COMPANY: GOLDSTREAM MINING NL/TITAN RESOURCES NL
PROJECT: MOINA RL 8810
HOLE NUMBER: HS 002

Commenced:	19May94
Completed:	30May94
Logged By:	LA Newnham
Drilled By:	Dia. Drill Tas.

Purpose of Hole

To test the Au-Zn potential of the Hugo Skarn between previously drilled holes, SMD 24 and SMD 16 to the west of SMD 13.

Comments on Completion

A vertical thickness of 105 metres of calc silicate skarns and wrigglite skarns was intersected. The skarn was strongly Sn-W anomalous, but only moderately Au anomalous. A zone of significant sphalerite intersected in lower half of skarn.

Collar Details

Grid	Northing	Easting	Elevation	Dip	Bearing
AMG	5406270	423650	610	-90	-

Length (m)
157.4

Hole Size

To (m)	Size
1.0	HW
	HQ
157.4	NQ

Significant Core Loss Zones

From	To	%Rec.

Hole Condition on Completion

All rods and casing removed from hole.

Summary of Results

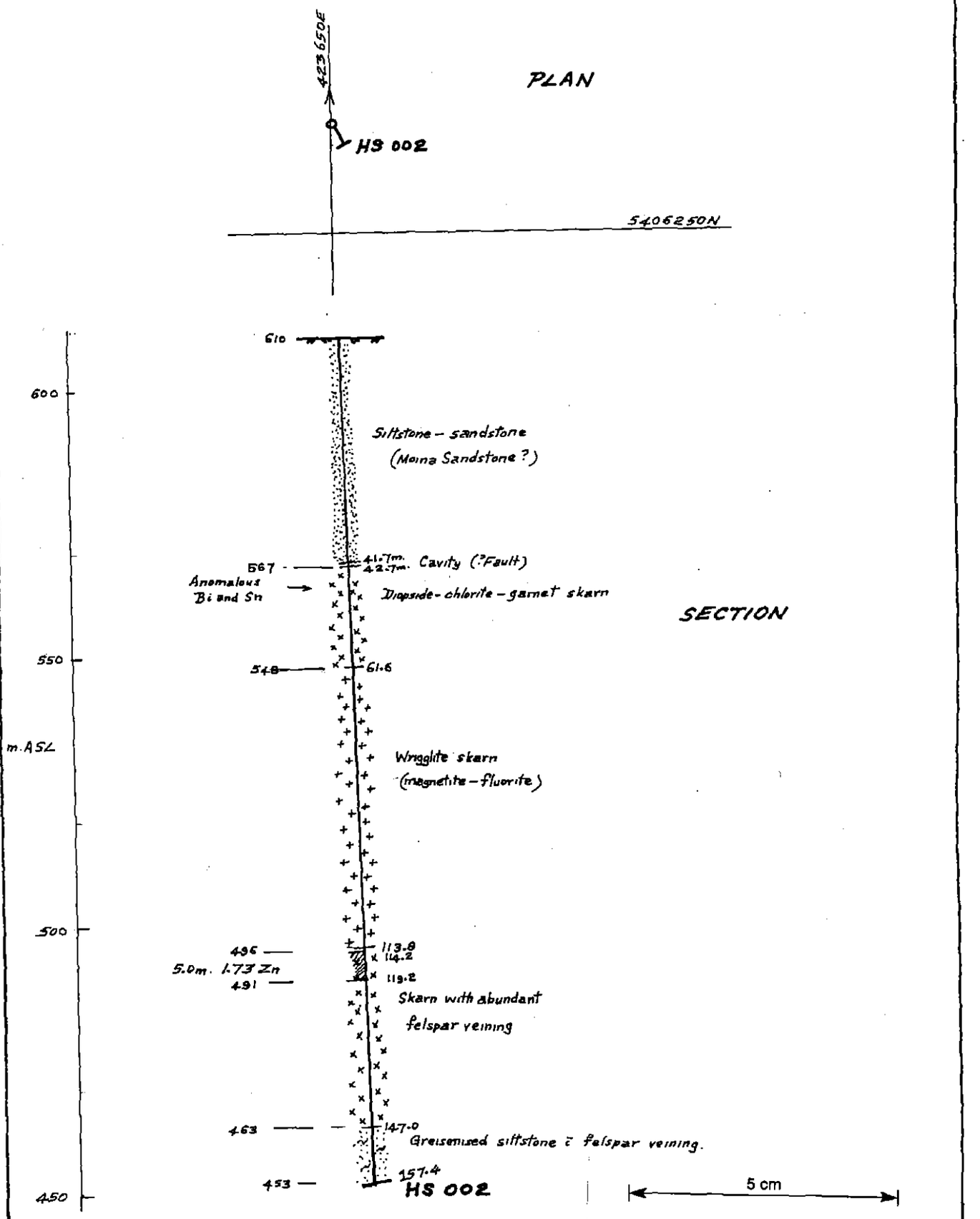
Depth		Recovery	Description	Assays							
From	To	%		Length	Zn						
114.2	119.2	100	Feldspar veined skarn.	5.0	1.73						

DOWN HOLE SURVEY DATA

COMPANY: *Goldstream - Titan*
PROJECT: Moina - Hugo Skarn
HOLE NUMBER: HS 002

Depth	Dip	Bearing	Interval		Length	Vertical Distance		Horizontal Distance		Co-ordinates			
(m)		(AMG)	From	To	(D)	D.sin dip	R.L.	D. cos dip (HD)	Cumulative HD	N. distance HD. cos brg.	N. co-ordinate	E. distance HD. sin brg.	E. co-ordinate
COLLAR	-90	0					610.00		0.00		5,406,270.0		423,650.0
0	-90	0	0	31.5	31.5	31.50	578.50	0.00	0.00	0.00	5,406,270.0	0.00	423,650.0
63	-88	119	31.5	85.5	54	53.97	524.53	1.88	1.88	-0.91	5,406,269.1	1.65	423,651.6
108	-87.8	193	85.5	130.5	45	44.97	479.57	1.73	3.61	-1.68	5,406,267.4	-0.39	423,651.3
153	-88	156	130.5	155.2	24.7	24.68	454.88	0.86	4.47	-0.79	5,406,266.6	0.35	423,651.6
157.4	-88	156	155.2	157.4	2.2	2.20	452.68	0.08	4.55	-0.07	5,406,266.5	0.03	423,651.6
157.4													

184041



NEWNHAM EXPLORATION AND MINING SERVICES

R.L. 8810 – MOINA AREA
HUGO SKARN DRILLING
DDH HS 002

0m	40	Scale: 1:1000
Drawn: L.A. Newnham	Date: Sept 94	Figure:

COMPANY: GOLDSTREAM-TITAN
PROJECT: MOINA RL 8810
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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Au	Zn	Mo	Bi	Sn	W
		SUMMARY LOG:														
0	1.0	HW tricone														
1.0	42.7	Siltstone-sandstone														
42.7	61.6	Diopside-chlorite-garnet skarn					%F as CaF2									
61.6	113.8	Wrigglite skarn														
113.8	147.0	Skarn with abundant feldspar veining														
147.0	157.4	Greisenised siltstone with feldspar veining														
		DETAILED LOG:														
0	1.0	*HW tricone - no core.*	0	1.0	0											
			1.0	4.0	7											
1.0	41.7	**Sandstone-Siltstone:**	4.0	6.9	85											
			6.9	8.7	50											
		Bleached, buff brown siltstone and fresher dark grey siltstone and sandstone.	8.7	10.5	10											
			10.5	12.0	40											
		Anastomosing network < 1 mm veinlets and fractures.	12.0	12.9	55											
			12.9	13.8	80											
			13.8	16.5	90											
		Minor fine grained pyrite less than 0.5% disseminated in fresher units and leading to limonite in weathered equivalents.	16.5	18.5	70											
			18.5	19.5	30											
			19.5	20.3	75		0.26		31.0	32.0	<0.005	740	3	8	20	<10
			20.3	21.3	40		0.22		32.0	33.0	<0.005	550	3	6	15	45
		Generally very broken and rubbly with occasional harder, more competent beds.	21.3	25.0	90		0.12		33.0	34.0	<0.005	640	4	7	5	25
			25.0	26.1	75		0.08		34.0	35.0	<0.005	330	6	6	5	15
			26.1	27.8	100											
		Some worm casts up to 4 mm long.	27.8	28.3	80											
			28.3	28.9	60											
		Softer green sericite material on fractures.	28.9	30.9	50											
			30.9	32.7	80											
		Virtually sandstone rubble 18 - 42 metres.	32.7	34.5	100											
			34.5	40.3	90											
		30-35: strongly pyritic, semi massive in placed, disseminated in sandstone and abundant in thin veins and fracture filling.	40.3	40.8	80											
			40.8	41.7	80											

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Au	Zn	Mo	Bi	Sn	W
		Stretched boudins in places, typically containing abundant pyrite (not a conglomerate).					%F as CaF2									
		Becoming very dark and siliceous below 40 metres, with abundant pyrite.														
41.7	42.7	**Cavity:**	41.7	42.7	0											
		Containing red mud (?hematite).														
42.7	61.1	**Hematitic Skarn & Skarn Breccia:**	42.7	43.5	75		0.30		42.7	43.5	<0.005	770	4	15	40	240
			43.5	45.1	50		0.22		43.5	45.1	0.012	510	13	260	340	260
		Mottled green-black skarn, impressively brecciated 46.8 - 52.5 metres.	45.1	46.3	66		3.05		45.1	46.1	0.008	800	<2	480	1980	100
			46.3	56.7	100		10.20		46.1	46.8	0.017	580	2	390	2050	470
		42.7-46.3: decomposed green-black skarn with soft red hematite veins and patches.	56.7	58.5	90											
			58.5	61.3	100											
		46.3-46.8: wrigglite cut by thin pink feldspar veins.					2.80		46.8	47.8	0.070	670	3	500	2650	230
							0.16		47.8	48.8	<0.005	510	9	1.61%	3300	140
							0.22		48.8	49.8	0.055	750	8	1580	3450	130
		46.8-52.6: breccia zone with large (to 10 cm) fragments of carbonate and skarn set in mottled green-black matrix. Hematite abundant as large blood red patches and veinlets; bismuthinite common as blebs and aggregates; magnetite common in ground mass.					0.12		49.8	50.8	0.055	580	4	990	4050	145
							0.18		50.8	51.8	0.036	1420	2	460	1950	120
							0.08		51.8	52.8	0.019	1020	<2	300	3850	110
		52.6-55.3: brecciated dark grey-black wrigglite unit with abundant white calcite? in fractures; hematite clots common.					0.12		52.8	53.8	<0.005	550	<2	15	35	90
							0.06		53.8	54.8	<0.005	780	<2	15	40	105
							0.18		54.8	55.3	<0.005	130	<2	15	210	260
		55.3-58.6: green-black mottled calcareous skarn, brecciated appearance in places; abundant blood red hematite clots; minor bismuthinite and magnetite.					0.28		55.3	56.7	0.080	470	<2	550	1880	230
							0.16		56.7	57.7	0.014	300	4	175	300	240
							0.14		57.7	58.6	0.040	610	<2	350	390	175

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Au	Zn	Mo	Bi	Sn	W
		58.6-60.3: black skarn with flecks of green mineral and white carbonate throughout. Minor magnetite and hematite.					%F as CaF2									
							0.16		58.6	59.6	0.013	630	<2	290	190	105
							0.08		59.6	60.3	0.024	650	<2	200	1240	90
		60.3-61.1: soft green calcareous skarn with abundant dark patches of semi massive magnetite; some hematite.					0.30		60.3	61.3	0.022	460	6	165	5700	65
							0.12		61.3	62.3	0.046	640	8	600	1800	85
							0.20		63.3	64.3	0.100	390	5	580	2750	110
		Skarn generally becoming more competent with depth.					8.80		64.3	65.3	0.046	240	8	570	980	160
							14.40		65.3	66.3	0.030	230	8	350	1850	490
							7.50		66.3	67.3	0.026	210	9	630	3000	320
61.6	113.8	**Wrigglite Skarn:**					7.02		67.3	68.3	0.038	155	4	950	2450	410
							5.52		68.3	69.2	0.017	115	5	135	670	510
		66.1-69.2: weathered and bleached wrigglite; dark grey-black magnetite wrigglite in top half of unit cut by feldspar veins degraded to soft green sericite. Bottom half of unit lighter coloured calcareous skarn with minor wrigglite component and cut by numerous pink feldspar veins and veinlets blood red soft hematite. Unit generally broken.					8.10		69.2	70.2	0.022	140	15	340	2150	550
			61.3	63.5	40		10.90		70.2	71.2	0.044	125	7	610	2250	380
			63.5	115.5	100		10.0		71.2	72.2	0.105	165	5	650	3050	320
							9.60		72.2	73.2	0.180	125	5	1720	3750	610
							9.32		73.2	74.2	0.060	160	5	570	1900	420
							12.70		74.2	75.2	0.120	175	19	1220	1640	790
							12.20		75.2	76.2	0.050	250	40	540	1440	1220
							7.60		76.2	77.2	0.046	100	9	390	2800	460
							9.85		77.2	78.2	0.110	185	20	660	2300	1340
							12.2		78.2	79.2	0.022	130	25	310	1500	1240
							10.3		79.2	80.2	0.017	105	12	220	1320	570
		69.2-113.8: classic magnetite-fluorite wrigglite skarn cut by numerous 1 -100 mm pink feldspar veins, randomly orientated; some minor zones of mottled light green weakly calcareous skarn; wrigglite moderately competent but some intervals broken with brittle fracturing associated with strong multidirectional jointing.					11.5		80.2	81.2	0.034	115	12	380	1160	390
							13.2		81.2	82.2	0.060	220	65	360	1340	590
							13.9		82.2	83.2	0.055	220	15	590	1680	1120
							12.4		83.2	84.2	0.050	230	65	940	2000	960
							13.8		84.2	85.2	0.034	190	13	500	1120	650
							12.1		85.2	86.2	0.044	230	14	490	960	830
							14.4		86.2	87.2	0.065	230	16	550	1000	1000
							11.2		87.2	88.2	0.044	220	8	440	1140	720
							12.2		88.2	89.2	0.034	210	10	460	1380	610
							11.2		89.2	90.2	0.110	450	18	710	1020	530
							12.4		90.2	91.2	0.048	240	20	530	1020	1500
							14.0		91.2	92.2	0.110	180	19	660	1200	710
							13.0		92.2	93.2	0.075	150	15	660	1080	650
							13.0		93.2	94.2	0.060	180	35	460	1150	870
							14.7		94.2	95.2	0.048	120	30	600	1200	1120

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Au	Zn	Mo	Bi	Sn	W
							%F as CaF2									
113.8	117.5	**Feldspar Veined Skarn:**	115.5	118.5	100											
							13.1		95.2	96.2	0.090	145	35	530	1100	950
		Grey-green calc silicate with zones softer green skarn; cut by abundant 5-50mm pink quartz-feldspar veins 60 - 70° CA and a fine network < 1 mm veinlets parallel to feldspar veins filled with magnetite.					11.3		96.2	97.2	0.050	220	20	470	1780	1120
							11.7		97.2	98.2	0.070	340	16	570	980	720
							10.2		98.2	99.2	0.048	600	17	490	980	680
							10.6		99.2	100.2	0.075	410	10	630	990	770
							10.5		100.2	101.2	0.048	230	30	380	1050	520
		Magnetite and ?sphalerite? common as selvages along quartz-feldspar veins, which are themselves occasionally zoned with quartz centres.					8.0		101.2	102.2	0.028	210	17	210	1500	370
							7.6		102.2	103.2	0.100	240	3	770	2200	350
							9.1		103.2	104.2	0.040	230	20	500	1360	2050
							11.9		104.2	105.2	0.038	195	4	590	2050	620
							11.3		105.2	106.2	0.080	150	140	610	1380	1.03%
		Disseminated and aggregate pyrite commonly associated with magnetite.					12.4		106.2	107.2	0.070	240	12	660	1300	790
							11.5		107.2	108.2	0.085	210	11	670	1620	1160
							12.5		108.2	109.2	0.090	370	45	660	1680	1580
		Unit competent.					11.0		109.2	110.2	0.065	310	15	420	1200	900
							13.4		110.2	111.2	0.065	260	17	550	1500	930
117.5	147.0	**Skarns:**	118.5	147.0	100		14.5		111.2	112.2	0.210	370	75	630	1460	870
							14.5		112.2	113.2	0.080	220	12	520	1240	970
		Pyroxene-epidote-garnet skarn, mottled pink and green; interbedded with a hard pink skarn.					8.2		113.2	114.2	0.040	0.69%	30	210	1580	590
							1.9		114.2	115.2	0.030	2.3%	35	15	370	280
							1.9		115.2	116.2	0.015	1.64%	40	35	240	1180
		Only minor magnetite; mottled green-pink skarn to 134 m, then hard pink skarn with patches dark green amphibole/epidote and softer light green mineral, and red garnets.					1.2		116.2	117.2	0.085	2.95%	20	40	420	220
							1.2		117.2	118.2	<0.005	0.53%	9	45	750	140
							0.9		118.2	119.2	0.009	1.23%	25	35	700	330
							0.5		119.2	120.2	<0.005	380	2	45	670	50
							0.3		120.2	121.2	<0.005	200	4	4	700	10
		Near top of unit, several thin veins (< 2 mm) of sphalerite.					1.2		121.2	122.2	<0.005	155	4	4	670	<10
							0.5		122.2	123.2	<0.005	135	100	<4	620	2450
							0.5		123.2	124.2	<0.005	115	<2	5	520	15
		Generally competent - few broken zones.					0.8		124.2	125.2	<0.005	195	100	4	510	175
							0.3		125.2	126.2	<0.005	135	2	7	640	20
		Grades into hornfelsed siltstone and sandstone with minor limestone beds.					0.5		126.2	127.2	<0.005	100	<2	4	760	25
							0.4		127.2	128.2	<0.005	100	<2	4	760	30
							1.1		128.2	129.2	<0.005	105	<2	6	760	35
							1.1		129.2	130.2	<0.005	85	60	10	590	340
							0.6		130.2	131.2	<0.005	85	<2	15	570	<10
							0.5		131.2	132.2	<0.005	95	2	15	480	<10

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From	To		From	To	%	From	To	%	From	To	Au	Zn	Mo	Bi	Sn	W
							%F as CaF2									
147.0	153.8	**Greisenised Siltstone, Minor Skarn, with Feldspar Veining:** Mottled dark grey-green hornfelsed and greisenised siltstone with occasional pink-light grey calc silicate beds. Pink feldspar veining common to 151 m then gradually diminishes. Veins typically have magnetite along margins, with or without pyrite.	147.0	157.4	100											
							?		132.2	133.2	<0.005	105	<2	10	430	30
							0.90		133.2	134.2	<0.005	110	<2	20	390	20
							0.55		134.2	135.2	<0.005	70	<2	15	350	20
							0.75		135.2	136.2	<0.005	70	<2	25	330	<10
							0.35		136.2	137.2	<0.005	100	2	6	440	<10
							0.85		137.2	138.2	<0.005	65	2	20	310	35
							0.20		138.2	139.2	<0.005	55	2	4	310	25
							0.55		139.2	140.2	<0.005	60	<2	30	360	<10
							0.25		140.2	141.2	0.01	320	<2	8	270	15
							0.25		141.2	142.2	<0.005	105	3	4	300	<10
153.8	157.4	**Hornfelsed Siltstone (Greisenised):** Dominantly dark grey-black hornfelsed siltstone cut by numerous thin veins filled with magnetite or quartz with magnetite or pyrite selvages. Disseminated pyrite also in hornfelses (2-3%). Occasional pink feldspar veins with quartz centres and magnetite rims. Unit hard and competent. ---- END OF HOLE ----					0.20		142.2	143.2	<0.005	75	4	8	340	<10
							0.25		143.2	144.2	<0.005	75	<2	5	440	20
							0.25		144.2	145.2	<0.005	80	<2	6	440	25
							0.15		145.2	146.2	0.005	125	<2	<4	470	20
							0.15		146.2	147.2	0.016	210	<2	<4	250	10
							3.50		153.0	154.0	<0.005	150	95	6	320	450
							3.00		156.0	157.0	<0.005	95	35	<4	140	980