015		29.0	106.0	25.0	55.0	8.0
		30% pyrite, 15% arsenopyrite.	48977	83.00-84.00	1.00	0.030		33.0	122.0	25.0	70.0	12.0
		<85.60-85.70> calcite vein	48978	84.00-85.00	1.00	0.100	0.20	60.0	412.0	100.0	57.0	16.0
		White										
		bedding 45°										
		White to pink in colour.										
		<90.65-90.70>White to pink.	48979	85.00-86.00	1.00	0.030		21.0	50.0	15.0	43.0	10.0
		<91.40-91.70> bedding 45°	48980	86.00-87.00	1.00	0.035		24.0	103.0	20.0	49.0	14.0
		White to pink, strongly banded.										
		<104.00-105.16> Broken Core										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<105.16-105.36>		calcite vein bedding 45° White to pink in colour, chlorite bands appear as faint green line.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-104

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-104	Date Completed:		Geotech by: MBW
LENGTH: 155.14	Core Diam: NQII		

Collar Location

Latitude:	1909.13
Departure:	1941.39
Elevation:	1347.57

S U M M A R Y

0.00-14.74	volcaniclastics *
14.74-20.10	volcaniclastics **
20.10-25.95	mudstone *
25.95-66.75	volcaniclastics ***
66.75-84.00	gabbro *
84.00-94.50	volcaniclastics *
94.50-99.50	gabbro
99.50-102.10	gabbro *
102.10-134.21	volcaniclastics *
134.21-148.50	mudstone *
148.50-150.10	rubbly fault zone
150.10-155.14	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	286.00	-74.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	14.74	volcaniclastics	48981	1.00-2.00	1.00	0.010		9.0	3.0	10.0	55.0	10.0
		Fine grained, gray, heterolithic, mottled	48982	2.00-3.00	1.00	0.010		10.0	7.0	15.0	53.0	10.0
		cleavage, foliation 20°:fracturing 65°	48983	3.00-4.00	1.00	0.055	0.40	28.0	49.0	200.0	60.0	16.0
		Frs=8/m :Vns =5/m	48984	4.00-5.30	1.30	0.110		46.0	49.0	205.0	49.0	14.0
		Strong SI pervasive	48985	5.30-6.20	0.90	23.560	3.80	277.0	547.0	2050.0	91.0	26.0
		Moderate CL pervasive	48986	6.20-7.00	0.80	0.750		20.0	67.0	105.0	72.0	14.0
		Moderate MS pervasive	48987	7.00-8.00	1.00	0.135		30.0	98.0	60.0	65.0	20.0
		Moderate KS pervasive	48988	8.00-9.00	1.00	0.040		34.0	100.0	80.0	43.0	36.0
		Moderate PY patches	48989	9.00-10.00	1.00	0.055		32.0	118.0	145.0	66.0	26.0
		Moderate QV vein	48990	10.00-11.00	1.00	0.065		30.0	138.0	40.0	69.0	24.0
		Strong QC microveins	48991	11.00-12.00	1.00	0.130		21.0	89.0	130.0	45.0	14.0
		Locally highly K-spar altered and silicified with	48992	12.00-13.00	1.00	0.310	0.60	38.0	117.0	290.0	53.0	16.0
		avery strong micro calcite stockwork along minute	48993	13.00-14.00	1.00	0.095	0.20	20.0	65.0	100.0	52.0	16.0
		fracturing, some calcite veins up to 1cm. wide, local										
		close spaced quartz veinlets, quartz/calcite veinlets										
		to 15%. MINERALIZATION- 5% pyrite as veinlets and										
		patches.										
	<0.00-14.74>	Intense MT vein										
		MINERALIZATION- 5% pyrite as veinlets and patches.										
	<2.13-2.74>	Broken Core										
	<5.96-6.00>	pyrite vein or veinlet										
		Veined										
		Intense PY vein										
		50% pyrite, weathers distinct red colour in vugs.										
	<6.47-7.32>	Hornblende feldspar breccia										
		Vuggy										
		Vuggy along narrow crystalline calcite veinlets at 10										
		degrees to core axis.										
	<9.20-11.40>	Broken Core										
		Limonitic alogn fractures, locally strong chloritic,										
		vuggy in sulphide rich sections.										
	<9.20-9.25>	pyrite vein or veinlet										
		Veined										
		Intense PY vein										
		Highly vuggy with distinct red brown limonite in vugs.										
	<13.50-13.70>	Hornblende feldspar breccia										
		Small hematite rich fragments along bands at 15										
		degrees to core axis, fragments to 1cm. form 10% of										
		interval.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<14.11-14.74> mudstone Fine grained, gray, contorted, bedded bedding 45°:contorted 0° Frs=2/m Weak SI patches Weak CL pervasive Intense CB pervasive Weak KS pervasive Weak PY microveins Highly altered to dark gray colour, very sericitic.										
14.74	20.10	volcaniclastics Fine grained, gray, heterolithic, bedded bedding 45°:fracturing 60° Frs=4/m Moderate SI pervasive Moderate CL pervasive Moderate MS pervasive Moderate KS pervasive Moderate PY microveins Weak QC microveins Locally highly banded sericitic with coarse grained pyrite blebs along banding, local high silicification and K-spar alteration, some of the clasts appear to have been stretched. MINERALIZATION- 3% pyrite as veinlets and patches.	48994	14.00-15.00	1.00	0.695	0.40	71.0	107.0	565.0	40.0	18.0
			48995	15.00-16.00	1.00	0.205	0.40	22.0	119.0	115.0	55.0	18.0
			48996	16.00-17.00	1.00	0.035		20.0	80.0	15.0	42.0	16.0
			48997	17.00-18.00	1.00	0.275		33.0	83.0	195.0	35.0	14.0
			48998	18.00-19.00	1.00	0.150		26.0	84.0	920.0	39.0	14.0
			48999	19.00-20.00	1.00	0.230		20.0	104.0	10.0	48.0	18.0
		<14.74-20.10> Moderate MT vein MINERALIZATION- 3% pyrite as veinlets and patches.										
		<16.00-16.15> volcaniclastics Limonitic and locally vuggy.										
		<19.15-19.19> Intense MT vein MINERALIZATION- 50% pyrite veinlets associated with strong black chlorite.										
		<19.15-19.19> semi-massive sulphides Intense PY microveins MINERALIZATION- 50% pyrite veinlets associated with strong black chlorite.										
20.10	25.95	mudstone Fine grained, grayish-black, bedded, mottled bedding 45°:fracturing 60° Weak SI patches	49000	20.00-21.00	1.00	0.080		33.0	130.0	65.0	52.0	18.0
			59001	21.00-22.00	1.00							
			59002	22.00-23.00	1.00							
			59003	23.00-24.00	1.00							

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate CL pervasive	59004	24.00-25.00	1.00							
		Intense MS pervasive										
		Moderate PY vein										
		Weak QC microveins										
		Varies from dark black to light gray, highly banded										
		with local sections sericite altered to light gray.										
	<22.00-22.40>	?? MT vein										
		MINERALIZATION- 8% fine pyrite veinlets along banding										
		(bedding?).										
	<22.00-22.40>	mudstone										
		Intense PY microveins										
		MINERALIZATION- 8% fine pyrite veinlets along banding										
		(bedding?).										
	<22.50-22.60>	calcite vein										
	<23.05-23.07>											
	<23.10-23.90>	Broken Core										
		fracturing 10°										
		Highly fractured with limonite on fractures.										
	<25.10-25.50>	Highly limonitic on fractures, highly broken, locally										
		vuggy.										
25.95	66.75	volcaniclastics	59005	25.00-26.00	1.00							
		Fine grained, gray, heterolithic	59006	26.00-27.00	1.00							
		fracturing 60°:fracturing 15°	59007	27.00-28.00	1.00							
		Frs=6/m	59008	28.00-29.00	1.00							
		Moderate SI patches	59009	29.00-30.00	1.00							
		Moderate CL pervasive	59010	30.00-31.00	1.00							
		Moderate MS pervasive	59011	31.00-32.00	1.00							
		Moderate KS pervasive	59012	52.00-53.00	1.00							
		Moderate PY patches	59013	53.00-54.00	1.00							
		Moderate QC microveins	59014	54.00-55.00	1.00							
		From 25.95 to 34.0m. highly sericite altered, strong	59015	55.00-56.00	1.00							
		calcite stockwork along core axis as well asat 15	59016	56.00-57.00	1.00							
		degrees. MINERALIZATION- 5% pyrite.	59017	57.00-58.00	1.00							
	<25.95-66.75>	MINERALIZATION- 5% pyrite.	59018	58.00-59.00	1.00							
	<28.40-30.18>	Strong MT patches										
		MINERALIZATION- 4% pyrite as patches, malachite.										
	<28.40-30.18>	Broken Core										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Vuggy										
		Highly broken, vuggy with strong limonite fractures, minor malachite at 29.96m. MINERALIZATION- 4% pyrite as patches, malachite.										
<47.50-49.00>		calcite vein										
		White										
		Intense CV vein										
		50% calcite veining at 10 degrees to core axis.										
<49.50-49.59>												
<53.40-53.43>		pyrite vein or veinlet										
		Intense CL pervasive										
		Intense PY vein										
		Heavy black chlorite with pyrite patches forming a narrow vein.										
<60.50-60.60>		gougy sheeted	59019	59.00-60.00	1.00							
		sheeting 45°										
		Narrow fault gouge about 1cm. in broken sections.										
<63.07-63.15>		calcite vein	59020	60.00-61.00	1.00							
		Weak KS microveins	59021	61.00-62.00	1.00							
		Patches and veinlets of epidote.	59022	62.00-63.00	1.00							
<64.97-65.03>		MINERALIZATION- 50% pyrite, trace arsenopyrite.	59023	63.00-64.00	1.00							
<64.97-65.03>		pyrite vein or veinlet	59024	64.00-65.00	1.00							
		Intense CL pervasive										
		Intense QV vein										
		MINERALIZATION- 50% pyrite, trace arsenopyrite.										
66.75	84.00	gabbro	59025	65.00-66.00	1.00							
		Fine grained, green, fragmental	59026	66.00-67.00	1.00							
		qz veining 45°:fracturing	59027	67.00-68.00	1.00							
		Frs=4/m :Vns =2/m	59028	68.00-69.00	1.00							
		Weak SI patches	59029	69.00-70.00	1.00							
		Moderate CL pervasive	59030	70.00-71.00	1.00							
		Weak KS pervasive	59031	71.00-72.00	1.00							
		Strong EP vein	59032	72.00-73.00	1.00							
		Strong PY microveins	59033	73.00-74.00	1.00							
		Strong QV vein	59034	74.00-75.00	1.00							
		Moderate QC microveins	59035	75.00-76.00	1.00							
		Generally a dark green, with a very strong	59036	76.00-77.00	1.00							
		quartz/epidote stockwork, abundant pyrite as veinlets	59037	77.00-78.00	1.00							
		<1cm. and as narrow fracture filling. MINERALIZATION-	59038	78.00-79.00	1.00							

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		10% pyrite as veinlets.	59039	79.00-80.00	1.00							
		<66.75-84.00> Trace MT vein	59040	80.00-81.00	1.00							
		MINERALIZATION- 10% pyrite as veinlets.	59041	81.00-82.00	1.00							
		<70.50-76.00> gabbro										
		20% quartz/epidote.										
		<81.70-81.75> calcite vein										
84.00	94.50	volcaniclastics	59042	82.00-83.00	1.00							
		Fine grained, gray, heterolithic	59043	83.00-84.00	1.00							
		cleavage, foliation 75°:fracturing 70°	59044	84.00-85.00	1.00							
		Frs=2/m :Vns =10/m										
		Moderate SI pervasive										
		Moderate CL pervasive										
		Moderate MS pervasive										
		Moderate KS pervasive										
		Moderate PY patches										
		Moderate QV microveins										
		Strong QC microveins										
		Strongly fractured with strong quartz/calcite										
		stockwork, loal strong silicification and K-spar										
		alteration. Contact at 45 degrees. MINERALIZATION- 2%										
		disseminated pyrite plus occasional patches.										
		<84.00-94.50> Weak MT disseminated										
		MINERALIZATION- 2% disseminated pyrite plus occasional										
		patches.										
		<91.14-93.00> volcaniclastics										
		cleavage, foliation 70°										
		Intense QC vein										
		15% strong veining of section.										
94.50	99.50	gabbro										
		Fine grained, green, mottled										
		cleavage, foliation 35°:fracturing 65°										
		Frs=3/m :Vns =50/m										
		Weak SI patches										
		Moderate CL pervasive										
		Weak KS pervasive										
		Moderate PY microveins										
		Dark green with very intense fine grained calcite										
		stockwork, gives the rock a sheeted appearance, lower										
		contact is quartz/calcite vein at 45 degrees.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<97.85-97.89>		calcite vein Pink white colour.										
<98.10-98.11>		bedding 45° Distinct pink white.										
99.50	102.10	gabbro Same description as 94.50 to 97.85m. MINERALIZATION- 2% pyrite.										
<99.50-102.10		MINERALIZATION- 2% pyrite.										
102.10	134.21	volcaniclastics Fine grained, gray, mottled, heterolithic cleavage, foliation 35°:fracturing 45° Frs=3/m :Vns =50/m Moderate SI pervasive Moderate CL pervasive Weak MS pervasive Moderate KS pervasive Weak PY wispy Intense QC microveins Very intensely calcite micro veined to 117.50m. Rare narrow pyrite veinlets, less calcite 119.0 to 126.50m. MINERALIZATION- 3% pyrite as disseminated graineds and as rare veinlets.										
<102.10-134.21>		Moderate MT disseminated MINERALIZATION- 3% pyrite as disseminated grains and as rare veinlets.										
<117.50-119.00>		calcite vein Bedded bedding 45° Intense CV vein Calcite filling voids in brecciated HFBx, 80% calcite.										
<123.10-123.25>		bedding 45° Intense CV vein										
<126.50-127.00>		bedding 45° Intense CV vein Distinct pink white.										
<128.00-128.40>		bedding 45° Intense CV vein Distinct pink white.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<128.90-129.05> bedding 45° Intense CV vein 50% calcite.										
134.21	148.50	mudstone Fine grained, blackish-tan, contorted, bedded bedding 30°:cleavage, foliation 30° Frs=5/m Weak SI patches Moderate CL pervasive Intense MS pervasive Moderate KS pervasive Weak PY disseminated Moderate QC microveins Highly altered argillite, extreme sericite alteration to tan, highly contorted schist, local strong calcite veining. MINERALIZATION- 2% disseminated pyrite.										
		<134.21-148.50> Weak MT disseminated MINERALIZATION- 2% disseminated pyrite.										
148.50	150.10	rubbly fault zone fault/gouge 0° Fault zone, narrow gouge filled sections in highly broken limonite, abundant clay in fractures surfaces.										
150.10	155.14	volcaniclastics Fine grained, gray, sheared, mottled sheeting 45°:fracturing 45° Frs=8/m Moderate SI patches Moderate CL pervasive Moderate MS pervasive Moderate KS pervasive Weak PY disseminated Moderate QC microveins Local high sericite alteration, sheared with fine calcite veinlets. MINERALIZATION- 1% disseminated pyrite.										
		<150.10-155.14> Trace MT disseminated MINERALIZATION- 1% disseminated pyrite.										
(eoh)												

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL95-105

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL95-105	Date Completed:		Geotech by:
LENGTH:	Core Diam:		

Collar Location	
Latitude:	
Departure:	
Elevation:	

S U M M A R Y

0.00-33.53 volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	33.53	volcaniclastics	59054	1.52-2.00	0.48	0.045	0.40	34.0	101.0	40.0	104.0	16.0
		Fine grained, redish-green, heterolithic, mottled	59055	2.00-3.00	1.00	0.025	0.20	58.0	76.0	65.0	77.0	30.0
		cleavage, foliation 45°:hematite stringers 45°	59056	3.00-4.00	1.00	0.020		63.0	65.0	60.0	78.0	10.0
		Frs=8/m :Vns =15/m	59057	4.00-5.00	1.00	0.015		38.0	155.0	35.0	93.0	8.0
		Moderate SI patches	59058	5.00-6.00	1.00	0.015	0.20	18.0	127.0	10.0	98.0	10.0
		Strong CL pervasive	59059	6.00-7.00	1.00	0.095	0.20	20.0	146.0	15.0	128.0	8.0
		Weak MT patches	59060	7.00-8.00	1.00	0.025		17.0	125.0	15.0	102.0	10.0
		Moderate KS pervasive	59061	8.00-9.00	1.00	0.020		23.0	55.0	20.0	90.0	14.0
		Moderate HE stockwork	59062	9.00-10.00	1.00	0.080		30.0	105.0	30.0	103.0	14.0
		Moderate PY patches	59063	10.00-11.00	1.00	5.280	0.80	278.0	268.0	275.0	113.0	10.0
		Moderate QC microveins	59064	11.00-12.00	1.00	0.030	0.20	44.0	47.0	45.0	72.0	10.0
		44.20BQTK11/07/96 11/07/96	59065	12.00-13.00	1.00	0.025		17.0	58.0	15.0	48.0	12.0
(eoh)			59066	13.00-14.00	1.00	0.025		13.0	52.0	10.0	32.0	12.0
			59067	14.00-15.00	1.00	0.015		11.0	50.0		28.0	16.0
			59068	15.00-16.00	1.00	0.015		22.0	55.0	20.0	26.0	8.0
			59069	16.00-17.00	1.00	0.010		25.0	25.0	20.0	25.0	4.0
			59070	17.00-18.00	1.00	0.035		22.0	23.0	15.0	27.0	12.0
			59071	18.00-19.00	1.00	0.015		43.0	69.0	30.0	27.0	10.0
			59072	19.00-20.00	1.00	0.425	0.20	20.0	139.0	15.0	73.0	6.0
			59073	20.00-21.00	1.00	0.700	1.00	22.0	941.0	20.0	103.0	8.0
			59074	21.00-22.00	1.00	0.165	0.60	33.0	125.0	160.0	76.0	14.0
			59075	22.00-23.00	1.00	0.120	0.20	17.0	152.0	85.0	70.0	8.0
			59076	23.00-24.00	1.00	0.155		14.0	78.0	10.0	66.0	14.0
			59077	24.00-25.00	1.00	0.025	0.20	13.0	80.0		65.0	18.0
			59078	25.00-26.00	1.00	0.030	0.60	13.0	412.0		85.0	10.0
			59079	26.00-27.00	1.00	0.020	0.20	9.0	33.0	15.0	49.0	6.0
			59080	27.00-28.00	1.00	0.015		11.0	31.0	15.0	41.0	4.0
			59081	28.00-29.00	1.00	0.030		13.0	38.0	25.0	64.0	6.0
			59082	29.00-30.00	1.00	0.040		11.0	34.0	20.0	55.0	8.0
			59083	30.00-31.00	1.00	0.015		12.0	44.0	55.0	33.0	6.0
			59084	31.00-32.00	1.00	0.020		12.0	32.0	60.0	38.0	6.0
			59085	32.00-33.53	1.53	0.015		11.0	50.0	20.0	28.0	6.0

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-106

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-106	Date Completed:		Geotech by: MBW
LENGTH: 60.96	Core Diam: NQII		

Collar Location

Latitude:	1874.76
Departure:	1987.57
Elevation:	1313.45

S U M M A R Y

0.00-25.91	volcaniclastics
25.91-44.96	volcaniclastics
44.96-48.77	Chlorite Streaming *
48.77-60.96	volcaniclastics **

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	236.00	-55.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	7.00	volcaniclastics	59086	2.00-3.00	1.00	0.015		39.0	73.0	30.0	95.0	12.0
		Fine grained, redish-green, heterolithic, stockwork	59087	3.00-4.00	1.00	0.030		18.0	102.0	10.0	74.0	30.0
		hematite stringers 35°:fracturing 35°	59088	4.00-5.00	1.00	0.020	0.20	23.0	156.0	20.0	82.0	28.0
		Frs=6/m :Vns =40/m	59089	5.00-6.00	1.00	0.030	0.20	60.0	136.0	50.0	93.0	16.0
		Moderate SI patches	59090	6.00-7.00	1.00	0.065		55.0	78.0	55.0	64.0	8.0
		Strong CL pervasive	59091	7.00-8.00	1.00	0.005		18.0	79.0	15.0	90.0	14.0
		Weak MT patches	59092	8.00-9.00	1.00	0.010		11.0	67.0	10.0	77.0	12.0
		Moderate KS pervasive	59093	9.00-10.00	1.00	0.040		12.0	104.0	20.0	53.0	12.0
		Moderate HE stockwork	59094	10.00-11.00	1.00	0.035		11.0	115.0	10.0	53.0	16.0
		Weak PY disseminated	59095	11.00-12.00	1.00	0.040	0.20	11.0	95.0	20.0	54.0	12.0
		Moderate QC microveins	59096	12.00-13.00	1.00	0.070	0.20	13.0	131.0		62.0	10.0
		Variably mottled red green with local strong hematite	59097	13.00-14.00	1.00	0.075		19.0	142.0	5.0	70.0	22.0
		stringer zone, local intense K-spar alteration,	59098	14.00-15.00	1.00	0.060		25.0	122.0	15.0	81.0	28.0
		silicification, limonite vein fractures.	59099	15.00-16.00	1.00	0.030	0.40	46.0	153.0	40.0	87.0	22.0
<3.85-7.00>		Fine grained, redish-green, stockwork										
		Strong SI patches										
		Strong CL pervasive										
		Strong KS pervasive										
		Strong HE stockwork										
		Moderate PY disseminated										
		Blood red hematite veinlets, local bleached light										
		pruple interval (K-spar silicification).										
<16.70-17.20>		Semi-massive hematite	59100	16.00-17.00	1.00	3.020	0.20	335.0	204.0	170.0	98.0	10.0
		hematite stringers 10°										
		Intense CL pervasive										
		Semi-massive hematite stringer sub parallel to core										
		axis.										
<18.10-18.80>		volcaniclastics	59101	17.00-18.00	1.00	1.770		368.0	80.0	190.0	75.0	8.0
		Fine grained, purpleish-green, mottled, wispy										
		Strong SI patches										
		Intense CL pervasive										
		Moderate HE stockwork										
		Mottled purple to green depending on chlorite content,										
		K-spar silicified.										
<20.50-20.54>		Hematite chlorite calcite vein	59102	18.00-19.00	1.00	0.070		55.0	41.0	30.0	40.0	8.0
		Veined	59103	19.00-20.00	1.00	0.250	0.20	43.0	85.0	30.0	47.0	8.0
		Calcite/chlorite veinlets (3) each less than 1cm.										
		across 4cm. interval.										
<20.54-25.91>		volcaniclastics	59104	20.00-21.00	1.00	1.160	0.40	37.0	130.0	30.0	74.0	6.0
		Fine grained, purpleish-green, mottled, wispy	59105	21.00-22.00	1.00	2.120	0.40	56.0	308.0	40.0	88.0	4.0
		Strong SI patches	59106	22.00-23.00	1.00	0.580	0.20	26.0	235.0	20.0	99.0	6.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Intense CL pervasive	59107	23.00-24.00	1.00	0.330	0.20	91.0	159.0	35.0	55.0	6.0
		Strong KS pervasive	59108	24.00-25.00	1.00	0.315		45.0	81.0	40.0	57.0	4.0
		Strong K-spar alteration, silicification local strong calcite/quartz stockwork at 90 degrees to core axis.										
	<25.91-44.96>	Fine grained, green, heterolithic, wispy	59109	25.00-26.00	1.00	0.060		31.0	84.0	10.0	58.0	4.0
		wispy 35°:cleavage, foliation 45°	59110	26.00-27.00	1.00	0.225		33.0	162.0	20.0	42.0	6.0
		Frs=7/m	59111	27.00-28.00	1.00	4.140	0.20	93.0	129.0	75.0	65.0	4.0
		Moderate SI patches	59112	28.00-29.00	1.00	0.235		37.0	53.0	20.0	76.0	6.0
		Moderate CL pervasive	59113	29.00-30.00	1.00	0.040	0.40	64.0	123.0	65.0	41.0	10.0
		Weak MS patches	59114	30.00-31.00	1.00	0.440	1.00	118.0	367.0	155.0	48.0	12.0
		Moderate KS pervasive	59115	31.00-32.00	1.00	1.630	0.40	92.0	10.0	120.0	69.0	8.0
		Moderate PY microveins	59116	32.00-33.00	1.00	0.215		157.0	78.0	135.0	95.0	10.0
		Moderate QC microveins	59117	33.00-34.00	1.00	0.115	0.20	59.0	208.0	50.0	81.0	12.0
		At 29.10 to 30.5m., strong breccia appearance with	59118	34.00-35.00	1.00	0.035	0.20	26.0	93.0	30.0	83.0	10.0
		clasts of hornblende feldpar, up to 3cm. (angular) in	59119	35.00-36.00	1.00	0.040		16.0	67.0	25.0	64.0	16.0
		a chloritic groundmass, local limonite on fractures,	59120	36.00-37.00	1.00	0.035		12.0	31.0	25.0	33.0	14.0
		at 31.70 to 33.81m., strong breccia texture.	59121	37.00-38.00	1.00	0.015		11.0	38.0	60.0	34.0	14.0
	<36.90-37.29>	rubbly fault zone										
		Highly broken with abundant fault gouge, weakly limonitic.										
	<38.90-39.10>	Broken Core	59122	38.00-39.00	1.00	0.030		11.0	36.0	90.0	33.0	10.0
	<39.87-39.91>	calcite vein										
		Whiteish-green, bedded										
		bedding 90°										
		Banded white green.										
44.96	48.77	Chlorite Streaming	59123	39.00-40.00	1.00	0.025		13.0	67.0	40.0	52.0	14.0
		Black, bedded, mottled	59124	40.00-41.00	1.00	0.015		13.0	45.0	70.0	36.0	12.0
		foliated 45°:cleavage, foliation 90°	59125	41.00-42.00	1.00	0.010		13.0	52.0	200.0	33.0	12.0
		Frs=3/m	59126	42.00-43.00	1.00	0.015		17.0	70.0	80.0	29.0	12.0
		Weak SI patches	59127	43.00-44.00	1.00	0.010		14.0	44.0	125.0	44.0	14.0
		Intense CL pervasive	59128	44.00-45.00	1.00	0.315	0.40	50.0	110.0	140.0	41.0	20.0
		Moderate KS pervasive	59129	45.00-46.00	1.00	0.705	1.00	88.0	343.0	120.0	96.0	18.0
		Weak HE patches	59130	46.00-47.00	1.00	0.075	0.60	44.0	216.0	45.0	132.0	20.0
		Strong PY microveins	59131	47.00-48.00	1.00	0.040	0.60	37.0	260.0	10.0	86.0	18.0
		Moderate QC microveins										
		Highly chloritic with fragments of hornblende										
		feldspar. MINERALIZATION- 9% pyrite as narrow bands.										
	<44.96-48.77>	?? MT bands										
		MINERALIZATION- 9% pyrite as narrow bands.										
	<48.50-48.54>	calcite vein										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
48.77	60.96	volcaniclastics	59132	48.00-49.00	1.00	1.190	1.20	58.0	193.0	510.0	64.0	22.0
		Fine grained, gray, heterolithic	59133	49.00-50.00	1.00	0.065	0.60	22.0	106.0	105.0	49.0	14.0
		cleavage, foliation 45°:fracturing 45°	59134	50.00-51.00	1.00	0.010	0.60	10.0	106.0	30.0	46.0	14.0
		Moderate SI patches	59135	51.00-52.00	1.00	0.825	1.60	43.0	136.0	350.0	67.0	16.0
		Moderate CL pervasive	59136	52.00-53.00	1.00	0.040		9.0	69.0	20.0	46.0	10.0
		Moderate KS pervasive	59137	53.00-54.00	1.00	0.180	0.40	82.0	104.0	1360.0	48.0	14.0
		Strong PY microveins	59138	54.00-55.00	1.00	0.110	1.20	64.0	167.0	945.0	48.0	14.0
		Moderate QC microveins	59139	55.00-56.00	1.00	0.010	0.40	19.0	97.0	135.0	48.0	12.0
		Generally equi granular texture with local	59140	56.00-57.00	1.00	0.680	0.40	22.0	83.0	150.0	63.0	14.0
		quartz/calcite veinlets, strong pyrite as fine	59141	57.00-58.00	1.00	0.015	0.60	13.0	95.0	40.0	73.0	20.0
		veinlets to dissemination. MINERALIZATION- 9% pyrite,	59142	58.00-59.00	1.00	0.020	1.80	29.0	164.0	330.0	93.0	30.0
		trace of arsenopyrite.	59143	59.00-60.00	1.00	0.025	1.00	11.0	115.0	30.0	49.0	16.0
<48.77-60.96>		?? MT vein	59144	60.00-60.96	0.96	0.025	0.20	18.0	52.0	130.0	54.0	16.0
		MINERALIZATION- 9% pyrite, trace of arsenopyrite.										
<48.81-48.86>		calcite vein										
		Banded pink white.										
<53.80-53.87>		MINERALIZATION- 30% pyrite, 30% arsenopyrite.										
<53.80-53.87>		semi-massive sulphides										
		Bedded										
		bedding 35°										
		Strong PY microveins										
		Silicified with pyrite veinlets, minor arsenopyrite.										
		MINERALIZATION- 30% pyrite, 30% arsenopyrite.										
(eoh)												

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-107

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-107	Date Completed:		Geotech by: MBW
LENGTH: 62.18	Core Diam: NQII		

Collar Location

Latitude:	1874.76
Departure:	1987.57
Elevation:	1313.45

SUMMARY

0.00-62.18	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	236.00	-65.00	

HOLE: CL96-107 HOMESTAKE MINING COMPANY - Clone

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	62.18	volcaniclastics	59145	1.00-2.00	1.00	0.020		14.0	103.0	20.0	91.0	18.0
		Fine grained, redish-green, heterolithic, stockwork	59146	2.00-3.00	1.00	0.025		10.0	100.0	15.0	81.0	20.0
		hematite stringers 35°:fracturing 45°	59147	3.00-4.00	1.00	0.005		11.0	88.0	10.0	101.0	14.0
		Frs=4/m :Vns =10/m	59148	4.00-5.00	1.00	0.020		16.0	127.0		119.0	12.0
		Moderate SI patches	59149	5.00-6.00	1.00	0.045		20.0	134.0	5.0	96.0	12.0
		Strong CL pervasive	59150	6.00-7.00	1.00	0.135		26.0	38.0	15.0	90.0	14.0
		Weak MT patches	59151	7.00-8.00	1.00	0.175		40.0	40.0	35.0	83.0	14.0
		Moderate KS pervasive	59152	8.00-9.00	1.00	0.010		15.0	135.0	5.0	43.0	10.0
		Moderate HE stockwork	59153	9.00-10.00	1.00	0.085		23.0	115.0	15.0	45.0	12.0
		Moderate PY patches	59154	10.00-11.00	1.00	0.025		16.0	89.0		41.0	10.0
		Moderate QC microveins	59155	11.00-12.00	1.00	0.010		13.0	47.0	5.0	48.0	10.0
		HP LaserJet - Letter	59156	12.00-13.00	1.00	0.020		48.0	6.0	10.0	91.0	12.0
<40.54-62.18>			59157	13.00-14.00	1.00	0.010		92.0	74.0	65.0	107.0	10.0
(eoh)												

12/03/96

From	TO	Measured Width	Recovery	RQD	Hardness
0.00	0.00	0.00	0	0	

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-108

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-108	Date Completed:		Geotech by: MBW
LENGTH: 60.96	Core Diam: NQII		

Collar Location

Latitude:	1874.76
Departure:	1987.57
Elevation:	1313.45

S U M M A R Y

0.00-25.91	volcaniclastics ***
25.91-40.85	volcaniclastics *
40.85-43.50	Chlorite Streaming *
43.50-56.20	volcaniclastics ***
56.20-60.96	rubbly fault zone

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	215.00	-45.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	25.91	volcaniclastics	59206	2.00-3.00	1.00	0.010		11.0	127.0	10.0	129.0	6.0
		Fine grained, greenish-red, heterolithic, stockwork	59207	3.00-4.00	1.00	0.015		19.0	157.0	25.0	74.0	6.0
		hematite stringers 10°:cleavage, foliation 45°	59208	4.00-5.00	1.00	0.035		18.0	164.0	20.0	82.0	6.0
		Frs=6/m :Vns =10/m	59209	5.00-6.00	1.00	0.105	0.40	32.0	260.0	30.0	107.0	6.0
		Moderate SI pervasive	59210	6.00-7.00	1.00	0.030		33.0	168.0	35.0	92.0	4.0
		Moderate CL pervasive	59211	7.00-8.00	1.00	0.005		32.0	116.0	25.0	119.0	2.0
		Weak MT vein	59212	8.00-9.00	1.00	0.050		32.0	167.0	25.0	43.0	4.0
		Moderate KS pervasive	59213	9.00-10.00	1.00	0.010		13.0	85.0	15.0	32.0	8.0
		Moderate HE stockwork	59214	10.00-11.00	1.00	0.020		26.0	118.0	15.0	37.0	14.0
		Moderate PY patches	59215	11.00-12.00	1.00	0.015		14.0	113.0	15.0	24.0	4.0
		Moderate QV vein	59216	12.00-13.00	1.00	0.005		17.0	59.0	15.0	22.0	4.0
		Moderate QC microveins	59217	13.00-14.00	1.00	0.015		15.0	62.0	20.0	30.0	4.0
		Variably chlorite/hematite altered with local strong	59218	14.00-15.00	1.00	0.005		11.0	27.0	5.0	25.0	2.0
		K-spar alteration/silification with a pink to purple	59219	15.00-16.00	1.00	0.010		19.0	39.0	20.0	22.0	
		generally brecciated rock, the zones of K-spar appear	59220	16.00-17.00	1.00	0.010		23.0	26.0	10.0	25.0	6.0
		as veins with tension fractures at right angles to the	59221	17.00-18.00	1.00	0.025		27.0	102.0	40.0	30.0	2.0
		strike of the veinlets. Tension fracturing is usually	59222	18.00-19.00	1.00	0.015		54.0	43.0	50.0	33.0	4.0
		intense giving the rock a boxwork texture.	59223	19.00-20.00	1.00	0.055		38.0	181.0	90.0	50.0	10.0
		MINERALIZATION- 3% pyrite, trace of calcopyrite, minor	59224	20.00-21.00	1.00	0.255	1.40	48.0	1184.0	70.0	164.0	8.0
		magnetite, local limonite on fractures.	59225	21.00-22.00	1.00	0.160		11.0	131.0		103.0	10.0
<0.00-25.91>		MINERALIZATION- 3% pyrite, traces of calcopyrite,	59226	22.00-23.00	1.00	0.500		24.0	426.0	10.0	148.0	10.0
		minor magnetite, local limonite on fractures.	59227	23.00-24.00	1.00	0.110		14.0	81.0	15.0	64.0	4.0
<7.00-8.10>		volcaniclastics										
		Fine grained, greenish-purple, veined, heterolithic										
		Strong SI pervasive										
		Strong CL pervasive										
		Strong KS pervasive										
		Moderate HE stockwork										
		Weak PY patches										
		Moderate QC microveins										
		Intense K-spar silification, chlorite alteration.										
<11.45-12.15>		Veined										
		Moderate PY patches										
		Strong QC vein										
		Strong quartz/calcite veining to 20% with minor										
		pyrite, traces chalcopyrite.										
<15.90-16.50>		Fine grained, redish-green, heterolithic, stockwork										
		cleavage, foliation 45°:fracturing 55°										
		Frs=25/m :Vns =20/m										
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Weak PY patches Strong QC microveins Very highly fractured with quartz/calcite stockwork alogn minute fractures.										
<17.80-17.90>	Hematite chlorite calcite vein Veined Intense CL pervasive Intense QC vein Zone of ten calcite with patches of green chlorite.										
<19.81-20.05>	MINERALIZATION- 50% pyrite.										
<19.81-20.05>	pyrite vein or veinlet Veined vein 10° 1cm. wide along the core axis. MINERALIZATION- 50% pyrite.										
<20.60-20.62>	MINERALIZATION- 50% pyrite.										
<20.60-20.62>	pyrite vein or veinlet vein 80° MINERALIZATION- 50% pyrite.										
<22.75-22.78>	massive hematite Intense MT vein Intense HE vein Magnetite/hematite vein.										
<23.10-25.91>	volcaniclastics Heterolithic, stockwork Moderate SI patches Moderate CL pervasive Strong KS pervasive Weak PY patches Moderate QC microveins K-spar/silicification as selvages to narrow chlorite filled fractures.	59228	24.00-25.00	1.00	0.060		16.0	80.0	10.0	87.0	10.0
<25.91-40.85>	Fine grained, green, heterolithic, mottled bedding 35°:cleavage, foliation 45° Frs=4/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Moderate PY patches	59229 59230 59231 59232 59233 59234 59235	25.00-26.00 26.00-27.00 27.00-28.00 28.00-29.00 29.00-30.00 30.00-31.00 31.00 32.00	1.00 1.00 1.00 1.00 1.00 1.00 1.00	0.055 0.010 0.165 0.130 0.005 0.010 0.010		17.0 12.0 11.0 24.0 12.0 16.0 13.0	175.0 96.0 83.0 79.0 57.0 70.0 75.0	15.0 10.0 35.0 25.0 60.0 105.0	99.0 65.0 66.0 51.0 36.0 39.0 43.0	4.0 2.0 4.0 4.0 8.0 8.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak QV microveins	59236	32.00-33.00	1.00	0.020		14.0	79.0	100.0	36.0	10.0
		Moderate QC microveins	59237	33.00-34.00	1.00	0.010		11.0	37.0	65.0	37.0	6.0
		At 35.55 to 37.70m., rock is chlorite banded with	59238	34.00-35.00	1.00	0.005		10.0	23.0	65.0	35.0	4.0
		large K-spar silicified fragments along banding.	59239	35.00-36.00	1.00	0.005		12.0	23.0	90.0	59.0	6.0
		MINERALIZATION- 3% patchy pyrite.	59240	36.00-37.00	1.00	0.010		16.0	22.0	45.0	67.0	4.0
	<25.91-40.85>	Moderate MT patches	59241	37.00-38.00	1.00	0.105		41.0	69.0	70.0	57.0	12.0
		MINERALIZATION- 3% patchy pyrite.	59242	38.00-39.00	1.00	0.015	0.60	24.0	70.0	65.0	37.0	14.0
40.85	43.50	Chlorite Streaming	59243	39.00-40.00	1.00	0.005		28.0	61.0	30.0	42.0	6.0
		Fine grained, green, bedded, foliated	59244	40.00-41.00	1.00	0.005		120.0	281.0	110.0	59.0	4.0
		foliated 35°:cleavage, foliation 45°	59245	41.00-42.00	1.00	0.110	0.40	185.0	560.0	180.0	86.0	26.0
		Frs=4/m	59246	42.00-43.00	1.00	0.260	0.60	84.0	675.0	95.0	85.0	4.0
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Weak HE patches										
		Moderate PY patches										
		Weak QC microveins										
		Highly chloritic with a foliated appearance to the										
		interval, minor hematite with minbor disseminated										
		pyrite, locally pyritic along patches and veinlets.										
		MINERALIZATION- 5% patchy pyrite.										
	<40.85-43.50>	Intense MT patches										
		MINERALIZATION- 5% patchy pyrite.										
43.50	56.20	volcaniclastics	59247	43.00-44.00	1.00	0.115	0.40	24.0	89.0	35.0	57.0	74.0
		Fine grained, green, heterolithic, mottled	59248	44.00-45.00	1.00	0.105		21.0	91.0	10.0	44.0	16.0
		fracturing 45°	59249	45.00-46.00	1.00	0.010		26.0	95.0	10.0	43.0	6.0
		Frs=15/m	59250	46.00-47.00	1.00	0.025		28.0	159.0	70.0	43.0	8.0
		Weak SI patches	59251	47.00-48.00	1.00	0.040		33.0	258.0	95.0	53.0	8.0
		Moderate CL pervasive	59252	48.00-49.00	1.00	0.070	0.40	34.0	278.0	145.0	56.0	10.0
		Moderate KS pervasive	59253	49.00-50.00	1.00	0.120	0.20	37.0	263.0	50.0	60.0	12.0
		Moderate PY patches	59254	50.00-51.00	1.00	0.060	0.60	45.0	374.0	70.0	46.0	12.0
		Weak QC microveins	59255	51.00-52.00	1.00	0.040		36.0	251.0	55.0	77.0	12.0
		Generally weakly foliated with local abundant pyrite	59256	52.00-53.00	1.00	0.035		22.0	85.0	25.0	100.0	20.0
		as fracture fillings and as patches.	59257	53.00-54.00	1.00	0.040		29.0	195.0	105.0	53.0	10.0
	<46.80-49.23>	Broken Core										
		Highly broken with abundant limonite on fractures.										
	<47.14-47.23>	Weak MT coarse grained										
		MINERALIZATION- 25% pyrite as coarse cubes.										
	<47.14-47.23>	semi-massive sulphides										
		Intense PY coarse grained										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		MINERALIZATION- 25% pyrite as coarse cubes.										
<48.50-48.55>		Weak MT coarse grained										
		MINERALIZATION- 25% pyrite as coarse cubes.										
<48.50-48.55>		semi-massive sulphides										
		Intense PY coarse grained										
		MINERALIZATION- 25% pyrite as coarse cubes.										
<50.50-56.00>		MINERALIZATION- 8% pyrite.	59258	54.00-55.00	1.00	0.005		37.0	303.0	120.0	46.0	12.0
<50.50-56.00>		volcaniclastics	59259	55.00-56.00	1.00	0.055		25.0	190.0	30.0	181.0	40.0
		Strong PY patches										
		Abundant pyrite as fine veinlets and as patches.										
		MINERALIZATION- 8% pyrite.										
56.20	60.96	rubbly fault zone	59260	56.00-57.00	1.00	0.155	2.00	32.0	359.0	160.0	793.0	216.0
		fault/gouge 35°	59261	57.00-58.00	1.00	0.995	2.80	153.0	305.0	1870.0	618.0	146.0
		Strong fault zone, highly limonitic with bleaching at	59262	58.00-59.00	1.00	0.090	1.00	33.0	276.0	350.0	154.0	20.0
		HFBx at 57.59m., 4cm. of gouge, strong alteration of	59263	59.00-60.00	1.00	0.135	1.20	34.0	360.0	160.0	100.0	18.0
		breccia at 59.28 to 60.96m. to a clay rich section at	59264	60.00-60.96	0.96	0.060	0.60	17.0	107.0	85.0	60.0	12.0
		59.28 appears as a 5cm. argillite fragment. E.O.H.										
		60.96m.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-109

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-109	Date Completed:		Geotech by: MBW
LENGTH: 60.66	Core Diam: NQII		

Collar Location

Latitude:	1874.76
Departure:	1987.57
Elevation:	1313.45

S U M M A R Y

0.00-1.52	CASING
1.52-33.25	volcaniclastics
33.25-45.20	volcaniclastics **
45.20-49.10	Chlorite Streaming ***
49.10-60.66	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	215.00	-55.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	1.52	CASING										
1.52	33.25	volcaniclastics	59265	1.52-2.00	0.48	0.005		19.0	54.0		73.0	18.0
		Fine grained, greenish-red, heterolithic, stockwork	59266	2.00-3.00	1.00	0.010		22.0	76.0	15.0	103.0	20.0
		cleavage, foliation 90°:fracturing 10°	59267	3.00-4.00	1.00	0.005		42.0	86.0	25.0	96.0	24.0
		Frs=6/m :Vns =10/m	59268	4.00-5.00	1.00	0.005		59.0	86.0	50.0	93.0	14.0
		Moderate SI patches	59269	5.00-6.00	1.00	0.025	0.40	45.0	135.0	30.0	87.0	24.0
		Moderate CL pervasive	59270	6.00-7.00	1.00	0.010		43.0	89.0	35.0	144.0	16.0
		Weak MT patches	59271	7.00-8.00	1.00	0.080		47.0	60.0	40.0	106.0	32.0
		Moderate KS pervasive	59272	8.00-9.00	1.00	0.015		2.0	1.0		3.0	2.0
		Moderate HE stockwork	59273	9.00-10.00	1.00	0.015		48.0	84.0	25.0	58.0	8.0
		Moderate PY patches	59274	10.00-11.00	1.00	0.005		14.0	132.0	15.0	60.0	10.0
		Moderate QC microveins	59275	11.00-12.00	1.00	0.010	0.20	13.0	127.0	10.0	58.0	14.0
		Variably hematite/chlorite altered with local sections	59276	12.00-13.00	1.00	0.015		18.0	170.0	5.0	77.0	20.0
		of intense K-spar alteration/silicification at 2.50 to	59277	13.00-14.00	1.00	0.010		112.0	65.0	70.0	84.0	8.0
		4.0m., strong hematite/chlorite stringers in veins,	59278	14.00-15.00	1.00	0.015		65.0	46.0	55.0	95.0	6.0
		between green fragments, chlorite gives the rock a	59279	15.00-16.00	1.00	0.010		40.0	92.0	45.0	92.0	18.0
		foliated appearance.	59280	16.00-17.00	1.00	0.125		86.0	148.0	80.0	67.0	18.0
<5.30-6.00>		gougy sheeted Vuggy Shear zone at 10 degrees to core axis, contains minor gouge.										
<6.50-8.90>		volcaniclastics Fine grained, purpleish-green, heterolithic, stockwork cleavage, foliation 90°:fracturing 15° Frs=3/m :Vns =15/m Strong SI patches Strong CL pervasive Strong KS pervasive Strong HE stockwork Altered green to light purple then highly brecciated along altered sections, tension fractures generally at right angles to alteration veins.										
<13.05-15.60>		Semi-massive hematite Fine grained, redish-green, heterolithic, stockwork Moderate SI patches Intense CL pervasive Strong KS pervasive Strong HE stockwork Some minor K-spar alteration/silicification with dark red hematite at 15 degrees to core axis.										
<15.60-25.00>		volcaniclastics	59281	17.00-18.00	1.00	0.010		69.0	65.0	40.0	39.0	14.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Heterolithic, stockwork	59282	18.00-19.00	1.00	0.035		109.0	79.0	40.0	39.0	14.0
	cleavage, foliation 45°	59283	19.00-20.00	1.00	0.055		31.0	49.0	20.0	33.0	14.0
	Generally weak hematite alteration, local stringer	59284	20.00-21.00	1.00	0.005		35.0	44.0	20.0	30.0	16.0
	breccia	59285	21.00-22.00	1.00	0.040		31.0	40.0	10.0	32.0	12.0
	appearance with clasts up to 3cm. in a chlorite	59286	22.00-23.00	1.00	0.305	0.20	33.0	284.0	30.0	94.0	18.0
	groundmass at 20.0 to 20.50m., strong calcite/chlorite	59287	23.00-24.00	1.00	0.755	1.00	46.0	363.0	50.0	188.0	20.0
	veinlets to .5mm. wide spaced 1 to 2cm. apart.	59288	24.00-25.00	1.00	0.800		21.0	116.0	15.0	174.0	14.0
<17.22-25.15>	Broken Core										
	Weakly broken core at 22.50 to 24.0m. laminations on										
	fractures.										
<26.42-32.00>	volcaniclastics	59289	25.00-26.00	1.00	0.300		28.0	116.0	20.0	53.0	12.0
	Fine grained, redish-green, heterolithic, mottled	59290	26.00-27.00	1.00	5.220	0.60	74.0	251.0	60.0	30.0	10.0
	cleavage, foliation 50°:fracturing 55°	59291	27.00-28.00	1.00	8.220	0.80	73.0	361.0	60.0	30.0	12.0
	Frs=4/m :Vns =10/m	59292	28.00-29.00	1.00	1.610		53.0	121.0	40.0	51.0	12.0
	Moderate SI patches	59293	29.00-30.00	1.00	1.410		102.0	184.0	95.0	47.0	12.0
	Intense CL pervasive	59294	30.00-31.00	1.00	0.165		58.0	153.0	45.0	30.0	14.0
	Weak MT patches	59295	31.00-32.00	1.00	0.120		73.0	197.0	55.0	31.0	18.0
	Moderate KS pervasive										
	Moderate HE stockwork										
	Moderate PY patches										
	Moderate QC microveins										
	Hematite/chlorite altered zone with local patches of										
	K-spar alteration/silicification.										
<32.00-32.50>	Intense K-spar alteration/silicification with strong										
	calcite/chlorite veinlets up to 0.5cm.- 1 to 2cm.										
	apart, veinlets from 5 to 10% of interval.										
<33.25-45.20>	cleavage, foliation 45°:fracturing 50°	59296	32.00-33.00	1.00	0.430		78.0	277.0	80.0	41.0	14.0
	Frs=3/m	59297	33.00-34.00	1.00	0.030		123.0	259.0	120.0	41.0	14.0
	Moderate SI patches	59298	34.00-35.00	1.00	3.150	0.60	197.0	391.0	215.0	53.0	14.0
	Moderate CL pervasive	59299	35.00-36.00	1.00	0.590	0.20	157.0	457.0	160.0	39.0	12.0
	Moderate KS pervasive	59300	36.00-37.00	1.00	0.075		31.0	136.0	35.0	29.0	12.0
	Moderate PY microveins	59301	37.00-38.00	1.00	0.045		16.0	60.0	15.0	35.0	14.0
	Moderate QC microveins	59302	38.00-39.00	1.00	0.030		13.0	57.0	15.0	32.0	12.0
	Fractured with abundant minute calcite stockwork along	59303	39.00-40.00	1.00	0.015	0.20	13.0	87.0	35.0	25.0	14.0
	fractures, pyrite as patches and veinlets generally in	59304	40.00-41.00	1.00	0.040	0.40	22.0	99.0	30.0	25.0	16.0
	areas of silicification. MINERALIZATION- 9% pyrite as	59305	41.00-42.00	1.00	0.055	0.40	22.0	140.0	90.0	29.0	14.0
	patches and veinlets.	59306	42.00-43.00	1.00	0.075	0.60	15.0	51.0	160.0	27.0	16.0
<34.90-35.05>	Semi-massive hematite										
	Semi-massive hematite vein at 5 to 10 degrees to core										
	axis, banded with dark green chlorite.										
<35.25-45.20>	?? MT patches	59307	43.00-44.00	1.00	0.160	1.40	26.0	138.0	320.0	16.0	60.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		MINERALIZATION- 9% pyrite as patches and veinlets.	59308	44.00-45.00	1.00	0.065	0.40	23.0	64.0	65.0	29.0	14.0
	<41.25-41.45>	pyrite vein or veinlet Fine grained Narrow 1cm. pyrite vein at 15 degrees to core axis.										
	<42.50-43.50>	Trace MT fracture fill MINERALIZATION- 12% fracture fill pyrite.										
	<42.50-43.50>	volcaniclastics Grayish-green, mottled Intense SI patches Strong CL pervasive Strong KS pervasive Intense PY vein Moderate QC vein Light gray green highly silicified with abundant pyrite mineralization as fine fracture fillings, minor coarse crystalline chlorite veinlets up to 1cm. MINERALIZATION- 12% fracture fill pyrite.										
45.20	49.10	Chlorite Streaming Fine grained, black, laminated, foliated foliated 45°:cleavage, foliation 45° Frs=4/m :Vns =5/m Moderate SI patches Intense CL pervasive Moderate KS pervasive Moderate HE vein Strong PY vein Moderate QC microveins Strongly chloritic with local sections of intense black chlorite stringers, locally chlorite form groundmass between clasts, local strong pyrite veinlets. MINERALIZATION- 10% pyrite as veinlets.	59309	45.00-46.00	1.00	0.205		24.0	89.0	40.0	56.0	14.0
			59310	46.00-47.00	1.00	0.215		43.0	115.0	55.0	96.0	20.0
			59311	47.00-48.00	1.00	0.010		29.0	53.0	70.0	84.0	24.0
			59312	48.00-49.00	1.00	0.215	0.40	24.0	212.0	65.0	35.0	24.0
	<45.20-49.10>	Trace MT vein MINERALIZATION- 10% pyrite as veinlets.										
	<46.90-46.95>	pyrite vein or veinlet Intense PY vein										
	<47.70-47.76>	Intense MT vein MINERALIZATION- pyrite veinlets to 50% of section.										
	<47.70-47.76>	pyrite vein or veinlet MINERALIZATION- pyrite veinlets to 50% of section.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<48.30-48.40>MINERALIZATION- pyrite stringers at 15 degrees to core axis.										
		<48.70-49.10>MINERALIZATION- 5% pyrite.										
		<48.70-49.10> Chlorite Streaming Fine grained, black, foliated foliated 45° Moderate SI patches Intense CL pervasive Moderate KS pervasive Strong HE microveins Moderate QC microveins Abundant hematite with veinlets of broken pink calcite in chloritic groundmass, weak K-spar/silicification. MINERALIZATION- 5% pyrite.										
49.10	60.66	volcaniclastics	59313	49.00-50.00	1.00	0.030	0.60	22.0	192.0	50.0	42.0	18.0
		Fine grained, gray, Brecciated, foliated	59314	50.00-51.00	1.00	0.005		15.0	48.0	10.0	25.0	4.0
		foliated 45°:fracturing 15°	59315	51.00-52.00	1.00	0.080	0.40	15.0	142.0	30.0	26.0	6.0
		Moderate SI patches	59316	52.00-53.00	1.00	0.100	1.20	19.0	128.0	70.0	82.0	10.0
		Moderate CL pervasive	59317	53.00-54.00	1.00	3.040	2.40	35.0	155.0	170.0	83.0	12.0
		Moderate KS pervasive	59318	54.00-55.00	1.00	0.360	1.60	30.0	100.0	125.0	56.0	12.0
		Moderate PY patches	59319	55.00-56.00	1.00	2.040	3.60	32.0	257.0	265.0	319.0	50.0
		Weak QC microveins	59320	56.00-57.00	1.00	0.060	0.80	20.0	159.0	95.0	56.0	10.0
		Generally weakly foliated, weak calcite stockwork.	59321	57.00-58.00	1.00	0.230	1.60	24.0	261.0	80.0	60.0	12.0
		<49.68-57.20> Broken Core Highly broken with abundant limonite.										
		<57.20-58.52>Bleached light green, abundant gouge, clay on fractures.										
		<59.00-60.00> volcaniclastics	59322	58.00-59.00	1.00	0.520	1.60	36.0	299.0	120.0	156.0	14.0
		Brecciated	59323	59.00-60.00	1.00	1.380	2.80	85.0	390.0	480.0	407.0	36.0
		Rock contains fragments of pink calcite, broken calcite veinlets in groundmass of dark green chlorite. E.O.H. 60.66m.										
(eoh)												

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-110

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-110	Date Completed:		Geotech by: MBW
LENGTH: 21.35	Core Diam: NQII		

Collar Location

Latitude:	2040.00
Departure:	1991.00
Elevation:	0.00

S U M M A R Y

0.00-12.90	volcaniclastics *
12.90-15.80	volcaniclastics
15.80-16.80	Chlorite Streaming
16.80-19.50	volcaniclastics
19.50-21.34	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-45.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	12.90	volcaniclastics	59362	0.00-1.00	1.00	0.080		14.0	48.0	5.0	31.0	14.0
		Fine grained, redish-green, wispy, heterolithic	59363	1.00-2.00	1.00	0.005		9.0	74.0		28.0	14.0
		fracturing 15°:vein 45°	59364	2.00-3.00	1.00	0.065		31.0	310.0	10.0	84.0	22.0
		Frs=12/m :Vns =15/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS pervasive										
		Moderate HE stockwork										
		Weak PY disseminated										
		Weak QC microveins										
		Highly K-spar altered with fragments of altered rocks										
		in hematite matrix, locally highly tension fractured										
		and fine quartz/calcite veinlets along fractures at										
		2.40m., narrow chloritic/limonitic 1cm. shear plane,										
		core is highly broken, locally altered along fractures										
		to a pseudo breccia appearance, section is highly										
		broken, limonite on fractures.										
<3.94-12.90>		Fine grained, blackish-red, veined	59365	3.00-4.00	1.00	24.800	1.60	85.0	461.0	40.0	59.0	22.0
		fracturing 45°:vein 45°	59366	4.00-5.00	1.00	0.335		66.0	268.0	15.0	66.0	18.0
		Frs=30/m :Vns =35/m	59367	5.00-6.00	1.00	0.920		47.0	135.0		85.0	26.0
		Moderate SI patches	59368	6.00-7.00	1.00	0.340		64.0	119.0	10.0	104.0	26.0
		Strong CL pervasive	59369	7.00-7.30	0.30	9.600	0.40	59.0	166.0	20.0	91.0	24.0
		Moderate MT patches	59370	7.30-7.70	0.40	102.000	2.60	77.0	172.0	25.0	85.0	60.0
		Moderate KS pervasive	59371	7.70-8.15	0.45	1.480		50.0	135.0	25.0	102.0	24.0
		Intense HE stockwork	59372	8.15-9.00	0.85	128.000	2.20	21.0	363.0	10.0	37.0	38.0
		Weak PY disseminated	59373	9.00-9.75	0.75	331.000	6.40	20.0	787.0	35.0	24.0	38.0
		Weak QC microveins	59374	9.75-10.50	0.75	3.700	6.60	47.0	9353.0	60.0	120.0	42.0
		H zone, strong chlorite/hematite sections, local	59375	10.50-11.00	0.50	0.295	0.80	46.0	1128.0	50.0	158.0	28.0
		K-spar/silicified sections, local 1 to 2cm. sections	59376	11.00-11.50	0.50	0.515	1.20	62.0	3474.0	40.0	200.0	28.0
		of K-spar with flat fractures across veinlets, giving	59377	11.50-12.00	0.50	8.200	3.80	37.0	3322.0	115.0	104.0	20.0
		boxwork texture.	59378	12.00-12.50	0.50	3.650	0.80	31.0	666.0	135.0	194.0	16.0
<3.94-3.97>		Semi-massive hematite										
		Veined										
		vein 45°										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS patches										
		Intense HE vein										
		Weak QC microveins										
		Hematite stringers up to 1cm., 50% of sections.										
<3.97-6.00>		Broken Core										
		Locally extremely broken, minor limonite in fractures,										
		at 5.0m. fragments of massive hematite at 5.79m. 1cm.										

FROM TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	massive hematite veinlet.										
<7.30-7.36>	massive hematite Veined Intense CL vein Intense HE vein Weak QC microveins Narrow 5mm. wide chlorite veinlets at 45 degrees to core axis.										
<7.36-7.45>	volcaniclastics ?? CL clasts Narrow calcite/chlorite veinlets to 2mm. parallel to core axis.										
<8.20-9.75>	.2% Visible gold - fine grained MINERALIZATION- very fine grained visible gold at 9.45 to 9.50m.										
<8.20-9.75>	massive hematite Fine grained, red, veined microveins 45°:fracturing 45° Frs=4/m Intense SI pervasive Moderate CL pervasive Intense KS pervasive Intense HE vein Moderate SE microveins Weak QC microveins Rock appears to have been highly K-spar altered/silicified then brecciated with altered rounded fragments up to 1cm. in hematite rich matrix, fine specularite veinlets, some with calcite others as minute fracture filling, minor malachite/azurite on fractures. MINERALIZATION- very fine grained visible gold at 9.45 to 9.50m.										
<9.75-12.30>	Chlorite Streaming Fine grained, blackish-red, foliated, stockwork foliated 35°:fracturing 45° Frs=5/m :Vns =10/m Moderate SI patches Intense CL pervasive Weak MT patches Moderate KS pervasive Moderate HE stockwork Weak PY disseminated										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Weak QC microveins Dark black chlorite with 2cm., massive chlorite vein at 10.5m., fine disseminated pyrite <1%, local K-spar/ silicified sections from 10.5 to 11.30m.										
<11.60-11.70>		massive hematite Veined Intense HE vein Massive hematite at 45 degrees to core axis.										
<12.30-12.90>		Semi-massive hematite Fine grained, red, veined vein 45°:fracturing 45° Moderate SI patches Intense CL pervasive Weak MT patches Moderate KS pervasive Intense HE vein Weak QC microveins Massive hematite vein fractures with fragments to 5 to 6 cm. long with heavy chlorite between fragments.										
12.90	15.80	volcaniclastics Fine grained, green, heterolithic, mottled stringer 35°:fracturing 45° Frs=4/m :Vns =3/m Moderate SI patches Intense CL pervasive Strong KS pervasive Moderate HE patches Weak PY disseminated Weak QC microveins Heavy chlorite streaming in areas of K-spar altered/silcified zones.	59379 59380 59381	12.50-13.00 13.00-13.50 13.50-14.50	0.50 0.50 1.00	2.600 0.300 0.080	1.20	96.0 38.0 29.0	2812.0 504.0 186.0	120.0	219.0 87.0 37.0	94.0 54.0 58.0
<14.80-15.80>		Broken Core Weak limonite on fractures.										
15.80	16.80	Chlorite Streaming Green, foliated foliated 45°:fracturing 15° Frs=3/m Moderate SI patches Intense CL pervasive Moderate KS pervasive Weak HE patches Weak PY disseminated	59382	14.50-16.00	1.50	0.030		25.0	199.0	15.0	32.0	34.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate QC microveins										
		Very strong chlorite veining between fracgments,										
		fragments to 1 to 2cm.										
16.80	19.50	volcaniclastics	59383	16.00-17.00	1.00	0.055	0.20	27.0	298.0	5.0	33.0	32.0
		Fine grained, greenish-red, wispy, stockwork	59384	17.00-18.00	1.00	0.020		22.0	193.0	15.0	44.0	22.0
		cleavage, foliation 45°:fracturing 45°	59385	18.00-19.00	1.00	0.475		48.0	124.0	30.0	73.0	24.0
		Frs=4/m :Vns =5/m										
		Weak SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Strong HE vein										
		H zone dark chlorite, foliated with local narrow										
		hematite veins.										
<16.80-16.81>		massive hematite										
		Intense HE vein										
		Massive hematite vein.										
<18.00-18.29>		Intense HE vein										
		Massive hematite vein.										
<19.05-19.50>		Intense HE vein										
		Massive hematite veinlet to 3cm. at 19.05 with strong										
		malachite along fractures.										
19.50	21.34	volcaniclastics	59386	19.00-20.00	1.00	3.870	0.60	171.0	864.0	210.0	84.0	40.0
		Fine grained, green, mottled, heterolithic	59387	20.00-21.34	1.34	0.020		30.0	80.0	50.0	133.0	24.0
		cleavage, foliation 45°:fracturing 45°										
		Weak SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak PY disseminated										
		Moderate QC microveins										
		Strong calcite veining locally strong chlorite										
		alteration, locally with minor .5mm. chlorite										
		veinlets.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-111

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-111	Date Completed:		Geotech by: MBW
LENGTH: 43.59	Core Diam: NQII		

Collar Location

Latitude:	2040.00
Departure:	1991.00
Elevation:	0.00

S U M M A R Y

0.00-43.59

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-55.00	

FROM TO DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<0.00-43.59>	59388	0.00-1.00	1.00	0.010	0.40	19.0	212.0		26.0	18.0
(eoh)	59389	1.00-2.00	1.00	0.015	0.40	12.0	76.0	5.0	20.0	18.0
	59390	2.00-3.00	1.00	0.005	0.40	11.0	104.0		25.0	20.0
	59391	3.00-4.00	1.00	0.005		9.0	54.0		37.0	16.0
	59392	4.00-5.00	1.00	0.005	0.40	10.0	61.0	5.0	49.0	16.0
	59393	5.00-6.00	1.00	0.010	0.20	12.0	148.0		82.0	14.0
	59394	6.00-7.00	1.00	0.005	0.20	15.0	158.0	5.0	114.0	18.0
	59395	7.00-8.00	1.00	1.440	1.00	65.0	195.0	30.0	150.0	28.0
	59396	8.00-9.00	1.00	0.140	1.00	38.0	141.0	5.0	57.0	22.0
	59397	9.00-10.00	1.00	0.095	0.60	37.0	118.0	5.0	47.0	20.0
	59398	10.00-11.00	1.00	0.105	0.20	37.0	127.0		49.0	20.0
	59399	11.00-12.00	1.00	0.160	0.40	41.0	114.0		49.0	18.0
	59400	12.00-13.00	1.00	2.190		45.0	167.0		47.0	30.0
	59401	13.00-14.00	1.00	0.110	0.40	46.0	189.0	10.0	40.0	56.0
	59402	14.00-15.00	1.00	0.675	0.40	54.0	186.0	15.0	63.0	24.0
	59403	15.00-16.00	1.00	4.060	1.20	58.0	1000.0	15.0	48.0	16.0
	59404	16.00-16.50	0.50	4.100		73.0	158.0	45.0	58.0	22.0
	59405	16.50-17.00	0.50	3.870	1.60	38.0	1526.0	45.0	51.0	24.0
	59406	17.00-17.50	0.50	0.130	3.40	86.0	4355.0		73.0	28.0
	59407	17.50-18.00	0.50	10.320	11.60	74.0		35.0	52.0	26.0
	59408	18.00-18.50	0.50	0.265	3.80	85.0	3325.0	40.0	78.0	28.0
	59409	18.50-19.00	0.50	1.970	0.20	104.0	324.0	35.0	88.0	28.0
	59410	19.00-20.00	1.00	0.125		41.0	163.0	10.0	66.0	22.0
	59411	20.00-21.00	1.00	0.930	2.40	72.0	1733.0	50.0	71.0	24.0
	59412	21.00-22.00	1.00	0.780	1.40	54.0	3751.0	60.0	55.0	42.0
	59413	22.00-23.00	1.00	0.210	3.00	64.0	7282.0	60.0	55.0	50.0
	59414	23.00-24.00	1.00	0.315		90.0	436.0	85.0	72.0	28.0
	59415	24.00-25.00	1.00	0.540	0.60	75.0	324.0	50.0	114.0	28.0
	59416	25.00-25.81	0.81	1.110		30.0	165.0	10.0	36.0	26.0
	59417	25.81-27.00	1.19	0.820		35.0	154.0	35.0	48.0	26.0
	59418	27.00-28.00	1.00	0.040		31.0	140.0	15.0	45.0	20.0
	59419	28.00-29.00	1.00	0.010		31.0	160.0	25.0	25.0	18.0
	59420	29.00-30.00	1.00	0.005		8.0	15.0		17.0	14.0
	59421	30.00-31.00	1.00	0.015		15.0	75.0	20.0	23.0	16.0
	59422	31.00-32.00	1.00	0.010		16.0	54.0	25.0	21.0	16.0
	59423	32.00-33.00	1.00	0.075	0.20	40.0	342.0	60.0	33.0	28.0
	59424	33.00-34.00	1.00	0.005		46.0	364.0	90.0	38.0	32.0
	59425	34.00-35.00	1.00	0.005		21.0	98.0	30.0	35.0	26.0
	59426	35.00-36.00	1.00	0.040	0.40	42.0	364.0	70.0	45.0	32.0
	59427	36.00-37.00	1.00	0.005		22.0	73.0	35.0	41.0	26.0
	59428	37.00-38.00	1.00	0.005		27.0	137.0	45.0	38.0	30.0
	59429	38.00-39.00	1.00	0.010		23.0	92.0	25.0	33.0	28.0
	59430	39.00-40.00	1.00	0.005		23.0	73.0	10.0	33.0	28.0
	59431	40.00-41.00	1.00	0.005		26.0	116.0	25.0	33.0	28.0
	59432	41.00-42.00	1.00	0.005		25.0	85.0	15.0	31.0	26.0
	59433	42.00-43.59	1.59	0.190		18.0	40.0	10.0	26.0	22.0

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-112

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-112	Date Completed:		Geotech by: MBW
LENGTH: 46.63	Core Diam: NQII		

Collar Location

Latitude:	2040.00
Departure:	1991.00
Elevation:	0.00

S U M M A R Y

0.00-18.00	volcaniclastics
18.00-32.40	volcaniclastics
32.40-46.63	volcaniclastics **

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-65.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	18.00	volcaniclastics	59434	0.31-1.00	0.69	0.005	0.20	16.0	51.0		24.0	18.0
		Fine grained, redish-green, heterolithic, mottled	59435	1.00-2.00	1.00	0.005	0.40	8.0	43.0	5.0	25.0	14.0
		cleavage, foliation 45°:hematite stringers 25°	59436	2.00-3.00	1.00	0.040	0.20	11.0	102.0		32.0	14.0
		Frs=8/m :Vns =25/m	59437	3.00-4.00	1.00	0.005		11.0	41.0		48.0	16.0
		Moderate SI patches	59438	4.00-5.00	1.00	0.005	0.40	11.0	80.0		50.0	20.0
		Strong CL pervasive	59439	5.00-6.00	1.00	0.010	0.40	11.0	117.0	5.0	35.0	16.0
		Strong KS pervasive	59440	6.00-7.00	1.00	0.005	0.40	10.0	99.0		35.0	16.0
		Moderate HE stockwork	59441	7.00-8.00	1.00	0.005		10.0	92.0	10.0	48.0	14.0
		Moderate QC microveins	59442	8.00-9.00	1.00	0.005	0.40	10.0	16.0		91.0	20.0
		Mottled red and green altered rock, local minor	59443	9.00-10.00	1.00	0.005	0.20	13.0	18.0		143.0	18.0
		hematite rich calcite veinlets, local intense K-spar	59444	10.00-11.00	1.00	0.010	0.20	12.0	23.0	15.0	148.0	18.0
		alteration/silcification to light green purple	59445	11.00-12.00	1.00	0.005	0.60	15.0	43.0		56.0	18.0
		sections.	59446	12.00-13.00	1.00	0.005		31.0	86.0		61.0	22.0
	<3.00-3.50>	Broken Core										
		Weak limonite on fractures.										
	<6.40-7.01>	Weak clay on fractures.										
	<14.30-14.94>	gougy sheeted	59447	13.00-14.00	1.00	0.095		50.0	59.0		153.0	24.0
		Lost core.										
	<16.00-17.67>	Broken Core	59448	14.00-15.00	1.00	0.130	0.40	90.0	51.0	20.0	98.0	24.0
		Limonite on fractures.	59449	15.00-16.00	1.00	0.275	0.60	60.0	306.0	10.0	44.0	18.0
18.00	32.40	volcaniclastics	59450	16.00-17.00	1.00	0.095	0.60	23.0	258.0	10.0	63.0	32.0
		Fine grained, redish-green, heterolithic, mottled	59451	17.00-18.00	1.00	0.005	0.80	31.0	1056.0	5.0	90.0	22.0
		cleavage, foliation 25°:hematite stringers 25°	59452	18.00-19.00	1.00	0.115	0.20	32.0	297.0	15.0	82.0	72.0
		Frs=5/m :Vns =30/m	59453	19.00-20.00	1.00	0.010	0.80	37.0	959.0	5.0	91.0	28.0
		Strong SI patches	59454	20.00-21.00	1.00	0.005		37.0	64.0		72.0	32.0
		Intense CL pervasive	59455	21.00-22.00	1.00	0.005		30.0	68.0	10.0	68.0	22.0
		Weak MT patches	59456	22.00-23.00	1.00	1.670		32.0	73.0		60.0	22.0
		Strong KS pervasive	59457	23.00-24.00	1.00	0.030		19.0	72.0	10.0	26.0	20.0
		Weak PY disseminated	59458	24.00-25.00	1.00	0.105		30.0	50.0		26.0	22.0
		Moderate QC microveins	59459	25.00-26.00	1.00	0.235	0.20	34.0	497.0	15.0	41.0	24.0
		H zone, generally weak zone with local areas of K-spar	59460	26.00-27.00	1.00	0.060		25.0	213.0		34.0	20.0
		alteration/silicification, chlorite streaming and	59461	27.00-28.00	1.00	0.005		36.0	106.0	5.0	49.0	56.0
		hematite veining, malachite staining at 25.20m.	59462	28.00-29.00	1.00	0.005		37.0	323.0		77.0	10.0
	<18.10-18.30>	massive hematite										
		Veined										
		Strong quartz/calcite veining.										
	<18.30-22.20>	Chlorite Streaming										
		Intense CL pervasive										
		Strong HE stockwork										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Intense chlorite with weak hematite wispy stringers.										
	<20.00-32.40>	cleavage, foliation 10°:cleavage, foliation 25°	59463	29.00-30.00	1.00	0.005		35.0	103.0	5.0	62.0	8.0
		Strong QC microveins	59464	30.00-31.00	1.00	0.005		35.0	83.0		74.0	10.0
		Intense chlorite with intense microveinlet stockwork	59465	31.00-32.00	1.00	0.035		43.0	227.0		101.0	22.0
		of quartz/calcite, minor clay along fractures.										
32.40	46.63	volcaniclastics	59466	32.00-33.00	1.00	0.215		24.0	67.0	5.0	58.0	16.0
		Fine grained, green, mottled, heterolithic	59467	33.00-34.00	1.00	0.005		14.0	25.0		35.0	4.0
		cleavage, foliation 10°:fracturing 25°	59468	34.00-35.00	1.00	0.005		11.0	31.0		35.0	4.0
		Frs=5/m	59469	35.00-36.00	1.00	0.005		17.0	55.0		33.0	6.0
		Moderate SI patches	59470	36.00-37.00	1.00	0.120		21.0	74.0		32.0	6.0
		Strong CL pervasive	59471	37.00-38.00	1.00	0.130		13.0	156.0		32.0	4.0
		Moderate KS pervasive	59472	38.00-39.00	1.00	0.005		12.0	16.0		32.0	4.0
		Weak HE patches	59473	39.00-40.00	1.00	0.005		14.0	15.0		33.0	4.0
		Moderate PY patches	59474	40.00-41.00	1.00	0.005		17.0	41.0		33.0	8.0
		Moderate QC microveins	59475	41.00-42.00	1.00	0.005		13.0	31.0		34.0	4.0
		Green highly crackled with minute calcite veinlets	59476	42.00-43.00	1.00	0.005		11.0	16.0		34.0	4.0
		alogn fractures.	59477	43.00-44.00	1.00	0.005		12.0	21.0		36.0	6.0
	<37.50-37.52>	MINERALIZATION- 50% pyrite.										
	<37.50-37.52>	semi-massive sulphides										
		MINERALIZATION- 50% pyrite.										
	<44.20-46.63>	Moderate MT patches	59478	44.00-45.00	1.00	0.015		35.0	102.0	25.0	75.0	8.0
		MINERALIZATION- 3% pyrite as local patches.	59479	45.00-46.63	1.63	0.045		32.0	160.0		73.0	10.0
	<44.20-46.63>	Chlorite Streaming										
		Intense CL pervasive										
		Moderate PY patches										
		Local hematite rich fragments in highly chloritic										
		zone. MINERALIZATION- 3% pyrite as local patches.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-113

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-113	Date Completed:		Geotech by: MBW
LENGTH: 69.49	Core Diam: NQII		

Collar Location

Latitude:	2040.00
Departure:	1991.00
Elevation:	0.00

S U M M A R Y

0.00-39.50	volcaniclastics
39.50-41.30	Semi-massive hematite
41.30-48.60	volcaniclastics
48.60-53.34	rubbly fault zone *
53.34-61.50	volcaniclastics
61.50-69.49	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-75.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	39.50	volcaniclastics	59480	0.00-1.00	1.00	0.005		15.0	162.0		27.0	12.0
		Fine grained, redish-green, mottled, heterolithic	59481	1.00-2.00	1.00	0.005		15.0	20.0		32.0	8.0
		cleavage, foliation 80°:fracturing 45°	59482	2.00-3.00	1.00	0.005		14.0	40.0		28.0	10.0
		Frs=6/m :Vns =20/m	59483	3.00-4.00	1.00	0.005		16.0	90.0		43.0	10.0
		Moderate SI patches	59484	4.00-5.00	1.00	0.005		10.0	71.0		29.0	10.0
		Strong CL pervasive	59485	5.00-6.00	1.00	0.005		12.0	28.0		87.0	8.0
		Strong KS pervasive	59486	6.00-7.00	1.00	0.005		12.0	26.0		77.0	6.0
		Moderate HE stockwork	59487	7.00-8.00	1.00	0.005		12.0	58.0		70.0	10.0
		Weak PY disseminated	59488	8.00-9.00	1.00	0.005		12.0	98.0		45.0	8.0
		Weak QC microveins	59489	9.00-10.00	1.00	0.005		12.0	34.0		55.0	8.0
		Variably mottled locally intense K-spar	59490	10.00-11.00	1.00	0.005		12.0	36.0		39.0	8.0
		altered/silcified at 5.80 to 6.30m., rock has strong	59491	11.00-12.00	1.00	0.005		13.0	53.0		33.0	8.0
		brecciated appearance with clasts up to 5cm. (clasts	59492	12.00-13.00	1.00	0.005		14.0	53.0		33.0	8.0
		are hronblende porphyry) in hematite matrix, 14.0 to	59493	13.00-14.00	1.00	0.005		14.0	44.0		35.0	8.0
		16.0m. strong hematite stockwork, 30.0 to 31.95m.	59494	14.00-15.00	1.00	0.085		81.0	41.0		39.0	10.0
		alteration along fractures giving psuedo breccia	59495	15.00-16.00	1.00	0.010		50.0	159.0		46.0	16.0
		appearance at 31.20, 2cm. wide zone of cavities with	59496	16.00-17.00	1.00	0.005		22.0	50.0		40.0	10.0
		fine calcite crystals plus traces of malachite.	59497	17.00-18.00	1.00	0.010		24.0	245.0		46.0	8.0
<31.95-39.50>		Fine grained, redish-green, mottled, stockwork	59498	18.00-19.00	1.00	0.335		83.0	73.0		101.0	20.0
		cleavage, foliation 80°:fracturing 45°	59499	19.00-20.00	1.00	0.145		51.0	125.0		83.0	12.0
		Frs=4/m :Vns =5/m	59500	20.00-21.00	1.00	0.060		52.0	79.0		70.0	14.0
		Moderate SI patches	59501	21.00-22.00	1.00	0.100		64.0	191.0		111.0	30.0
		Strong CL pervasive	59502	22.00-23.00	1.00	0.005		43.0	25.0		111.0	12.0
		Moderate KS pervasive	59503	23.00-24.00	1.00	0.130		34.0	155.0		97.0	12.0
		Moderate EP microveins	59504	24.00-25.00	1.00	0.155		34.0	618.0		95.0	14.0
		Weak HE stockwork	59505	25.00-26.00	1.00	0.005		37.0	118.0		116.0	14.0
		Weak PY disseminated	59506	26.00-27.00	1.00	0.005		38.0	223.0		119.0	18.0
		Moderate QV microveins	59507	27.00-28.00	1.00	0.345		31.0	191.0		192.0	12.0
		Moderate QC microveins	59508	28.00-29.00	1.00	0.260		68.0	330.0		234.0	12.0
		Generally weak hematite stockwork, strong	59509	29.00-30.00	1.00	0.075	0.80	57.0	643.0	15.0	259.0	10.0
		epidote/quartz veinlets stockwork, local strong K-spar	59510	30.00-31.00	1.00	0.010	1.80	23.0	1869.0		118.0	64.0
		alteratio/silicification, locally highly fractured	59511	31.00-32.00	1.00	0.020	3.40	28.0	4307.0	30.0	106.0	94.0
		with minute calcite stockwork.	59512	32.00-33.00	1.00	0.005		49.0	187.0		92.0	122.0
39.50	41.30	Semi-massive hematite	59513	33.00-34.00	1.00	0.005		40.0	193.0		84.0	16.0
		Fine grained, redish-green, veined	59514	34.00-35.00	1.00	0.005		43.0	49.0	10.0	70.0	14.0
		fracturing 45°:hematite stringers 45°	59515	35.00-36.00	1.00	0.005		42.0	51.0	10.0	75.0	16.0
		Frs=4/m :Vns =25/m	59516	36.00-37.00	1.00	0.005		41.0	65.0		73.0	18.0
		Strong SI patches	59517	37.00-38.00	1.00	0.030		63.0	331.0		66.0	36.0
		Strong CL pervasive	59518	38.00-39.00	1.00	0.005		44.0	93.0		65.0	22.0
		Strong KS pervasive	59519	39.00-39.50	0.50	0.005		34.0	52.0		75.0	16.0
		Strong HE stockwork	59520	39.50-40.00	0.50	0.525		42.0	814.0	5.0	92.0	20.0
		Weak QC microveins	59521	40.00-40.50	0.50	0.390		77.0	139.0	30.0	101.0	16.0
		H zone, generally narrow zone of massive hematite	59522	40.50-41.00	0.50	2.520		295.0	165.0	290.0	47.0	24.0
		stringers, highly K-spar altered/silcified zones plus										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		intense chlorite streaming.										
<40.98-41.30>		massive hematite										
		Veined										
		Intense HE vein										
41.30	48.60	volcaniclastics	59523	41.00-41.50	0.50	6.120		340.0	244.0	305.0	112.0	16.0
		Fine grained, green, heterolithic, foliated	59524	41.50-42.00	0.50	0.035		27.0	240.0		94.0	24.0
		foliated 15°:fracturing 45°	59525	42.00-43.00	1.00	0.475		94.0	347.0	40.0	86.0	32.0
		Frs=3/m	59526	43.00-44.00	1.00	1.180	0.60	248.0	574.0	190.0	208.0	26.0
		Moderate SI patches	59527	44.00-45.00	1.00	0.095	0.60	321.0	412.0	225.0	239.0	20.0
		Strong CL pervasive	59528	45.00-46.00	1.00	0.005		46.0	418.0	35.0	101.0	20.0
		Moderate KS pervasive	59529	46.00-47.00	1.00	0.005		43.0	239.0	10.0	75.0	18.0
		Moderate PY patches	59530	47.00-48.00	1.00	0.040		44.0	166.0	95.0	117.0	20.0
		Weak QC microveins										
		Locally strongly limonitic with malachite stain at										
		43.90 to 44.0m., zone appears to have been brecciated										
		with fragments of hematite rich calcite in very										
		chloritic section, narrow patches and veinlets of										
		pyrite. MINERALIZATION- 4% pyrite.										
48.60	53.34	rubbly fault zone	59531	48.00-49.00	1.00	0.135		30.0	141.0	60.0	96.0	16.0
		Fine grained, green, gouge	59532	49.00-50.00	1.00	0.180	0.40	38.0	146.0	145.0	84.0	16.0
		fault/gouge 10°	59533	50.00-51.00	1.00	0.705	2.40	71.0	319.0	765.0	121.0	30.0
		Intense CL pervasive	59534	51.00-52.00	1.00	1.570	3.00	270.0	487.0	225.0	155.0	20.0
		Strong PY patches	59535	52.00-53.00	1.00	1.110	0.80	229.0	129.0	80.0	183.0	10.0
		Extremely highly broken and abundant gouge, abundant										
		limonite in unweathered fragments. MINERALIZATION- 7%										
		coarse pyrite as patches, minor hematite fragments.										
<48.60-53.34>		?? MT patches										
		MINERALIZATION- 7% coarse pyrite as patches, minor										
		hematite fragments.										
53.34	61.50	volcaniclastics	59536	53.00-54.00	1.00	0.020	1.00	19.0	291.0	25.0	51.0	10.0
		Fine grained, green, mottled, heterolithic	59537	54.00-55.00	1.00	0.010	1.20	17.0	157.0		52.0	10.0
		fracturing 45°:foliated 15°	59538	55.00-56.00	1.00	0.005	1.00	16.0	96.0		51.0	18.0
		Frs=5/m :Vns =5/m	59539	56.00-57.00	1.00	0.005	0.40	18.0	124.0		54.0	16.0
		Strong SI pervasive	59540	57.00-58.00	1.00	0.005	0.40	25.0	132.0		69.0	10.0
		Strong CL pervasive	59541	58.00-59.00	1.00	0.005		23.0	80.0		62.0	10.0
		Strong KS pervasive	59542	59.00-60.00	1.00	0.040		26.0	65.0		81.0	14.0
		Moderate HE stockwork	59543	60.00-61.00	1.00	0.005	0.40	35.0	28.0	15.0	115.0	10.0
		Moderate PY patches										
		Weak QV vein										
		Moderate QC microveins										
		Generally strongly K-spar altered/silicified with										
		local bleaching to light gray/purple, local strong										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		pyrite along fractures, K-spar veinlets of calcite forming boxwork texture along veinlets.										
		<57.10-57.13> QUARTZ-CALCITE VEINS Vuggy										
		Vuggy.										
61.50	63.10	volcaniclastics	59544	61.00-62.50	1.50	0.065		25.0	83.0	10.0	110.0	12.0
		Fine grained, green, mottled, heterolithic	59545	62.50-64.00	1.50	0.005	0.40	19.0	83.0	10.0	119.0	18.0
		fracturing 45°:foliated 15°	59546	64.00-65.50	1.50	0.005		14.0	103.0		99.0	18.0
		Frs=3/m	59547	65.50-67.00	1.50	0.080		30.0	134.0	10.0	118.0	12.0
		Strong SI pervasive	59548	67.00-68.50	1.50	0.005		25.0	101.0		154.0	22.0
		Strong CL pervasive	59549	68.50-69.49	0.99	0.005	0.40	20.0	127.0	10.0	98.0	50.0
		Strong KS pervasive										
		Weak PY patches										
		Weak QV vein										
		Moderate QC microveins										
		Narrow K-spar veinlets along core axis from 63.50 to 64.60m., alteration to 2cm. wide along very narrow chlorite filled fractures.										
		<62.85-63.10>Zone of strong quartz/calcite veining to 0.5mm. and 10% of section, veinlets are vuggy.										
		<63.60-63.84> QUARTZ-CALCITE VEINS Vuggy.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-114

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-114	Date Completed:		Geotech by: MBW
LENGTH: 106.36	Core Diam: NQII		

Collar Location

Latitude:	2040.00
Departure:	1991.00
Elevation:	0.00

S U M M A R Y

0.00-37.80	volcaniclastics
37.80-68.50	volcaniclastics *
68.50-89.00	volcaniclastics *
89.00-106.36	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-85.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	37.80	volcaniclastics	59550	1.00-2.00	1.00	0.005		18.0	15.0		42.0	12.0
		Fine grained, redish-green, mottled, heterolithic	59551	2.00-3.00	1.00	0.005		14.0	89.0		40.0	14.0
		cleavage, foliation 45°:fracturing 45°	59552	3.00-4.00	1.00	0.035		13.0	77.0		27.0	46.0
		Frs=7/m :Vns =30/m	59553	4.00-5.00	1.00	0.005		15.0	47.0	5.0	40.0	10.0
		Moderate SI patches	59554	5.00-6.00	1.00	0.005		16.0	19.0		33.0	10.0
		Strong CL pervasive	59555	6.00-7.00	1.00	0.005		15.0	20.0		32.0	10.0
		Strong KS pervasive	59556	7.00-8.00	1.00	0.005		12.0	45.0		28.0	10.0
		Strong HE stockwork	59557	8.00-9.00	1.00	0.010		15.0	34.0		33.0	12.0
		Weak PY disseminated	59558	9.00-10.00	1.00	0.055		15.0	34.0	5.0	34.0	12.0
		Weak QC microveins	59559	10.00-11.00	1.00	0.065		15.0	84.0		34.0	14.0
		Strong hematite/chlorite alteration, local strong	59560	11.00-12.00	1.00	0.010		11.0	21.0		27.0	10.0
		K-spar alteration/silcification, locally intensely	59561	12.00-13.00	1.00	0.010		13.0	75.0		26.0	14.0
		fractured veining and stockwork.	59562	13.00-14.00	1.00	0.005		13.0	121.0		29.0	10.0
<15.10-15.70>		Broken Core	59563	14.00-15.00	1.00	0.015		13.0	180.0		31.0	12.0
<22.50-23.00>		calcite vein	59564	15.00-16.00	1.00	0.025		12.0	53.0		42.0	10.0
		Approximately 30% calcite veining with chlorite	59565	16.00-17.00	1.00	0.010		11.0	38.0		30.0	10.0
		fragments in calcite, largest vein to 2.5cm.	59566	17.00-18.00	1.00	0.020		12.0	90.0		27.0	10.0
<23.50-25.45>		Broken Core	59567	18.00-19.00	1.00	0.005		15.0	48.0		33.0	12.0
		Limonitic on fractures.	59568	19.00-20.00	1.00	0.015		14.0	37.0		37.0	12.0
<24.38-25.00>		volcaniclastics	59569	20.00-21.00	1.00	0.005		16.0	107.0		36.0	10.0
		Fine grained, vuggy	59570	21.00-22.00	1.00	0.005		25.0	100.0		70.0	14.0
		Strong SI patches	59571	22.00-23.00	1.00	0.010		32.0	24.0		136.0	18.0
		Intense KS pervasive	59572	23.00-24.00	1.00	0.010		37.0	166.0		156.0	18.0
		Bleached red green, brecciated with vuggy vein filled	59573	24.00-25.00	1.00	0.025	1.60	17.0	1184.0		57.0	10.0
		with small calcite crystals, minor malachite on										
		fractures, section appears highly K-spar										
		altered/silicified.										
<33.15-33.20>		calcite vein	59574	25.00-26.00	1.00	0.005	1.60	36.0	1359.0		109.0	18.0
		Chlorite inclusions in vein.	59575	26.00-27.00	1.00	0.005		36.0	152.0		86.0	20.0
<33.20-36.12>		Broken Core	59576	27.00-28.00	1.00	0.005		36.0	145.0		107.0	16.0
		Limonitic on fractures.	59577	28.00-29.00	1.00	0.005		29.0	110.0		84.0	16.0
<36.50-37.00>		Limonitic on fractures.	59578	29.00-30.00	1.00	0.010		38.0	375.0		199.0	18.0
37.80	68.50	volcaniclastics	59579	30.00-31.00	1.00	0.010	1.00	39.0	1219.0		84.0	22.0
		Fine grained, green, mottled, heterolithic	59580	31.00-32.00	1.00	0.015	0.20	33.0	547.0		106.0	20.0
		fracturing 45°:cleavage, foliation 35°	59581	32.00-33.00	1.00	0.015		14.0	139.0		58.0	12.0
		Frs=6/m	59582	33.00-34.00	1.00	0.065	0.40	25.0	372.0		119.0	14.0
		Moderate SI patches	59583	34.00-35.00	1.00	0.005		27.0	119.0		119.0	14.0
		Strong CL pervasive	59584	35.00-36.00	1.00	0.005		22.0	147.0		89.0	16.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate KS pervasive	59585	36.00-37.00	1.00	0.005	1.80	20.0	669.0		86.0	68.0
		Moderate PY microveins	59586	37.00-38.00	1.00	0.090	0.80	19.0	1540.0		89.0	28.0
		Weak QV vein	59587	38.00-39.00	1.00	0.010	0.40	16.0	102.0	5.0	73.0	62.0
		Weak QC microveins	59588	39.00-40.00	1.00	0.015	0.60	12.0	136.0	20.0	55.0	94.0
		Locally K-spar altered/silicified, locally vuggy along	59589	40.00-41.00	1.00	0.040	0.80	13.0	200.0	15.0	80.0	14.0
		carbonate filled fractures, pyrite occurs as patches	59590	41.00-42.00	1.00	0.040	0.40	9.0	75.0	5.0	42.0	14.0
		and as fine fracture filling, local strong wispy	59591	42.00-43.00	1.00	0.075	0.20	12.0	63.0		36.0	16.0
		chlorite stringers (black) as selvages to sulphide	59592	43.00-44.00	1.00	0.020		15.0	90.0		39.0	16.0
		stringers.	59593	44.00-45.00	1.00	0.025		11.0	61.0		37.0	12.0
<38.50-39.00>		Broken Core										
<39.50-41.80>		rubbly fault zone										
		sheeting 40°										
		Highly broken with clay on fractures at 40.90 to										
		41.80m. poor recovery with fault gouge, minor limonite										
		on fractures.										
<39.55-39.58>		calcite vein										
<41.20-42.75>		volcaniclastics										
		Intense KS pervasive										
		High K-spar altered fragments to 60% in black chlorite										
		matrix, minor hematite rich fragments, fragments vary										
		from angular to rounded.										
<43.00-66.00>		Strong SI patches	59594	45.00-46.00	1.00	0.005		9.0	27.0		54.0	14.0
		Strong CL pervasive	59595	46.00-47.00	1.00	0.025	0.20	9.0	62.0		35.0	10.0
		Strong KS pervasive	59596	47.00-48.00	1.00	0.010		8.0	20.0		33.0	12.0
		Moderate PY microveins	59597	48.00-49.00	1.00	0.015	0.80	15.0	74.0	10.0	30.0	12.0
		Locally vuggy along fractures, minor limonite strong	59598	49.00-50.00	1.00	0.015	1.00	31.0	61.0		34.0	10.0
		fractures, local strong K-spar	59599	50.00-51.00	1.00	0.010	0.40	18.0	46.0	10.0	39.0	12.0
		alteration/silicification.	59600	51.00-52.00	1.00	0.020	0.20	23.0	67.0		31.0	12.0
<62.30-68.50>		Moderate MT vein	59601	52.00-53.00	1.00	0.015	0.40	12.0	39.0		57.0	28.0
		MINERALIZATION- 3% pyrite as fine veinlets, minor	59602	53.00-54.00	1.00	0.020		11.0	63.0		37.0	16.0
		hematite.	59603	54.00-55.00	1.00	0.010	0.60	12.0	56.0	10.0	31.0	20.0
<62.30-68.50>		volcaniclastics	59604	55.00-56.00	1.00	0.030	0.60	16.0	102.0	15.0	41.0	32.0
		Mottled	59605	56.00-57.00	1.00	0.015	0.40	14.0	67.0		40.0	20.0
		Moderate SI patches	59606	57.00-58.00	1.00	0.010		13.0	66.0	5.0	34.0	18.0
		Strong CL pervasive	59607	58.00-59.00	1.00	0.015		13.0	69.0		41.0	16.0
		Strong KS pervasive	59608	59.00-60.00	1.00	0.015	0.40	14.0	76.0		50.0	24.0
		Weak HE stockwork	59609	60.00-61.00	1.00	0.005		11.0	56.0		38.0	16.0
		Moderate PY microveins	59610	61.00-62.00	1.00	0.005		11.0	48.0		38.0	12.0
		Strong K-spar alteration to locally pink to tan	59611	62.00-63.00	1.00	0.030	0.60	29.0	74.0	15.0	35.0	14.0
		colour. MINERALIZATION- 3% pyrite as fine veinlets,	59612	63.00-64.00	1.00	0.005	0.40	15.0	55.0		67.0	18.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	minor hematite.	59613	64.00-65.00	1.00	0.010	0.60	26.0	138.0		88.0	20.0
<68.50-89.00>	Fine grained, redish-green, mottled, foliated	59614	65.00-66.00	1.00	0.005		17.0	75.0		61.0	14.0
	hematite stringers 10°:fracturing 10°	59615	66.00-67.00	1.00	0.020	1.00	15.0	76.0	5.0	40.0	24.0
	Frs=5/m :Vns =35/m	59616	67.00-68.00	1.00	0.005		21.0	51.0		60.0	16.0
	Moderate SI patches	59617	68.00-69.00	1.00	0.120	0.40	52.0	150.0	35.0	61.0	36.0
	Strong CL pervasive	59618	69.00-70.00	1.00	0.405		77.0	152.0	30.0	93.0	12.0
	Moderate MT patches	59619	70.00-71.00	1.00	3.670		46.0	120.0	10.0	88.0	14.0
	Moderate KS pervasive	59620	71.00-72.00	1.00	1.270		64.0	150.0	20.0	62.0	18.0
	Strong HE stockwork	59621	72.00-73.00	1.00	0.170		27.0	52.0		64.0	26.0
	Moderate PY vein	59622	73.00-74.00	1.00	0.010		11.0	16.0		45.0	20.0
	Moderate QC microveins	59623	74.00-75.00	1.00	0.015		12.0	72.0		41.0	18.0
	H zone, generally weak H zone with several areas of	59624	75.00-76.00	1.00	0.005		11.0	62.0		46.0	14.0
	narrow hematite/magnetite veinlets, streaming and	59625	76.00-77.00	1.00	0.250		23.0	98.0	5.0	95.0	22.0
	local strong K-spar/silcification.	59626	77.00-78.00	1.00	1.870	1.00	20.0	106.0	5.0	103.0	52.0
<69.00-69.20>	Strong SI patches										
	Strong CL pervasive										
	Intense KS pervasive										
	Light purple to red K-spar altered, minute fine										
	calcite veinlets along numerous tension fractures.										
<70.90-70.95>	massive hematite										
	Veined										
	Intense MT patches										
	Intense HE vein										
	Strong K-spar selvages up to 3cm. on wall of vein.										
<71.60-71.63>	vein 10°										
	Moderate MT patches										
	Intense HE vein										
<72.40-72.80>	volcaniclastics										
	Strong K-spar alteration along zones up to 4cm. at 10										
	degrees to core axis, strong tension fracturing alogn										
	zones with black chlorite wisps along selvages.										
<77.70-78.00>	0.5mm. blood red hematite stringer at 10 degrees to										
	core axis.										
<79.25-79.80>	MINERALIZATION- 5% pyrite.	59627	78.00-79.00	1.00	0.030		18.0	60.0		82.0	16.0
<79.25-79.80>	volcaniclastics										
	Moderate PY microveins										
	Very fine closely spared pyrite veinlets alogn										
	fractures. MINERALIZATION- 5% pyrite.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<81.00-81.40>Same as 77.70 to 78.0m.	59628	79.00-80.00	1.00	0.120	0.40	24.0	182.0		90.0	14.0
		<87.95-88.05> Semi-massive hematite	59629	80.00-81.00	1.00	0.370	0.20	19.0	92.0	15.0	76.0	12.0
		Strong MT patches	59630	81.00-82.00	1.00	0.430	0.20	36.0	107.0	20.0	63.0	12.0
		Intense HE vein	59631	82.00-83.00	1.00	0.080		46.0	119.0	40.0	64.0	10.0
		<88.00-89.00> Chlorite Streaming	59632	83.00-84.00	1.00	0.245	0.40	83.0	208.0	80.0	73.0	16.0
		Intense CL pervasive	59633	84.00-85.00	1.00	0.005	0.20	30.0	140.0	25.0	83.0	18.0
		Strong HE patches	59634	85.00-86.00	1.00	0.005		21.0	94.0	20.0	62.0	12.0
		Strong PY vein	59635	86.00-87.00	1.00	0.005		46.0	98.0	45.0	83.0	12.0
		Very strong black chlorite with patchy hematite and	59636	87.00-87.95	0.95	0.005		197.0	333.0	210.0	139.0	10.0
		sparse pyrite.	59637	87.95-89.00	1.05	1.980	0.80	551.0	646.0	680.0	135.0	18.0
		<88.50-88.60> semi-massive sulphides										
		Several 1cm. wide pyrite veins with 30% hematite.										
89.00	106.36	volcaniclastics	59638	89.00-90.00	1.00	0.020		74.0	161.0	100.0	51.0	26.0
		Fine grained, green, mottled, heterolithic	59639	90.00-91.00	1.00	0.015		34.0	117.0	50.0	44.0	14.0
		fracturing 45°:cleavage, foliation 45°	59640	91.00-92.00	1.00	0.060		15.0	50.0	20.0	48.0	20.0
		Frs=6/m	59641	92.00-93.00	1.00	0.005	0.20	8.0	31.0	10.0	42.0	12.0
		Moderate SI patches	59642	93.00-94.00	1.00	0.005	0.20	57.0	78.0	70.0	56.0	14.0
		Moderate CL pervasive	59643	94.00-95.00	1.00	0.010	0.20	102.0	109.0	130.0	65.0	16.0
		Moderate KS pervasive										
		Weak HE patches										
		Moderate PY microveins										
		Strong QC microveins										
		Green mottled with wispy black chlorite microveins										
		from 0 to 10 degrees to core axis, local strong										
		calcite veining, minor K-spar alteration along 1cm.										
		zones at 10 degrees to core axis. MINERALIZATION- 2%										
		pyrite as patches and fine veinlets.										
		<89.00-106.36> Weak MT patches										
		MINERALIZATION- 2% pyrite as patches and fine										
		veinlets.										
		<92.40-92.45> calcite vein										
		<94.50-94.52> gougy sheeted										
		sheeting 45°										
		(eoh)										

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-115

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-115	Date Completed:		Geotech by: MBW
LENGTH: 23.17	Core Diam: NQII		

Collar Location

Latitude:	2032.00
Departure:	1987.00
Elevation:	0.00

S U M M A R Y

0.00-17.30	volcaniclastics
17.30-19.63	volcaniclastics
19.63-23.17	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-45.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	17.30	volcaniclastics	59644	1.00-2.00	1.00	0.005		11.0	18.0		48.0	14.0
		Fine grained, redish-green, heterolithic, mottled	59645	2.00-3.00	1.00	0.005		13.0	77.0		44.0	14.0
		cleavage, foliation 45°:fracturing 45°	59646	3.00-4.00	1.00	0.005		14.0	86.0		47.0	14.0
		Frs=5/m :Vns =10/m	59647	4.00-5.00	1.00	0.005						6.0
		Moderate SI patches	59648	5.00-6.00	1.00	0.005		12.0	49.0		44.0	12.0
		Strong CL pervasive	59649	6.00-7.00	1.00	0.005		12.0	14.0		36.0	12.0
		Moderate KS pervasive	59650	7.00-8.00	1.00	0.005		12.0	17.0	10.0	39.0	12.0
		Moderate HE stockwork	59651	8.00-9.00	1.00	0.005		11.0	43.0		28.0	10.0
		Moderate QC microveins	59652	9.00-10.00	1.00	0.005		13.0	109.0		41.0	12.0
		Variably chlorite/hematite altered as well as locally	59653	10.00-11.00	1.00	0.005		14.0	227.0		41.0	12.0
		K-spar altered/silicified, local strong quartz/calcite	59654	11.00-12.00	1.00	0.005		14.0	91.0		103.0	12.0
		stockwork, narrow calcite/chlorite veinlets generally	59655	12.00-13.00	1.00	0.010		12.0	24.0		110.0	10.0
		2mm. throughout section, K-spar altered sections are	59656	13.00-14.00	1.00	0.080		21.0	49.0	10.0	125.0	14.0
		generally distinct light red to purple with strong	59657	14.00-15.00	1.00	0.065		14.0	34.0		123.0	12.0
		tension fracturing and subsequent calcite infusion.	59658	15.00-16.00	1.00	0.250		31.0	37.0	20.0	169.0	14.0
<11.16-11.17>		massive hematite										
<11.50-13.00>		volcaniclastics										
		Foliated										
		Hematite stringers foliated at 45 degrees to core										
		axis.										
<17.30-19.63>		Fine grained, redish-green, stockwork	59659	16.00-17.00	1.00	0.650		55.0	307.0	15.0	126.0	20.0
		cleavage, foliation 45°:fracturing 45°	59660	17.00-18.00	1.00	0.370		100.0	280.0	60.0	170.0	14.0
		Moderate SI patches	59661	18.00-19.00	1.00	0.195		29.0	110.0		99.0	12.0
		Moderate CL pervasive	59662	19.00-19.63	0.63	14.220		26.0	239.0	50.0	36.0	8.0
		Moderate KS pervasive										
		Strong HE stockwork										
		Moderate QC microveins										
		H zone, weak zone with K-spar alteration along minute										
		calcite/chlorite veinlets (as selvages), minor narrow										
		calcite/chlorite veinlets to 2mm.										
<19.25-19.50>		Semi-massive hematite										
		Intense HE vein										
		Patches and massive hematite veins to 2cm. wide.										
19.63	23.17	volcaniclastics	59663	19.63-21.00	1.37	0.055		34.0	132.0	20.0	61.0	10.0
		Fine grained, green, mottled, heterolithic	59664	21.00-22.00	1.00	0.030		30.0	102.0	15.0	48.0	6.0
		cleavage, foliation 45°:fracturing 35°	59665	22.00-23.17	1.17	0.025		36.0	152.0	15.0	50.0	6.0
		Frs=5/m										
		Weak SI patches										
		Strong CL pervasive										
		Weak KS pervasive										
		Weak HE stockwork										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Moderate PY patches Strong QC microveins Strongly chloritic, highly crackled with abundant calcite veining as fracture filling, minor local hematite. MINERALIZATION- 3% pyrite as patches.										
<19.63-23.17>	Moderate MT patches MINERALIZATION- 3% pyrite as patches.										
(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-116

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-116	Date Completed:		Geotech by: MBW
LENGTH: 48.84	Core Diam: 0NQI		

Collar Location

Latitude:	2032.00
Departure:	1987.00
Elevation:	0.00

S U M M A R Y

0.00-23.18	volcaniclastics *
23.18-40.84	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-55.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	23.18	volcaniclastics	59666	1.00-2.00	1.00	0.020		10.0	18.0		40.0	6.0
		Fine grained, redish-green, heterolithic, mottled	59667	2.00-3.00	1.00	0.010		9.0	92.0		39.0	6.0
		fracturing 35°:cleavage, foliation 80°	59668	3.00-4.00	1.00	0.015		9.0	48.0		36.0	6.0
		Frs=4/m :Vns =25/m	59669	4.00-5.00	1.00	0.020		9.0	153.0		32.0	8.0
		Moderate SI patches	59670	5.00-6.00	1.00	0.010		10.0	51.0		36.0	6.0
		Moderate CL pervasive	59671	6.00-7.00	1.00	0.015		8.0	186.0		31.0	16.0
		Moderate KS pervasive	59672	7.00-8.00	1.00	0.020		9.0	145.0		33.0	12.0
		Strong HE stockwork	59673	8.00-9.00	1.00	0.015		11.0	25.0		33.0	6.0
		Strong QC microveins	59674	9.00-10.00	1.00	0.030		6.0	85.0		27.0	4.0
		Mottled red green, local intense microveinlets	59675	10.00-11.00	1.00	0.015		9.0	142.0		30.0	6.0
		stockwork of calcite, patchy wispy chlorite stringers	59676	11.00-12.00	1.00	0.030	0.60	12.0	598.0		32.0	6.0
		to 1mm., minor limonite on fractures.	59677	12.00-13.00	1.00	0.050		16.0	106.0		31.0	4.0
<18.90-23.18>		Fine grained, redish-green, stockwork	59678	13.00-14.00	1.00	0.035		12.0	72.0		38.0	4.0
		hematite stringers 35°:fracturing 35°	59679	14.00-15.00	1.00	0.020		11.0	69.0		41.0	6.0
		Frs=4/m :Vns =40/m	59680	15.00-16.00	1.00	0.010		11.0	61.0		49.0	6.0
		Moderate SI patches	59681	16.00-17.00	1.00	0.045		27.0	262.0		71.0	8.0
		Strong CL pervasive	59682	17.00-18.00	1.00	0.035		26.0	121.0	10.0	55.0	46.0
		Weak MT patches	59683	18.00-19.00	1.00	0.025		42.0	88.0	15.0	69.0	8.0
		Moderate KS pervasive	59684	19.00-20.00	1.00	0.060	0.40	130.0	1410.0	30.0	124.0	8.0
		Strong HE stockwork	59685	20.00-21.00	1.00	0.050		28.0	313.0		53.0	4.0
		Strong QC microveins	59686	21.00-22.00	1.00	0.170	1.20	38.0	2327.0	10.0	70.0	8.0
		H zone, weak zone with patches of hematite, minor	59687	22.00-23.18	1.18	14.300	0.80	75.0	1188.0	25.0	90.0	60.0
		strong chloritic zones and massive sulphide at										
		19.60m., strong slickenslides at 65 degrees to										
		fractures at 10 degrees to core axis, minor malachite										
		at 19.65m.										
<23.00-23.18>		MINERALIZATION- 6% pyrite, 5% magnetite.										
<23.00-23.18>		massive sulphide and hematite										
		Veined										
		Intense MT patches										
		Intense PY vein										
		Very magnetic. MINERALIZATION- 6% pyrite, 5%										
		magnetite.										
23.18	40.84	volcaniclastics	59688	23.18-24.00	0.82	0.560		39.0	266.0	35.0	103.0	28.0
		Fine grained, green, heterolithic, foliated	59689	24.00-25.00	1.00	0.040		42.0	300.0	25.0	49.0	10.0
		cleavage, foliation 35°:fracturing 35°	59690	25.00-26.00	1.00	0.020		38.0	250.0	30.0	55.0	14.0
		Frs=4/m	59691	28.00-29.00	1.00	0.025		33.0	96.0	80.0	257.0	18.0
		Moderate SI patches	59692	29.00-30.50	1.50	0.030		31.0	96.0	45.0	124.0	14.0
		Moderate CL pervasive	59693	30.50-32.00	1.50	0.035		33.0	118.0	25.0	121.0	12.0
		Moderate KS pervasive	59694	32.00-33.50	1.50	0.055		36.0	106.0	15.0	105.0	12.0
		Moderate HE wispy	59695	33.50-35.00	1.50	0.050		40.0	136.0	40.0	51.0	14.0
		Weak PY disseminated	59696	35.00-36.50	1.50	0.160		39.0	129.0	30.0	50.0	14.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Strong QC microveins	59697	36.50-38.00	1.50	0.100		25.0	72.0	15.0	48.0	10.0
		Locally strongly chloritic, foliated at 35 degrees to	59698	38.00-39.50	1.50	0.060		39.0	146.0	40.0	64.0	12.0
		core axis, local 1cm. calcite veinlets, local strong	59699	39.50-40.84	1.34	0.055		38.0	165.0	35.0	53.0	10.0
		K-spar alteration/silcification section is very										
		calcareous.										
<33.00-37.50>		Chlorite Streaming										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-117

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-117	Date Completed:		Geotech by: MBW
LENGTH: 48.77	Core Diam: NQII		

Collar Location

Latitude:	2032.00
Departure:	1987.00
Elevation:	0.00

S U M M A R Y

0.00-24.50	volcaniclastics
24.50-41.10	volcaniclastics *
41.10-48.77	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-65.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	24.50	volcaniclastics	59700	2.00-3.00	1.00	0.015	0.40	11.0	361.0	5.0	45.0	14.0
		Fine grained, redish-green, heterolithic, wispy	59701	3.00-4.00	1.00	0.025		11.0	33.0		39.0	14.0
		cleavage, foliation 45°:fracturing 45°	59702	4.00-5.00	1.00	0.040		10.0	266.0		54.0	12.0
		Frs=5/m :Vns =15/m	59703	5.00-6.00	1.00	0.035		8.0	73.0		52.0	14.0
		Moderate SI patches	59704	6.00-7.00	1.00	0.030		11.0	57.0		82.0	12.0
		Moderate CL pervasive	59705	7.00-8.00	1.00	0.060		12.0	85.0		79.0	14.0
		Moderate KS pervasive	59706	8.00-9.00	1.00	0.110		14.0	62.0	5.0	56.0	10.0
		Weak EP patches	59707	9.00-10.00	1.00	0.045		11.0	14.0		47.0	10.0
		Weak HE stockwork	59708	10.00-11.00	1.00	0.135		13.0	14.0		41.0	8.0
		Weak PY disseminated	59709	11.00-12.00	1.00	0.075		14.0	115.0		49.0	10.0
		Moderate QC microveins	59710	12.00-13.00	1.00	0.030		14.0	25.0		37.0	10.0
		Variably mottled red/green with local strong calcite	59711	13.00-14.00	1.00	0.040		13.0	94.0		38.0	10.0
		stockwork, minor epidote at 5.70m., variably altered	59712	14.00-15.00	1.00	0.010		14.0	25.0		36.0	4.0
		along fractures to give psuedo breccia appearance.	59713	15.00-16.00	1.00	0.015		11.0	190.0		30.0	12.0
<16.30-16.56>		gougy sheeted										
		Gouge										
		gouge 15°										
		Abundant gouge, slickenslides at 15 degrees to core										
		axis, abundant sheared hematite along shear.										
<17.10-17.40>		Broken Core	59714	16.00-17.00	1.00	0.035		27.0	144.0	15.0	82.0	12.0
<17.90-21.03>		Bleached altered section, vuggy along quartz/calcite	59715	17.00-18.00	1.00	0.025		33.0	324.0	20.0	94.0	10.0
		veinlets, abundant limonite on all fractures.	59716	18.00-19.00	1.00	0.020	0.40	18.0	354.0	25.0	47.0	12.0
<19.90-20.01>		Quartz/chlorite vein	59717	19.00-20.00	1.00	0.010	0.80	23.0	127.0	30.0	75.0	12.0
		Quartz with abundant chlorite, vuggy.										
<20.12-21.03>		Rusty bands to 5mm. wide inclusion, presence of	59718	20.00-21.00	1.00	0.030	1.00	46.0	216.0	25.0	179.0	10.0
		weathered sulphides.										
<20.32-21.10>		Broken Core										
		Poor recovery, minor limonite and malachite on										
		weathered surfaces.										
<21.10-21.30>		calcite vein										
		2cm. wide vein sub parallel to core axis.										
24.50	41.10	volcaniclastics	59719	21.00-22.00	1.00	0.015		46.0	332.0	30.0	64.0	60.0
		Fine grained, redish-green, heterolithic, wispy	59720	22.00-23.00	1.00	0.030		53.0	187.0	50.0	57.0	68.0
		foliated 25°:cleavage, foliation 45°	59721	23.00-24.00	1.00	0.010		44.0	170.0	170.0	63.0	30.0
		Frs=5/m :Vns =30/m	59722	24.00-25.00	1.00	0.050		40.0	116.0	100.0	81.0	14.0
		Moderate SI patches	59723	25.00-26.00	1.00	0.015		38.0	98.0	80.0	101.0	16.0
		Strong CL pervasive	59724	26.00-27.00	1.00	0.015		39.0	109.0	55.0	96.0	8.0
		Strong KS pervasive	59725	27.00-28.00	1.00	0.060		43.0	272.0	20.0	68.0	14.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Strong HE stockwork	59726	28.00-29.00	1.00	0.040		36.0	322.0	5.0	61.0	8.0
		Moderate PY microveins	59727	29.00-30.00	1.00	0.030		39.0	180.0	10.0	58.0	8.0
		Strong QC microveins	59728	30.00-31.00	1.00	0.015		38.0	116.0	5.0	55.0	12.0
		H zone generally rich and weak zone incuding locally	59729	31.00-32.00	1.00	0.025		35.0	112.0	5.0	54.0	8.0
		abundant hematite areas of very strong chlorite as	59730	32.00-33.00	1.00	0.020		39.0	52.0		57.0	10.0
		well as sections of strong K-spar	59731	33.00-34.00	1.00	0.025		35.0	95.0		56.0	8.0
		alteration/silicification, aone is generally darker in	59732	34.00-35.00	1.00	0.005		41.0	170.0		55.0	10.0
		colour than surrounding rocks. MINERALIZATION- 4%	59733	35.00-36.00	1.00	0.010		34.0	137.0	10.0	81.0	10.0
		local abundant pyrite as fine veinlets and patches.	59734	36.00-37.00	1.00	0.090	0.20	28.0	622.0	20.0	113.0	10.0
<24.50-41.10>		Strong MT vein	59735	37.00-38.00	1.00	0.110	1.00	41.0	1270.0	20.0	165.0	12.0
		MINERALIZATION- 4% local abundant pyrite as fine	59736	38.00-39.00	1.00	0.055	1.00	19.0	2649.0	70.0	56.0	10.0
		veinlets and patches.	59737	39.00-40.00	1.00	0.015		41.0	130.0		57.0	12.0
<26.00-36.00>		Chlorite Streaming										
		Fine grained, green, foliated										
		foliated 45°										
		Abundant chlorite with minor hematite, shows breccia										
		features with clats of K-spar altered material at										
		29.30 to 30.20m., narrow fractures filled with										
		marcasite to 6%.										
<36.50-37.50>		Strongly K-spar altered, the fractures with black										
		chlorite along fracturing.										
<38.61-38.63>		semi-massive sulphides										
		Intense PY vein										
<39.10-40.50>		Strong K-spar alteration with patches of red blood										
		hematite.										
41.10	48.77	volcaniclastics	59738	40.00-41.00	1.00	0.160		46.0	56.0	15.0	76.0	10.0
		Fine grained, green, heterolithic, mottled	59739	41.00-42.00	1.00	0.010		42.0	109.0		86.0	14.0
		cleavage, foliation 15°:foliated 45°	59740	42.00-43.00	1.00	0.005		42.0	109.0		88.0	14.0
		Frs=4/m	59741	43.00-44.00	1.00	0.010		46.0	226.0	15.0	89.0	14.0
		Strong SI patches	59742	44.00-45.00	1.00	0.045	1.40	52.0	285.0	15.0	111.0	22.0
		Strong CL pervasive	59743	45.00-46.00	1.00	0.010	0.20	23.0	97.0	15.0	75.0	16.0
		Strong KS pervasive	59744	46.00-47.00	1.00	0.040		20.0	99.0		95.0	12.0
		Weak HE stockwork	59745	47.00-48.00	1.00	0.010		38.0	132.0	20.0	80.0	18.0
		Weak PY patches	59746	48.00-48.77	0.77	0.005		27.0	167.0	10.0	102.0	12.0
		Moderate QC microveins										
		Locally bleached and vuggy, narrow 1cm. quartz/pyrite										
		vein at 44.50m., at 45.50 to 46.0m., strongly										
		silicified, vuggy.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-118

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-118	Date Completed:		Geotech by: MBW
LENGTH: 67.50	Core Diam: NQII		

Collar Location

Latitude:	2032.00
Departure:	1987.00
Elevation:	0.00

S U M M A R Y

0.00-31.30	volcaniclastics
31.30-50.29	volcaniclastics
50.29-67.05	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-75.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	31.30	volcaniclastics	59747	28.00-29.00	1.00	0.035		23.0	122.0		53.0	16.0
		Fine grained, redish-green, heterolithic, stockwork	59748	29.00-30.00	1.00	0.180		37.0	126.0		70.0	14.0
		cleavage, foliation 45°:fracturing 45°	59749	30.00-31.30	1.30	0.010		31.0	103.0		60.0	18.0
		Frs=7/m :Vns =20/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS patches										
		Weak EP pervasive										
		Moderate HE stockwork										
		Weak PY disseminated										
		Moderate QC microveins										
		Variably mottled local calcite/chlorite veinlets from										
		2 to 3mm., local bronze coloured biotite, local strong										
		K-spar alteration/silicification, limonite on										
		fractures, local strong breccia textures.										
	<10.10-10.67>	gougy sheeted										
		Gouge										
		gouge 15°										
		Poor recovery, clay rock gouge on upper contact,										
		abundant limonite.										
	<15.05-15.10>	calcite vein										
		Bedded										
		bedding 20°										
		Abundant chlorite as bands.										
	<15.85-15.90>	bedding 65°										
		Moderate KS microveins										
		Banded with chlorite and epidote.										
	<21.15-21.30>	30% calcite/chlorite/epidote.										
	<22.00-24.00>	volcaniclastics										
		Narrow 5mm. epidote/calcite/chlorite veinlets to 10%,										
		section has also strong calcite/chlorite veinlets.										
	<26.03-26.07>	calcite vein										
		Bedded										
		bedding 70°										
		50% chlorite as bands.										
	<29.50-31.30>	volcaniclastics										
		fracturing 15°										
		Weak broken, limonite on fractures.										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<31.30-50.29>	vein 70°:fracturing 15°	59750	31.30-32.00	0.70	0.010		34.0	87.0		56.0	14.0
	Frs=8/m :Vns =30/m	57851	32.00-33.00	1.00	0.020		29.0	200.0	35.0	41.0	4.0
	Moderate SI patches	57852	33.00-34.00	1.00	0.015		22.0	125.0		36.0	
	Strong CL pervasive	57853	34.00-35.00	1.00	0.010		22.0	124.0		33.0	2.0
	Strong KS pervasive	57854	35.00-36.00	1.00	0.020		29.0	169.0		57.0	6.0
	Strong HE stockwork	57855	36.00-37.00	1.00	0.005		27.0	119.0		39.0	2.0
	Moderate PY vein	57856	37.00-38.00	1.00	0.010		25.0	181.0		41.0	4.0
	Moderate QC microveins	57857	38.00-39.00	1.00	0.040		28.0	68.0		35.0	6.0
	H zone, very hard to determine contacts, generally	57858	39.00-40.00	1.00	0.020		27.0	149.0	5.0	34.0	4.0
	weak zone of hematite stringers, local intense K-spar	57859	40.00-41.00	1.00	0.030		28.0	195.0	30.0	31.0	6.0
	alteration/silcificcation along veins up to 2 to 3cm.	57860	41.00-42.00	1.00	0.010		29.0	261.0		46.0	4.0
	wide plus the occasional pyrite veinlet and local	57861	42.00-43.00	1.00	7.530	0.80	23.0	207.0	5.0	299.0	2.0
	intense chlorite streaming, limonite on fractures.	57862	43.00-44.00	1.00	0.610	2.20	10.0	1663.0		207.0	
<35.08-35.15>	pyrite vein or veinlet										
	Pyrite veinlets along fractures, veinlets up to 5mm.										
	to 15% of section, minor very narrow hematite stringer										
	with pyrite.										
<42.20-46.00>	volcaniclastics	57863	44.00-45.00	1.00	0.790	0.80	16.0	494.0		324.0	
	Intense SI pervasive	57864	45.00-46.00	1.00	7.210		19.0	113.0		372.0	
	Intense CL pervasive										
	Intense KS pervasive										
	Very intense K-spar alteration/silcification along the										
	core axis, rock altered to pale purple colour.										
<50.29-67.05>	fracturing 10°:fracturing 45°	57865	46.00-47.00	1.00	0.035	2.20	26.0	2070.0		210.0	4.0
	Frs=6/m :Vns =8/m	57866	47.00-48.00	1.00	0.105	13.00	20.0	9523.0	10.0	149.0	
	Strong SI patches	57867	48.00-49.00	1.00	0.040	7.40	19.0	6361.0	265.0	180.0	40.0
	Moderate CL pervasive	57868	49.00-50.00	1.00	0.925	5.20	24.0	3798.0	40.0	150.0	24.0
	Strong KS pervasive	57869	50.00-51.00	1.00	0.040	3.80	27.0	4514.0	60.0	182.0	4.0
	Weak HE stockwork	57870	51.00-52.00	1.00	0.360	1.00	18.0	805.0	10.0	212.0	6.0
	Moderate PY microveins	57871	52.00-53.00	1.00	0.015	0.20	24.0	158.0	25.0	75.0	10.0
	Moderate QC microveins	57872	57.00-58.00	1.00	1.340	2.00	78.0	128.0	85.0	142.0	6.0
	Weakening K-spar alteration downhole, strong breccia	57873	58.00-59.00	1.00	1.150	1.40	72.0	187.0	80.0	214.0	4.0
	features from 58.0 to 67.05m., pyrite as veinlets and	57874	59.00-60.00	1.00	0.155	0.80	24.0	426.0	25.0	130.0	4.0
	patches to 30%, at 56.0 to 57.0m. coarse crystalline	57875	60.00-61.00	1.00	0.105	1.00	23.0	479.0	20.0	197.0	8.0
	calcite along vugs and fractures along core axis.	57876	61.00-62.00	1.00	0.110	0.80	35.0	517.0	15.0	99.0	6.0
(eoh)		57877	62.00-63.00	1.00	0.005		24.0	160.0	5.0	90.0	6.0
		57878	63.00-64.00	1.00	0.275	0.60	36.0	158.0	10.0	136.0	8.0
		57879	64.00-65.00	1.00	0.015		23.0	26.0		63.0	4.0

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-119

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-119	Date Completed:		Geotech by: MBW
LENGTH: 93.57	Core Diam: NQII		

Collar Location

Latitude:	2032.00
Departure:	1987.00
Elevation:	0.00

S U M M A R Y

0.00-42.90	volcaniclastics
42.90-62.20	volcaniclastics
62.20-93.57	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	225.00	-80.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	42.90	volcaniclastics	57880	32.00-33.00	1.00	0.010		24.0	28.0		52.0	10.0
		Fine grained, redish-green, heterolithic, mottled	57881	33.00-34.00	1.00	0.020		24.0	38.0		42.0	32.0
		fracturing 10°:cleavage, foliation 45°	57882	34.00-35.00	1.00	0.020		16.0	92.0		32.0	14.0
		Frs=5/m	57883	35.00-36.00	1.00	0.025		15.0	77.0	10.0	58.0	28.0
		Moderate SI patches	57884	36.00-37.00	1.00	0.065		34.0	227.0		122.0	40.0
		Moderate CL pervasive	57885	37.00-38.00	1.00	0.205	1.00	49.0	180.0		105.0	14.0
		Moderate KS pervasive	57886	38.00-39.00	1.00	0.030		27.0	146.0	10.0	64.0	8.0
		Weak EP microveins	57887	39.00-40.00	1.00	0.005		31.0	124.0		66.0	6.0
		Moderate HE stockwork	57888	40.00-41.00	1.00	0.010		35.0	124.0		73.0	6.0
		Weak PY disseminated	57889	41.00-42.00	1.00	0.030		33.0	168.0	35.0	51.0	10.0
		Moderate QC microveins										
		Variably altered, same as CL96-118 interval, 0 to										
		31.30m.										
	<5.20-5.50>	Schists, rusty along fracture.										
	<7.00-8.30>	Broken Core										
		Poor recovery limonite section from 8.0 to 9.50m. in										
		bleached, locally very limonitic.										
	<14.80-14.82>	calcite vein										
		Bedded										
		bedding 70°										
		Chlorite to 10%.										
	<22.20-22.30>	Moderate EP microveins										
		Quartz/calcite with minor epidote, bleached around										
		vein to light green.										
	<27.00-28.00>	Fractures along core axis, limonitic.										
	<32.70-33.05>	Chlorite Streaming										
		Foliated										
		Strong chlorite in strongly K-spar altered section.										
	<33.05-33.70>	volcaniclastics										
		Strong SI patches										
		Strong KS pervasive										
		Strong K-spar alteration with strong calcite veining										
		at right angles to trended K-spar veinlets.										
	<36.00-38.00>	Chlorite Streaming										
		Foliated, vuggy										
		foliated 10°										
		Moderate PY microveins										
		Strong chlorite, strong breccia features, clasts to										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		45% in chlorite matrix, clasts are angular and up to										
		1cm. from sand size.										
42.90	62.20	volcaniclastics	57890	42.00-43.00	1.00	0.035		37.0	137.0	25.0	62.0	10.0
		Fine grained, redish-green, heterolithic, wispy	57891	43.00-44.00	1.00	0.080		25.0	145.0		72.0	10.0
		hematite stringers 15°:foliated 15°	57892	44.00-45.00	1.00	2.280	1.20	29.0	3065.0	25.0	98.0	18.0
		Frs=6/m :Vns =25/m	57893	45.00-46.00	1.00	0.525		27.0	416.0	30.0	62.0	8.0
		Moderate SI patches	57894	46.00-47.00	1.00	0.210		25.0	87.0		74.0	6.0
		Strong CL pervasive	57895	47.00-48.00	1.00	0.010	0.40	33.0	655.0	10.0	90.0	16.0
		Strong KS pervasive	57896	48.00-49.00	1.00	0.005		29.0	413.0		94.0	10.0
		Strong HE stockwork	57897	49.00-50.00	1.00	0.210	0.20	55.0	580.0	40.0	178.0	12.0
		Moderate PY microveins	57898	50.00-51.00	1.00	0.475		215.0	265.0	215.0	144.0	10.0
		Moderate QC microveins	57899	51.00-52.00	1.00	0.025		78.0	157.0	65.0	50.0	6.0
		H zone, very indistinct contacts, zone consists of	57900	52.00-53.00	1.00	0.005		82.0	165.0	70.0	82.0	6.0
		local consists of local strong K-spar alteration,	57901	53.00-54.00	1.00	0.070	2.40	321.0	1374.0	895.0	92.0	4.0
		locally narrow hematite stringers hematite stringers,	57902	54.00-55.00	1.00	0.005	0.40	39.0	268.0	115.0	44.0	6.0
		minor pyrite veinlets and local strong chloritic	57903	55.00-56.00	1.00	0.005		32.0	109.0	30.0	42.0	6.0
		zones.	57904	56.00-57.00	1.00	0.010		17.0	79.0	20.0	38.0	8.0
		<43.20-44.00>4 narrow 1cm. hematite veinlets.										
		<44.00-44.60> semi-massive sulphides										
		Strong PY microveins										
		Narrow pyrite veinlets, marcasite on fractures.										
		<44.40-44.50> pyrite vein or veinlet										
		50% black chlorite.										
		<45.50-45.52> sulphide-hematite vein										
		10% pyrite in hematite stringer.										
		<49.20-50.30>Strong K-spar alteration/silicification.										
		<58.50-58.52> massive hematite	57905	57.00-58.00	1.00	0.005		43.0	23.0	10.0	45.0	4.0
62.20	93.57	volcaniclastics	57906	58.00-59.00	1.00	0.690	0.40	250.0	587.0	290.0	102.0	6.0
		Green, heterolithic, mottled	57907	59.00-60.00	1.00	0.075		33.0	42.0	15.0	75.0	4.0
		foliated 15°:cleavage, foliation 45°	57908	60.00-61.00	1.00	0.005		16.0	24.0	10.0	69.0	6.0
		Frs=3/m :Vns =8/m	57909	61.00-62.00	1.00	0.120		41.0	47.0	15.0	101.0	6.0
		Moderate SI patches	57910	62.00-63.00	1.00	1.970		129.0	41.0	85.0	96.0	6.0
		Moderate CL pervasive	57911	63.00-64.00	1.00	0.070		25.0	33.0	25.0	77.0	6.0
		Moderate KS pervasive	57912	64.00-65.00	1.00	0.015	0.60	57.0	97.0	25.0	80.0	6.0
		Weak HE stockwork	57913	65.00-66.00	1.00	1.890	0.60	181.0	150.0	165.0	102.0	14.0
		Moderate PY microveins	57914	66.00-67.00	1.00	0.055	1.20	72.0	181.0	55.0	82.0	22.0
		Moderate QC microveins	57915	67.00-68.00	1.00	0.530	1.20	92.0	84.0	80.0	139.0	8.0
		Weakly chloritic/hematitic altered, local K-spar	57916	68.00-69.00	1.00	0.010	0.20	26.0	60.0	10.0	80.0	6.0
		alteration/silicification, local strong breccia	57917	69.00-70.00	1.00	0.005		14.0	40.0	20.0	52.0	6.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	features in strongly altered features in strongly	57918	70.00-71.00	1.00	0.010		8.0	39.0	5.0	41.0	12.0
	altered zones, chloritic between clasts.	57919	71.00-72.00	1.00	0.005		9.0	9.0		39.0	6.0
<65.50-65.70>	pyrite vein or veinlet										
	Narrow 1cm. pyrite vein sub parallel to core axis in strongly K-spar altered zone.										
<65.90-67.00>	calcite vein										
	Calcite vein sub parallel to core axis.										
<72.30-73.50>	Hematite Stringer	57920	72.00-73.00	1.00	0.620		12.0	429.0	5.0	48.0	6.0
	Narrow 1cm. hematite stringer parallel to sub parallel to core axis.										
<77.00-77.70>	volcaniclastics	57921	73.00-74.00	1.00	0.145		12.0	161.0	10.0	37.0	6.0
	Strong breccia features with dark, black chlorite	57922	74.00-75.00	1.00	0.520	0.40	13.0	1117.0	10.0	42.0	4.0
	between clats.	57923	75.00-76.00	1.00	0.055		15.0	326.0	10.0	39.0	10.0
<79.85-79.95>	pyrite vein or veinlet	57924	76.00-77.00	1.00	0.010		8.0	100.0		26.0	4.0
	Narrow pyrite veinlets.	57925	77.00-78.00	1.00	0.005		22.0	70.0	5.0	47.0	6.0
<80.00-80.50>	calcite vein	57926	78.00-79.00	1.00	0.010		23.0	69.0	20.0	52.0	6.0
	15% calcite parallel to core axis.	57927	79.00-80.00	1.00	1.060	0.60	262.0	216.0	290.0	46.0	10.0
<81.60-82.50>	volcaniclastics	57928	80.00-81.00	1.00	0.140	1.60	35.0	376.0	25.0	62.0	6.0
	Strong breccia features.	57929	81.00-82.00	1.00	0.160	0.20	112.0	263.0	125.0	62.0	6.0
<88.40-88.42>	Hematite Stringer	57930	82.00-83.00	1.00	0.030		40.0	143.0	40.0	58.0	28.0
	Hematite stringer.	57931	83.00-84.00	1.00	0.015		19.0	92.0	20.0	53.0	10.0
<89.60-89.61>	Hematite stringer.	57932	84.00-85.00	1.00	0.005		23.0	52.0	20.0	58.0	6.0
<91.20-91.35>	Trace MT vein	57933	85.00-86.00	1.00	0.015		14.0	34.0	10.0	44.0	6.0
	MINERALIZATION- pyrite veinlets to 10%, veinlets from	57934	86.00-87.00	1.00	0.005	0.20	7.0	18.0		37.0	6.0
	1 to 2mm.	57935	87.00-88.00	1.00	0.010		12.0	30.0	15.0	47.0	8.0
<91.20-91.35>	pyrite vein or veinlet	57936	88.00-89.00	1.00	0.160	0.80	125.0	326.0	130.0	75.0	18.0
	MINERALIZATION- pyrite veinlets to 10%, veinlets from	57937	89.00-90.00	1.00	4.520	1.60	142.0	150.0	140.0	70.0	24.0
	1 to 2mm.										
(eoh)											

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-120

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-120	Date Completed:		Geotech by: NONE
LENGTH: 55.17	Core Diam: NQII		

Collar Location

Latitude:	2106.00
Departure:	1956.00
Elevation:	0.00

S U M M A R Y

0.00-5.20	volcaniclastics
5.20-6.30	Semi-massive hematite
6.30-21.50	volcaniclastics
21.50-55.17	volcaniclastics *

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-72.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	5.20	volcaniclastics Fine grained, green, mottled, foliated foliated 15°:fracturing 45° Frs=5/m :Vns =6/m Moderate SI patches Strong CL pervasive Strong KS pervasive Weak HE patches Weak PY disseminated Moderate QC microveins Variably mottled, black chlorite along foliation, local strong calcite stockwork, local weak hematite along calcite veinlets.		0.00-0.00	0.00							
5.20	6.30	Semi-massive hematite Fine grained, redish-green, bedded, foliated bedding 15°:fracturing 15° Frs=3/m Moderate SI patches Strong CL pervasive Strong KS pervasive Strong HE vein Moderate QC microveins S2a zone, zone of thin hematite stringers, dark black chlorite stringers, variably K-spar altered/silicified zone with local strong breccia features.										
6.30	55.17	volcaniclastics Fine grained, redish-green, heterolithic, stockwork fracturing 45°:hematite stringers 15° Frs=5/m :Vns =10/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Moderate EP patches Moderate HE stockwork Moderate PY blebs Moderate QC microveins Strong hematite/chlorite alteration.										
<10.21-10.62>		Foliated foliated 10° Strong breccia features with K-spar altered fragments up to 4cm. in foliated banded chlorite/hematite stringers.										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<21.50-55.17>	Fine grained, green, heterolithic, mottled fracturing 45°:cleavage, foliation 15° Frs=5/m Moderate SI patches Strong CL pervasive Weak HE patches Moderate PY microveins Moderate QC microveins Variably mottled local breccia features, strong calcite stockwork, local limonite on fractures.										
<21.50-21.92>	gougy sheeted Broken core, limonitic on fractures.										
<25.00-25.45>	Broken Core										
<25.50-25.60>	calcite vein Bedded bedding 40° 50% chlorite bands.										
<25.90-26.00>	Broken Core										
<26.40-26.60>											
<29.50-31.86>	Strong MT coarse grained MINERALIZATION- 4% coarse pyrite along fine veinlets.										
<29.50-31.86>	volcaniclastics Moderate PY microveins Black chlorite stringers. MINERALIZATION- 4% coarse pyrite along fine veinlets.										
<33.00-33.20>	Broken Core										
<33.50-33.80>	gougy sheeted Abundant limonite, clay on fracture surfaces.										
<35.66-36.60>	calcite vein Brecciated section with coarse crystalline calcite cementing clasts, calcite to 30%, strongly altered chlorite into pale green clay (selvages to calcite).										
<53.70-53.72>	pyrite vein or veinlet Strong QC microveins Semi-massive pyrite. HOLE ABANDONED DUE TO STUCK ROCK IN CLAY SEAM AT 55.17M.										

FROM	TO	D E S C R I P T I O N	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-121

PROJECT: Clone	Date Commenced:	Contractor: JT THOMAS	Logged by: ERK
DRILL HOLE: CL96-121	Date Completed:		Geotech by: MBW
LENGTH: 124.36	Core Diam: NQII		

Collar Location

Latitude:	2106.00
Departure:	1956.00
Elevation:	0.00

S U M M A R Y

0.00-10.06	volcaniclastics
10.06-11.00	Semi-massive hematite
11.00-20.61	volcaniclastics
20.61-20.95	Semi-massive hematite
20.95-67.80	volcaniclastics ***
67.80-79.20	volcaniclastics
79.20-124.38	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-72.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	10.06	volcaniclastics	57938	2.00-3.00	1.00	0.005		17.0	92.0	10.0	45.0	14.0
		Fine grained, greenish-red, heterolithic, stockwork	57939	3.00-4.00	1.00	0.005	0.40	28.0	207.0	35.0	50.0	12.0
		cleavage, foliation 45°:foliated 15°	57940	4.00-5.33	1.33	0.005		33.0	145.0	10.0	103.0	10.0
		Frs=4/m :Vns =10/m	57941	5.33-6.50	1.17	0.005		26.0	131.0	5.0	101.0	12.0
		Moderate SI patches	57942	6.50-8.00	1.50	0.010		27.0	36.0	5.0	93.0	10.0
		Strong CL pervasive	57943	8.00-9.00	1.00	0.005		28.0	103.0		70.0	8.0
		Moderate KS pervasive	57944	9.00-10.00	1.00	0.160		33.0	142.0	45.0	291.0	16.0
		Moderate HE stockwork										
		Moderate PY microveins										
		Moderate QC microveins										
		Locally highly foliated partially, 2 to 6m. foliated										
		sections are very chloritic with local fine pyrite										
		veinlets along foliation.										
	<7.30-8.20>	Broken Core										
		Fractures at 15 degrees.										
10.06	11.00	Semi-massive hematite	57945	10.00-11.00	1.00	0.415		45.0	130.0	40.0	405.0	18.0
		Redish-green, veined										
		Moderate MT patches										
		Intense HE vein										
		Strong PY blebs										
		Moderate QC microveins										
		S2b zone, zone of black chlorite/hematite stringers										
		and blebs of coarse pyrite in brecciated chlorite										
		rock.										
	<10.20-10.25>	massive hematite										
		Veined										
		Coarse pyrite blebs in 5cm. wide zone.										
11.00	20.61	volcaniclastics	57946	11.00-12.00	1.00	0.015		16.0	23.0	5.0	69.0	12.0
		Fine grained, redish-green, heterolithic, stockwork	57947	12.00-13.00	1.00	0.020		18.0	65.0	10.0	61.0	14.0
		foliated 12°:cleavage, foliation 45°	57948	13.00-14.00	1.00	0.010		24.0	103.0	25.0	53.0	8.0
		Frs=5/m :Vns =10/m	57949	14.00-15.00	1.00	0.010		37.0	142.0	20.0	46.0	12.0
		Moderate SI patches	57950	15.00-16.00	1.00	0.005		29.0	116.0	10.0	56.0	10.0
		Moderate CL pervasive	57951	16.00-17.00	1.00	0.005		30.0	127.0	5.0	64.0	10.0
		Moderate KS pervasive	57952	17.00-18.00	1.00	0.005		26.0	125.0	20.0	51.0	8.0
		Moderate HE stockwork	57953	18.00-19.00	1.00	0.005		42.0	80.0	35.0	58.0	8.0
		Moderate PY microveins	57954	19.00-20.00	1.00	0.020		45.0	19.0	25.0	59.0	8.0
		Moderate QC microveins										
		Locally mottled, variably hematite stockwork from										
		strong to weak local K-spar alteration/silicification,										
		local chlorite streaming.										
	<13.09-13.40>	Broken Core										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Limonitic on fractures.										
<15.10-17.40>		Chlorite Streaming Fine grained, redish-green, stockwork Moderate SI patches Intense CL pervasive Strong KS pervasive Strong HE stockwork Moderate QC microveins Strong hematite alteration with strong chlorite, local strong chlorite, local strong K-spar alteration/ silicification.										
<17.37-17.98>		Broken Core Limonitic on fractures, some gouge.										
<18.80-18.82>		calcite vein Banded with chlorite.										
<19.20-19.24>		Banded with chlorite.										
<20.00-20.61>		Bleached light green.										
20.61	20.95	Semi-massive hematite Fine grained, redish-green, veined, foliated bedding 45° Strong MT patches Intense HE vein H zone, contacts at 45 degrees to core axis, narrow aone with hematite/magnetite stringers in banded chlorite, K-spar altered zone, K-spar altered rock has been brecciated with green chlorite between clasts.										
20.95	67.80	volcaniclastics Fine grained, greenish-red, heterolithic, mottled fracturing 45°:cleavage, foliation 45° Frs=6/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Weak HE stockwork Weak PY microveins Moderate QC microveins Generally weak hematite alteration, local strong chlorite and calcite stockwork.	57955	20.00-21.00	1.00	0.045		48.0	51.0	25.0	124.0	8.0
			57956	21.00-22.00	1.00	0.065		91.0	132.0	105.0	167.0	14.0
			57957	22.00-23.00	1.00	0.005		37.0	120.0	40.0	68.0	10.0
			57958	23.00-24.00	1.00	0.005		35.0	91.0	45.0	42.0	8.0
			57959	24.00-25.00	1.00	0.005		27.0	63.0	25.0	47.0	8.0
			57960	25.00-26.00	1.00	0.010		41.0	101.0	45.0	40.0	10.0
			57961	26.00-27.00	1.00	0.005		28.0	69.0	15.0	39.0	8.0
			57962	27.00-28.00	1.00	0.005		19.0	8.0		38.0	6.0
			57963	28.00-29.00	1.00	0.005		31.0	130.0		42.0	10.0
			57964	29.00-30.00	1.00	0.055		40.0	203.0	10.0	46.0	12.0
			57965	30.00-31.00	1.00	0.010		35.0	348.0		32.0	12.0
			57966	31.00-32.00	1.00	0.010		25.0	217.0	10.0	35.0	14.0
<21.20-23.00>		Broken Core										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Weakly limonitic on fractures.										
<28.70-34.00>	Intense MT blebs	57967	32.00-33.00	1.00	0.010		28.0	301.0	25.0	39.0	16.0
	MINERALIZATION- 5% pyrite as veinlets and blebs	57968	33.00-34.00	1.00	0.015		47.0	676.0	50.0	49.0	24.0
	associated with chlorite.										
<28.70-34.00>	volcaniclastics										
	Wispy										
	Strong CL pervasive										
	Strong chlorite stringer as wispy zones.										
	MINERALIZATION- 5% pyrite as veinlets and blebs										
	associated with chlorite.										
<32.61-33.53>	Broken Core										
	Locally bleached with strong limonite on fractures.										
<35.66-36.88>	Locally bleached light green, abundant clay on	57969	34.00-35.00	1.00	0.015		15.0	32.0	15.0	33.0	10.0
	fractures, weakly limonitic.	57970	35.00-36.00	1.00	0.005		15.0	24.0	10.0	33.0	10.0
<38.50-49.20>	Chlorite Streaming	57971	36.00-37.00	1.00	0.005		18.0	24.0		37.0	10.0
	Foliated	57972	37.00-38.00	1.00	0.045		19.0	77.0	15.0	42.0	10.0
	Intense CL pervasive	57973	38.00-39.00	1.00	0.010		31.0	42.0	10.0	64.0	12.0
	Moderate PY patches	57974	39.00-40.00	1.00	0.010		30.0	71.0	30.0	60.0	12.0
	Strong QC microveins	57975	40.00-41.00	1.00	0.015		34.0	86.0	30.0	70.0	10.0
	Strongly chloritic both as interstitial grains and as	57976	41.00-42.00	1.00	0.010		29.0	67.0		77.0	10.0
	black stringers to 1mm., very strong calcareous with	57977	42.00-43.00	1.00	0.010		30.0	75.0	10.0	43.0	8.0
	numerous microveinlets of calcite as well as 1 to 2cm.	57978	43.00-44.00	1.00	0.005		25.0	74.0	15.0	45.0	8.0
	veins, generally, parallel to sub parallel, to core	57979	44.00-45.00	1.00	0.005		29.0	87.0	15.0	50.0	10.0
	axis.	57980	45.00-46.00	1.00	0.010		35.0	93.0	15.0	52.0	10.0
<51.50-53.00>	volcaniclastics	57981	46.00-47.00	1.00	0.005		26.0	85.0	15.0	33.0	6.0
	Fine grained, redish-green, stockwork, heterolithic	57982	47.00-48.00	1.00	0.005		26.0	53.0	10.0	43.0	8.0
	foliated 15°:hematite stringers 15°	57983	48.00-49.00	1.00	0.010		37.0	85.0	15.0	49.0	8.0
	Frs=4/m :Vns =20/m	57984	49.00-50.00	1.00	0.005		28.0	78.0	10.0	52.0	8.0
	Moderate SI patches	57985	50.00-51.00	1.00	0.015		34.0	86.0	20.0	46.0	8.0
	Strong CL pervasive	57986	51.00-52.00	1.00	0.005		37.0	93.0		73.0	8.0
	Strong KS pervasive	57987	52.00-53.00	1.00	0.065		38.0	69.0	15.0	171.0	10.0
	Strong HE stockwork										
	Moderate QC microveins										
	Local strong K-spar alteration with strong hematite										
	alteration as fine veinlets.										
<54.05-54.10>	calcite vein	57988	53.00-54.00	1.00	0.155		37.0	106.0	45.0	239.0	12.0
<54.15-55.30>	Chlorite Streaming	57989	54.00-55.00	1.00	0.340		58.0	370.0	60.0	171.0	12.0
	Blackish-green, foliated										
	foliated 15°										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	Intense CL pervasive										
	Strong KS pervasive										
	Strong HE stockwork										
	Strong PY patches										
	Moderate QC microveins										
	Coarse pyrite blebs associated with black chlorite, local K-spar alteration.										
<55.30-56.30>	volcaniclastics	57990	55.00-56.00	1.00	0.810		26.0	105.0	25.0	162.0	14.0
	Strong K-spar alteration with clasts of hematite altered rock.										
<57.90-58.00>	?? MT blebs	57991	56.00-57.00	1.00	0.210		25.0	227.0	35.0	122.0	14.0
	MINERALIZATION- coarse blebs of pyrite to 60%.										
<57.90-58.00>	pyrite vein or veinlet										
	Veined										
	Intense PY vein										
	MINERALIZATION- coarse blebs of pyrite to 60%.										
<58.22-60.00>	volcaniclastics	57992	57.00-58.22	1.22	0.155		33.0	282.0	75.0	96.0	18.0
	Strong CL pervasive	57993	58.22-59.00	0.78	0.160		26.0	190.0		112.0	10.0
	Strong HE stockwork	57994	59.00-60.00	1.00	0.005		29.0	78.0		70.0	12.0
	Strong hematite alteration with abundant chlorite.										
<60.00-65.00>	?? MT stringer	57995	60.00-61.00	1.00	0.050		31.0	64.0	80.0	60.0	14.0
	MINERALIZATION- 6% pyrite along stringers, local weak	57996	61.00-62.00	1.00	0.095		35.0	93.0	100.0	55.0	14.0
	hematite alteration.	57997	62.00-63.00	1.00	0.020		33.0	70.0	60.0	51.0	14.0
<60.00-65.00>	volcaniclastics	57998	63.00-64.00	1.00	0.060		34.0	62.0	65.0	58.0	12.0
	Strong CL pervasive	57999	64.00-65.00	1.00	0.005		31.0	102.0	15.0	57.0	12.0
	Strong PY vein										
	MINERALIZATION- 6% pyrite along stringers up to 1cm., local weak hematite alteration.										
<67.80-79.20>	foliated 15°:fracturing 45°	58000	65.00-66.00	1.00	0.005		24.0	95.0	5.0	58.0	8.0
	Frs=3/m :Vns =40/m	11951	66.00-67.00	1.00	0.175		25.0	108.0		107.0	4.0
	Strong SI patches	11952	67.00-67.80	0.80	0.255		33.0	65.0		168.0	6.0
	Strong CL pervasive	11953	67.80-69.00	1.20	0.730	0.20	113.0	122.0	100.0	164.0	4.0
	Intense KS pervasive	11954	69.00-70.00	1.00	0.680	0.80	116.0	241.0	75.0	284.0	4.0
	Strong HE stockwork	11955	70.00-71.00	1.00	0.055		62.0	284.0	40.0	111.0	6.0
	Moderate PY vein	11956	71.00-72.00	1.00	0.005		27.0	314.0	5.0	116.0	8.0
	Moderate QC microveins	11957	72.00-73.00	1.00	0.005		40.0	203.0	35.0	110.0	6.0
	H zone, generally weak zone of intense K-spar	11958	73.00-74.00	1.00	0.080		450.0	400.0	405.0	111.0	8.0
	alteration, narrow hematite, pyrite stringers with	11959	74.00-75.00	1.00	0.005		520.0	208.0	485.0	124.0	8.0
	local intense chlorite alteration.	11960	75.00-76.00	1.00	0.005		920.0	179.0	710.0	223.0	8.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<67.80-67.82>	sulphide-hematite vein Pyrite/hematite.										
<67.82-67.94>	calcite vein Banded with calcite.										
<68.05-71.00>	volcaniclastics Mottled Strong SI patches Intense CL pervasive Intense KS pervasive Strong K-spar alteration/silicification, strong chlorite.										
<75.29-75.39>	Semi-massive hematite Coarse pyrite in hematite.										
<76.95-77.00>	1cm. wide hematite vein at 15 degress to core axis.	11961	76.00-77.00	1.00	0.005	0.40	330.0	348.0	300.0	140.0	12.0
<77.00-77.80>	Broken Core *Highly broken, manganese strain and limonite on* fractures.										
<77.80-79.20>	volcaniclastics Local strong calcite veinlets up to 1cm. with coarse grain chlorite patches, calcite is locally coarsely crystalline on fractures.	11962 11963	77.00-78.00 78.00-79.00	1.00 1.00	0.005 0.005	0.60 0.40	490.0 44.0	410.0 290.0	325.0 35.0	209.0 81.0	14.0 34.0
<79.20-124.38>	cleavage, foliation 45°:fracturing 45° Frs=4/m :Vns =15/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Moderate HE stockwork Moderate QC microveins Variably hematite/chlorite altered, local strong K-spar alteration/silicification, strong hematite alteration on fractures giving psuedo brecciated appearance.	11964 11965 11966 11967 11968 11969 11970	79.00-80.00 80.00-81.00 88.00-89.00 118.90-120.00 120.00-121.00 121.00-122.00 122.00-123.00	1.00 1.00 1.00 1.10 1.00 1.00 1.00	0.030 0.005 0.170 0.400 0.005 0.005 0.005	0.20	31.0 16.0 15.0 11.0 12.0 11.0 13.0	250.0 164.0 87.0 43.0 3.0 51.0 11.0	15.0 10.0 5.0	116.0 114.0 42.0 44.0 46.0 35.0 35.0	36.0 18.0 10.0 6.0 6.0 4.0 6.0
<79.21-99.00>	D.A.P. 77.80 to 79.20										
<88.05-88.06>	massive hematite At 94.0m. intersected hole at 85 degrees.										
<100.10-100.12>	calcite vein										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	<111.10-111.3	Highly brecciated with calcite cementing fragments.										
	<118.90-122.78	Strongly K-spar altered/silicified.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-122

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL96-122	Date Completed:		Geotech by:
LENGTH: 121.92	Core Diam: NQII		

Collar Location

Latitude:	2106.00
Departure:	1956.00
Elevation:	0.00

S U M M A R Y

0.00-8.00	volcaniclastics
8.00-9.25	Semi-massive hematite
9.25-19.20	volcaniclastics
19.20-22.66	Hornblende Feldspar xtalline
22.66-53.00	volcaniclastics
53.00-71.20	volcaniclastics
71.20-79.00	volcaniclastics
79.00-85.20	volcaniclastics
85.20-86.92	Semi-massive hematite
86.92-121.97	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-76.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	8.00	volcaniclastics	11971	2.00-3.00	1.00	0.005		18.0	93.0	15.0	48.0	10.0
		Fine grained, greenish-green, heterolithic, mottled	11972	3.00-4.00	1.00	0.005		21.0	125.0	20.0	45.0	10.0
		cleavage, foliation 45°:foliated 15°	11973	4.00-5.00	1.00	0.010		25.0	166.0		73.0	8.0
		Frs=5/m	11974	5.00-6.00	1.00	0.005		19.0	49.0		66.0	6.0
		Moderate SI patches	11975	6.00-7.00	1.00	0.005		22.0	95.0	10.0	64.0	8.0
		Strong CL pervasive	11976	7.00-8.00	1.00	0.005		26.0	132.0		95.0	6.0
		Moderate KS pervasive										
		Weak HE microveins										
		Weak PY disseminated										
		Moderate CV microveins										
		Generally locally foliated with minor very narrow										
		hematite microveinlettes--generally hematite becomes										
		stringy from 7-8m. Local breccia features. Local										
		intense chlorite streaming-local intense calcite										
		micro-veining.										
<3.50-3.53>		calcite vein										
		Bedded										
		bedding 15°										
		Strongly banded with fine chlorite stringers.										
8.00	9.25	Semi-massive hematite	11977	8.00-9.25	1.25	0.050		23.0	89.0	15.0	90.0	8.0
		Fine grained, redish-green, veined										
		hematite stringers 15°:vein 15°										
		Strong SI patches										
		Intense CL pervasive										
		Intense KS pervasive										
		Intense HE vein										
		S2B zone- zone of fine anomalous hematite veinlets.										
		K-spar alteration. Silicification as well as										
		chloriteshearing contacts at 15 degrees - CA -										
		foliated chlorite rock at lower contact for ~ 6cm.										
9.25	19.20	volcaniclastics	11978	9.25-10.00	0.75	0.015		30.0	128.0	15.0	66.0	8.0
		Fine grained, redish-green, heterolithic, stockwork	11979	10.00-11.00	1.00	0.105		16.0	33.0	5.0	33.0	8.0
		hematite stringers 45°:foliated 15°	11980	11.00-12.00	1.00	0.190		19.0	11.0		71.0	8.0
		Frs=5/m :Vns =15/m	11981	12.00-13.00	1.00	0.010		18.0	13.0		63.0	12.0
		Moderate SI patches	11982	13.00-14.00	1.00	0.090		23.0	64.0		67.0	10.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Strong CL pervasive	11983	14.00-15.00	1.00	0.005		17.0	16.0		50.0	6.0
		Moderate KS pervasive	11984	15.00-16.00	1.00	0.005		31.0	19.0		44.0	8.0
		Moderate HE stockwork	11985	16.00-17.00	1.00	0.005		34.0	32.0	10.0	48.0	6.0
		Weak PY microveins	11986	17.00-18.00	1.00	0.045		38.0	44.0	15.0	43.0	8.0
		Moderate QC microveins	11987	18.00-19.00	1.00	0.010		53.0	72.0	20.0	54.0	8.0
		Generally st ???, laminated etch work, local intense calcite micro-veinlets. stkwk. Additional textures are: mottled, foliated, whispy										
<10.50-11.10>		Hornblende Feldspar xtalline Fine grained, grayish-gray, porphyritic Weak CL pervasive Weak HE microveins Weak PY disseminated Moderate QC microveins Narrow zone of intrisive? cntl medium grained feldspar x/s in fine grained ground mass.										
<19.20-22.66>		Fine grained, greenish-green, porphyritic cleavage, foliation 80°:fracturing 45° Frs=4/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Weak HE microveins Moderate QC microveins Medium grained feldspar x/s in fine grained matrix - minor fine micro-veinlets of hematite especially near contact - lower contact appears to be at 45 degrees - upper contact is indistinct - local brecciation up to 1cm. wide with black chlorite filling voids between clasts.	11988	19.00-20.00	1.00	0.045		18.0	20.0		49.0	10.0
			11989	20.00-21.00	1.00	0.015		16.0	23.0	10.0	35.0	12.0
22.66	53.00	volcaniclastics Fine grained, greenish-green, heterolithic, mottled cleavage, foliation 45°:fracturing 45° Frs=4/m Moderate SI patches Moderate CL pervasive Moderate KS pervasive Moderate PY microveins Strong QC microveins Top contact with above intrusive is dark green and fine grained for about 1.5m - patches and fine fracture fillings of pyrite. Min pyrite ~ 3% - locally highly K-spar altered/silicified - locally,	11990	22.70-24.00	1.30	0.010		23.0	57.0	15.0	46.0	8.0
			11991	24.00-25.00	1.00	0.010		28.0	116.0	30.0	39.0	12.0
			11992	25.00-26.00	1.00	0.010		27.0	99.0	35.0	39.0	10.0
			11993	26.00-27.00	1.00	0.035		38.0	129.0	30.0	42.0	12.0
			11994	27.00-28.00	1.00	0.020		33.0	107.0	25.0	39.0	12.0
			11995	28.00-29.00	1.00	0.030		29.0	152.0	35.0	33.0	10.0
			11996	29.00-30.00	1.00	0.060		26.0	173.0	35.0	51.0	10.0
			11997	30.00-31.00	1.00	0.080		34.0	281.0	40.0	57.0	18.0
			11998	31.00-32.00	1.00	0.120		40.0	300.0	65.0	62.0	30.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		limonite in fractures.										
		<23.85-24.00> calcite vein										
		~30% calcite cementing brecciated HFBx.										
		<27.20-27.23>										
		<35.60-37.00> volcaniclastics										
		Intense QC microveins										
		Brecciated with very strong calcite stockwork. Some										
		veins up to 1cm overall calcite ~10% - 15%.										
		<37.50-38.50> rubbly fault zone										
		Gouge										
		gouge 45°										
		Strong fault zone with 2-3cm goug zones on the										
		contacts - rock is very broken and clay rich fractures										
		in the vicinity of the fault.										
		<40.50-40.52> calcite vein										
		<42.30-42.32>										
53.00	71.20	volcaniclastics	11999	53.00-54.00	1.00	0.070		12.0	139.0		100.0	4.0
		Fine grained, redish-green, heterolithic, stockwork	12000	54.00-55.00	1.00	0.060		11.0	139.0		26.0	4.0
		cleavage, foliation 45°:fracturing 45°	12001	55.00-56.00	1.00	0.035		22.0	144.0		40.0	8.0
		Frs=5/m :Vns =10/m	12002	56.00-57.00	1.00	0.020		33.0	180.0		39.0	8.0
		Moderate SI patches	12003	57.00-58.00	1.00	0.020		37.0	96.0	10.0	38.0	8.0
		Moderate CL pervasive	12004	58.00-59.00	1.00	0.165		34.0	75.0		44.0	8.0
		Moderate KS pervasive	12005	59.00-60.00	1.00	0.005		34.0	71.0		49.0	8.0
		Moderate HE stockwork	12006	60.00-61.00	1.00	0.025		32.0	90.0		53.0	10.0
		Weak PY disseminated	12007	61.00-62.00	1.00	0.020		34.0	225.0		59.0	8.0
		Weak QC microveins	12008	62.00-63.00	1.00	0.010		38.0	208.0		62.0	8.0
		Local K-spar alteration/silicification with hematite	12009	63.00-64.00	1.00	0.025		39.0	118.0		64.0	10.0
		alteration. Varying from weak to strong minor	12010	64.00-65.00	1.00	0.020		22.0	133.0		33.0	8.0
		calcopyrite at 54.9m. Additional textures are:	12011	65.00-66.00	1.00	0.005		23.0	77.0		38.0	8.0
		mottled,	12012	66.00-67.00	1.00	0.010		31.0	153.0	10.0	43.0	10.0
		<63.95-63.98> shear zone										
		Shear zone with chlorite + ground up pyrite.										
71.20	79.00	volcaniclastics	12013	67.00-68.00	1.00	0.015		41.0	98.0		56.0	8.0
		Fine grained, redish-green, veined, foliated	12014	68.00-69.00	1.00	0.015		42.0	110.0	15.0	56.0	8.0
		foliated 15°:fracturing 45°	12015	69.00-70.00	1.00	0.010		36.0	366.0	20.0	61.0	10.0
		Frs=4/m :Vns =30/m	12016	70.00-71.20	1.20	0.025	2.00	39.0	2647.0	25.0	141.0	8.0
		Strong SI patches	12017	71.20-72.00	0.80	0.850	1.20	164.0	448.0	30.0	529.0	6.0
		Strong CL pervasive	12018	72.00-73.00	1.00	7.560	1.00	362.0	122.0	80.0	391.0	6.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate MT patches	12019	73.00-74.00	1.00	0.510	0.40	121.0	122.0	10.0	186.0	6.0
		Strong KS pervasive	12020	74.00-75.00	1.00	0.355		56.0	34.0		123.0	6.0
		Intense HE vein	12021	75.00-76.00	1.00	0.340		57.0	65.0	5.0	113.0	6.0
		Moderate QC microveins	12022	76.00-77.00	1.00	0.120		60.0	46.0	10.0	120.0	6.0
		H-zone - generally weak one of semi - massive hematite	12023	77.00-78.00	1.00	0.110		84.0	274.0	10.0	149.0	6.0
		zones of intense K-spar alteration/silicification as	12024	78.00-79.00	1.00	0.680	1.40	370.0	1091.0	280.0	993.0	8.0
		well as intense /chlorite streaming - local breccia										
		features with intense chlorite filling voids between										
		clasts.										
<72.10-72.30>		Semi-massive hematite										
		vein										
		Strong MT patches										
		Intense HE vein										
		Moderate SE patches										
		Strong QC microveins										
		Highly foliated, semi-massive with patches of										
		specularite.										
<72.70-72.90>		calcite vein										
		Calcite veins ~3cm wide. Sub-parellel to C.A.										
<78.85-78.95>		Semi-massive hematite										
		Intense K-spar alteration with 1cm veinlets of										
		hematite.										
79.00	85.20	volcaniclastics	12025	79.00-80.00	1.00	0.010		174.0	85.0	80.0	1287.0	6.0
		Medium grained, redish-tan, Brecciated, foliated	12026	80.00-81.00	1.00	0.010		47.0	49.0	10.0	245.0	8.0
		foliated 15°:fracturing 35°	12027	81.00-82.00	1.00	0.005		27.0	69.0	25.0	75.0	8.0
		Frs=4/m	12028	82.00-83.00	1.00	0.010		30.0	50.0	20.0	60.0	12.0
		Moderate SI patches	12029	83.00-84.00	1.00	0.015		35.0	70.0	10.0	58.0	6.0
		Strong CL pervasive	12030	84.00-85.20	1.20	0.005		46.0	54.0	25.0	53.0	10.0
		Moderate KS pervasive										
		Moderate HE pervasive										
		Weak QC microveins										
		Rock has strong breccia texture with approx. 70%										
		clasts in hematite chlorite matrix - clasts consist of										
		K-spar altered/silicified rock with clast size										
		rangeing from sand size up to 4cm.										
<83.10-83.40>		calcite vein										
		vein 45°										
		Approx. 50% calcite with 1-2 cm wide bright green										
		chlorite vein.										
85.20	86.92	Semi-massive hematite	12031	85.20-86.00	0.80	0.990	0.20	1550.0	211.0	1090.0	159.0	8.0
		Fine grained, redish-green, veined, stockwork	12032	86.00-86.92	0.92	9.260	0.60	840.0	99.0	675.0	190.0	12.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		vein 15°:cleavage, foliation 3°										
		Frs=15/m										
		Strong SI patches										
		Strong CL pervasive										
		Strong KS pervasive										
		Intense HE vein										
		Moderate QC microveins										
		H-zone - zone of massive hematite veinlets. K-spar alteration/silicification with generally intense calcite stkwk along altered zones as well as chlorite stringers and wisps ~1-2mm. At 85.4-85.45 rusty zone with coarsely x//line calcite with micro-veinlets of marcasite.										
		<86.77-86.92> massive hematite										
		Weak MT patches										
		Intense HE vein										
86.92	121.97	volcaniclastics	12033	86.92-88.00	1.08	0.105		370.0	226.0	345.0	143.0	10.0
		Fine grained, redish-green, heterolithic, stockwork	12034	88.00-89.00	1.00	0.050	0.20	220.0	207.0	205.0	88.0	14.0
		vein 45°:fracturing 35°	12035	89.00-90.00	1.00	0.005		39.0	112.0	45.0	36.0	12.0
		Frs=4/m :Vns =8/m	12036	102.00-103.00	1.00	0.605		10.0	160.0		84.0	14.0
		Moderate SI patches	12037	103.00-104.00	1.00	0.550	0.40	31.0	24.0	20.0	48.0	10.0
		Moderate CL pervasive	12038	104.00-105.00	1.00	0.045		12.0	42.0	5.0	47.0	8.0
		Moderate KS pervasive	12039	111.00-112.00	1.00	0.030	0.80	24.0	385.0	35.0	57.0	48.0
		Moderate HE stockwork	12040	112.00-113.00	1.00	18.030	3.40	3000.0	732.0	13600.0	82.0	26.0
		Weak PY vein	12041	113.00-114.00	1.00	0.335		91.0	373.0	125.0	57.0	8.0
		Moderate QC microveins	12042	114.00-115.00	1.00	0.040		22.0	75.0	35.0	46.0	10.0
		Variable hematite - chlorite altered with local strong	12043	115.00-116.00	1.00	0.050		15.0	80.0	20.0	50.0	28.0
		K-feldspar/silicification. Local narrow	12044	116.00-117.00	1.00	0.520	0.60	18.0	167.0	25.0	78.0	40.0
		calcite-chlorite veinlets as well as local intense	12045	117.00-118.00	1.00	0.010		7.0	7.0	5.0	46.0	10.0
		calcite micro-veinlets at 102.6-104 ??? narrow. 5mm hematite stringers.										
		<104.17-104.18> Hematite chlorite calcite vein										
		<104.80-107.00> volcaniclastics										
		Intense qtz-calcite stringer zone with ~30 stringers per meter with stringers generally up to 5mm to 1cm counted.										
		<112.38-112.58> sulphide-hematite vein										
		vein 45°										
		Intense CL vein										
		Abundant chlorite with hematite/sulfide as well as 10cm K-spar altered/silicified zone just below vein.										

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<112.58-117.00>	volcaniclastics Local breccia features with generally intensely K-spar altered/silicified forming clasts in chloritic matrix.										
<113.50-121.92>	calcite vein Strong calcite stockwork with veinlets up to 1cm locally ~ 50-60 marrow veinlets per meter.										
<116.05-116.07>	PYRITE VEIN Pyrite here has been brecciated with calcite along fractures.										
(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-123

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL96-123	Date Completed:		Geotech by:
LENGTH: 137.16	Core Diam: NQII		

Collar Location

Latitude:	2106.00
Departure:	1956.00
Elevation:	0.00

SUMMARY

0.00-6.20	volcaniclastics
6.20-9.64	Chlorite Streaming
9.64-11.00	Semi-massive hematite
11.00-20.90	volcaniclastics
20.90-41.80	Hornblende Feldspar xtalline
41.80-63.60	volcaniclastics
63.60-68.40	Hornblende Feldspar xtalline
68.40-77.80	volcaniclastics
77.80-85.00	volcaniclastics
85.00-90.20	Semi-massive hematite
90.20-121.80	volcaniclastics
121.80-137.16	Hornblende Feldspar xtalline

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-80.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	6.20	volcaniclastics	12046	1.00-2.00	1.00	0.020	0.60	21.0	137.0	15.0	48.0	22.0
		Fine grained, greenish-green, heterolithic, foliated	12047	2.00-3.00	1.00	0.005		17.0	128.0	15.0	48.0	18.0
		foliated 10°:cleavage, foliation 45°	12048	3.00-4.00	1.00	0.005	0.20	17.0	73.0	10.0	48.0	16.0
		Frs=10/m	12049	4.00-5.00	1.00	0.005		17.0	96.0	10.0	47.0	16.0
		Moderate SI patches	12050	5.00-6.00	1.00	0.010	0.20	14.0	154.0		51.0	14.0
		Strong CL pervasive										
		Moderate KS pervasive										
		Moderate PY patches										
		Moderate QC microveins										
		Additional textures are: mottled and whispy.										
		Generally highly foliated with blebs of pyrite along										
		foliation calcite micro veinlets are are at 0 degrees										
		and 45 dgrees to CA - Minor limonite along fractures.										
		Some black chlorite stringers with pyrite veinlets										
		~2-3cm Min py~2%.										
6.20	9.64	Chlorite Streaming	12051	6.00-7.00	1.00	0.005		19.0	36.0	5.0	79.0	16.0
		Fine grained, redish-green, mottled, foliated	12052	7.00-8.00	1.00	0.005		17.0	117.0		62.0	14.0
		cleavage, foliation 10°:foliated 10°	12053	8.00-9.00	1.00	0.005		21.0	82.0	10.0	89.0	14.0
		Frs=4/m :Vns =25/m	12054	9.00-9.64	0.64	0.130		20.0	28.0	20.0	86.0	10.0
		Moderate SI patches										
		Intense CL pervasive										
		Strong KS pervasive										
		Strong HE stockwork										
		Moderate QC microveins										
		Minor K-spar alteration/silicification with local										
		breccia textures. Clasts of red hematite rich										
		fragments in matrix of dark green chlorite. - Minor										
		?????? 2-3mm massive hematite.										
9.64	11.00	Semi-massive hematite	12055	9.64-11.00	1.36	0.095	0.40	23.0	89.0	30.0	47.0	6.0
		Fine grained, redish-green, foliated, mottled										
		foliated 15°:vein 15°										
		Frs=4/m :Vns =35/m										
		Strong SI patches										
		Intense CL pervasive										
		Strong KS pervasive										
		Intense HE vein										
		Moderate QC microveins										
		S2B zone - contact at 15 dgrees to CA - zone consists										
		of narrow veinlets of massive hematite parallel to										
		each other as well as brecciated hematite rich										
		fragments aligned in elongated manner eith chlorite										
		wisps giving a foliated appearence. Clasts in										
		??gouge?? are from sand size up to 4cm and are for the										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		most angular (mylonitic xtals).										
		Additional texture is "vn".										
11.00	20.90	volcaniclastics	12056	11.00-12.00	1.00	0.045		24.0	119.0	15.0	47.0	20.0
		Fine grained, greenish-green, mottled, heterolithic	12057	12.00-13.00	1.00	18.860	0.80	16.0	135.0	20.0	32.0	18.0
		vein 5°:cleavage, foliation 15°	12058	13.00-14.00	1.00	0.830	0.60	19.0	98.0	20.0	48.0	22.0
		Frs=10/m	12059	14.00-15.00	1.00	0.060	0.60	44.0	405.0	40.0	51.0	30.0
		Moderate SI patches	12060	15.00-16.00	1.00	0.005		24.0	123.0	20.0	35.0	16.0
		Strong CL pervasive	12061	16.00-17.00	1.00	0.005		23.0	121.0	15.0	28.0	14.0
		Strong KS pervasive	12062	17.00-18.00	1.00	0.015		36.0	143.0	30.0	38.0	20.0
		Moderate HE vein	12063	18.00-19.00	1.00	0.030	0.40	18.0	38.0	15.0	39.0	18.0
		Moderate PY microveins	12064	19.00-20.00	1.00	0.015		22.0	24.0	10.0	43.0	20.0
		Moderate QC microveins										
		Additional tx=vn and sw										
		Generally highly K-spar altered/silicified with local										
		very intense tension fracturing with subsequent										
		calcite emplacement - hematite present up to 19.2m										
<12.30	-14.00>	Chlorite Streaming										
		Medium grained, greenish-green, Brecciated										
		Strong PY microveins										
		Zone of highly brecciated rock with subsequent										
		chlorite streaming - discontinuous patches of rusty										
		zone (after sulphide) at 0 to 15 degrees to CA										
		Fragments of hematite rich rock.										
<14.80	-14.82>	massive hematite										
20.90	41.80	Hornblende Feldspar xtalline	12065	20.00-21.00	1.00	0.010		17.0	7.0	10.0	40.0	16.0
		Fine grained, grayish-gray, porphyritic, massive	12066	21.00-22.00	1.00	0.015	0.20	15.0	6.0		42.0	12.0
		cleavage, foliation 45°:fracturing 45°	12067	22.00-23.00	1.00	0.010		19.0	44.0	10.0	41.0	10.0
		Frs=6/m	12068	23.00-24.00	1.00	0.005		18.0	45.0	15.0	40.0	12.0
		Moderate SI patches	12069	24.00-24.00	0.00	0.035		18.0	57.0	25.0	43.0	14.0
		Moderate CL pervasive	12070	25.00-26.00	1.00	0.005		17.0	76.0	25.0	30.0	18.0
		Moderate KS pervasive	12071	26.00-27.00	1.00	0.010		20.0	88.0	25.0	32.0	18.0
		Moderate PY disseminated	12072	27.00-28.00	1.00	0.025		24.0	179.0	25.0	43.0	22.0
		Moderate QC microveins	12073	28.00-29.00	1.00	0.055	0.20	29.0	224.0	55.0	44.0	24.0
		From 20.9 to 29.7, the rock is grey porphyritic with	12074	29.00-30.00	1.00	0.060	1.00	41.0	446.0	55.0	56.0	38.0
		medium grained feldspar x/s in fine grained groundmass	12075	30.00-31.00	1.00	0.065	0.80	25.0	211.0	65.0	28.0	22.0
		from 20.9 to 41m, the rock is basically very fine	12076	31.00-32.00	1.00	0.055		44.0	184.0	220.0	30.0	20.0
		grained with no obvious xl structure. Section from	12077	32.00-33.00	1.00	0.100		28.0	120.0	155.0	26.0	16.0
		24.7 to 28.8 is distinguishable due to darker colour	12078	33.00-34.00	1.00	0.170		30.0	192.0	90.0	24.0	22.0
		and lack of strong calcite stockwork. Pyrite occurs	12079	34.00-35.00	1.00	0.070		37.0	118.0	225.0	31.0	22.0
		as both veinlets and disseminations.	12080	35.00-36.00	1.00	0.255	0.60	29.0	125.0	80.0	37.0	22.0

FROM TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<27.50-27.90>	semi-massive sulphides Highly pyritic as fine grained patches and veinlets. Min py ~15%.										
<28.90-29.10>	calcite vein Approx. 30% calcite with minor chlorite stringers with pyrite. Min py~5%.										
<29.35-29.70>	semi-massive sulphides Highly pyritic and chloritic rock. Min py ~10%.										
<30.75-30.80>	calcite vein										
<30.87-30.88>											
<35.70-37.00>	Broken Core Limonitic on fractures.	12081	36.00-37.00	1.00	0.075	0.60	18.0	83.0	45.0	30.0	18.0
<37.70-37.80>	shear zone sheeting 40° Narrow shear planes with slickensides along dip surfaces.										
<37.95-38.20>	Broken Core	12082	37.00-38.00	1.00	0.140		27.0	189.0	75.0	42.0	22.0
<39.05-39.30>	Limonite on fractures.	12083	38.00-39.00	1.00	0.175		14.0	70.0	35.0	35.0	14.0
<39.60-40.40>		12084	39.00-40.00	1.00	0.065		28.0	136.0	60.0	48.0	20.0
<40.40-40.76>	semi-massive sulphides vein 15° Massive pyrite veins up to 4cm width. Veins are at 15 degrees to CA with 1cm calcite vein along bottom contact. Zone consists of sulfide, minor hematite calsts, black chlorite wisps, carbonate as well as minor arsenopyrite. Min py~50% Ap~5% cp<1%										
<41.00-41.10>	calcite vein	12085	40.00-41.00	1.00	7.310	2.60	407.0	1489.0	3750.0	71.0	52.0
<41.23-41.80>	rubbly fault zone Highly broken into pieces varying from sand up to 4cm with poor recovery.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
41.80	63.60	volcaniclastics	12086	41.00-42.00	1.00	0.035		20.0	63.0	120.0	21.0	14.0
		Fine grained, grayish-gray, fragmental, mottled	12087	42.00-43.00	1.00	0.450	0.20	26.0	85.0	265.0	24.0	38.0
		cleavage, foliation 45°:fracturing 35°	12088	43.00-44.00	1.00	4.460	1.40	49.0	316.0	325.0	49.0	42.0
		Frs=6/m	12089	44.00-45.00	1.00	0.900	0.20	13.0	124.0	50.0	33.0	12.0
		Moderate SI patches	12090	45.00-46.00	1.00	0.060		9.0	59.0	20.0	26.0	12.0
		Moderate CL pervasive	12091	46.00-47.00	1.00	0.275		7.0	635.0	35.0	45.0	14.0
		Moderate KS pervasive	12092	47.00-48.00	1.00	0.060		9.0	297.0	80.0	36.0	20.0
		Weak PY disseminated	12093	48.00-49.00	1.00	0.120		8.0	322.0	50.0	35.0	14.0
		Moderate QC microveins	12094	49.00-50.00	1.00	0.005		19.0	653.0	80.0	35.0	10.0
		Locally highly K-spar altered/silicified with minor										
		narrow chlorite veinlets. Narrow black chlorite										
		veinlets have py associated with them - locally										
		extremely brecciated with calcite minor stockwork										
		along fractures.										
		Additional textures are: HT and brecciated.										
<41.80-42.80>		calcite vein										
		Stron calcite ?flooding? with calcite up to 50% of										
		zone.										
<62.40-62.90>		Broken Core										
63.60	68.40	Hornblende Feldspar xtalline										
		Fine grained, grayish-gray, heterolithic										
		cleavage, foliation 45°:fracturing 35°										
		Frs=4/m										
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak HE patches										
		Weak PY disseminated										
		Moderate QC microveins										
		Locally K-spar altered/silicified with fine grained										
		altered hornblende in almost aphanitic groundmass.										
68.40	77.80	volcaniclastics	12095	68.00-69.00	1.00	0.020	0.20	28.0	163.0	40.0	43.0	14.0
		Grayish-gray, mottled, Brecciated	12096	69.00-70.00	1.00	0.035	0.60	27.0	120.0	30.0	35.0	16.0
		cleavage, foliation 45°:fracturing 35°	12097	70.00-71.00	1.00	0.010		31.0	121.0	25.0	42.0	20.0
		Frs=5/m	12098	71.00-72.25	1.25	0.020		19.0	71.0	15.0	40.0	14.0
		Strong SI patches	12099	72.25-73.19	0.94	0.130	1.00	25.0	371.0	20.0	31.0	26.0
		Strong CL pervasive	12100	73.19-74.00	0.81	0.040	0.40	15.0	143.0	15.0	34.0	16.0
		Strong KS pervasive	12101	74.00-75.00	1.00	0.075		31.0	179.0	25.0	33.0	16.0
		Moderate PY patches	12102	75.00-76.00	1.00	0.025		30.0	115.0	15.0	27.0	16.0
		Moderate QC microveins	12103	76.00-77.30	1.30	0.005		31.0	108.0	5.0	39.0	14.0
		Local strong breccia textures - breccia consists of										
		K-spar altered fragments elongated in matrix of black										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		chlorite.										
		Addition Tx=HT										
<68.50-69.00>		Broken Core										
		Limonitic on fractures (lost core).										
<72.20-73.10>		volcaniclastics										
		Breccia with coarse pyritic blebs up to 2cm - at 773 to 131 in semi-massive py. Min py~10%										
<77.80-79.10>		stringer 15°:cleavage, foliation 45°	12104	77.30-78.00	0.70	0.065	0.20	30.0	444.0	15.0	45.0	12.0
		Frs=4/m										
		Strong SI patches										
		Intense CL pervasive										
		Intense KS pervasive										
		Weak HE patches										
		Weak PY blebs										
		Strong QC microveins										
		H-zone. Very intense K-spar alteration to a pink to tan rock with stringers of green to black chlorited ~15 degrees to CA. Minor pyrite blebs on upper contact ~30cm of intense chlorite streaming.										
<79.10-85.00>		Fine grained, greenish-green, mottled, heterolithic	12105	78.00-79.30	1.30	0.140	0.80	42.0	150.0	35.0	67.0	12.0
		cleavage, foliation 45°:fracturing 45°	12106	79.30-81.00	1.70	0.010		28.0	172.0	20.0	41.0	10.0
		Moderate SI patches	12107	81.00-82.00	1.00	0.040	0.20	33.0	302.0	50.0	40.0	18.0
		Moderate CL pervasive	12108	82.00-83.00	1.00	0.005	0.60	34.0	136.0	25.0	45.0	20.0
		Moderate KS pervasive	12109	83.00-84.00	1.00	0.005		27.0	76.0		44.0	14.0
		Weak HE stockwork	12110	84.00-85.00	1.00	0.005	0.60	29.0	218.0		68.0	14.0
		Weak PY disseminated										
		Strong QC microveins										
		Minor hematite alteration generally from 83.7-85.										
		Strong calcite stockwork.										
<79.95-80.05>		calcite vein										
<83.80-83.85>		Minor hematite in chloritic fragments in vein.										
85.00	90.20	Semi-massive hematite	12111	85.00-86.00	1.00	0.060	1.00	38.0	940.0	45.0	97.0	14.0
		Fine grained, redish-green, heterolithic, stockwork	12112	86.00-87.00	1.00	0.010		19.0	551.0	10.0	53.0	16.0
		fracturing 35°:cleavage, foliation 45°	12113	87.00-88.00	1.00	0.040	0.40	27.0	324.0	30.0	75.0	8.0
		Frs=7/m	12114	88.00-89.00	1.00	0.780	1.00	39.0	414.0	40.0	81.0	4.0
		Strong SI patches	12115	89.00-90.00	1.00	0.340	0.60	56.0	117.0	40.0	104.0	8.0
		Strong CL pervasive										
		Strong KS pervasive										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Strong HE stockwork.										
		Weak PY disseminated										
		Moderate QC microveins										
		H-zone. Zone consists of sections of strong hematite										
		alteration local narrow K-spar										
		alteration/silicification, strongly brecciated rock										
		with k-spar altered fragments in block chorite matrix.										
		Minor cp at 86.9 to 87.1m										
90.20	121.80	volcaniclastics	12116	90.00-91.00	1.00	0.520	0.80	110.0	387.0	140.0	62.0	12.0
		Fine grained, grayish-gray, heterolithic, mottled	12117	91.00-92.00	1.00	0.005		15.0	33.0	10.0	21.0	10.0
		fracturing 35°:cleavage, foliation 45°	12118	92.00-93.00	1.00	0.215	0.20	18.0	95.0	35.0	29.0	10.0
		Frs=4/m	12119	93.00-94.00	1.00	0.010	0.60	13.0	45.0	20.0	43.0	18.0
		Moderate SI patches	12120	94.00-95.00	1.00	0.005		13.0	47.0	25.0	45.0	14.0
		Moderate CL pervasive	12121	95.00-96.00	1.00	0.030		12.0	45.0	15.0	35.0	16.0
		Moderate KS pervasive	12122	96.00-97.00	1.00	0.010		14.0	37.0	10.0	40.0	8.0
		Weak HE patches	12123	97.00-98.00	1.00	0.010		9.0	16.0		22.0	8.0
		Moderate PY vein	12124	98.00-99.00	1.00	0.005		11.0	85.0	10.0	25.0	12.0
		Moderate QC microveins	12125	99.00-100.00	1.00	0.100		17.0	69.0	45.0	33.0	38.0
		Generally appears as crystalline ????? except for	12126	100.00-101.00	1.00	0.060	0.80	19.0	222.0	70.0	46.0	24.0
		local breccia features. Local strong K-spar	12127	101.00-102.00	1.00	0.040	0.60	23.0	187.0	55.0	45.0	24.0
		alteration/silicification with wisps of black chlorite	12128	102.00-103.00	1.00	1.160		70.0	237.0	170.0	44.0	14.0
		local strong calcite stockwork.	12129	103.00-104.00	1.00	1.890		38.0	121.0	60.0	50.0	4.0
<99.35-99.37>		calcite vein										
<99.85-99.87>												
<102.70-105.00>		Chlorite Streaming	12130	104.00-105.00	1.00	0.015		9.0	8.0	15.0	30.0	14.0
		Foliated										
		foliated 15°										
		Strong SI patches										
		Intense CL pervasive										
		Strong KS pervasive										
		Weak PY microveins										
		Local stron K-spar alteration/silicification.										
<113.00-113.60>		Weak HE microveins	12131	105.00-106.00	1.00	0.020		10.0	48.0	25.0	34.0	12.0
		Strong PY vein										
		Strong pyrite as patches and veinlets, minor hematite.										
<117.00-118.60>		Intense SI pervasive	12132	113.00-114.00	1.00		0.20	242.0	274.0	445.0	112.0	56.0
		Moderate HE microveins	12133	114.00-115.00	1.00	0.010		24.0	287.0	50.0	65.0	40.0
		Strong PY vein	12134	115.00-116.00	1.00	0.070		27.0	162.0	50.0	66.0	22.0
		Strong local K-spar alteration/silicification with	12135	116.00-117.00	1.00	0.405		38.0	145.0	65.0	81.0	54.0
		hematite veinlets +- ????? 117.75m 118.9 and 118.3m	12136	117.00-117.96	0.96	0.760	0.60	84.0	281.0	145.0	108.0	38.0
		(veinlets are 2.3 cm wide).										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		<121.20-121.35> semi-massive sulphides	12137	117.96-119.00	1.04		0.80	120.0	376.0	195.0	107.0	26.0
		Coarse py as large patches at 20 dgrees to CA. Minor	12138	119.00-120.00	1.00	0.045	0.20	20.0	121.0	30.0	64.0	14.0
		hematite. Min py~25%	12139	120.00-121.00	1.00	0.035	0.20	21.0	269.0	15.0	53.0	14.0
121.80	137.16	Hornblende Feldspar xtalline	12140	121.00-122.00	1.00	0.080	0.40	34.0	288.0	120.0	56.0	24.0
		Fine grained, grayish-gray, crystalline	12141	122.00-123.00	1.00	0.005		19.0	106.0	30.0	46.0	6.0
		cleavage, foliation 35°:fracturing 35°	12142	123.00-124.00	1.00	0.010		23.0	83.0	30.0	59.0	8.0
		Frs=4/m	12143	124.00-125.00	1.00	0.005		11.0	80.0	15.0	49.0	8.0
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak HE microveins										
		Weak PY disseminated										
		Moderate QC microveins										
		Narrow local patches of brecciated ??????? frock with										
		strong chlorite for the most part sections as very										
		fine grained with a strong calcite stockwork.										
		<135.63-136.90> rubbly fault zone										
		Foliated										
		foliated										
		Weakly limonitic gouge.										
		<136.90-137.16> Hornblende Feldspar xtalline										
		Brecciated										
		Highly brecciated with abundant clay on fractures.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-124

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL96-124	Date Completed:		Geotech by:
LENGTH: 123.74	Core Diam: NQII		

Collar Location

Latitude:	2084.00
Departure:	1960.00
Elevation:	0.00

S U M M A R Y

0.00-4.10	volcaniclastics
4.10-13.80	Chlorite Streaming
13.80-36.50	volcaniclastics
36.50-52.90	volcaniclastics
52.90-68.10	volcaniclastics
68.10-85.00	Semi-massive hematite
85.00-123.74	Hornblende Feldspar xtalline

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-72.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	4.10	volcaniclastics	12144	1.18-2.00	0.82	0.110		9.0	13.0	30.0	36.0	8.0
		Greenish-green, mottled, heterolithic	12145	2.00-3.00	1.00	0.755		10.0	53.0	10.0	38.0	44.0
		cleavage, foliation 45°:fracturing 45°	12146	3.00-4.00	1.00	0.205	0.20	11.0	98.0	10.0	44.0	48.0
		Frs=5/m										
		Moderate SI patches										
		Strong CL pervasive										
		Moderate KS pervasive										
		Weak PY disseminated										
		Moderate QC microveins										
		Locally K-spar altered/silicified with some strong										
		breccia features - rock attears to have been										
		originally a feldspar porphyry - strong chlorite in										
		area of brecciation.										
4.10	13.80	Chlorite Streaming	12147	4.00-5.00	1.00		0.80	27.0	169.0	10.0	60.0	12.0
		Medium grained, greenish-black, Brecciated, mottled	12148	5.00-6.00	1.00	0.480		11.0	21.0		44.0	4.0
		cleavage, foliation 45°:fracturing 45°	12149	6.00-7.00	1.00	0.175		16.0	15.0		42.0	6.0
		Frs=5/m	12150	7.00-8.00	1.00	0.005		13.0	5.0		37.0	4.0
		Strong SI patches	12151	8.00-9.60	1.60	0.230		13.0	6.0		39.0	4.0
		Strong CL pervasive	12152	9.60-11.00	1.40		2.80	19.0	134.0	10.0	49.0	8.0
		Strong KS pervasive	12153	11.00-12.00	1.00		1.20	13.0	31.0		35.0	4.0
		Weak HE microveins	12154	12.00-13.00	1.00	0.455		24.0	54.0	25.0	54.0	8.0
		Moderate PY patches										
		Moderate QC microveins										
		S-2A zone - zone consists of strong brecciated										
		materials, strong chlorite streaming in areas of										
		brecciation as well as strongly K-spar altered										
		silicified fragments(showing strong brecciation										
		features with intense calcite micro-veinlets filling										
		fractures) minor hematite micro veinlets.										
	<4.10-4.50>	Clasts up to 8cm with black chlorite and coarse pyrite										
		patches - black chlorite between. Min py ~10%.										
	<9.60-10.90>	Clasts up to 8cm - some clasts are extremely K-spar										
		altered with veinlets of hematite clasts are also										
		extemely fractured with intense calcite micro-veinlet										
		stockwork., pyrite as blebs - black chlorite between										
		clasts. Min py ~5%.										
	<11.00-13.80>	foliated 45°										
		Moderate HE wispy										
		Weak PY disseminated										
		Moderate QC microveins										
		Abundant fine hematite as wisps and micro-veinlets -										
		local intense K-spar alteration - zone has appearence										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		of mylonite.										
13.80	36.50	volcaniclastics	12155	13.00-14.00	1.00		0.80	78.0	87.0	105.0	88.0	18.0
		Fine grained, greenish-green, mottled, Brecciated	12156	14.00-15.00	1.00	0.075		33.0	153.0	55.0	86.0	14.0
		cleavage, foliation 45°:fracturing 20°	12157	15.00-16.00	1.00	0.050		22.0	80.0	45.0	89.0	28.0
		Frs=4/m	12158	16.00-17.00	1.00	0.005		20.0	12.0	15.0	73.0	8.0
		Moderate SI patches	12159	17.00-18.00	1.00	0.005		28.0	67.0	45.0	84.0	10.0
		Moderate CL pervasive	12160	18.00-19.50	1.50	0.005		15.0	37.0	30.0	54.0	20.0
		Strong KS pervasive	12161	19.50-21.00	1.50	0.230	0.40	18.0	118.0	15.0	54.0	12.0
		Weak HE patches	12162	21.00-22.00	1.00	0.105		10.0	55.0	20.0	40.0	8.0
		Moderate PY patches	12163	22.00-23.00	1.00		1.00	16.0	111.0	40.0	45.0	14.0
		Moderate QC microveins	12164	23.00-24.00	1.00	0.290		18.0	7.0	30.0	55.0	8.0
		From 13.8 - 15.6 - weak hematite rich calcite fragment	12165	24.00-25.00	1.00	0.415		16.0	33.0	25.0	52.0	8.0
		- local very intense calcite stockwork - local breccia	12166	25.00-26.00	1.00	0.615		18.0	56.0	95.0	51.0	10.0
		sections with black chlorite and minor pyrite.	12167	26.00-27.00	1.00		1.00	384.0	55.0	5575.0	61.0	244.0
<19.60-20.00>		Chlorite Streaming										
		Large K-spar altered clasts in a black chlorite rich										
		groundmass. Min py ~2%.										
<20.90-21.03>		Coarse pyrite along lineations in black chlorite.										
<22.30-22.60>		Clasts of intensely altered K-spar up to 10cm in black										
		chlorite groundmass. Pyrite as coarse blebs. Min										
		py~9%										
<23.50-26.25>		foliated 15°:cleavage, foliation 40°										
		Weak PY disseminated										
		Strong breccia feature with clasts of intensely K-spar										
		altered rock ~40-50% is very chloritic matrix. Minor										
		py. Min py~1%										
<30.70-31.40>		Fine grained, greenish-black, foliated, mottled	12168	27.00-28.00	1.00	0.090		41.0	146.0	75.0	47.0	28.0
		foliated 15°	12169	28.00-29.00	1.00	0.020		36.0	263.0	35.0	51.0	14.0
		Frs=6/m	12170	29.00-30.00	1.00	0.035		26.0	271.0	30.0	60.0	14.0
		Moderate SI patches	12171	30.00-31.00	1.00	0.140	0.60	30.0	570.0	80.0	59.0	30.0
		Intense CL pervasive										
		Strong KS pervasive										
		Intense PY blebs										
		Strongly chloritic with coarsely x/line pyrite (cubes)										
		with calcite occurring as blebs in black chlorite.										
		Min py~10%. Weathers ???vuggy?? - limonitic on										
		fractures.										
<31.70-31.72>		calcite vein										
<35.50-35.52>			12172	31.00-32.00	1.00	0.160		36.0	125.0	135.0	47.0	22.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
36.50	52.90	volcaniclastics	12173	32.00-33.00	1.00	0.045		36.0	248.0	30.0	57.0	12.0
		Fine grained, redish-green, stockwork, heterolithic	12174	33.00-34.00	1.00	0.010		25.0	110.0		61.0	12.0
		foliated 20°:cleavage, foliation 40°	12175	34.00-35.00	1.00	0.020		29.0	266.0		53.0	12.0
		Frs=5/m :Vns =15/m	12176	35.00-36.00	1.00	0.005		23.0	164.0		51.0	10.0
		Moderate SI patches	12177	36.00-37.00	1.00	0.030		22.0	199.0	5.0	48.0	10.0
		Strong CL pervasive	12178	37.00-38.00	1.00	0.025		18.0	63.0		47.0	10.0
		Strong KS pervasive	12179	38.00-39.00	1.00	0.060		18.0	98.0		45.0	14.0
		Moderate HE stockwork	12180	39.00-40.00	1.00	0.025		16.0	56.0		45.0	10.0
		Weak PY disseminated	12181	40.00-41.00	1.00	0.020		19.0	87.0	10.0	36.0	12.0
		Moderate QC microveins	12182	41.00-42.00	1.00	0.020		22.0	134.0	20.0	47.0	12.0
		Lower contact of hematite rich zone is at 20 degrees -	12183	42.00-43.00	1.00	0.180		28.0	414.0		62.0	14.0
		hematite - chlorite altered zone, local intense K-spar										
		alteration - abundant chlorite minor hematite rich										
		calcite fragments up to 1cm. Minor limonitic										
		fractures. Additional textures are: mottled and										
		whispy/										
<43.10-52.90>		Fine grained, greenish-green, heterolithic, mottled	12184	43.00-44.00	1.00	0.015		26.0	108.0		47.0	14.0
		fracturing 45°:cleavage, foliation 45°	12185	44.00-45.00	1.00	0.080		30.0	164.0		52.0	16.0
		Frs=6/m	12186	45.00-46.00	1.00	0.010		36.0	160.0	25.0	47.0	16.0
		Moderate SI patches	12187	46.00-47.00	1.00	0.020		21.0	127.0	30.0	55.0	16.0
		Moderate CL pervasive	12188	47.00-48.00	1.00	0.040		33.0	185.0	30.0	53.0	22.0
		Moderate KS pervasive	12189	48.00-49.00	1.00	0.015		32.0	188.0	35.0	50.0	20.0
		Moderate PY microveins	12190	49.00-50.00	1.00	0.030		35.0	180.0	45.0	59.0	22.0
		Strong QC microveins	12191	50.00-51.00	1.00	0.080		40.0	282.0	15.0	97.0	20.0
		Strongly fractured with strong calcite stockwork along	12192	51.00-52.00	1.00	0.070		42.0	331.0	40.0	70.0	26.0
		fractures - local minor pyrite microveinlets.										
<49.40-49.85>		Broken Core										
		Limonitic on fractures.										
<51.70-52.00>		Limonitic on fractures.										
52.90	68.10	volcaniclastics	12193	52.00-53.00	1.00	0.005		37.0	193.0	20.0	55.0	20.0
		Fine grained, redish-green, heterolithic, stockwork	12194	53.00-54.00	1.00	0.005		33.0	189.0	10.0	84.0	22.0
		foliated 10°:cleavage, foliation 15°	12195	54.00-55.00	1.00	0.020		57.0	277.0	50.0	88.0	26.0
		Frs=6/m	12196	55.00-56.00	1.00	0.035		112.0	346.0	45.0	103.0	16.0
		Moderate SI patches	12197	56.00-57.00	1.00	0.070		57.0	295.0		80.0	20.0
		Strong CL pervasive	12198	57.00-58.00	1.00	0.025		33.0	53.0		84.0	20.0
		Moderate KS pervasive	12199	58.00-59.00	1.00	0.010		22.0	68.0		97.0	22.0
		Moderate HE stockwork	12200	59.00-60.00	1.00	0.430		62.0	103.0	25.0	64.0	28.0
		Weak PY disseminated	12201	60.00-61.00	1.00	0.020		42.0	147.0	5.0	53.0	24.0
		Moderate QC microveins	12202	61.00-62.00	1.00	0.010		31.0	148.0		52.0	18.0
		Locally highly foliated (mylonitic) with strong	12203	62.00-63.00	1.00	0.010		26.0	97.0	10.0	57.0	24.0
		chorite stringers ~1-2mm - local K-spar alteraiton.	12204	63.00-64.00	1.00	0.020		39.0	161.0	5.0	76.0	24.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Minor hematite stringers ~1-2mm. Additional textures	12205	64.00-65.00	1.00	0.020		39.0	250.0	55.0	85.0	22.0
		are: foliated and mottled.	12206	65.00-66.00	1.00	0.060	0.40	44.0	546.0	35.0	129.0	14.0
	<63.30-65.37>	Broken Core										
		Local calcite - chlorite veins up to 1cm.										
	<65.50-68.10>	Chlorite Streaming	12207	66.00-67.00	1.00	0.325		454.0	80.0	355.0	227.0	16.0
		Foliated	12208	67.00-68.00	1.00		0.80	701.0	799.0	750.0	184.0	22.0
		foliated 25°										
		Strong chlorite with some narrow massive hematite										
		stringers ~2-3mm.										
	<67.70-68.00>	Broken Core										
		Poor core recovery.										
68.10	85.00	Semi-massive hematite	12209	68.00-69.00	1.00	0.630		60.0	453.0	20.0	72.0	20.0
		Fine grained, blackish-red, stockwork, veined	12210	69.00-70.00	1.00	0.515	0.80	91.0	245.0	410.0	74.0	52.0
		:cleavage, foliation 45°	12211	70.00-71.00	1.00	0.470		28.0	170.0	25.0	75.0	20.0
		Frs=4/m	12212	71.00-72.00	1.00			101.0	139.0	75.0	106.0	20.0
		Moderate SI patches	12213	72.00-73.00	1.00	0.075		148.0	216.0	150.0	84.0	12.0
		Intense CL pervasive	12214	73.00-74.00	1.00	0.070		48.0	396.0	65.0	60.0	12.0
		Moderate MT vein	12215	74.00-75.00	1.00	0.080		188.0	300.0	330.0	115.0	14.0
		Strong KS pervasive	12216	75.00-76.00	1.00		0.20	3034.0	368.0	3465.0	384.0	26.0
		Moderate HE microveins	12217	76.00-77.00	1.00		0.20	1172.0	151.0	1370.0	161.0	12.0
		Moderate PY vein	12218	77.00-78.00	1.00		29.40	951.0	341.0	1265.0	128.0	24.0
		Weak QC microveins	12219	78.00-79.17	1.17		24.80	409.0	333.0	630.0	88.0	50.0
		H-zone - Very strong H-zone consisting of some massive	12220	79.17-80.00	0.83		1.40	755.0	21.0	640.0	284.0	14.0
		pyrite veins, massive to semi-massive hematite	12221	80.00-81.00	1.00	0.295		884.0	54.0	485.0	261.0	14.0
		stringers, minor chlorite streaming and sections of	12222	81.00-82.00	1.00	0.245	1.00	842.0	1420.0	985.0	257.0	16.0
		intense K-spar alteration silicification - hematite	12223	82.00-83.00	1.00	0.615		39.0	200.0	20.0	91.0	36.0
		veins are at 20 degrees to CA.	12224	83.00-84.00	1.00	0.100		44.0	99.0	25.0	106.0	16.0
	<68.10-68.25>	massive hematite										
	<69.50-69.75>	PYRITE VEIN										
		Coarse grained pyrite - rusty.										
	<69.75-70.00>	Chlorite Streaming										
		Black chlorite with ~10% pyrite.										
	<75.50-76.00>	massive hematite										
		Veins of magnetite up to 1cm in massive hematite.										
		Some magnetite occurs as patched.										
	<76.00-76.30>	Semi-massive hematite										
		Intense K-spar alteration/silicification.										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<76.60-76.70>		hematite vein Veined										
<77.50-77.80>		Coarse grained magnetite ~20% of zone.										
<77.90-77.95>												
<78.03-79.17>		?? HE vein Moderate SE microveins Specularite - calcite veinlets ~5mm - Coarse magnetite Veinlets up to 1cm Magnetite ~20%.										
<83.20-83.25>												
<84.90-85.00>		Semi-massive hematite Strong black chlorite.	12225	84.00-85.00	1.00	0.005		30.0	154.0	20.0	71.0	12.0
85.00	123.74	Hornblende Feldspar xtalline	12226	85.00-86.00	1.00	0.005		37.0	81.0	60.0	83.0	14.0
		Fine grained, redish-green, crystalline, stockwork	12227	86.00-87.00	1.00	0.025		32.0	48.0	30.0	77.0	14.0
		cleavage, foliation 45°:hematite stringers 45°	12228	87.00-88.00	1.00	0.015		20.0	161.0	10.0	102.0	14.0
		Frs=6/m :Vns =45/m	12229	88.00-89.00	1.00	0.015		18.0	49.0	5.0	66.0	24.0
		Moderate SI patches	12230	89.00-90.00	1.00	0.005		15.0	59.0	5.0	36.0	16.0
		Moderate CL pervasive	12231	90.00-91.00	1.00	0.005		16.0	73.0	10.0	33.0	14.0
		Moderate KS phenocrystal replacement	12232	91.00-92.00	1.00	0.005		17.0	65.0	10.0	36.0	14.0
		Moderate HE stockwork	12233	92.00-93.00	1.00	0.140		21.0	93.0	15.0	41.0	14.0
		Weak PY disseminated	12234	93.00-94.00	1.00	0.260		19.0	71.0	20.0	65.0	18.0
		Moderate QC microveins	12235	94.00-95.00	1.00	0.020		17.0	50.0	25.0	40.0	24.0
		Variably hematite - chlorite altered with minor 1cm	12236	95.00-96.00	1.00	0.005		14.0	35.0	25.0	67.0	24.0
		hematite veinlets - local intense K-spar alteration	12237	96.00-97.00	1.00	0.010		11.0	42.0	30.0	549.0	250.0
		with wisps of black chlorite - local calcite -	12238	116.00-117.00	1.00	0.010		34.0	91.0	45.0	142.0	20.0
		chlorite veinlets <1cm - locally rock has	12239	117.00-118.00	1.00	0.050		21.0	10.0	20.0	84.0	14.0
		psuedo-breccia appearence due to hematite alteration	12240	118.00-119.00	1.00	0.005		14.0	94.0		70.0	4.0
		along fractures - local intense K-spar	12241	119.00-120.00	1.00	0.010		16.0	121.0	10.0	64.0	4.0
		alteration/silicification. Additional textures are:	11242	120.00-121.00	1.00							
		whispy and mottled.	11243	121.00-122.00	1.00							
<92.50-92.51>		hematite vein										
<93.10-93.11>												
<96.50-96.80>		Broken Core Limonite in fractures.										
<119.00-121.80>		Chlorite Streaming Minor pyrite veinlets, local breccia appearance.										
<121.80-121.97>		calcite vein										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
	(eoh)											

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-125

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL96-125	Date Completed:		Geotech by:
LENGTH: 159.71	Core Diam: NQII		

Collar Location

Latitude:	2084.00
Departure:	1960.00
Elevation:	0.00

S U M M A R Y

0.00-4.88	Hornblende Feldspar xtalline
4.88-7.23	Chlorite Streaming
7.23-68.50	Hornblende Feldspar xtalline
68.50-77.00	Chlorite Streaming
77.00-88.40	Hornblende Feldspar xtalline
88.40-91.20	Chlorite Streaming
91.20-109.50	Hornblende Feldspar xtalline
109.50-111.20	Chlorite Streaming
111.20-128.90	Hornblende Feldspar xtalline
128.90-140.50	Hornblende Feldspar xtalline
140.50-159.71	Hornblende Feldspar xtalline

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-76.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	4.88	Hornblende Feldspar xtalline	12244	1.00-2.00	1.00	0.110		7.0	4.0		43.0	6.0
		Fine grained, greenish-green, mottled, crystalline	12245	2.00-3.00	1.00		2.60	17.0	102.0	25.0	56.0	52.0
		cleavage, foliation 15°:fracturing 45°	12246	3.00-4.00	1.00	0.040		9.0	48.0	10.0	56.0	30.0
		Frs=5/m	12247	4.00-4.88	0.88	0.110	0.40	12.0	130.0	10.0	62.0	42.0
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak PY patches										
		Moderate QC microveins										
		Rock appears to be brecciated porphyry with local										
		intense K-spar alteration - local breccia appearence										
		with strong black chlorite - pyrite occurs as coarse										
		blebs.										
4.88	7.23	Chlorite Streaming	12248	4.88-6.00	1.12		0.80	28.0	68.0	25.0	63.0	12.0
		Blackish-green, Brecciated, mottled	12249	6.00-7.23	1.23		0.60	17.0	151.0	10.0	52.0	10.0
		cleavage, foliation 45°:fracturing 60°										
		Frs=4/m										
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Weak HE patches										
		Moderate PY patches										
		Moderate CV microveins										
		S-2b zone - zone of intense K-spar										
		alteration/silicification that has been brecciated										
		with clasts up to 10cm - clasts are highly fractured										
		with intense calcite micro veinlets along fractures -										
		fragments contain minor hematite - coarse patches fo										
		pyrite generally in the black chlorite between the										
		clasts.										
		Additional texture is fragmental.										
7.23	68.50	Hornblende Feldspar xtalline	12250	7.23-9.00	1.77	0.260		14.0	37.0		45.0	6.0
		Fine grained, grayish-gray, mottled, crystalline	12251	9.00-10.00	1.00	0.005		13.0	4.0		45.0	6.0
		cleavage, foliation 50°	12252	10.00-11.00	1.00	0.010		14.0	2.0	5.0	43.0	6.0
		Frs=5/m	12253	11.00-12.00	1.00	0.120		14.0	4.0		38.0	6.0
		Moderate SI patches	12254	12.00-13.00	1.00	0.010		13.0	4.0		34.0	4.0
		Weak CL pervasive	12255	13.00-14.00	1.00			13.0	17.0	10.0	40.0	6.0
		Strong KS pervasive	12256	14.00-15.00	1.00	0.855		16.0	37.0	15.0	71.0	8.0
		Weak PY disseminated	12257	15.00-16.00	1.00	0.335		15.0	20.0	10.0	56.0	8.0
		Strong QC microveins	12258	16.00-17.00	1.00	0.430		13.0	36.0	15.0	56.0	12.0
		rock varies from a fine grained dense unit to a med	12259	17.00-18.00	1.00	0.060		14.0	41.0	5.0	55.0	16.0
		grained porphyritic one - local very strong qtz -	12260	18.00-19.00	1.00		0.80	18.0	61.0	20.0	44.0	8.0
		clcite stkwk - local intense K-spar	12261	19.00-20.00	1.00		4.20	25.0	132.0	35.0	42.0	8.0
		alteration/silicification.	12262	20.00-21.00	1.00	0.235		26.0	67.0	45.0	78.0	10.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
<12.50-	16.60>	Chlorite Streaming Blackish-green, Brecciated, mottled Local brecciated appearence with clasts of intensely K-spar altered/silicified rock in matrix of black chlorite - minor patches of coarse pyrite. Addition texture is fragmented.										
<24.50-	27.50>	Blackish-green, Brecciated, fragmental Strong SI patches Intense CL pervasive Strong KS pervasive Weak HE patches Moderate PY patches Moderate QC microveins Local 0.3 - 0.5m sections of brecciation in intensely K-spar altered rock. Clasts up to 10cm in matrix of black chlorite. Coars patches of pyrite in chlorite - minor hematite in clasts. Min py ~4%	12263 12264 12265 12266 12267 12268	21.00-22.00 22.00-23.00 23.00-24.00 24.00-25.00 25.00-25.90 25.90-27.00	1.00 1.00 1.00 1.00 0.90 1.10	0.300 0.035 0.305 0.435 0.215	2.80	41.0 29.0 27.0 101.0 13.0 43.0	276.0 63.0 88.0 19.0 17.0 223.0	150.0 65.0 135.0 2820.0 115.0 520.0	86.0 67.0 60.0 60.0 60.0 124.0	20.0 12.0 12.0 30.0 26.0 44.0
<25.90-	26.00>	PYRITE VEIN vein 45°										
<28.70-	29.20>	Broken Core Limonitic on fractures.	12269 12270	27.00-28.00 28.00-29.00	1.00 1.00	0.165	0.60	61.0 29.0	62.0 82.0	300.0 30.0	77.0 53.0	48.0 10.0
<30.35-	34.80>	Limonitic on fractures - poor recovery.										
<43.20-	43.24>	calcite vein										
<45.20-	45.35>	Approx. 3% calcite.										
<46.50-	46.54>	grey, coarsely x/line.										
<63.70-	66.50>	Hornblende Feldspar xtalline Chloritic with abundant fine grained pyrite.	12271 12272	63.00-64.00 64.00-65.00	1.00 1.00	0.115 0.050		52.0 48.0	142.0 151.0	65.0 95.0	63.0 69.0	24.0 26.0
<67.20-	67.30>	Hematite chlorite calcite vein Black chloritic stringers with minor pyrite - some hematite.	12273 12274	65.00-66.00 66.00-67.00	1.00 1.00	0.040 0.280		57.0 56.0	210.0 208.0	70.0 105.0	67.0 58.0	30.0 26.0
68.50	77.00	Chlorite Streaming Redish-green, foliated, Brecciated foliated 15°:cleavage, foliation 10° Frs=5/m :Vns =15/m Moderate SI patches Strong CL pervasive	12275 12276 12277 12278 12279 12280	67.00-68.00 68.00-69.00 69.00-70.00 70.00-71.00 71.00-72.00 72.00-73.00	1.00 1.00 1.00 1.00 1.00 1.00	0.205 0.020 0.035 0.130 0.030 0.015		49.0 28.0 37.0 44.0 32.0 36.0	198.0 137.0 216.0 198.0 185.0 401.0	50.0 40.0 25.0 60.0 45.0 10.0	66.0 110.0 169.0 117.0 112.0 123.0	18.0 20.0 26.0 28.0 28.0 26.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate HE stockwork	12281	73.00-74.00	1.00	0.105		74.0	184.0	35.0	114.0	28.0
		Weak PY disseminated	12282	74.00-75.00	1.00		0.80	154.0	543.0	125.0	117.0	20.0
		Moderate QC microveins	12283	75.00-76.00	1.00	0.705	0.40	156.0	576.0	110.0	102.0	16.0
		Zone of hematite - chlorite alteration into a locally	12284	76.00-77.00	1.00	0.175		167.0	79.0	95.0	255.0	16.0
		hybrid, foliated rock (mylonite). Additional textures										
		are fragmental and stockwork.										
77.00	84.40	Hornblende Feldspar xtalline	12285	77.00-78.00	1.00	0.015		41.0	99.0	20.0	154.0	18.0
		Fine grained, blackish-green, wispy, mottled	12286	78.00-79.00	1.00	0.005		17.0	121.0	10.0	170.0	20.0
		cleavage, foliation 45°:fracturing 45°	12287	79.00-80.00	1.00	0.005		15.0	53.0		81.0	16.0
		Frs=4/m :Vns =5/m	12288	80.00-81.00	1.00	0.005		18.0	104.0	10.0	70.0	18.0
		Moderate SI patches	12289	81.00-82.00	1.00	0.005		22.0	37.0	5.0	58.0	20.0
		Moderate CL pervasive	12290	82.00-83.00	1.00	0.005		22.0	54.0	5.0	47.0	18.0
		Strong KS pervasive	12291	83.00-84.00	1.00	0.090		44.0	77.0	30.0	35.0	20.0
		Moderate HE wispy	12292	84.00-85.00	1.00	0.055		52.0	46.0	60.0	35.0	18.0
		Weak PY disseminated	12293	85.00-86.00	1.00	0.005		26.0	29.0	25.0	42.0	20.0
		Weak QC microveins	12294	86.00-87.00	1.00	0.005		23.0	52.0	145.0	41.0	16.0
		Rock is a very dense ?umfern? green color with wisps	12295	87.00-88.00	1.00	0.010		24.0	43.0	395.0	42.0	22.0
		of black chlorite and hematite locally intense K-spar										
		alteration. Some with hematite selveges - locally										
		breccia appearence.										
<81.50-82.70>		Fragmental										
		Strong breccia appearance with clasts of K-spar										
		altered rock up to 3-4 cm in matrix of black chlorite										
		and hematite.										
<83.50-84.40>		Narrow veins of intense K-spar alteration. Altered										
		rock is intensely fractured with micro veinlet stkwk										
		of calcite.										
88.40	91.20	Chlorite Streaming	12296	88.00-89.00	1.00	0.055		36.0	100.0	265.0	95.0	38.0
		Foliated	12297	89.00-90.00	1.00	0.015		40.0	149.0	85.0	106.0	44.0
		foliated 20°	12298	90.00-91.00	1.00	0.035		42.0	92.0	55.0	138.0	42.0
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Weak PY disseminated										
		Weak QC microveins										
		Strong black chlorite as filling between fragments or										
		clasts.										
91.20	109.50	Hornblende Feldspar xtalline	12299	91.00-92.00	1.00	0.050		27.0	46.0	60.0	80.0	22.0
		Fine grained, greenish-black, foliated, foliated	12300	92.00-93.00	1.00	0.020		27.0	55.0	70.0	89.0	20.0
		foliated 20°:cleavage, foliation 45°	12301	93.00-94.00	1.00	0.355	0.40	39.0	184.0	50.0	137.0	24.0
		Frs=3/m	12302	94.00-95.00	1.00	0.040	0.20	35.0	161.0	40.0	102.0	32.0
		Moderate SI patches	12303	95.00-96.00	1.00	0.010		22.0	77.0	25.0	61.0	28.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate CL pervasive	12304	96.00-97.00	1.00	0.005		23.0	62.0	40.0	52.0	24.0
		Moderate KS pervasive	12305	97.00-98.00	1.00	0.010		15.0	47.0	20.0	60.0	20.0
		Weak HE patches	12306	98.00-99.00	1.00	0.005		14.0	55.0	25.0	49.0	18.0
		Weak PY disseminated	12307	99.00-100.00	1.00	0.010		15.0	41.0	30.0	48.0	24.0
		Weak QC microveins	12308	100.00-101.00	1.00	0.305		21.0	90.0	50.0	53.0	20.0
		Generally uniform dense rock with minor calcite	12309	101.00-102.00	1.00	0.005		17.0	86.0	30.0	49.0	22.0
		stockwork - local intense chlorite and wisps or	12310	102.00-103.00	1.00	0.035		27.0	66.0	50.0	43.0	20.0
		stringers. Additional texture is whispy.	12311	103.00-104.00	1.00	0.005		27.0	68.0	45.0	34.0	18.0
109.50	111.20	Chlorite Streaming	12312	104.00-105.00	1.00	0.840		19.0	90.0	25.0	52.0	20.0
		Fine grained, redish-green, mottled, foliated	12313	105.00-106.00	1.00	0.495		28.0	96.0	55.0	56.0	24.0
		foliated 15°:fracturing 25°	12314	106.00-107.00	1.00	0.010		16.0	63.0	25.0	44.0	26.0
		Moderate SI patches	12315	107.00-108.00	1.00	0.095		84.0	76.0	65.0	64.0	18.0
		Intense CL pervasive	12316	108.00-109.50	1.50	0.005		27.0	128.0	10.0	46.0	18.0
		Strong KS pervasive	12317	109.50-110.00	0.50	0.060		22.0	81.0	40.0	40.0	12.0
		Strong HE stockwork	12318	110.00-111.20	1.20	0.050		31.0	116.0	20.0	40.0	14.0
		Moderate QC microveins										
		H-zone - weak zone of K-spar altertion, hematite -										
		chlorite alteration - minor narrow massive hematite										
		veinlets <5mm or cm???? at upper contact - lower										
		contact appears to be rusty shear zone.										
111.20	128.90	Hornblende Feldspar xtalline	12319	111.20-112.00	0.80	0.210		57.0	76.0	35.0	56.0	16.0
		Fine grained, greenish-green, mottled, crystalline	12320	112.00-113.00	1.00	0.230	1.20	147.0	277.0	240.0	103.0	30.0
		cleavage, foliation 90°:fracturing 45°	12321	113.00-114.00	1.00	0.025	2.00	56.0	866.0	85.0	123.0	38.0
		Frs=4/m	12322	114.00-115.00	1.00	0.005	0.40	72.0	265.0	90.0	160.0	42.0
		Moderate SI patches	12323	115.00-116.00	1.00	0.015	0.60	56.0	296.0	95.0	145.0	46.0
		Moderate CL pervasive	12324	116.00-117.50	1.50	0.015		28.0	118.0	30.0	82.0	34.0
		Moderate KS pervasive	12325	117.50-119.00	1.50		0.40	85.0	234.0	80.0	117.0	40.0
		Moderate PY patches	12326	123.00-124.00	1.00	0.020		26.0	94.0	25.0	67.0	42.0
		Moderate QC microveins	12327	124.00-125.00	1.00	0.050	0.20	50.0	103.0	55.0	88.0	46.0
		Weak foliation, wispy black chlorite micro veinlets	12328	125.00-126.00	1.00	0.005		14.0	68.0	10.0	94.0	38.0
		~5% - pyrite occurs as minor patches min py~3% - minor										
		calcite - chlorite veinlets usually <5mm minor cp at										
		127.8m.										
<120.02-120.09>		calcite vein										
<124.50-124.80>		Chlorite Streaming										
		Black chlorite with hematite contact ~15 degrees - 2cm										
		calcite vein along interval.										
128.90	140.50	Hornblende Feldspar xtalline	12329	134.00-135.00	1.00	0.060		39.0	76.0	20.0	98.0	24.0
		Fine grained, greenish-green, stockwork, crystalline	12330	135.00-136.00	1.00	0.165		17.0	34.0	10.0	86.0	18.0
		cleavage, foliation 45°:fracturing 45°	12331	136.00-137.00	1.00	0.005		12.0	23.0	10.0	78.0	16.0
		Frs=4/m	12332	137.00-138.00	1.00	0.010		9.0	8.0		88.0	18.0
		Moderate SI patches	12333	138.00-139.00	1.00	0.005		12.0	76.0		105.0	70.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate CL pervasive										
		Moderate KS pervasive										
		Moderate HE stockwork										
		Moderate PY patches										
		Moderate QC microveins										
		Variably hematite-chlorite altered wih local K-spar										
		alteraton - local intense calcite micro-veinlet										
		stockwork - some veinlets up to 5mm. Additional										
		texture is brecciated.										
		<134.90-135.15> Semi-massive hematite										
		Intense K-spar alteration hematite veinlets up to 5mm										
		- k-spar rock is intensely fractured.										
140.50	159.71	Hornblende Feldspar xtalline	12334	151.00-152.00	1.00	0.010		12.0	41.0		36.0	6.0
		Fine grained, greenish-green, mottled, stockwork	12335	152.00-153.00	1.00	0.220	1.00	35.0	61.0	25.0	61.0	14.0
		cleavage, foliation 45°:fracturing 45°	12336	153.00-154.00	1.00	0.010		8.0	30.0		59.0	6.0
		Frs=5/m										
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak HE stockwork										
		Moderate PY disseminated										
		Moderate QC microveins										
		Locally intensely fractured with calcite ????? -										
		veinlet stockwork local weak hematite alteration. min										
		py ~ 2%. Additional texture is breacciated.										
(eoh)												

11/29/96

HOMESTAKE MINING COMPANY — DRILL HOLE LOG — CL96-126

PROJECT: Clone	Date Commenced:	Contractor:	Logged by:
DRILL HOLE: CL96-126	Date Completed:		Geotech by:
LENGTH: 175.56	Core Diam: NQII		

Collar Location

Latitude:	2084.00
Departure:	1960.00
Elevation:	0.00

S U M M A R Y

0.00-3.41	Hornblende Feldspar xtalline
3.41-11.93	Chlorite Streaming
11.93-18.70	Hornblende Feldspar xtalline
18.70-30.10	volcaniclastics
30.10-54.38	Hornblende Feldspar xtalline
54.38-57.20	Chlorite Streaming
57.20-79.00	volcaniclastics
79.00-92.10	Hornblende Feldspar xtalline
92.10-96.30	Chlorite Streaming
96.30-101.50	Hornblende Feldspar xtalline
101.50-102.56	Chlorite Streaming
102.56-118.50	Hornblende Feldspar xtalline
118.50-119.00	shear zone
119.00-123.05	Chlorite Streaming
123.05-145.90	Hornblende Feldspar xtalline
145.90-146.90	Chlorite Streaming
146.90-163.57	Hornblende Feldspar xtalline
163.57-175.56	volcaniclastics

DOWN HOLE SURVEYS

Depth	Azim	Inclin	Method
0.00	45.00	-80.00	

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
0.00	3.41	Hornblende Feldspar xtalline	12337	1.00-2.00	1.00	0.005		7.0	5.0		44.0	8.0
		Fine grained, greenish-green, mottled, crystalline	12338	2.00-3.41	1.41	0.065		7.0	10.0		43.0	8.0
		cleavage, foliation 45°:fracturing 45°										
		Frs=3/m										
		Moderate SI patches										
		Moderate CL pervasive										
		Moderate KS pervasive										
		Weak PY disseminated										
		Moderate QC microveins										
		Regularly spaced 1 cm calcite veinlet a g. intrusive.										
		Minor med grained feld x/s - minor limonite feature.										
3.41	11.93	Chlorite Streaming	12339	3.41-4.39	0.98	38.880	9.20	37.0	400.0	40.0	79.0	374.0
		Blackish-green, foliated, Brecciated	12340	4.39-5.50	1.11	0.055		6.0	32.0	10.0	39.0	28.0
		cleavage, foliation 45°:foliated 10°	12341	5.50-6.00	0.50	0.670	0.40	8.0	75.0	10.0	49.0	70.0
		Frs=3/m	12342	6.00-7.00	1.00	0.175	0.20	5.0	32.0	10.0	22.0	34.0
		Strong SI patches	12343	7.00-7.90	0.90	0.805	0.20	10.0	65.0		66.0	14.0
		Intense CL pervasive	12344	7.90-9.00	1.10	2.500	0.20	11.0	65.0		61.0	4.0
		Strong KS pervasive	12345	9.00-10.00	1.00	7.460	0.80	34.0	103.0	20.0	127.0	6.0
		Strong HE stockwork	12346	10.00-11.00	1.00	6.100	1.40	113.0	304.0	115.0	145.0	8.0
		Strong PY vein										
		Moderate QC microveins										
		S-2B zone - zone consists of intensely K-spar altered										
		clasts in black chlorite matrix (mylonite appearence).										
		Some of the fragments have elongated habit - clasts										
		form from 40-80%. Zone - pyrite occurs as										
		discontinuous stringers and as patches. min py ~6%										
		overall.										
	<4.29-4.39>	semi-massive sulphides										
	<4.39-7.10>	Hornblende Feldspar xtalline										
		Minor chlorite streaming.										
	<5.80-5.90>	Chlorite Streaming										
		Coarse casts in black chlorite . min py ~5%										
	<8.70-11.93>	Semi-massive hematite										
		Minor pyrite as discontinous veinlets locally very										
		mylonitic - intensely altered K-spar clasts are very										
		intensily fractured with calcite micro-veinlet										
		stockwork.										
11.93	18.70	Hornblende Feldspar xtalline	12347	11.00-12.00	1.00	3.480	0.40	33.0	134.0	30.0	146.0	8.0
		Fine grained, grayish-gray, mottled, crystalline	12348	12.00-13.00	1.00	0.250		14.0	12.0		57.0	6.0
		cleavage, foliation 45°:foliated 10°	12349	13.00-14.00	1.00	0.040		14.0	4.0		39.0	2.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Frs=6/m	12350	14.00-15.00	1.00	0.010		11.0	2.0	10.0	29.0	2.0
		Moderate SI patches	12351	15.00-16.00	1.00	0.005		14.0	3.0		30.0	2.0
		Moderate CL pervasive	12352	16.00-17.00	1.00	0.020		11.0	22.0		32.0	2.0
		Moderate KS pervasive	12353	17.00-18.00	1.00	0.270		13.0	18.0	10.0	33.0	4.0
		Weak PY disseminated										
		Moderate QC microveins										
		Locally K-spar altered - some local narrow sections with K-spar altered calsts in black chlorited - locally limonitic on fractures. Additiona texture is foliated										
18.70	30.10	volcaniclastics	12354	18.00-19.00	1.00	4.340	0.60	30.0	99.0	225.0	70.0	16.0
		Fine grained, grayish-gray, fragmental, foliated	12355	19.00-20.00	1.00	0.150		31.0	105.0	120.0	105.0	10.0
		foliated 20°:fracturing 45°	12356	20.00-21.00	1.00	0.005		29.0	126.0	45.0	103.0	6.0
		Frs=4/m	12357	21.00-22.00	1.00	0.015		33.0	117.0	75.0	123.0	6.0
		Moderate SI patches	12358	22.00-23.00	1.00	0.150		31.0	86.0	95.0	103.0	10.0
		Moderate CL pervasive	12359	23.00-24.00	1.00	0.710	1.00	39.0	109.0	235.0	102.0	12.0
		Moderate KS pervasive	12360	24.00-25.00	1.00	0.010		29.0	84.0	255.0	91.0	6.0
		Weak PY disseminated	12361	25.00-26.00	1.00	0.405		39.0	117.0	155.0	80.0	12.0
		Weak PR microveins	12362	26.00-27.00	1.00	0.720	0.40	101.0	177.0	1125.0	55.0	18.0
		2 % pyrrhotite - microveins	12363	27.00-28.00	1.00	0.745	0.60	33.0	117.0	370.0	72.0	52.0
		Well preserved clasts in fine ground matrix -	12364	28.00-29.00	1.00	0.375		30.0	98.0	280.0	67.0	100.0
		generally weak calcite stockwork limonitic along	12365	29.00-30.00	1.00	0.050		27.0	121.0	110.0	59.0	92.0
		fractures.										
<18.70-18.70>		Chlorite Streaming										
		Clasts up to 3cm in black chloritic matrix.										
<25.90-26.21>		Broken Core										
		Limonte on fractures										
<27.10-27.15>		semi-massive sulphides										
		Heavy black chlorite with coarse pyrite patches up to 4cm.										
<28.10-29.13>		Broken Core										
		Limonite on fractures.										
30.10	54.38	Hornblende Feldspar xtalline	12366	30.00-31.00	1.00	0.100		90.0	94.0	85.0	41.0	22.0
		Fine grained, grayish-gray, mottled, crystalline	12367	31.00-32.00	1.00	0.530		450.0	28.0	180.0	48.0	8.0
		cleavage, foliation 45°:fracturing 45°	12368	32.00-33.00	1.00	0.045		25.0	95.0	35.0	41.0	2.0
		Frs=4/m	12369	33.00-34.00	1.00	1.750		39.0	147.0	215.0	60.0	6.0
		Moderate SI patches	12370	34.00-35.00	1.00	7.230	0.40	57.0	168.0	230.0	65.0	6.0
		Moderate CL pervasive	12371	52.00-53.00	1.00	0.315	0.40	60.0	36.0	370.0	56.0	4.0
		Moderate KS pervasive	12372	53.00-54.38	1.38	0.365		43.0	46.0	320.0	63.0	4.0
		Weak PY disseminated										
		Moderate QC microveins										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Generally strong calcite stockwork, medium grained feldspar x/s in fine grained groundmass. Local intense K-spar alteration.										
		<33.95-34.15> Chlorite Streaming										
		<52.95-52.96> semi-massive sulphides K-spar alteration veinlet with ap+cp as well as black chlorite.										
54.38	57.20	Chlorite Streaming	12373	54.38-55.57	1.19	12.530	1.60	437.0	800.0	3985.0	109.0	18.0
		Blackish-gray	12374	55.57-56.57	1.00	2.660	0.80	40.0	507.0	210.0	80.0	16.0
		vein 45°:cleavage, foliation 41° Frs=4/m Intense SI patches Intense CL pervasive Intense KS pervasive Intense PY vein Moderate QC microveins Intense K-spar alteration with stringers of black chlorite . Min py, ap, cp with black chlorite.										
		<54.38-54.78> semi-massive sulphides Intense black chlorite with veinlets of py, minor ap, cp as well as traces malachite. Min py ~15%, ap ~3%, cp ~1%.										
		<56.37-56.38> PYRITE VEIN 1cm wide zone with wisps of cp.										
57.20	79.00	volcaniclastics	12375	56.57-58.00	1.43	0.405		25.0	22.0	160.0	55.0	16.0
		Grayish-gray, fragmental, mottled	12376	58.00-59.00	1.00	0.015		9.0	18.0	15.0	65.0	22.0
		cleavage, foliation 45°:fracturing 25° Frs=5/m Strong SI patches Moderate CL pervasive Strong KS pervasive Weak PY disseminated Moderate QC microveins Generally fragmental in appearence - local intense K-spar alteration locally limonitic on fractures.										
		<76.70-76.80> shear zone Pyrite is smeared along slickenslides, minor limonitic gouge.										
79.00	92.10	Hornblende Feldspar xtalline	12377	91.00-92.00	1.00	0.045		14.0	42.0	10.0	51.0	6.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Fine grained, grayish-gray, crystalline										
		cleavage, foliation 45°:fracturing 45°										
		Frs=3/m										
		Moderate SI patches										
		Weak CL pervasive										
		Moderate KS patches										
		Weak PY disseminated										
		Moderate QC microveins										
		Dense uniform rock with strong calcite stockwork.										
92.10	96.30	Chlorite Streaming	12378	92.00-93.00	1.00	0.050		42.0	332.0	55.0	64.0	20.0
		Fine grained, greenish-green, foliated	12379	93.00-94.00	1.00	0.090	0.60	42.0	252.0	70.0	96.0	18.0
		foliated 10°:fracturing 15°	12380	94.00-95.00	1.00	0.010		40.0	151.0	65.0	140.0	10.0
		Frs=8/m	12381	95.00-96.00	1.00	0.005		25.0	215.0	40.0	62.0	6.0
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Weak HE patches										
		Strong PY disseminated										
		Weak QC microveins										
		Locally abundant fine grained pyrite associated with										
		strong chlorite alteration. Rusty along fractures.-										
		local intense K-spar alteration, minor hematite. Min										
		py ~7%.										
<92.10-92.30>		semi-massive sulphides										
<93.60-93.70>												
<95.70-95.80>		calcite vein										
		Bedded										
		bedding 45°										
		Red hematite rich bands.										
<96.10-96.30>		shear zone										
		Abundant gouge - crushed py in clay.										
96.30	101.50	Hornblende Feldspar xtalline	12382	96.00-97.00	1.00	0.440		53.0	187.0	640.0	93.0	14.0
		Fine grained, grayish-gray, mottled, crystalline	12383	97.00-98.00	1.00	1.020		23.0	118.0	135.0	91.0	12.0
		cleavage, foliation 45°:fracturing 45°	12384	98.00-99.00	1.00	0.205		43.0	129.0	210.0	72.0	8.0
		Frs=4/m	12385	99.00-100.00	1.00	14.610	2.40	134.0	697.0	465.0	77.0	10.0
		Moderate SI patches	12386	100.00-101.00	1.00	2.700	0.40	45.0	252.0	200.0	168.0	10.0
		Moderate CL pervasive										
		Strong KS pervasive										
		Strong PY vein										
		Moderate QC microveins										
		Highly broken with strong calcite stockwork along										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		fractures.										
		<99.20-99.25> PYRITE VEIN										
		<99.80-99.86>										
		<101.20-101.24>										
101.50	102.56	Chlorite Streaming	12387	101.00-102.00	1.00	1.470		57.0	427.0	325.0	127.0	8.0
		Fine grained, grayish-red, foliated	12388	102.00-102.56	0.56	4.450	1.20	295.0	808.0	4145.0	104.0	12.0
		foliated 15°:vein 15°										
		Frs=3/m										
		Moderate SI patches										
		Intense CL pervasive										
		Moderate KS pervasive										
		Moderate HE patches										
		Intense PY vein										
		Weak QC microveins										
		Highly foliated with black chlorite stringers banded										
		with pyrite and hematite rich calcite. Min py ~20%										
102.56	118.50	Hornblende Feldspar xtalline	12389	102.56-104.00	1.44	0.030		17.0	55.0	90.0	86.0	10.0
		Fine grained, grayish-gray, crystalline	12390	104.00-105.00	1.00	0.040		15.0	70.0	50.0	67.0	16.0
		cleavage, foliation 45°:fracturing 45°	12391	105.00-106.00	1.00	0.025	0.40	13.0	66.0	50.0	83.0	10.0
		Frs=6/m	12392	106.00-107.00	1.00	0.450	0.20	195.0	88.0	940.0	62.0	12.0
		Moderate SI patches	12393	107.00-108.00	1.00	0.620		95.0	107.0	820.0	72.0	14.0
		Moderate CL pervasive	12394	108.00-109.00	1.00	0.025		96.0	48.0	1025.0	54.0	14.0
		Moderate KS pervasive	12395	113.00-114.00	1.00	0.035		32.0	136.0	60.0	136.0	20.0
		Weak HE patches	12396	114.00-115.00	1.00	0.030		35.0	116.0	55.0	123.0	24.0
		Weak PY disseminated	12397	115.00-116.00	1.00	0.015		34.0	139.0	40.0	125.0	20.0
		Moderate QC microveins	12398	116.00-117.00	1.00	0.020		36.0	179.0	50.0	78.0	26.0
		Minor black chlorite stringers with pyrite blobs at	12399	117.00-118.00	1.00	0.020		27.0	146.0	50.0	62.0	14.0
		106.5 - 107.8 - local intense K-spar alteration.										
		<115.80-115.90> gouge										
		Gouge										
		Gouge.										
118.50	119.00	shear zone	12400	118.00-119.00	1.00	0.170		52.0	210.0	90.0	115.0	42.0
		Highly broken with gouge, minor limonite.										
119.00	123.05	Chlorite Streaming	12401	119.00-120.00	1.00	0.325	0.60	81.0	233.0	110.0	135.0	46.0
		Blackish-gray, gouge, foliated	12402	120.00-121.00	1.00	0.340		94.0	131.0	125.0	106.0	16.0
		cleavage, foliation 45°:fracturing 45°	12403	121.00-122.00	1.00	0.025		58.0	206.0	70.0	94.0	14.0
		Frs=4/m	12404	122.00-123.00	1.00	1.650	0.40	92.0	226.0	130.0	98.0	16.0
		Moderate SI patches										
		Intense CL pervasive										

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Moderate KS pervasive Moderate PY disseminated Moderate QC microveins Locally strongly K-spar altered, abundant black chlorite stringers, local breccia texture. py occurs as fine patches.										
<119.15-119.80>		shear zone Highly broken, some gouge.										
123.05	145.90	Hornblende Feldspar xtalline Fine grained, grayish-gray, crystalline cleavage, foliation 45°:fracturing 45° Frs=3/m Moderate SI patches Weak CL pervasive Moderate KS pervasive Weak PY disseminated Moderate QC microveins Dense uniform with weakening calcite stockwork - minor black wispy chlorite stringers.	12405 12406	123.00-124.00 144.00-145.00	1.00 1.00	0.005 0.010		21.0 24.0	110.0 61.0	25.0 20.0	64.0 116.0	22.0 108.0
<123.80-123.90>		calcite vein ~50% calcite.										
<134.95-135.40>		shear zone Abundant clay + gouge.										
<138.60-138.95>		Broken Core										
145.90	146.90	Chlorite Streaming Fine grained, greenish-green, foliated foliated 45°:fracturing 45° Frs=3/m Moderate SI patches Intense CL pervasive Strong KS pervasive Moderate HE vein Strong PY vein Moderate QC microveins Local intense K-spar alteration - stringers + veins with pyrite and minor cp. Min py ~10%.	12407	145.00-146.00	1.00	0.040	1.20	53.0	363.0	65.0	270.0	544.0
<146.10-146.30>		SULPHIDE VEIN About 50% pyrite, strong hematite + chlorite, ~2%.										
146.90	163.57	Hornblende Feldspar xtalline	12408	146.00-147.00	1.00	6.850	9.20	352.0	1967.0	455.0	635.0	292.0

FROM	TO	DESCRIPTION	Sample	INTERVAL	WIDTH	Au g/T	Ag ppm	Co ppm	Cu ppm	As ppm	Zn ppm	Pb ppm
		Fine grained, greenish-green, crystalline, mottled	12409	147.00-148.00	1.00	0.110	0.80	56.0	314.0	60.0	129.0	88.0
		cleavage, foliation 45°:fracturing 45°	12410	148.00-149.00	1.00	0.040	0.60	27.0	325.0	25.0	135.0	102.0
		Frs=4/m	12411	149.00-150.00	1.00	0.030	0.60	51.0	374.0	50.0	187.0	144.0
		Moderate SI patches	12412	150.00-151.00	1.00	0.005	0.80	64.0	383.0	60.0	335.0	240.0
		Moderate CL pervasive	12413	151.00-152.00	1.00	0.030	1.20	82.0	543.0	85.0	735.0	714.0
		Weak HE patches	12414	152.00-153.00	1.00	0.015	1.60	38.0	308.0	30.0	367.0	400.0
		Moderate PY vein	12415	153.00-154.00	1.00	0.060	0.80	19.0	284.0	20.0	230.0	164.0
		Moderate QC microveins	12416	154.00-155.00	1.00	0.010	0.60	14.0	193.0		114.0	92.0
		Narrow chlorite rich section local intense K-spar	12417	155.00-156.00	1.00	0.030	0.40	17.0	165.0	5.0	97.0	40.0
		alt/silicification. Pyrite as patches and veinlets.	12418	156.00-157.00	1.00	0.015	0.20	25.0	152.0	20.0	172.0	48.0
		Min py ~4%	12419	157.00-158.00	1.00	0.005		15.0	49.0		167.0	22.0
	<149.50-149.80>	Chlorite Streaming										
		Minor hematite, pyrite as veinlets.										
	<151.20-152.80>	Hornblende Feldspar xtalline										
		Narrow pyrite veinlets parallel to sub-parallel to CA.										
		Min py~5%.										
	<163.37-163.55>	calcite vein										
163.57	175.56	volcaniclastics	12420	165.00-166.00	1.00	0.005		23.0	142.0	50.0	51.0	14.0
		Fine grained, grayish-gray, mottled, foliated	12421	166.00-167.00	1.00	0.005		25.0	200.0	60.0	59.0	16.0
		cleavage, foliation 45°:foliated 45°	12422	167.00-168.00	1.00	0.010		24.0	202.0	30.0	51.0	14.0
		Frs=3/m	12423	168.00-169.00	1.00	0.010		25.0	204.0	45.0	49.0	14.0
		Strong SI patches										
		Weak CL pervasive										
		Intense MS pervasive										
		Strong KS pervasive										
		Moderate PY microveins										
		Strong QC microveins										
		Highly sericitic here, local intense K-spar alteration										
		- pyrite as fine veinlets - locally very intense										
		calcite stockwork. Min py ~5%.										
	<170.10-170.12>	calcite vein										
		Fine chlorite along veins.										
(eoh)												

11/29/96