COMPANY: Goldstream - Titan
PROJECT: Hugo RL 8810
HOLE NUMBER: HS 9

Commenced:	21 Sept 96
Completed:	04 October 96
Logged By:	L A Newnham
Drilled By:	Dia. Drill Tas

Purpose of Hole
.to test the eastern margin of the main Au - Zn Hugo Skarn deposit

Comments on Completion
.only a 1 m. wide skarn zone was intersected in the middle of a thick sandstone sequence; this probably does not equate with the Hugo Skarn; the hole was probably drilled just on the east side of the main fault which truncates the eastern side of the Hugo Skarn;

Collar Details

Grid	*Northing*	*Easting*	*Elevation*	*Dip*	*Bearing*
AMG	5406298	423731	643	-90	-

Length (m)
.150.0

Hole Size	
To (m)	**Size**
66.0	HQ
150.0	NQ

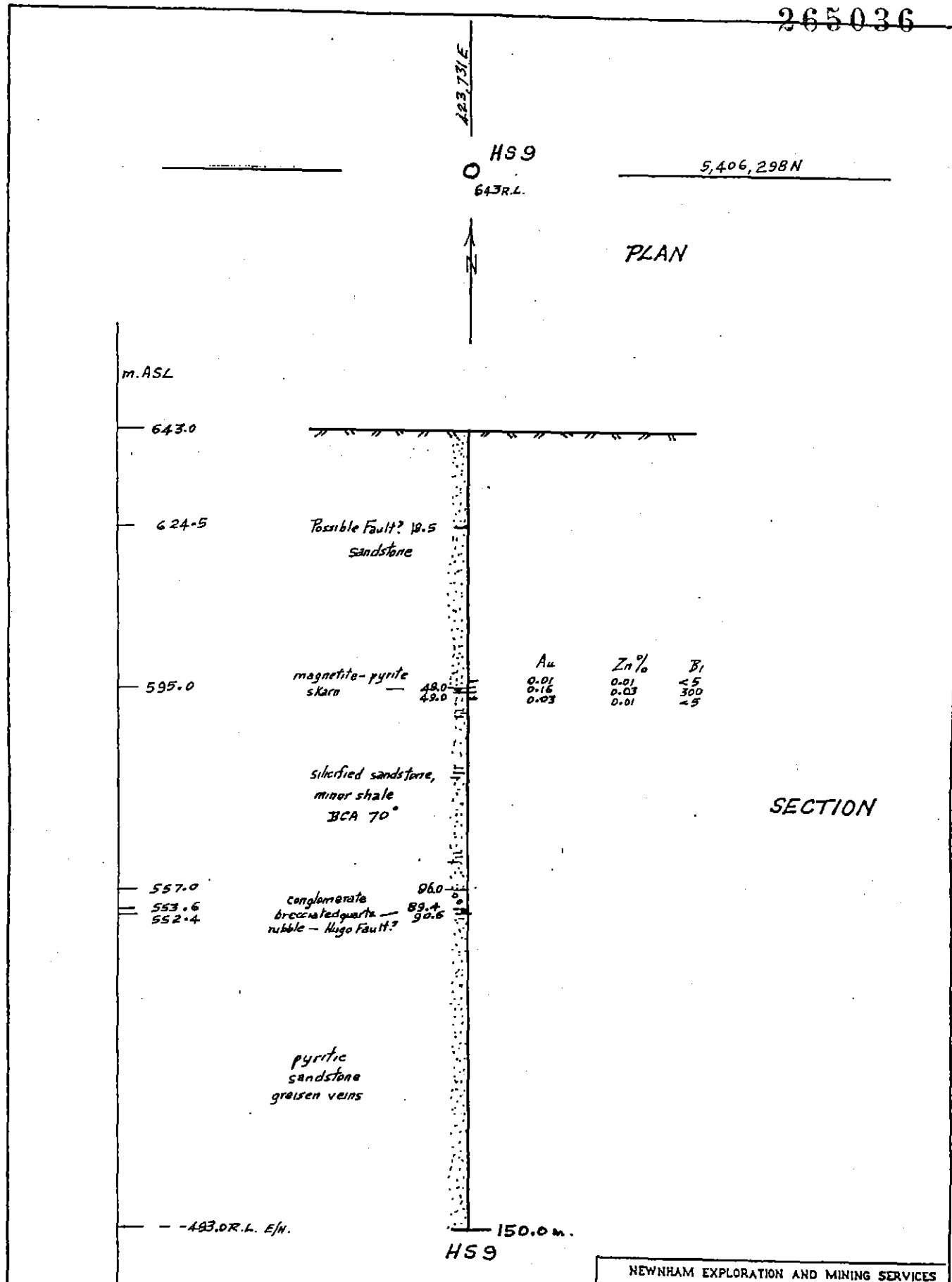
Significant Core *Loss Zones*		
From	**To**	**%Rec.**
89.4	90.4	50

Hole Condition on Completion
.all steel casing removed from hole

Summary of Results:

Depth		**Recovery**	**Description**	**Assays**							
From	**To**	**%**		**Length**	**Au**	**Ag**	**Cu**	**Pb**	**Zn**	**As**	**S**
no significant assays											

265036



NEWNHAM EXPLORATION AND MINING SERVICES		
GOLDSTREAM – TITAN J/V.		
R.L. 8810 – HUGO PROJECT		
DDH HS 9		
10m. 40m		Scale: 1:1000
Drawn: L.A. Newnham	Date: Jan 97	Figure:

5 cm

DOWN HOLE SURVEY DATA

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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					643.00		0.00		5,406,298.0		423,731.0
0	-90		0	25	25	25.00	618.00	0.00	0.00	0.00	5,406,298.0	0.00	423,731.0
50	-88.5	206	25	75	50	49.98	568.02	1.31	1.31	-1.18	5,406,296.8	-0.57	423,730.4
100	-88.3	267	75	125	50	49.98	518.04	1.48	2.79	-0.08	5,406,296.7	-1.48	423,728.9
150	-88	228	125	150	25	24.98	493.05	0.87	3.66	-0.58	5,406,296.2	-0.65	423,728.3
150													

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Au	Zn	Ag	As	Mo	Bi
.0.0	48.0	**.SANDSTONE:**														
			0	2	30											
		light gray, medium grained sandstone;	2	11	100											
		pyritic where fresh, limonitic where	11	13.8	86											
		weathered;	13.8	48	100											
		BCA 75-80;														
		generally very broken, several joint sets,														
		usually coated with limonite and sericite;														
		0.4 m. core lost at 11 m. in rubbly quartzites;														
		below 15.8 m: light gray sandstone with														
		network fine anastomosing pyritic veinlets														
		resulting in dendritic appearance; also 3-5%														
		pyrite as disseminations and aggregates in														
		sandstone;														
		18.5-18.8 m: puggy zone with embedded														
		angular fragments of quartzite;														
		below 20 m: quartzite strongly pyritic, as														
		disseminations and blebs, along joints and in														
		fine dendritic fractures;														
		soft puggy 200 mm. zones at 23.8, 24.6, 28.7m														
		tubicolor texture well developed at 30.5 m;														
		below 40 m: increasing proportion of altered														
		siltstone-shale with well pronounced bedding,														
		BCA 75-80; mottled greenish texture probably														
		due to alteration of fine mica;														
		pyrite 2-5% pervasive as clots, disseminated														
		and concentrated along margins of thin														
		greisen veins, sub parallel to core axis;														
		core generally very broken, along sericitic joint														
		surfaces; strong joint direction10-20 CA;														
		47-48.0 m: sandstone dark green, mottled														
		texture, soft in places with light brown clay														
		filled anastomosing veinlets;														
		possibly gradational with narrow skarn zone														
		below; BCA 80; *core competent but greasy,*														
		dark green joint surfaces common;														
48.0	49.0	**SKARN:**														
		dark gray-black magnetite - pyrite skarn, with	48.0	49.0	100				47	48	0.01	0.01	<0.5	<0.005	1	<5
		patches white sacchroidal material - possibly							*48*	*49*	*0.16*	*0.03*	*2*	*<0.005*	*<1*	*300*
		topaz rich sandstone ??; bands of up to 75%							49	50	0.03	0.01	<0.5	0.005	1	<5
		magnetite														

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To	Sn	W				
49.0	86.0	**SILICIFIED SANDSTONE and MINOR SHALE:** **above 51 m:** mottled brown sandstone and light gray - cream shales, developed as a result of alteration of shales; clayey and very crumbly in part; **below 51 m:** light gray intensely silicified sandstone with minor whispy cream partings of soft altered fine grained sediments; 3-5% pervasive pyrite as coarse euhedral grains and blebs and concentrated in thin greisen veins; 10-20 mm. white fractured quartz veins common at 45 CA; BCA 70; core moderately fractured along cream colored clay filled joint planes; dominant joint set 20-30 CA; intensely silicified below 66 m. REDUCED TO HQ AT 66 m; **below 78 m:** light buff brown soft altered siltstone-shale interbedded with light gray - white intensely silicified sandstone which has conglomeratic appearance in places; 1-2% disseminated pyrite;	49	86	100				47 48 49	48 49 50	44 300 65	20 20 30				
86.0	89.4	**CONGLOMERATE:** white quartz clasts in light gray siliceous groundmass; gradational with unit above; minor 1-2% disseminated pyrite grains in groundmass; generally hard brittle and broken; brecciated 88.8-89.0 m;	86.0 87.2	87.2 89.4	100 90											
89.4	90.6	**BRECCIATED QUARTZ and QUARTZITE RUBBLE:** light gray brecciated quartz with interstitial quartzite; 50% core loss; sericitic and rubbly in places; ?? POSSIBLE FAULT ZONE??	89.4	90.4	50											

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Description			Core Recovery			RQD			Assays							
From	To		From	To	%	From	To	%	From	To						
.90.6	150.0	**.PYRITIC SANDSTONE:**														
			90.4	147.4	100											
		light gray monotonous pyritic sandstone, very broken in places;	147.4	150	58											
		pyrite 2-5% but up to 10% over short intervals disseminated and clots in sandstone but also common in thin whispy veinlets;														
		core broken to 95 m. then more competent;														
		2-5 mm. quartz-pyrite greisen veins 30 CA, and generally widely spaced;														
		narrow brown units below 111m., possibly represent mica rich zones;														
		113-115.5: *very broken and mottled greenish* sandstone, possible result of altered feldspathic groundmass;														
		118-124.5: similar mottled greenish-rusty coloration;														
		129.4-132 : several major fractured quartz veins, with 3-5% pyrite mainly in fractures but also disseminated;														
		below 135.5: *2-5 mm. greisen veins 20-30 CA* becoming more common, with disseminated dark metallic mineral ? hematite;														
		below 140: sandstone has mottled rusty orange-green appearance, possibly altered felspathic sandstone;														
		141.7-143.0: massive white quartz vein, very broken;														
		147.6-148.0: *rubbly white quartz vein;*														
		overall decrease in pyrite down hole below 140m.														
		END OF HOLE														