VANGORDA GRUM

DIAMOND DRILL RECORDS

UNDERGROUND

~~75 - U1 to U9~~
~~76 - U10 to U25~~ U-30

December 1975

018546

76U-136
to U171

75 - U1 to U9
76 - U10 to U25 U.G. 136 - 171 (Typed)

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-136 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,657.164 70W STARTED JULY 29, 1976

DEPARTURE 7,651.876 2N COMPLETED JULY 30, 1976

ELEVATION 1,163.492 PROPOSED DEPTH

ULTIMATE DEPTH 76.2

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	244	+48°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 70%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	4.8	GRAPHITIC PHYLLITE (G). Broken flakey core. Foliation = 30	0.8		0	4.8	4.8								
		-35°. Poor core recovery.													
		4.8: Abrupt change to limy bleached phyllite (SBk).													
		Contact broken ground.													
4.8	8.5	LIMY BLEACHED PHYLLITE (SBk). Broken blocky core with max.	3.0		4.8	8.5	3.7								
		=4cm length. Earthy white with greenish stripe (bleached													
		sericite). Foliation = 45-50° changing to 60° @ 7.7. No													
		clear F_1 noted. Calcite in groundmass as thin laminae.													
		8.5: Gradual change to limy sericite phyllite (SK).													
8.5	32.0	LIMY SERICITE PHYLLITE (SK). Broken, blocky core ave: 3cm	21.5		8.5	32.0	23.5								
		long. Foliation = 60-65°; F_1 = 0-10°. Some intervals at													
		16.7-18 show some thin green laminae (chlorite?).													
		25.9-27.5: Foliation change into = 70-75°; F_1 = 0-5°													
		29.5-29.7; 30-30.8: Bleached phyllite intervals. Buff													
		colour; broken ground. Grades into mineralized bleached phyllite until 32m.													

LOGGED BY _____ D.D.H. Nº 76-U-136 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		32.0: Abrupt change to massive sulfide (M).													
32.0	61.5	MASSIVE SULFIDE ZONE. Intervals of structureless 65 6	1.0	4065	32.0	33.5	1.5	5.76	5.40	75.77			8.64	8.10	113.66
		bands (M), barite in groundmass (Mb) and some with 65 7	1.0	4066	33.5	35.1	1.6	5.36	5.45	72.69			8.58	8.72	116.30
		quartz inclusions (MI). Included sericite and bleached			35.1	39.0	3.9								
		phyllite intervals. 75 6	1.3	4067	39.0	41.1	2.1	2.55	1.90	52.46					
		32-33.5: Barite in groundmass. Compositional ban- 75 8	0.8	4068	41.1	42.7	1.6	3.95	2.45	70.63			6.32	3.92	113.01
		ding = 65-70° (very faint Sph/Py-ba). 75 8	1.0	4069	42.7	45.7	3.0	7.15	7.13	103.87			21.45	21.39	311.61
		34.0-34.2: Porous variety. Voids aligned = 70°. 75 10	0.9	4070	45.7	48.8	3.1	6.40	6.53	100.80			19.84	20.24	312.48
		34.2-35.1: Sulfide breccia. Fragments Ø = 0.5-1.5cm 75 6	1.4	4071	48.8	50.3	1.5	7.36	7.79	104.92			11.04	11.69	157.38
		Well cemented by sulfides. 75 5	1.5	4072	50.3	51.8	1.5	6.10	6.63	95.66			9.15	9.95	143.49
		35.1-39: Intervals of bleached phyllite and normal 70 8	1.3	4073	51.8	53.3	1.5	7.06	6.75	89.83			10.59	10.13	134.75
		gray phyllite with small trace calcite. 70 8	1.0	4074	53.3	54.9	1.6	4.45	3.75	60.34			7.12	6.00	96.54
		Foliation = 70-75°; F = 0-5°. Contacts 60 6	0.9	4075	54.9	56.4	1.5	1.70	1.23	25.37			2.55	1.85	38.06
		gradational. 70 6	0.8	4076	56.4	57.9	1.5	1.93	1.00	32.23			2.90	1.5	48.35
		42.7: Broken blocky core. Some have barite in grdmas. 70 8	0.9	4077	57.9	59.4	1.5	2.05	1.25	34.29			3.08	1.88	51.44
		55.9-56.3: Bleached phyllite. Foliation = 40°. 70 6	1.3	4078	59.4	61.5	2.1	1.85	1.40	35.31			3.89	2.94	74.15
		Contacts broken ground.		W.Av.	32.0	35.1	3.1	5.55	5.43	74.18			17.22	16.82	229.96
		61.0: Fold nose.		W.Av.	41.1	54.9	13.8	5.20	6.04	91.98			85.51	83.32	1269.26
		61.5: Sharp change to bleached phyllite (Sb). Contact		W.Av.	54.9	61.5	6.6	1.88	1.24	32.12			12.42	8.17	212.00
		broken core (and re-drilled , core nipple).													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
61.5	63.0	BLEACHED PHYLLITE (Sb). Competent. Buff with greenish hue.	1.0		61.5	63.0	1.5								
		Foliation = 65-70° with occasional sulfide laminae.													
		62.0: Fold nose.													
		63.0: Gradual change to sericite phyllite (S).													
63.0	68.6	SERICITE PHYLLITE (S). Competent. Foliation = 70-75°.	5.1		63.0	68.6	5.6								
		Short calcite stringers = 30-35° opposite direction of													
		general 70-75° foliation.													
		68.6: Gradual change to Graphitic Sericite Phyllite (SG).													
68.6	75.0	GRAPHITIC SERICITE PHYLLITE (SG). Broken core. Trace	6.0		68.6	75.0	6.4								
		calcite as small discontinuous stringers in random orien-													
		tation. Foliation = 65-75°.													
		69.5-70.2: Broken core. Pebble size. Could be a fault.													
		No gouge but with some sandy phyllite.													
		70.2-71.2: Bleached phyllite interval. White to buff													
		colour. Broken ground. Second contact = 30°. Sharp and													
		clean.													
		74.8-75.5: FAULT. Black sticky gouge with phyllite/quartz													
		fragments. Contact with bleached phyllite.													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
75.5	76.2	BLEACHED PHYLLITE (Sb). White with green fuchsite spots/	0.5		75.5	76.2	0.7								
		laminae. Broken ground in most part. Solid core show 35-													
		40° foliation.													
	76.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO

D.D.H. Nº 76-U-137 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,659.737 ? 70W STARTED JULY 30, 1976

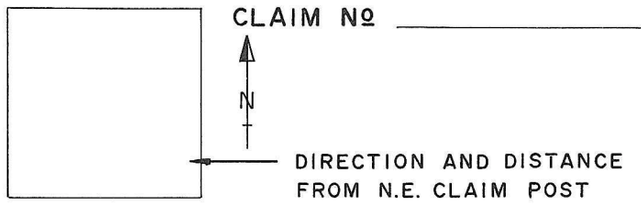
DEPARTURE 7,652.458 ? 2N COMPLETED AUG 1, 1976

ELEVATION 1,164.00 ? PROPOSED DEPTH

ULTIMATE DEPTH 61m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	42° 01'	+65°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 96%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	10.7	LIMY GRAPHITIC PHYLLITE (G+K). Competent. Foliation = 40-	10.5		0	10.7	10.7								
		45°; F_1 = 0-5°. Calcite in groundmass as laminae forming													
		the F_1, also as randomly oriented stringers. Sporadic clots													
		of Py.													
		9.5; 10.5: Fold noses.													
		10.7: Abrupt change calcitic-chloritic sericite phyllite.													
		Contact broken ground marked by bull quartz and short													
		Sb interval.													
10.7	25.9	CALCITIC-CHLORITIC SERICITE PHYLLITE (SK+C). Competent.	14.8		10.7	25.9	15.2								
		White with green stripes. Calcite as laminae in both F_2 &													
		F_1, also as stringers. Foliation F_2 = 40-45°; F_1 perpendicu-													
		lar to F_2.													
		25.0: Fold nose.													
		25.9: Decrease in calcitic constituent. Rx becoming normal													
		sericite phyllite (S).													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No.	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
25.9	44.0	SERICITE PHYLLITE (S) W/SMALL TRACE CALCITE. Broken, blocky	17.2		25.9	44.0	18.1								
		core ranging from flakes to 4cm long. Foliation = 25-30°;													
		F = 0-5°. Bleached phyllite intervals.													
		1 26.5-27.5: Bleached phyllite. Competent. Buff. Foliation													
		= 25-30°. Calcite stringers = 0°. First contact													
		broken ground, second contact sharp and clean =													
		35-40°.													
		30.5-33.4: Bleached Phyllite (?). Competent. Pinkish white.													
		Fine grained, doesn't have foliation like normal (Sb).													
		Groundmass appear to be mixture of volcanish ash, quartz													
		(volcanic glass?), minor sericite and some pepering of Py.													
		Pressure shadow around bigger quartz. Layering feature													
		could be primary. First contact sharp marked by FAULT (?)													
		gouge. Second contact abrupt-broken ground.													
		36-36.6: FAULT. Thick sticky light gray gouge with phyllite													
		flakes.													
		42.6: Bleached phyllite. Buff groundmass with thin greenish													
		stripe-chloritic. Foliation = 40-45°. Contacts bro-													
		ken ground.													
		43.5-44: FAULT. Watery, loose, sticky gouge with sericite													
		and bleached phyllite fragments. Contact with													
		bleached phyllite (Sb).													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
44.0	50.0	BLEACHED PHYLLITE (Sb). Competent. Partly similar to the 30.5-33.4m interval bleached phyllite. However, in this case foliation is pronounced = 40-45°. Trace calcite. Both contacts broken ground. 47.2-48: Watery gray to light brown gouge with phyllite fragments. 50.0: Change to sericite phyllite with trace calcite (SK). Contact broken ground.	5.0		44.0	50.0	6.0								
50.0	56.4	SERICITE PHYLLITE (SK). Competent. Foliation = 35-40°. Trace calcite as thin laminae and short stringers. No clear F /F relationship noted. 1 2 56.4: Shear contact with Calcitic-chloritic phyllite.	6.4		50.0	56.4	6.4								
56.4	61.0	CALCITIC-CHLORITIC PHYLLITE (SK+C). Foliation = 30-35°. No F /F relationship. 1 2 59.5: Calcite stringer = 30° opposite general foliation direction and is displaced 1cm by the latter. Calcite in groundmass and as laminae/stringers. Minute greenishflakes in groundmass (chlorite) given rock a general greenish hue and spots.	4.6		56.4	61.0	4.6								

LOGGED BY _____ D.D.H. Nº 76-U-137 PAGE 4

Interval		DESCRIPTION	Recovery	Sample	Interval		Sample	Assay					Assay x		
From	To			Nº	From	To	Length	Pb	Zn	Ag	Au	Cu	Pb	Zn	Ag
	61.0	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-138 PAGE 1

PROPERTY GRUM JOINT VENTURE

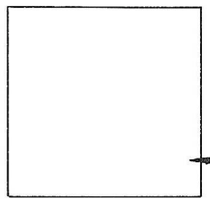
LATITUDE 10,808.025 76W STARTED JULY 29, 1976

DEPARTURE 7,544.558 3N+3.6mNE COMPLETED AUG. 6, 1976

ELEVATION 1,133.906 PROPOSED DEPTH

ULTIMATE DEPTH 122.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	47° 15'	-48° 54'
45.7	042	-52°
91.4	041	-59°
121.9	042	-62°



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 79.4%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	14.0	MINERALIZED CHLORITIC BLEACHED PHYLLITE (P-Sbc). 10 2	1.5	4079	0	3.9	3.9	1.07	1.43	18.17					
		Soft, broken core. Mineralization in form of widely spaced	1.6		3.9	6.2	2.3								
		laminae. Rx is white with green stripes and spots. 10 3	1.0	4080	6.2	7.5	1.3	2.28	3.25	36.34					
		Prominent quartz stringers.	6.0		7.5	14.0	6.5								
		4.7: Fold nose. Also at 6.5; 8.5.													
		14.0: Change to Sericite Phyllite (S).													
14.0	30.7	SERICITE PHYLLITE (S). Competent. Foliation = 35°; F 1 = 0	15.5		14.0	30.7	16.7								
		-5°. Some spots of chlorite in groundmass. Sporadic sulfide													
		clots.													
		21.0; 22.0; 23.5; 29.5: Fold noses.													
		30.7: Gradual increase in mineralization. Rx becoming min-													
		eralized quartz-sercite (P).		W.Av.	30.7	36.6	5.9	2.27	PbZn						
30.7	53.6	QUARTZ-SERICITE-SULFIDE (P). Competent. Foliation = 15 2	3.1	3988	30.7	33.8	3.1	1.25	1.08	14.06			2.33	PbZm	
		20-25°; F 1 = inconsistent ranging from 10-30°. 10 2	2.5	3989	33.8	36.6	2.8	1.03	1.18	16.11			2.21	PbZn	
		Sulfides following both foliation. 10 1	3.1	3990	36.6	39.8	3.2	2.80	2.45	37.37					

LOGGED BY _____ D.D.H. No 76-U-138 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		35.0; 35.5: Fold noses. 15 3	2.5	3991	39.8	42.7	2.9	1.05	0.45	17.14					
		44.2: Foliation changing into 35-40°; F 1 = 5-10°.	3.3		42.7	46.0	3.3								
		15 3	3.0	3992	46.0	49.0	3.0	2.38	1.05	26.40			3.43	PbZn	
		53.6: Gradual change into mineralized bleached 10 2	3.1	3993	49.0	52.1	3.1	1.00	1.35	15.09			2.35	PbZn	
		phyllite (P-Sb). 10 4	3.0	3994	52.1	55.1	3.0	1.93	0.63	23.31			2.56	PbZn	
		5 Tr.	1.5		55.1	56.6	1.5								
53.6	56.5	MINERALIZED BLEACHED PHYLLITE (P-Sb). Competent. 10 3	3.0	3995	56.6	59.7	3.1	1.85	1.95	27.43					
		Foliation = 50-55°. Buff with greenish hue. 10 2	3.2	3996	59.7	63.0	3.3	0.53	0.53	8.23					
		Sulfides parallel to foliation.													
		56.5: Abrupt change to quartz-sulfide. Contact broken core.		W.Av.	46.0	55.1	9.1	2.78	PbZn				22.26	PbZn	
56.5	63.0	QUARTZ-SULFIDE (P). Competent. Foliation = 45-50°; F 1 =													
		0-5°. Weakly mineralized. Sulfides as thin laminae in even													
		increasing spacing towards end of run.													
		63.0: Gradual change to Dark Sericite Phyllite (S).													
63.0	76.0	DARK SERICITE PHYLLITE (S). Competent. Foliation = 45-50°.	12.2		63.0	76.0	13.0								
		No good F / F relationship noted.													
		1 2 65.8-66: FAULT. White-gray sticky gouge.													
		69.8-69.9: FAULT. Gray thick fault with sericite flakes.													
		70.4: Introduction trace graphite. Foliation becoming													
		= 80-85°. Core poker chips.													

LOGGED BY _____ D.D.H. No 76-U-138 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		72.3-72.4: FAULT. Thick sticky gray gouge with phyllite													
		flake fragments.													
		74-74.9: F_2 = 85-90°; F_1 = 0-5°.													
		76.0: Abrupt change to Bleached Phyllite (Sb). Contact													
		sheared = 85°.													
76.0	77.0	BLEACHED PHYLLITE (Sb). Soft broken core. Buff with green	1.0		76.0	77.0	1.0								
		mariposite spots. Clots of sulfides and laminae. Foliation													
		= 80°.													
		77.0: Abrupt change to Mineralized Graphtic Phyllite.													
		Contact = 85°.		W.Av.	81.0	84.1	3.1	2.29	3.33	33.92			7.09	10.32	105.15
77.0	84.7	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 40 10	2.3	4101	77.0	79.5	2.5	1.14	1.68	25.37					
		Foliation = 85°; F_1 = 0-10°. Compositional bands in 40 6	1.4	4102	79.5	81.0	1.5	0.09	0.23	13.03					
		wide sulfide zone = 75-80°. 35 6	1.6	4103	81.0	82.6	1.6	2.65	3.45	38.40			4.24	5.52	61.44
		84.5-84.7: FAULT. Gray thick gouge with phyllite 30 8	1.5	4104	82.6	84.1	1.5	1.90	3.20	29.14			2.85	4.80	43.71
		fragments. Contact with bleached phyll. 20 3	1.2	4105	84.1	85.6	1.5	0.35	0.63	4.11					
84.7	85.6	BLEACHED PHYLLITE (Sb). Broken soft ground. Show weak													
		mineralization.													
		85.6: Abrupt change to sericite phyllite (S). Contact													
		broken ground.													

LOGGED BY _____ D.D.H. No 76-U-138 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
85.6	107.5	SERICITE PHYLLITE (S). Broken blocky core from flakes to	9.6		85.6	107.5	11.9								
		4cm long. Foliation = 45-50°; F_1 = 0-10° @ 106.0. Bleached													
		interval at 88.5-89.8.													
		90-91.8: FAULT. Gray gouge with quartz pebbles and phyllite													
		flakes.													
		94-7-97.8: FAULT ZONE. Light gray gouge with sericite phyll													
		flakes. Low core recovery = 0.05/3.1.													
		106.9-107.5: FAULT. Dark gray thick sticky gouge with		W.Av.	107.5	110.5	3.0	2.58	4.67	37.20			7.73	14.00	111.61
		sericite flakes. Contact with mineralized		W.Av.	109.0	112.0	3.0	1.86	PbZn						
		graphitic (sericite) phyllite (PG).		W.Av.	112.0	117.6	5.6	2.99	PbZn						
				W.Av.	107.5	112.0	4.5	1.93	3.47	28.0					
107.5	119.1	GRAPHITIC (SERICITE) PHYLLITE-MINERALIZED (PG). 40 8	1.3	4106	107.5	109.0	1.5	4.25	8.23	61.37			6.38	12.35	92.06
		Competent. Foliation = 50-55°. Has some wide mas- 30 6	1.4	4107	109.0	110.5	1.5	0.90	1.10	13.03			1.35	1.65	19.55
		sive sulfide bands with faint compositional banding = 30 5	1.2	4108	110.5	112.0	1.5	0.65	1.08	9.94			1.73	PbZn	
		60°. No clear F_1 / F_2 relationship. 20 2	0.9	4109	112.0	113.5	1.5	0.58	1.75	8.23			2.33	PbZn	
		112.5-112.9: Chloritic bleached phyllite. Contacts 15 1	1.7	4110	113.5	117.6	4.1	1.13	2.10	14.06			3.23	PbZn	
		broken ground. Foliation = 75-80°.	0.8		117.6	119.1	1.5								
		114-114.6: Bleached Phyllite (Sb). Light gray with greenish													
		hue. Broken core.													
		114.6-115: FAULT. White to black sticky gouge.													
		117.6-119.1: Bleached phyllite; broken soft core. Poor													
		core recovery. Weak mineralization.													

LOGGED BY _____ D.D.H. No 76-U-138 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		119.1: Change into dark sericite phyllite. Contact broken													
		core (pebbles).													
119.1	122.2	DARK SERICITE PHYLLITE (S). Broken, blocky to pebbly cores.	2.0		119.1	122.2	3.1								
		Foliation = 45-50°.													
		120.7-121: Gougy with sericite flakes.													
	122.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-139 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,658 * 70W STARTED AUGUST 1, 1976

DEPARTURE 7,653 * 2N COMPLETED AUGUST 2, 1976

ELEVATION 1,164 * PROPOSED DEPTH

* - approximated ULTIMATE DEPTH 76.2

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	+75°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 87%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	5.5	CALCITIC GRAPHITIC PHYLLITE (GK). Broken poker chips.	2.2		0	5.5									
		Foliation = fissility = 85-90°. F 1 = 0-5°. Calcite as thin													
		laminae and as short stringers in random orientation.													
		Change to Bleached Phyllite @ 5.5. Contact abrupt and													
		clean = 85°.													
5.5	6.1	BLEACHED PHYLLITE. Competent. Light buff to greenish	0.6		5.5	6.1	0.6								
		Groundmass non-limy. Foliation = 85°.													
		6.1: Gradual change to Calcitic-chloritic sericite phyllite													
		(Sc+K).													
6.1	26.2	CALCITIC-CHLORITIC SERICITE PHYLLITE (Sc+K). Competent.	19.1		6.1	26.2	20.1								
		Foliation = 80-85°; F 1 = 0-5°. Calcite as thin laminae and													
		stringers. Calcite usually mark the S-shaped F 1. Chlorite													
		in groundmass with sericite. Rx has green with white stripe													
		appearance.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		26.2: Decrease in calcitic constituent. Change is gradual-													
		contact arbitrary. Rx becoming normal Sericite													
		Phyllite (S)., with trace calcite and chlorite.													
26.2	35.2	SERICITE PHYLLITE W/TRACE CALCITE AND CHLORITE (S±C±K).	7.8		26.2	35.2	9.0								
		Competent. Foliation = 85-90°; F = 0-5°. Calcite as													
		randomly oriented stringers.													
		28.7-28.8: Small fault. Light gray gouge with phyllite													
		fragments and sericite flakes.													
		32.2-32.4: FAULT. Small interval grayish gouge with phyllite													
		flakes.													
		35.2: Graudal change to Bleached Sericite Phyllite (Sb).													
35.2	37.0	BLEACHED SERICITE PHYLLITE (Sb). Poker chips. Light to	1.7		35.2	37.0	1.8								
		silvery gray. Foliation = 85-90°. F = 0-5°. Trace													
		calcite in thin laminae.													
		37.0: Gradual change to Quartz-sulfide with bleached													
		sericite laminae (P-Sb).													
37.0	47.0	QUARTZ-SULFIDE W/BLEACHED PHYLLITE (P-Sb), slowly changing													
		to massive sulfide (M) @ 38.5. Foliation = 85-90° @ 40 8	2.1	3980	37.0	39.6	2.6	6.35	6.50	86.74			16.51	16.90	225.5
		37-38.5. Compositional banding = 80-85° @ 39-39.5. 75 6	1.0	3981	(39.6 39.6	40.0 41.1	0.4) 1.5	2.58	0.75	36.34			(1.03 3.87	0.30 1.13	14.5) 54.5

LOGGED BY _____ D.D.H. Nº 76-U-139 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		44.3-44.5: Porous variety. Voids aligned = 75-80°. 75 7	1.2	3982	41.1	42.7	1.6	3.70	3.40	65.49			5.92	5.44	104.8
		Some barite in groundmass. 75 7	1.5	3983	42.7	44.2	1.5	5.97	5.15	82.63			8.96	7.73	123.9
		44.5-44.7: Sulfide Bx (MXs). Sulfide angular frag- 30 7	2.3	3984	44.2	47.0	2.8	4.55	3.73	59.31			12.74	10.50	156.1
		ments Ø = 0.5-1.5cm cemented by sulfides and													
		other black materials.		W.Av.	37.0	40.0	3.0	5.85	5.73	80.0			17.54	17.20	240.0
		45.7-47.0: Transition zone. Bleached phyllite with de-		W.Av.	42.7	47.0	4.3	5.05	4.24	67.4			21.70	18.23	290.0
		creasing amount of mineralization.		W.Av.	37.0	47.0	10.0	4.80	4.17	67.5			48.00	41.70	674.8
		47.0: Abrupt change to graphitic phyllite (G). Contact													
		broken ground.													
47.0	48.8	GRAPHITIC PHYLLITE W/TRACE CALCITE (GK). Easily breaks into	1.7		47.0	48.8	1.8								
		poker chips. Folliation = fissility = 75-80°; F_1 = 0-5°.													
		47.3: Shear.													
		48.8: Gradual change to graphtici sericite phyllite (Sg).													
		Calcite decreasing.													
48.8	51.0	GRAPHTIC SERICITE PHYLLITE (SG). Competent. Foliation = 65-	2.0		48.8	51.0	2.2								
		70°. No clear F_1 / F_2 relationship noted.													
		51.0: Gradual change to mineralized bleached phyllite (P-Sb).													
51.0	57.8	MINERALIZED BLEACHED PHYLLITE (P-Sb) W/short intervals of													
		graphitic phyllite (G). Broken, very fragmented ground.													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Foliation = 75-80°. Wide sulfide bands alternating with													
		greenish-white bleached sericite. 30 5	1.5	3986	51.0	53.3	2.3	1.50	1.50	15.09			3.45	3.45	34.7
		53.5-54: Graphitic sericite phyllite interval. 30 5	2.0	3987	53.3	57.8	4.5	1.25	1.18	13.03			5.63	5.31	58.6
		Foliation = 75°, F 1 = 5°. Trace calcite.													
		53.3-54.4: Very poor core recovery. Some sheared span.		W.Av.	51.0	57.8	6.8	1.34	1.29	13.7			9.08	8.76	93.3
		56-56.3: FAULT. White gouge with sulfide phyllite fragments													
		57.8: Shear contact with dark Sericite phyllite with													
		intercalated graphitic phyllite run (S+G).													
57.8	63.5	DARK SERICITE PHYLLITE (S) W/INTERCALATED SHORT RUNS OF	5.0		57.8	63.5	5.7								
		GRAPHITIC PHYLLITE (G). Broken, blocky core. Foliation =													
		65-70°. F 1 = 0-5° marked by calcite.													
		62.4-62.5: FAULT. Black gouge. Sticky, thick graphitic													
		with sericite/graphite flakes.													
		63.5: Change to bleached phyllite. Contact abrupt, broken													
		ground.													
63.5	72.9	BLEACHED PHYLLITE (Sb) WITH SOME MINERALIZED INTERVAL (P-Sb).	1.0		63.5	64.5	1.0								
		Broken core. White with greenish hue in groundmass.													
		Foliation = 75-80°; F 1 = 0-5°													
		64.5-67.5: Mineralized interval. Laminae of sulfides 30 6	2.9	3985	64.5	67.5	3.0	4.10	3.25	54.51					
		alternating with bleached sericite. Po spots.													

LOGGED BY _____ D.D.H. NO 76-U-139 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample NO	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		66.0: Fold nose.	4.5		67.5	72.9	5.4								
		72.9: Abrupt change to Sericite Phyllite (S).													
72.9	76.2	DARK SERICITE PHYLLITE (S) WITH SHORT INTERVALS OF BLEACHED	6.0		72.9	76.2	6.7								
		PHYLLITE (Sb). Broken core. F = 75-80°. No clear F													
		2 1 noted.													
		74.7-75.6: Bleached phyllite interval. Buff-green colour.													
		Calcite as stringers.													
	76.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-140 PAGE 1

PROPERTY GRUM JOINT VENTURE

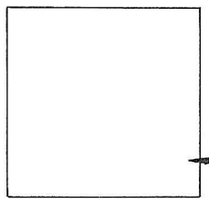
LATITUDE 10,978.484 80W STARTED AUGUST 4, 1976

DEPARTURE 7,540.686 7N COMPLETED AUGUST 16, 1976

ELEVATION 1,110.904 PROPOSED DEPTH 650' - 198.12

ULTIMATE DEPTH - 123.4

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	50° 09'	-58° 45'



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 94.4%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	3.0	GRAPHITIC QUARTZ-SULFIDE (PG). Broken core. Foliation 35 12	0.9	4094	0	3.0	3.0	4.08	8.19	63.43					
		= 40-45°. Interlamination of sulfides/quartz and graphite.													
		No clear F / F relationship noted. Extreme low core recov.													
		3.0: Sharp contact with bleached phyllite (Sb) = 50°.													
			0.4		3.0	3.5	0.5								
3.0	3.5	BLEACHED PHYLLITE. Competent. Partly with weak minerali-													
		zation Py: 5%, Zn+Pb: 1%. Foliation = 50°, F = 40-45° (?)													
		not very distinct.													
		3.5: Sharp contact with Graphitic Phyllite = 50°.													
3.5	7.6	GRAPHITIC PHYLLITE (G). Broken blocky core easily breaks	3.5		3.5	7.6	4.1								
		into poker chips. Foliation = 45°. F = 10°. Short inter-													
		val of bleached phyllite = 5cm.													
		7.6: Decrease in graphitic constituents. Rx becoming dark													
		sericite phyllite with trace graphite (S+G).													

LOGGED BY _____ D.D.H. Nº 76-U-140 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
7.6	58.5	DARK SERICITE PHYLLITE WITH TRACE GRAPHITE (S+G). Fissile,	47.3		7.6	55.8	48.2								
		easily breaks into poker chip. Foliation = fissility =													
		65-70°. F = 0-10°. Calcite as stringers in random orien-													
		tation. Isolated clots of Po.													
		35.6: Shear.													
		55.8-56.8: Mineralized interval (PG). Competent. Compo-													
		sitional banding in wide sulfide bands = 75-80°. 45 15	1.0	4095	55.8	56.8	1.0	7.05	16.64	114.86			7.05	16.64	114.86
		Both contact appear sharp and clean but broken core-no	1.6		56.8	58.5	1.7								
		angle measurement possible.													
		58.5: Gradual change to Bleached Phyllite (Sb).													
58.5	59.8	BLEACHED PHYLLITE (Sb). Easily breaks into poker chips.	1.0		58.5	59.8	1.3								
		Light gray with buff laminae. Thin flakes have silvery white													
		colour. Foliation = fissility = 75-80°; F = 0-5°.													
		59.8: Sharp clean contact with mineralized graphitic phyl-													
		lite (PG) = 80°.													
59.8	62.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 45 15	2.4	4096	59.8	62.5	2.7	5.48	7.84	77.83			14.8	21.17	210.14
		Foliation = 75-80°; same angle for some compositional bands		W.Av.	55.8	62.5	6.7	3.26	5.64	48.5			21.85	37.81	325.00
		in wider sulfide spans.													
		61.0: Fold nose.													
		62.5: Sharp contact with bleached phyllite (Sb) = 80°.													

LOGGED BY _____ D.D.H. Nº 76-U-140 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
62.5	64.0	BLEACHED PHYLLITE (Sb). Competent-good long core. Buff with greenish gray hue. Foliation = 80-85°; F$_1$ = 0-5°. 64.0: Sharp change to Graphitic Sericite Phyllite (SG). Contact marked by bull quartz = 85°.	1.5		62.5	64.0	1.5								
64.0	83.4	GRAPHITIC SERICITE PHYLLITE (S)(G). Competent. Foliation = 80-85°; F$_1$ = 0-5°. 70.1-73.2: Widely spaced sulfide laminae PY: 4%, PbZn: 1% Spots of Po = 1%, occassionally with Py. 74.7-79.2: Series of small noses marked by F$_1$. 83.4: Gradual increase in mineralization. Rx becoming mineralized graphitic phyllite (PG).	18.5		64.0	83.4	19.4								
					(70.1	73.2)		1 PZ	est.						
83.4	87.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 20 3	3.0	4097	83.4	86.4	3.0	0.88	1.46	58.63					
		Foliation = 85-90° followed by sulfides. 25 5	1.1	4098	86.4	87.5	1.1	3.98	5.20	16.11					
		83.8-84.8: Bleached Phyllite interval. Competent. Foliation = 85-90°; F$_1$ = 0-5°. White to buff with greenish hue. Po in spots = 1%. First contact = 85°, second contact = 80°. 87.5: Gradual change to bleached Phyllite (Sb). Decrease in graphitic and sulfides constituents.													

LOGGED BY _____ D.D.H. Nº 76-U-140 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
87.5	95.6	BLEACHED PHYLLITE (Sb) W/intercalated intervals of sericite	8.1		87.5	95.6	8.1								
		phyllite (S). Contacts are gradual. Bleached phyllite has													
		buff thin laminae with greenish hue (not fuchsite-could be													
		inter-stacked minute chlorite flakes). Foliation = 85-90°;													
		F = 0-5°.													
		93-94: Sericite phyllite interval. Competent.													
		94.5-95.0: Tuffaceous looking groundmass in bleached													
		phyllite. Trace calcite. Foliation = 90°; F =0°													
		95.6: Gradual change to Sericite Phyllite (S).													
95.6	98.0	SERICITE PHYLLITE (S). Competent. Foliation = 85-90°;	2.4		95.6	98.0	2.4								
		F = 0-5°. Minor sporadic sulfide clots.													
		98.0: Sharp contact with Massive Sulfide (M). Contact													
		marked by long interval of bull quartz. Contact @													
		98.7 = 85°.													
98.0	104.3	MASSIVE SULFIDE ZONE (M) GRADING INTO QUARTZ SULFIDE 60 8	1.2	4099	98.0	100.0	2.0	3.63	6.53	53.49			7.26	13.06	106.98
		AND BLEACHED PHYLLITE (P-Sb). With intercalated short 25 6	1.5	4100	100.6	102.1	1.5	0.91	0.80	17.14			1.70	PbZn	
		run of graphitic phyllite. 20 2	2.0	4201	102.1	104.3	2.2	0.35	0.53	5.14			0.88	PbZn	
		98-99.2: Massive sulfide (M). Competent. Compositional													
		band = 80-85°. Gradual change to Quartz-sulfide		W.Av.	100.6	104.3	3.7	1.22	PbZn						
		and with bleached Phyllite (P-Sb).		W.AV.	98.0	101.0	3.0	2.72	4.62	41.4			8.17	13.86	124.12

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		100-100.5: Graphitic phyllite interval. Barren. Foliation													
		= 85-90°. First contact sharp = 80°;													
		Second contact broken ground.													
		100.5-104.3: Interval of alternating span of quartz-sulfide													
		and mineralized bleached Phyllite (P-Sb).													
		Contacts are gradual. Fuchsites in bleached													
		phyllites. Foliation = 75-85°. Po @ 104 = 0.5													
		104.3: Sharp contact with dark graphitic sericite phyllite													
		(SG) = 70°.													
104.3	120.4	DARK GRAPHITIC SERICITE PHYLLITE (SG). Competent. Foliation	16.1		104.3	120.4	16.1								
		= 80-85°; F_1 = 0-5°. Trace of calcite in groundmass @ 114.3													
		-118.9.													
		120.4: Transition to Sericite Phyllite (S).													
120.4	123.4	SERICITE PHYLLITE (S). Competent. Foliation = 75-80°.	3.0		120.4	123.4	3.0								
		Has some thin chlorite laminae. F_1 not very well developed,													
		could be 0° at 121.7.													
	123.4	END OF HOLE. NOTE: Driller dropped rod. Tried fishing w/													
		bell tap and was unsuccessful. Hole begun caving in.													
		Finally decided to abandon hole. Also considered wedging													

LOGGED BY _____ D.D.H. Nº 76-U-140 PAGE 6

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		but there is no guarantee it will stay on section (no													
		driller around with good wedging experience.													
		August 17, 1976, Alex y. po													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-141 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,581.782 ? 66W STARTED AUGUST 5, 1976

DEPARTURE 7,747.787 ? 2N COMPLETED AUGUST 8, 1976

ELEVATION 1,178.564 ? Drift changed PROPOSED DEPTH 120m

ULTIMATE DEPTH

HOLE SURVEY:		
DEPTH	BEARING	DIP
collar	224	0
42.7	231	-1
94.5	238	0

CLAIM Nº

NOTE: Hole stopped due to high pressure water and squeezing ground.

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 78%

Interval From	Interval To	DESCRIPTION	Py	Zn+Pb	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	9.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken, blocky	30	5	0.9	4111	0	3.0	3.0	0.58	1.45	20.23					
		core. Foliation = 75-80° (F_1 = 90°) - could be	30	4	1.2	4112	3.0	4.6	1.6	0.18	1.33	12.00			1.57	PbZn	
		F_1.	20	3	1.4	4113	4.6	6.1	1.5	0.60	0.85	25.37			1.45	PbZn	
		3.1: Fold nose. F_1 = 0° with closure marked by	25	3	1.4	4114	6.1	7.6	1.5	0.45	1.35	12.00			1.80	PbZn	
		sulfides with crenulated laminae.	30	6	1.3	4115	7.6	9.1	1.5	4.65	6.03	54.51			6.98	9.05	81.77
		4.5-5.1: Sulfide Bx. Ø = 1mm-1.5cm. Well cemented	75	10	1.4	4116	9.1	10.7	1.6	7.64	13.31	106.97			12.22	21.30	171.15
		by graphite.	75	12	1.4	4117	10.7	12.2	1.5	9.64	13.74	122.1			14.46	20.61	183.09
		9.1: Abrupt change to Massive sulfide zone.	75	15	1.3	4118	12.2	13.7	1.5	7.11	11.16	107.0			10.67	16.74	160.46
		Contact broken ground.	75	12	1.4	4119	13.7	15.2	1.5	6.40	11.44	89.83			9.6	17.16	134.75
			75	18	1.4	4120	15.2	16.8	1.6	7.36	10.92	107.0			11.78	17.44	171.15
9.1	24.0	MASSIVE SULFIDE (M). Some porous variety (MV) and	70	8	1.3	4121	16.8	18.3	1.5	4.48	3.56	55.54			6.72	5.34	83.31
		some with quartz inclusions (MIq). Generally com-	70	8	1.5	4122	18.3	19.8	1.5	5.56	4.68	70.63			8.34	7.02	105.95
		petent except in the friable porous variety. Compo-	70	10	0.8	4123	19.8	21.3	1.5	6.64	6.22	94.63			9.96	9.33	141.95
		sitional bands = 75-80°. Same trend for void	75	15	2.1	4124	21.3	24.0	2.7	5.99	7.62	84.69			16.17	20.57	228.66
		alignments in porous ground.															
		19.8-22.9: Barite in groundmass.				W.Av.	7.6	24.0	16.4	6.52	8.82	89.16			106.90	114.59	1462.2
		24.0: Sharp clean contact with bleached Phyllite (Sb) = 35°.				W.Av.	3.0	7.6	4.6	1.59	PbZn						

LOGGED BY _____ D.D.H. Nº 76-U-141 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
24.0	26.3	BLEACHED PHYLLITE (Sb). Soft core. Foliation = 25-30°.	1.7		24.0	26.3	2.3								
		F_1 could be almost parallel to F_2. 25.7; 26: Fold noses.													
		26.3: Shear contact with graphitic phyllite (G).													
26.3	35.1	GRAPHITIC PHYLLITE (G). Fissile, easily breaks into poker	8.5		26.3	35.1	8.8								
		chips. Foliation = 25°; F_1 = 10°. Numerous fold noses.													
		28.5-29: Bleached phyllite interval; flakey. Buff to light													
		gray. Contacts broken ground. Foliation = 10-15°.													
		27; 27.6; 28.5; 29.3; 30.6; 32.7; 33.7: Fold noses.													
		35.1: Decrease in graphite laminae. Rx becoming sericite													
		phyllite (S).													
35.1	50.3	SERICITE PHYLLITE (S). Flakey. Foliation = 0-5° due to	11.7		35.1	50.3	15.2								
		fold noses. Calcites as randomly oriented stringers.													
		36; 37; 40; 40.5; 43.5; 47.2; 47.5: Fold noses.													
		44.5-45.2: FAULT. Black gouge with phyllite flakes.													
		50.3: Change to Graphitic Sericite Phyllite (SG). Contacts													
		broken flakey ground.													
50.3	59.8	GRAPHITIC SERICITE PHYLLITE (SG). Broken fragmented flakey	4.2		50.3	59.8	9.5								
		core. Very poor core recovery. Foliation = 50° (rough est.)													

LOGGED BY _____ D.D.H. No 76-U-141 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		59.4-59.8: FAULT. Black thick sticky gouge. Contact with massive sulfide with barite in groundmass. Contact = 30° and ground immediately around is brecciated sulfide (for about 5cm along core axis).													
59.8	62.7	MASSIVE SULFIDE WITH BARITE IN GROUNDMASS (Mb) and 65 8	0.8	4125	59.8	61.3	1.5	5.51	9.25	86.74			8.27	13.88	130.11
		interval of sulfide breccia (MXs). Broken, blocky 50 6	0.7	4126	61.3	62.7	1.4	4.45	8.64	75.77			6.23	12.10	106.08
		from pebbles to 3cm long core. Compositional band = 40-45°.		W.Av.	58.8	62.7	2.9	5.00	8.96	81.44			14.50	25.98	236.19
		60.5-61.3: Sulfide breccia. Bx fragments Ø = 1mm-1.5cm		W.Av.	59.8	63.8	4.0	3.63	6.5	59.0					
		cemented by sulfide and other dark fine grain materials.													
		62.7: Sharp clean contact with Graphitic Phyllite. Contact = 85°.													
62.7	68.6	GRAPHITIC PHYLLITE (G). Broken soft core. Gougey in most	2.8		62.7	68.6	5.9								
		part of run. Solid core @ 67.3-67.9 show foliation = 0-5°.													
		Fold nose at 67.5.													
		63-64; 64.5-67.1: FAULT. Black, sticky, thick gouge.													
		68.6: Sharp contact with bleached phyllite = 30°.													

LOGGED BY _____ D.D.H. Nº 76-U-141 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
68.6	70.2	BLEACHED PHYLLITE (Sb). Competent. White with greenish laminae (chlorite). Foliation = 30-35°. Blebs of sulfides. 70.2: Fault contact with chloritic-calcitic phyllite. Fault gouge 10cm long is white, sticky and thick with quartz and phyllite fragments. Walls appear to be = 85°.	1.6		68.6	70.2	1.6								
70.2	94.5	CHLORITIC-CALCITIC SERICITE PHYLLITE (Sc+K). Competent. Stripes of green and white. Foliation = F_2 = 25-30°; F_1 = 80-85°. 94.5: Decrease in calcitic constituent. Rx becoming just chloritic sericite phyllite (Sc).	23.9		70.2	94.5	24.3								
94.5	96.3	CHLORITIC SERICITE PHYLLITE (Sc). Broken core. Foliation = 30-35°. Hit water at 96.0. Cores flakey.	0.5		94.5	96.3	1.8								
	96.3	END OF HOLE. Stopped due to high pressure water and squeezing ground.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-142 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,976.417 ? 80W STARTED AUGUST 9, 1976

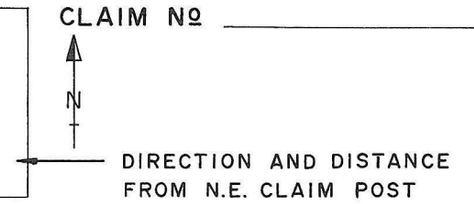
DEPARTURE 7,538.102 ? 7N COMPLETED AUGUST 11, 1976

ELEVATION 1,111.220 ? PROPOSED DEPTH

ULTIMATE DEPTH 152.4m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	223° 02'	-29° 33'
56.4	225°	-33°
140.2	220°	-46°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 94%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	11.5	MASSIVE SULFIDES INTERCALATED WITH INTERVALS OF GRA- 60 8	0.9	4202	0	2.1	2.1	10.76	14.99	190.6			22.60	31.48	400.32
		PHITIC PHYLLITE (M+G). Broken, blocky core from 60 12	1.5	4203	2.1	4.5	2.4	8.44	10.61	141.3			20.26	25.46	339.02
		pebbles to 4cm long core. Compositional bands Sph/py 40 8	1.3	4204	4.5	6.1	1.6	1.98	3.05	33.26			3.17	4.88	53.22
		= 25-30°. Foliation in graphitic intervals = 35-40°. 40 15	1.4	4205	6.1	7.6	1.5	6.06	10.56	100.8			9.99	15.84	151.2
		Contacts between graphitic/sulfide units = 45-60°. 35 15	1.5	4206	7.6	9.1	1.5	3.93	7.14	58.29			5.90	10.71	87.44
		7.6-8: Bleached phyllite interval. Light gray with 35 12	2.0	4207	9.1	11.7	2.6	4.60	7.46	73.31			11.96	19.40	191.65
		greenish hue-spots fuchsite. Contacts clean and sharp = 50°.													
		11.5: Change to Graphitic Phyllite. Contact marked by		W.Av.	0	11.7	11.7	6.31	9.21	104.5			73.88	107.77	1222.9
		short interval of bleached Phyllite (=20cm).		W.Av.	0	4.5	4.5	9.52	12.65	164.3			42.68	56.94	739.34
		Broken ground.		W.Av.	6.1	11.7	5.6	4.97	8.21	76.84			27.85	45.95	438.29
11.5	16.2	GRAPHITIC PHYLLITE (G). Easily breaks into poker chips.	4.3		11.5	16.2	4.7	Trace PZ est.							
		Foliation F_2 = 50-60°; F_1 = 5-10°. Blebs of sulfides with													
		F_2 structure. Py: 2%, PbZn: Trace.													
		F_1 16.2: Abrupt change to Bleached Phyllite (Sb). Contact													
		broken ground marked by bull quartz.													

LOGGED BY _____ D.D.H. Nº 76-U-142 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
16.2	19.6	BLEACHED PHYLLITE (Sb). Competent. Foliation F$_1$ = 30°;	3.3		16.2	19.6	3.4	1 PZ,	est.						
		F$_2$ = 45-60°. Buff with white stripes and spots of fuchsites													
		Sporadic clots/laminae of sulfides. Py: 3%, PbZn: 1%.													
		19.8: Sharp and clean change to Graphitic Phyllite. Con-													
		tact = 45° marked by 2cm. bull quartz.													
19.6	21.3	GRAPHITIC PHYLLITE (G). Easily breaks into poker chips.			19.6	21.3	1.7								
		Foliation = fissility = 30-35°. Blebs of Py.													
		21.2: Shear.													
		21.3: Change to Quartz-sulfide (P). Contact sharp and													
		clean = 50°.													
21.3	45.8	QUARTZ-SULFIDE (P) with intervals of mineralized 45 3	1.5	4208	21.3	22.9	1.6	0.25	0.15	7.20					
		graphitic phyllite (PG) and bleached Phyllite (Sb). 35 8	1.2	4209	22.9	24.4	1.5	2.48	6.25	44.23			3.72	9.38	66.35
		Foliation = 40-45°. Compositional banding in wider 35 8	1.5	4210	24.4	25.9	1.5	4.58	10.66	107.0			6.87	15.99	160.46
		sulfide runs = 40°. 30 6	1.4	4211	25.9	27.4	1.5	1.68	3.55	28.11					
		25.6-25.9: Bleached phyllite interval. Silvery white 30 4	1.5	4212	27.4	29.0	1.6	0.65	0.83	14.06			1.48	PbZn	
		with greenish laminae. Contact angle- 25 3	1.5	4213	29.0	30.5	1.5	0.53	0.60	9.94			1.13	PbZn	
		first = 45°; second contact = 25 2	3.0	4214	30.5	33.5	3.0	0.73	0.73	15.09			1.43	PbZn	
		27.4-36.6: Quartz-sulfide. Appear like bull quartz 25 2	3.0	4215	33.5	36.6	3.1	0.33	0.15	7.89			0.48	PbZn	
		originally fracture filled with sulfides 35 4	3.0	4216	36.6	39.6	3.0	0.33	0.70	8.91			1.03	PbZn	
		particularly Py and Po. 40 8	1.5	4217	39.6	41.1	1.5	3.80	8.23	72.69			5.70	12.35	109.04

LOGGED BY _____ D.D.H. Nº 76-U-142 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		42.5: F = 50°; F = 0-5°. Mineralized graphitic 40 10	1.5	4218	41.1	42.7	1.6	4.18	9.60	76.80			6.69	15.36	122.88
		2 1 phyllite. 35 10	1.5	4219	42.7	44.2	1.5	4.05	8.40	68.56			6.08	12.6	102.84
		42.7; 44; 44.3: Small fold noses. 40 12	1.5	4220	44.2	45.7	1.5	5.25	10.66	93.94			7.88	15.99	140.91
		45.8: Sharp change to massive sulfide (M). Contact 25 8	1.5	4221	45.7	47.2	1.5	5.92	14.33	114.9			8.88	21.50	172.29
		= 25°. 60 5	1.5	4222	47.2	48.8	1.6	0.75	2.55	16.11			1.20	4.08	25.78
		70 5	1.5	4223	48.8	50.3	1.5	1.90	5.65	36.34			2.85	8.48	54.51
45.8	55.0	MASSIVE SULFIDE (M). Mixed, structureless variety (M) with													
		quartz inclusion (MIq) with trace of calcite. 70 8	1.5	4224	50.3	51.8	1.5	5.67	12.95	109.0			8.51	19.43	163.55
		Compositional banding = 10° @ 46-46.5 and change 75 9	1.5	4225	51.8	53.3	1.5	6.56	14.47	103.9			9.84	21.71	155.84
		to 30-35° @ 48.5. 75 9	1.5	4226	53.3	54.9	1.6	8.76	20.63	164.6			14.02	33.01	263.31
		55.0: Gradual change to mineralized graphitic 50 7	1.4	4227	54.9	56.4	1.5	5.81	7.29	81.60			8.72	10.94	122.4
		phyllite (PG). 30 5	1.5	4228	56.4	57.9	1.5	2.28	2.55	34.29			3.42	3.83	51.44
		35 6	1.6	4229	57.9	59.6	1.7	1.50	4.60	30.17			2.55	7.82	51.29
55.0	59.6	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.													
		Foliation = 20-25°.		W.Av.	22.9	25.9	3.0	3.53	8.46	75.60			10.59	25.37	266.81
		55.6; 59: Fold noses.		W.Av.	27.4	39.6	12.2	1.06	PbZn						
		59.6: Sharp clean contact with bleached phyllite (Sb).		W.Av.	22.9	27.4	4.5	2.91	6.82	59.8					
		Contact = 5° - due to fold nose at 59m. Contact		W.Av.	39.6	56.4	16.8	4.78	10.44	85.32			80.37	175.45	1433.35
		angle is steep.		W.Av.	56.4	59.6	3.2	1.87	3.64	32.1			5.97	11.65	102.73

LOGGED BY _____ D.D.H. Nº 76-U-142 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
59.6	62.5	BLEACHED PHYLLITE (Sb) W/short interval of sericite phyllite	3.9		59.6	62.5	3.9								
		(S). Competent. Buff with greenish hue. Foliation = 45-50°													
		62.5: Gradual change to sericite phyllite (S).													
62.5	67.0	SERICITE PHYLLITE (S). Competent. Foliation = 20-25°.	4.5		62.5	67.0	4.5								
		No clear F / F relationship noted. Sporadic clots of Po.													
		1 2 67.0: Sharp clean contact with quartz-sulfide (P).													
		Contact = 55-60°.													
67.0	70.2	QUARTZ-SULFIDE (P) W/intervals of barren sericite 30 4	3.0	4230	67.0	70.2	3.2	2.24	4.45	36.34					
		phyllite ground @ 68-68.6. Foliation = 25-30°. Sulfides													
		as thin laminae.													
		70.2: Change to sericite phyllite (S). Contact broken													
		ground.													
70.2	91.4	SERICITE PHYLLITE (S). Competent. Foliation = 40-45°;	20.9		70.2	91.4	21.2								
		F = 10° @ 77.9.													
		1 72.0: Shear.													
		82.3-89.9: Blebs of sporadic Po. F = 60°; F = 20°.													
		2 1 87-87.3: Bleached phyllite with biotite (?).													
		91.4: Sharp clean contact with Bleached Phyllite (Sb) = 85°.													

LOGGED BY _____ D.D.H. No 76-U-142 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
91.4	97.0	BLEACHED PHYLLITE (Sb). Competent. Silvery white with	5.6		91.4	97.0	5.6								
		fuchsite spots. Intervals with chlorite and biotite.													
		Foliation = 70-75°. Spots and laminae of Po following													
		general foliation.													
		91.5-91.7: Dark brown colour. Biotite with bleached seri-													
		cite. Biotite confined along quartz healed fis-													
		sures and appear to disperse laterally following													
		the general foliation.													
		95.5-96.5: Chloritic interval. Green stripes of chlorite													
		following general 70-75° foliation.													
		97.0: Gradual change to quartz-sulfide (P).													
97.0	97.7	QUARTZ-SULFIDE (P). Competent. Foliation = 47°; F_1 = 10°													
		(opposite direction of F_1). Sulfides as thin laminae and													
		blebs in groundmass. F_2													
		97.7: Gradual change to mineralized graphitic phyllite (PG).													
97.7	117.3	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 25 4	2.1	4231	97.0	99.1	2.1	0.90	1.45	15.09					
		Foliation = 30-40°(F_2); F_1 = varigated orientation 25 4	1.5	4232	99.1	100.6	1.5	0.55	1.03	9.94			1.58	PbZn	
		due to fold noses from 10° to 0°. 20 2	1.5	4233	100.6	102.1	1.5	0.70	0.90	14.06			1.60	PbZn	
		101.9; 102.3; 103.4; 105; 109.7; 113: Fold noses. 20 2	1.5	4234	102.1	103.6	1.5	0.63	0.98	13.03			1.61	PbZn	
		106.7-109.7: Foliation becoming more regular and 25 4	1.6	4235	103.6	105.2	1.6	1.94	1.63	26.40			3.10	2.61	42.24

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		uniform F_1 = 60°; F_2 = 30°. 25 4	1.5	4236	105.2	106.7	1.5	5.20	1.70	58.63			7.80	2.55	87.95
		117.3: Gradual increase in sulfide. Rx becoming 30 3	1.5	4237	106.7	108.2	1.5	0.80	0.90	22.29			1.70	PbZn	
		massive sulfide (M). 35 3	1.5	4238	108.2	109.7	1.5	0.05	0.23	20.23			0.28	PbZn	
		40 2	1.6	4239	109.7	111.3	1.6	0.05	0.30	18.17			0.35	PbZn	
117.3	118.5	MASSIVE SULFIDE (M) WITH FAINT COMPOSITIONAL BANDING 40 2	1.5	4240	111.3	112.8	1.5	0.08	0.25	8.91			0.33	PbZn	
		= 80-85°. Short intervals of porous variety with 25 4	1.5	4241	112.8	114.3	1.5	3.30	4.10	48.34					
		voids aligned = 80°. 30 3	1.5	4242	114.3	115.8	1.5	0.04	0.20	8.23					
		118.5: Change to massive sulfide with barite in 30 6	1.5	4243	115.8	117.3	1.5	2.63	4.15	46.29			3.95	6.23	69.44
		groundmass. Contact = 30°. 75 7	1.6	4244	117.3	118.9	1.6	4.00	6.38	64.46			6.40	10.21	103.14
		65 8	1.5	4245	118.9	120.4	1.5	2.13	4.05	25.37			3.20	6.08	38.06
118.5	128.7	MASSIVE SULFIDE W/BARITE IN GROUNDMASS (Mb). 60 8	1.5	4246	120.4	121.9	1.5	2.38	4.30	45.26			3.57	6.45	67.89
		Competent. Compositional banding Sph-Pb/Py-Ba = 75°. 70 8	1.5	4247	121.9	123.4	1.5	5.20	8.89	70.63			7.8	13.34	105.95
		Intervals of porous sulfides with voids aligned = 75 12	1.4	4248	123.4	125.0	1.6	6.69	12.04	91.89			10.70	19.26	147.02
		75-85° @ 124-125. 75 10	1.5	4249	125.0	126.5	1.5	4.65	8.13	71.66			6.98	12.20	107.49
		125-126: Sulfide breccia (MXs). Angular to sub- 30 6	1.9	4250	126.5	128.7	2.2	3.78	8.43	64.46			8.32	18.55	141.81
		rounded sulfides Ø = 2mm-1.5cm. Cemented by sul-													
		fides. Trace calcite in groundmass.													
		126.5-128.7: Sulfide breccia with quartz cementing material		W.Av.	97.0	103.6	4.5	1.60	PbZn						
				W.Av.	103.6	106.7	3.1	3.52	1.66	42.0			10.90	5.16	130.19
		(MXq). Very angular sulfide fragments Ø = 1-		W.Av.	106.7	112.8	6.1	0.66	1.66						
		1.5cm.		W.Av.	115.8	118.9	3.1	3.34	5.30	55.67			10.35	16.44	172.58
		128.7: Abrupt change to Graphitic phyllite (G). Contact		W.Av.	115.8	121.9	6.1	2.81	4.75	45.66			17.12	28.97	278.53
		broken ground.													

LOGGED BY _____ D.D.H. Nº 76-U-142 PAGE 7

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
				W.Av.	121.9	128.7	6.8	4.97	9.32	73.9			33.80	63.35	502.27
128.7	152.4	GRAPHITIC PHYLLITE (G). Easily breaks into poker chips.	20.1		128.7	152.4	23.7								
		Foliation = 70-75°; F$_1$ = 10°.													
		135: Increasing calcite constituent in groundmass. Rx													
		becoming calcitic graphitic phyllite (GK). Foliation													
		= 60-65°; F$_1$ = 0-10° and usually marked by calcite.													
		Blebs of Po.													
		149.2-149.4: Chloritic-calcitic interval with thin buff													
		laminae of bleached sericite (Sbc + K).													
		Foliation = 35-40°. Contacts clean and sharp													
		= 40°.													
	152.4	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-143 PAGE 1

PROPERTY GRUM JOINT VENTURE

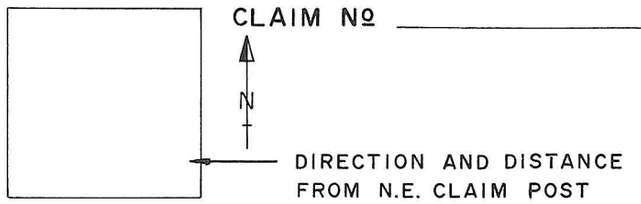
LATITUDE 10,585.165 ? 66W STARTED AUGUST 9, 1976

DEPARTURE 7,751.162 ? 2N COMPLETED AUGUST 12, 1976

ELEVATION 1,177.584 ? PROPOSED DEPTH 137.2m

ULTIMATE DEPTH 132.6m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	044	-25°
67m	047	-34°
121.9m	054	-44°



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 73.3%

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	42.7	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken blocky	25 3	0.8	4127	0	4.6	4.6	0.18	0.63	7.20			0.81	PbZn	
		core. Short run of sulfide breccia cemented by	30 4	1.7	4128	4.6	7.6	3.0	0.07	0.43	5.14			0.50	PbZn	
		graphite (MXg). Foliation = 20-25°; F_1 = 5-10°	25 2	2.0	4129	7.6	10.3	2.7	0.17	0.45	7.20			0.62	PbZn	
		(opposite dip direction of F_1).	20 2	2.8	4130	10.3	13.4	3.1	0.08	0.10	4.11			0.18	PbZn	
		6.1-7.6: Sulfide breccia. Fragments F_2 Ø = 1mm-1.5cm	30 1	1.9	4131	13.4	16.8	3.4	0.10	0.23	28.11			0.33	PbZn	
		angular to sub-rounded cemented by graph-	15 1	2.6	4132	16.8	19.8	3.0	0.23	0.58	7.89			0.81	PbZn	
		ite. Some fragments show graphite laminae	15 1	1.3	4133	19.8	22.9	3.1	0.15	0.43	5.14			0.58	PbZn	
		with the sulfide. Pots of Cpy.	10 2	2.6	4134	22.9	25.9	3.0	0.18	0.13	7.89			0.31	PbZn	
		24: F_1 = 45-50°; F_2 = 60°.	15 1	1.9	4135	25.9	29.0	3.1	0.03	0.23	2.06			0.26	PbZn	
		36.6: F_1 = 0-10°; F_2 = 65°.	15 2	2.5	4136	29.0	32.0	3.0	0.20	0.43	7.20			0.63	PbZn	
		Small series of fold noses until 38.1m	15 2	2.0	4137	32.0	35.1	3.1	0.63	0.48	15.09			1.11	PbZn	
		42.7: Abrupt change to Bleached Phyllite (Sb).	20 1	2.3	4138	35.1	38.1	3.0	0.10	0.23	5.14			0.33	PbZn	
		Contact broken ground.	15 2	2.1	4139	38.1	42.7	4.6	0.18	0.63	5.14			0.81	PbZn	
42.7	49.0	BLEACHED PHYLLITE. Soft broken core. Gougey in most part.		5.1		42.7	49.0	6.3								
		Could be a fault zone. Solid core silvery white.														
		Foliation = 70°; F_1 = 0-10°.			W.Av.	0	42.7	42.7	0.50	PbZn						

LOGGED BY _____ D.D.H. Nº 76-U-143 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		42.8-46.1: Light gray, sticky thick gouge with phyllite													
		flakes and quartz pebbles.													
		46.1-47.3: Solid core. Sericite phyllite. Foliation = 80°													
		49.0: Change to Sericite Phyllite. Contact broken ground.													
49.0	57.9	SERICITE PHYLLITE (S). Broken flakey to gougy core. No	5.1		49.0	57.9	8.9								
		positive foliation observation possible.													
		49.5-54: Interval of alternating flakey and gougey ground-													
		could be a fault zone (series of closely spaced or													
		swarm faulting).													
		57.9: Change to Graphitic Sericite Phyllite (SG). Contact													
		broken ground.													
57.9	67.1	GRAPHITIC SERICITE PHYLLITE (SG). Broken, blocky to flakey	7.2		57.9	67.1	9.2								
		core. Solid cores = 4cm show foliation = 30-35°. No													
		definite F_1/F_2 relationship noted. Sporadic sulfides.													
		63-64: Bleached phyllite. Chloritic. Foliation = 30°.													
		67.1: Change into graphitic phyllite (G). Contact broken													
		ground.													
67.1	76.2	GRAPHITIC PHYLLITE (G). Broken blocky core. Foliation = 30°	8.0		67.1	76.2	9.1								
		Sulfides in some laminae - Py: 1%, PbZn: NIL/TRACE.													

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		76.2: Sharp contact with chloritic bleached phyllite (Sbc).														
		Contact = 40° marked by bull quartz.														
76.2	76.8	CHLORITIC BLEACHED PHYLLITE (Sbc). Competent. Alternating		0.6		76.2	76.8	0.6								
		thin laminae of chlorite and felsic minerals with blebs of														
		sulfides. Foliation = 35°.			W.Av.	76.8	80.8	4.0	1.66	2.28	30.24			6.64	9.11	120.97
		76.8: Sharp clean contact with mineralized graphitic			W.Av.	82.3	88.4	6.1	5.48	5.02	64.95			33.42	30.63	396.17
		phyllite (PG). Contact = 25°.			W.Av.	83.8	86.9	3.1	7.05	6.64	81.51			21.87	20.57	252.69
76.8	82.3	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken blocky	40 8	2.0	4140	76.8	79.2	2.4	1.40	2.13	20.23			3.36	5.11	48.55
		core from flakes to 3cm long.	35 7	0.8	4141	79.2	80.8	1.6	2.05	2.50	45.26			3.28	4.00	72.42
		Foliation = 43°; F = 20-30°.	1 Tr	0.5		80.8	82.3	1.5								
		79.2: Fold nose.	40 8	1.2	4142	82.3	83.8	1.5	3.40	2.85	48.34			5.10	4.28	72.51
		79.4-79.6: Bleached phyllite interval. Silvery	60 10	1.3	4143	83.8	85.3	1.5	7.75	8.86	100.8			11.63	13.29	151.2
		white. First contact = 80°; second	60 10	1.2	4144	85.3	86.9	1.6	6.40	4.55	63.43			10.24	7.28	101.49
		contact = broken ground.	60 10	1.3	4145	86.9	88.4	1.5	4.30	3.65	47.31			6.45	5.48	70.97
		82.3: Abrupt change to bleached phyllite (Sb).	75 7	1.2	4251	88.4	89.9	1.5	0.90	0.93	9.94			1.83	PbZn	
		Contact broken ground.	75 6	0.9	4146	89.9	91.4	1.5	0.18	0.35	6.17			0.53	PbZn	
			75 5	1.0	4147	91.4	93.0	1.6	1.73	1.90	20.23					
82.3	83.5	MINERALIZED BLEACHED PHYLLITE (P-Sb). Competent.	70 6	1.3	4148	93.0	94.5	1.5	2.90	3.40	32.23			4.35	5.10	48.35
		Interval of blached sericite phyllite and massive	75 5	1.4	4149	94.5	96.0	1.5	3.10	2.10	35.31			4.65	3.15	52.97
		sulfides. Contacts between alternating bands are =	75 4	1.5	4150	96.0	97.5	1.5	0.40	0.08	8.23					

LOGGED BY _____ D.D.H. Nº 76-U-143 PAGE 4

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		80-85°. Sulfide bands from 3cm to 5cm long.	75 12	1.3	4151	97.5	99.1	1.6	5.93	6.95	68.57			9.49	11.12	109.71
			60 12	0.9	4152	99.1	100.6	1.5	4.38	7.46	67.54			6.57	11.19	101.31
		83.5: Abrupt clean contact with massive sulfide (M).	60 10	1.2	4153	100.6	102.1	1.5	3.08	6.52	42.51			4.62	9.78	63.77
		Contact = 75°.	40 3	2.6	4154	102.1	105.2	3.1	0.68	0.84	9.94			1.52	PbZn	
			40 2	2.2	4155	105.2	108.2	3.0	0.43	0.60	8.91			1.03	PbZn	
83.5	103.6	MASSIVE SULFIDE (M) WITH MIXTED TYPE: Porous (MV),	35 2	2.1	4156	108.2	111.3	3.1	1.03	1.15	10.97			2.18	PbZn	
		Banded (MB), and with barite groundmass (Mb). Gener-	30 2	2.0	4157	111.3	114.3	3.0	0.55	1.03	8.23			1.58	PbZn	
		ally competent except for the short porous type.	25 2	1.9	4158	114.3	117.3	3.0	1.08	0.70	18.17			1.78	PbZn	
		Compositional banding generally = 80-85°. Each type	30 3	3.1	4159	117.3	120.4	3.1	0.28	0.40	7.20			0.68	PbZn	
		grading to each other.	25 2	3.0	4160	120.4	123.4	3.0	0.18	0.50	4.11			0.68	PbZn	
		84-86: Barite in groundmass.	10 1	3.1	4161	123.4	126.5	3.1	0.30	0.60	3.09			0.90	PbZn	
		88-88.4: Short bleached phyllite interval. First contact														
		= 80°; Second contact = 75°.			W.Av.	88.4	91.4	3.0	1.18	PbZn						
		Buff colour.			W.Av.	93.0	96.0	3.0	3.00	2.75	33.77			9.00	8.25	101.32
		89.7-89.9: Sulfide bx (MXs). With sulfide prism.			W.Av.	97.5	102.1	4.6	4.50	6.98	59.74			20.68	32.09	274.79
		96-97.5: Spots/laminae of Po and Magnetite, (Mgtt.)			W.Av.	97.5	100.6	3.1	5.18	7.20	68.07			16.06	22.31	211.02
		98-99.3: Porous variety.			W.Av.	102.1	126.5	24.4	1.29	PbZn						
		100-100.6: Bleached phyllite interval. Clean contacts =														
		80-85°. Foliation = 85-90°.														
		100.6-101.4: Barite in groundmass.														
		101.4: Start of magnetic minerals (Po and Mgtt) in laminae														
		and blebs.														

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		103.6: Gradual change to quartz-sulfide with thin laminae of bleached sericite (P-Sb).													
103.6	125.0	QUARTZ-SULFIDE W/INTERLAMINATED BLEACHED SERICITE PHYLLITE (P-Sb). Competent. Foliation = 70-75°. Po and Mgtt blebs/ laminae sporadically distributed. 104: First appearance of garnet. In this spot, garnet occur with epidote (?) Rest of the run have sporadically distributed clusters and/or isolated crystals. 123: F_2 = 80°; F_1 = 0-5°; chlorite in groundmass. 125.0: Decreasing sulfide content. Rx becoming sericite phyllite (S) intercalated with bleached phyllite (Sb)												
125.0	130.0	MIX INTERVALS OF SERICITE AND BLEACHED SERICITE PHYLLITE (S+Sb). Competent. Foliation = 80-85°; F_1 = 0-5°. Sporadic clusters and isolated garnet xls. Intervals with chlorite stripes (sometimes spotty). Thin laminae of Po and Mgtt. 130.0: Gradual change to Chloritic-calcitic phyllite with trace biotite (C-K bio).	3.2		126.5	130.0	3.5								

LOGGED BY _____ D.D.H. Nº 76-U-143 PAGE 6

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
130.0	132.6	CHLORITIC-CALCITIC PHYLLITE W/TRACE BIOTITE (C-K bio).	2.6		130.0	132.6	2.6								
		Competent. Deep green groundmass with white stripes (F_1).													
		F_1 = 0-5° marked by calcite. F_2 = 80°.													
		Biotite confined along clacite healed fx and disbursed later-													
		ally following F_2 foliation.													
	132.6	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO

D.D.H. Nº 76-U-144 PAGE 1

PROPERTY GRUM JOINT VENTURE

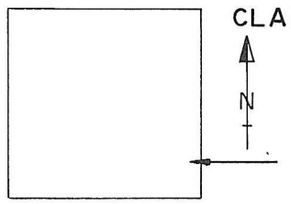
LATITUDE 10,978.674 80W STARTED AUGUST 12, 1976

DEPARTURE 7,541.299 7N COMPLETED AUGUST 13, 1976

ELEVATION 1,114.349 PROPOSED DEPTH 500' - 152.4m

ULTIMATE DEPTH - 73.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	42° 41'	+51° 19'



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

CLAIM Nº

NOTE: Hole abandoned due to squeezing ground and caved-in condition.

TOTAL C ORE RECOVERY: 85.2%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	45.0	GRAPHITIC PHYLLITE (G). Competent, brittle. Foliation = 50-	40.2		0	45.0	45.0								
		55°; F_1 = 0-10°. Sporadic blebls of sulfide-Py and Po.													
		32.5; 36; 36.5; 38: Fold noses.													
		33.5-35.1: Change in foliation. F_2 = 60-65°; F_1 = 0-5°.													
		41.1-41.4: Shear.													
		45.0: Sharp clean contact with bleached phyllite (Sb) = 45°.													
45.0	46.2	BLEACHED PHYLLITE (Sb). Competent. Buff with greenish hue	1.2		45.0	46.2	1.2								
		laminae alternating with quartz. Foliation = 40-45°. No													
		F_1/F_2 relationship noted.													
		46.2: Gradual change to Graphitic Phyllite. Contact is													
		increasing inter-lamination with graphite. Transi-													
		tion zone is approximately 5cm long.													
46.2	47.2	GRAPHITIC PHYLLITE. Competent. Foliation = 50-55°; F_1 =	0.8		46.2	47.2	1.0								
		5-10°. Blebs of sulfides.													
		47.2: Sharp change to Bleached Phyllite = 40°.													

LOGGED BY _____ D.D.H. No 76-U-144 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
47.2	50.3	BLEACHED PHYLLITE (Sb). Same characteristics as in 45-46.2	3.0		47.2	50.3	3.1								
		run. Spots of fuchsite.													
		50.3: Sharp change to Graphitic unit. Contact broken ground													
50.3	52.1	GRAPHITIC PHYLLITE (G). Competent. Foliation = 50-55°;	1.5		50.3	52.1	1.8								
		F_1 = 0-5° but not very well developed (only faint crenulation													
		between F_2). Short intercalated bleached phyllite run at													
		51.0-51.4.													
		52.1: Sharp contact with bleached phyllite (Sb) = 30°.													
		Contact marked by 1.5cm quartz.													
52.1	53.5	BLEACHED PHYLLITE (Sb). Competent. Light gray to buff.	1.4		52.1	53.5	1.4								
		Foliation = 35°. No F_1/F_2 relationship.													
		53.5: Sharp clean contact with graphitic phyllite = 30°.													
53.5	55.8	GRAPHITIC PHYLLITE (G). Fissile, breaks into poker chips.	2.0		53.5	55.8	2.3								
		Foliation = 45-50°; F_1 = 0-10°.													
		64; 64.6: Fold noses.													
		55.8: Sharp contact with bleached phyllite = 50°.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
55.8	57.3	BLEACHED PHYLLITE (Sb). Competent. Buff with white felsic	1.3		55.8	57.3	1.5								
		mineral laminae. Foliation = 70°; F$_1$ = 0-5°.													
		57.0: Fold nose.													
		57.3: Sharp contact with quartz-sulfide. Contact is wavy													
		parallel to core axis. Actually fold nose with one													
		side as quartz-sulfide and the other side is bleached													
		phyllite.													
57.3	61.3	QUARTZ-SULFIDE (P) WITH BLEACHED PHYLLITE (Sb), 25 10	1.9	4252	57.3	59.4	2.1	3.15	6.65	48.34			6.62	13.97	101.51
		nosing in and out. Foliation = 0-80° in a series of 30 6	1.5	4253	59.4	61.3	1.9	5.10	7.16	74.74			9.69	13.60	142.01
		fold nose closures. Po and Mgtt blebs with Py.		W.Av.	57.3	61.3	4.0	4.08	6.89	60.88			16.31	27.57	243.52
		59.4-61.3: Groundmass includes graphitic laminae. Rx unit		W.Av.	58.3	61.3	3.0	4.39	6.97	65.1			13.16	20.92	195.18
		is mineralized phyllite (PG). Foliation = 25°.													
		61.3: Gradual change to graphitic sericite phyllite (SG).													
61.3	64.3	GRAPHITIC SERICITE PHYLLITE (SG). Broken soft core.	2.5		61.3	64.3	3.0								
		Foliation = 25-30°; F$_1$ = 0-10°.													
		63.0: Small fault. Dark gray sticky gouge.													
		63.8-64: Shear? Small flakes of graphite.													
		64.3: Gradual change to quartz-sulfide with trace graphite.													

LOGGED BY _____ D.D.H. Nº 76-U-144 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
64.3	65.9	QUARTZ-SULFIDE WITH THIN GRAPHITIC LAMINAE (PG). 25 8	1.5		64.3	65.9	1.6	2.05	3.70	27.43					
		Competent. Foliation = 80° followed by sulfide laminae-													
		could be the F 1.													
		65-65.5: Sulfide Bx. Ø = 1mm-1 cm. Angular to sub-rounded													
		cemented by graphite. First contact = 25°;													
		Second contact broken ground.													
		65.9: Sharp change to bleached phyllite = 45°.													
65.9	67.1	BLEACHED PHYLLITE (Sb). Broken core. Buff with prominent	0.6		65.9	67.1	1.2								
		fuchsite spots/laminae.													
		67.1: Change to graphitic phyllite (G). Contact very broken													
		ground with clay.													
67.1	73.2?	GRAPHITIC PHYLLITE (G). Combined sand, mud, flakes. No	3.0		67.1	73.2	6.1								
		gouge noted.													
	73.2?	END OF HOLE.													
		NOTE: Ground caved in after drill rods were pull out to													
		change bit. Driller not able to push to original depth but													
		only up to 67.1. The 73.2 (?) run is excess interval from													
		71.6 which was definitely reached and recorded.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-145 PAGE 1

PROPERTY GRUM JOINT VENTURE CLAIM Nº

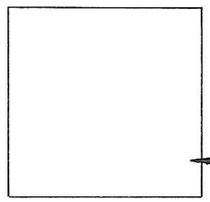
LATITUDE 66W STARTED AUGUST 13, 1976

DEPARTURE 2N COMPLETED AUGUST 15, 1976

ELEVATION PROPOSED DEPTH

ULTIMATE DEPTH 121.9m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	044	-65°
45.72m	059	-67°
91.44m	067	-72°



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 84%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	35.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent, bri- 20 2	0.9	4162	0	4.6	4.6	0.08	0.90	6.17			0.98	PbZn	
		ttle. Foliation = 45-50°. At 16.8, foliation 25 2	2.5	4163	4.6	7.6	3.0	0.07	1.28	5.14			1.35	PbZn	
		changes into F_2 = 70-75°; F_1 = 5-10°. 25 2	2.6	4164	7.6	10.7	3.1	0.35	1.68	9.94			2.03	PbZn	
		4.6-5.0: Sulfide bx cemented by graphite/clay mineral 25 2	2.4	4165	10.7	13.7	3.0	0.25	0.70	14.06			0.95	PbZn	
		9.3-9.6: Sulfide bx. Bigger fragments Ø = 2cm. 20 1	2.6	4166	13.7	16.8	3.1	0.05	0.43	6.17			0.48	PbZn	
		Cemented by graphite. Walls = 45°. Blebs cpy. 15 1	3.0	4167	16.8	19.8	3.0	0.18	0.85	6.17			1.03	PbZn	
		24.4-29.0: Series of small fold nose closures. 15 2	2.7	4168	19.8	22.9	3.1	0.13	0.53	7.20			0.66	PbZn	
		24.4-35.1: Foliation = 75-80°; F_1 = 0-5°. 10 Tr.	11.0		22.9	35.1	12.2								
		35.1: Sharp abrupt change to bleached phyllite (Sb).													
		Contact broken core.		W.Av.	0	22.9	22.9	1.06	PbZn						
35.1	38.3	BLEACHED PHYLLITE (Sb), WITH CHLORITIC INTERVAL AND TRACE	3.1		35.1	38.3	3.2								
		CALCITE (Sbc + K). Soft rx unit. Spots of fuchsite.													
		Foliation = 75-80°. White/green stripes.													
		38.3: Abrupt change to mineralized graphitic phyllite (PG).													
		Contact broken ground.													

LOGGED BY _____ D.D.H. Nº 76-U-145 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
38.3	51.8	MINERALIZED GRAPHITIC PHYLLITE (PG). Fissile, breaks into													
		poker chips. F_2 = 80-85°; F_1 = 15-20°. 20 2	2.6	4169	38.3	42.7	4.4	0.04	0.35	3.06			0.39	PbZn	
		45-45.6: Bx. Phyllite sub-angular fragments Ø = 1mm 25 2	1.9	4170	42.7	45.7	3.0	0.04	0.45	5.14			0.49	PbZn	
		-1.0cm cemented by graphite. 25 3	0.8	4171	45.7	47.2	1.5	0.75	2.75	15.09			3.50	PBZn	
		48.4-48.8: Sulfide bx. Angular fragments of sulfides 40 6	1.0	4172	47.2	48.8	1.6	0.90	2.58	18.17			3.48	PbZn	
		and graphite Ø = 1mm-1.5cm. cemented by 60 10	1.5	4173	48.8	50.3	1.5	2.60	3.55	30.17			3.90	5.33	45.26
		barite. 25 3	1.0	4174	50.3	51.8	1.5	1.65	2.23	30.17			2.48	3.35	45.26
		51.8: Abrupt change to Graphitic Phyllite (G).													
		Contact broken core.		W.Av.	38.3	45.7	7.4	0.43	PbZn						
				W.Av.	45.7	48.8	3.1	3.49	PbZn						
51.8	61.2	GRAPHITIC PHYLLITE (G). Very fissile. Poker chips core.	8.6		51.8	61.2	9.4								
		Foliation = 75-80°. No clear F_1 /F_2 relationship noted.													
		Sporadic Po blebs.		W.Av.	48.8	51.8	3.0	2.13	2.89	30.17			6.38	8.68	90.52
		55.0: Shear.		W.Av.	48.5	51.8	3.3	2.02	2.86	29.1			6.65	9.45	95.97
		61.2: Shear contact with bleached phyllite (Sb) = 80°.													
61.2	62.7	BLEACHED PHYLLITE (Sb). Soft broken core. Buff with	1.2		61.2	62.7	1.5								
		greenish hue. Foliation = 75-80°.													
		62.2-62.4: Massive sulfide band: Py: 75, PbZn: 2%.													
		62.7: Gradual change to Sericite Phyllite with short													
		graphite interval (S+G).													

LOGGED BY _____ D.D.H. No 76-U-145 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
62.7	83.5	SERICITE PHYLLITE W/INTERCALATED SHORT INTERVALS OF GRAPHITIC	19.6		62.7	83.5	20.8								
		PHYLLITE (S+G). Fissile, easily breaks into poker chips.													
		Foliation = 75-80°; F$_1$ = 5-10°. Sporadic clots of Po and													
		leaf Py.													
		77.7-78.4: Bleached phyllite. Light silvery gray. Folia-													
		tion = 75-80°. First contact gradual; second													
		contact broken gougy ground.													
		78.4-78.6: Small fault - gray thick, sticky gouge with													
		quartz pebbles.													
		83.5: Gradual change to bleached sericite phyllite (Sb).													
83.5	86.2	BLEACHED SERICITE PHYLLITE (Sb). Soft but solid core.	2.7		83.5	86.2	2.7								
		Buff to silvery white with greenish hue. Foliation = 75-85°.													
		Blebs and laminae of Po following foliation.													
		86.2: Sharp contact with graphitic phyllite (G) = 80°.													
86.2	90.5	GRAPHITIC PHYLLITE (G). Fissile, easily breaks into poker	4.0		86.2	90.5	4.3								
		chips. Foliation = 80-85°; F$_1$ = 0-5°. Clots of sulfides in													
		felsic laminae. Py: = 1%, PbZn: = Trace.													
		90.5: Increasing mineralization. Rx becoming mineralized													
		graphitic phyllite.													

LOGGED BY _____ D.D.H. No 76-U-145 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
90.5	99.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Fissile, easily 20 4	2.1	4175	90.5	93.0	2.5	3.30	5.94	54.51			8.25	14.85	136.28
		breaks into poker chips. Foliation F_2 = 85-90° ; 20 6	1.2	4176	93.0	94.5	1.5	2.48	4.10	38.40			3.72	6.15	57.6
		F_2 = 0-5°. 15 Tr.	2.1		94.5	97.5	3.0								
		F_1 Massive sulfide @ 93-93.2. 25 7	0.9	4177	97.5	99.1	1.6	1.38	1.88	20.23			3.26	PbZn	
		98-98.2: Bleached phyllite. Broken core. Silvery 75 5	1.4	4178	99.1	100.6	1.5	2.40	2.20	27.43			4.60	PbZn	
		white with greenish hue. 75 2	1.5	4179	100.6	102.1	1.5	1.50	0.75	19.20			2.25	PbZn	
		99.1: Abrupt change to Massive sulfide (M). 60 2	1.5	4180	102.1	103.6	1.5	0.63	1.08	9.94					
		Contact broken ground. 25 3	2.8	4181	103.6	106.7	3.1	2.65	4.25	42.51			8.22	13.18	131.78
99.1	106.7	MASSIVE SULFIDE(M) WITH SOME VARIETIES HAVING QUARTZ INCLU-		W.Av.	90.5	94.5	4.0	2.99	5.25	48.47			11.97	21.00	193.88
		SIONS (MIq), SULFIDE BX (MXs). Po and Mgtt clots as well as		W.Av.	97.5	102.1	4.6	3.37	PbZn						
		laminae. Short intervals of bleached phyllite (Sb). Faint		W.Av.	103.2	106.7	3.5	2.42	3.89	38.79			8.47	13.61	135.76
		compositional banding = 75-80°.													
		104.1-105.3: Bleached phyllite (Sb). Buff with silvery													
		gray intervals. Foliation = 30°, with fold													
		nose at 104.5. Contacts broken ground.													
		105.5-106.7: Sulfide bx. Sulfide fragments Ø = 1mm=2cm.,													
		angular to sub-rounded well cemented by sulfide													
		graphite and trace calcite.													
		106.7: Change to Sericite Phyllite. Contact broken ground,													
		marked by bull quartz pebbles.													

LOGGED BY _____ D.D.H. No 76-U-145 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
106.7	111.3	SERICITE PHYLLITE (S). Broken gougy ground. Could be a fault zone. Ground composed of flakes, pebbles of phyllite, quartz and some bleached sericite fragments all together mixed with gougy materials.	4.0		106.7	111.3	4.6								
		111.3: Contact with bleached phyllite. Contact marked by well healed sulfide bx.													
111.3	121.9	BLEACHED PHYLLITE (Sb). Soft solid core. Buff to silvery gray colour with short interval of massive sulfide.	9.2		111.3	121.9	10.6								
		111.3-111.8: Sulfide bx cemented by quartz (MXq).													
		112.5-113.8: FAULT. Buff coloured gouge with sericite phyllite and quartz pebbles.													
		120.4-121.9: F_2 = 85-90°; F_1 = 0-5°. F_1 has some sulfide blebs.													
		NOTE: From 111.3 to 121.9 sulfides occur as thin laminae and isolated blebs. Sulfides average: Py, Po with tr. Zn + Pb. Oxides: Mgtt usually as blebs.													
	121.9	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-146 PAGE 1

PROPERTY GRUM JOINT VENTURE

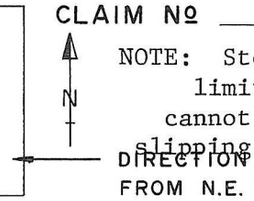
LATITUDE 10,977.386 80W STARTED AUGUST 13, 1976

DEPARTURE 7,539.854 7N COMPLETED AUGUST 15, 1976

ELEVATION 1,115.607 PROPOSED DEPTH 84.0m

ULTIMATE DEPTH 73.7m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	245° 56'	88° 38'



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

CLAIM Nº

NOTE: Stopped due to mechanical limitation of drill. Chuck cannot support rods. Rods keep slipping.

TOTAL CORE RECOVERY: 94.1%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	15.2	GRAPHITIC PHYLLITE (G). Competent. Foliation = 85-90°;	15.0		0	15.2	15.2								
		F = 0-5°. Blebs of Py/Po sporadically distributed.													
		1 4.6-6.1: Bleached phyllite interval. Competent. Foliation													
		= 90°. Silvery white with green fuchsite spots.													
		Contacts broken ground.													
		15.2: Gradual increase in mineralization. Rx becoming													
		mineralized graphitic phyllite (PG).													
15.2	30.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 20 3	2.9	4255	15.2	18.3	3.1	1.30	2.10	24.34			3.40	PbZn	
		Foliation = 75-85°; F = 0-10°. Sulfides as thin 20 3	3.0	4256	18.3	21.3	3.0	1.10	1.55	24.34			2.65	PbZn	
		1 laminae following foliation F with some in F . 25 4	1.6	4257	21.3	22.9	1.6	1.43	2.13	26.40			3.56	PbZn	
		2 1 30 6	1.4	4258	22.9	24.4	1.5	1.93	2.80	28.46					
		27-27.2: Sheared. Black flakey core. 30 6	1.5	4259	24.4	25.9	1.5	3.30	4.60	45.26					
		28.8-29.5: Bleached phyllite interval. Light gray. 25 4	1.5	4260	25.9	27.4	1.5	1.40	3.40	21.26					
		First contact sharp = 40°; second contact 25 4	1.4	4261	27.4	29.0	1.6	5.49	7.16	77.83			8.78	11.46	124.53
		broken ground. 25 6	1.4	4262	29.0	30.5	1.5	3.20	6.00	49.37			4.80	9.00	74.06
		30.5: Abrupt change to Qtz-sulfide. Contact broken 30 8 ground.	1.5	4263	30.5	32.3	1.8	4.23	5.66	70.63			7.61	10.19	127.13

LOGGED BY _____ D.D.H. No 76-U-146 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
				W.Av.	24.4	27.4	3.0	2.35	4.00	33.3					
				W.Av.	27.4	30.5	3.1	4.38	6.60	64.1			13.58	20.46	198.59
				W.Av.	27.4	32.3	4.9	4.32	6.26	66.5			21.19	30.65	325.72
30.5	32.3	QUARTZ-SULFIDE (P). Competent. Foliation = 80°; F_1 = 0°.		W.Av.	29.0	32.5	3.3	3.76	5.82	60.97			12.41	19.19	201.19
		Sulfides in both foliation.		W.Av.	15.2	22.9	7.7	3.14	PbZn						
		32.3: Abrupt clean change to bleached sericite phyllite (Sb)		W.Av.	22.9	27.4	4.5	2.21	3.60	31.7					
		Contact = 85°.													
32.3	33.0	BLEACHED PHYLLITE (Sb). Light gray colour. Competent.	0.7		32.3	33.0	0.7								
		Foliation = 80-85°. Minor blebs of Po.													
		33.0: Gradual change to Sericite phyllite (S).													
33.0	38.6	SERICITE PHYLLITE (S). Competent. Foliation = 80-85°; F_1	5.0		33.0	38.6	5.6								
		= 0-5°.													
		36.0: Shear.													
		38.6: Abrupt change to bleached phyllite (Sb). Contact = 85													
38.6	39.6	BLEACHED PHYLLITE (Sb). Competent. Buff with fuchsite spots	0.4		38.6	39.0	0.4								
		Foliation = 80-85°.													
		39.1-39.3: Mineralized band. Sulfide following foli- 30 7	2.0	4264	39.0	41.6	2.6	2.35	4.25	38.40					
		ation.													
		39.6: Sharp change to mineralized graphitic phyllite 4 Tr.	1.9		41.6	44.0	2.4	Trace, est.							
		(P-G). Contact very sharp and clean = 80°. 25 6	1.7	4265	44.0	45.7	1.7	1.90	3.68	35.31			3.23	6.26	60.03

LOGGED BY _____ D.D.H. No 76-U-146 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		30 5	1.4	4266	45.7	47.2	1.5	1.68	1.18	35.31			2.52	1.77	52.97
		35 10	1.6	4267	47.2	49.1	1.9	3.90	5.20	65.49			7.41	9.88	124.43
39.6	49.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. With		W.Av.	44.0	49.1	5.1	2.58	3.51	46.6			13.16	17.91	237.43
		intervals of bleached phyllite plus some with chlorite		W.Av.	46.1	49.1	3.0	3.09	3.73	54.4			9.26	11.18	163.27
		laminae (Sb+c). Foliation = 80-85°.													
		41.5-42.5: Bleached phyllite interval. Contacts broken													
		ground. Foliation = 80°; F_1 = 0°.													
		43.5-44: Chloritic phyllite (Sbc). Striped white and green.													
		Foliation = 80°. First contact = 85°; second													
		contact = 90°.													
		49.1: Sharp contact with graphitic phyllite = 85°.													
49.1	54.4	GRAPHITIC PHYLLITE (G). Competent. Foliation = 85°; F_1 =	4.8		49.1	54.4	5.3								
		0-5°. Short intervals of bleached phyllite = 5cm @ 50.6.													
		51.5-51.7: FAULT. Black sticky gouge.													
		54.4. Sharp change to bleached phyllite (Sb) = 45°.													
54.4	55.1	BLEACHED PHYLLITE (Sb). Competent. Buff coloured.	0.7		54.4	55.1	.7								
		Foliation = 85-90°. No F_1 / F_2 relationship noted.													
		55.1: Sharp change to Sericite phyllite (S) = 30°.													

LOGGED BY _____ D.D.H. Nº 76-U-145 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
55.1	59.4	SERICITE PHYLLITE (S). Blocky core. Foliation = 85-90°;	4.0		55.1	59.4	4.3								
		F_1 = 10-20°. Trace calcite in groundmass.													
		59.4: Increasing calcitic content. Also intervals with													
		chloritic laminae (Sk+c).													
59.4	73.7	CALCITIC-CHLORITIC SERICITE PHYLLITE (SK+c). Competent.	14.0		59.4	73.7	14.3								
		F_2 = 85-90°; F_1 = 0-5°. Calcite marking F_1; while chloritic													
		interval have chlorite laminae following F_2.													
		71.6: Sheared.													
	73.7	END OF HOLE. Stopped due to mechanical limitation of													
		machine. Chuck can't hold on the rods without													
		slipping.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-147 PAGE 1

PROPERTY GRUM JOINT VENTURE

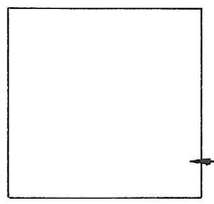
LATITUDE 10,582.414 2N STARTED AUGUST 15, 1976

DEPARTURE 7,748.358 66W COMPLETED AUGUST 18, 1976

ELEVATION 1.180.899 PROPOSED DEPTH 250' - 76.2m

ULTIMATE DEPTH - 76.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	227° 02'	+46° 09'



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

CLAIM Nº

TOTAL CORE RECOVERY: 68%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	19.8	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. Foliation													
		= 75-80°; F_1 = 0-5°. Series of fold noses defining	0.9	4268	0	6.1	6.1	0.17	2.23	5.14					
		the F_1 clearly at 9.1-16.8.	2.4	4269	6.1	9.1	3.0	0.13	0.88	7.20			1.01	PbZn	
			2.9	4270	9.1	12.2	3.1	0.18	1.15	10.97			1.33	PbZn	
		4.8-5.5: Bleached phyllite interval. Buff with	3.0	4271	12.2	15.2	3.0	0.10	0.93	7.20			1.03	PbZn	
		fuchsite green/splot laminae. Contacts	2.8	4272	15.2	18.3	3.1	0.13	0.80	8.23			0.93	PbZn	
		broken ground. Foliation = 80-85°.	1.4	4273	18.3	19.8	1.5	1.65	3.00	31.20			1.95	PbZn	
		19.8: Gradual change to massive sulfide (M). Sul-	1.5	4274	19.8	21.3	1.5	6.98	14.88	93.94			10.47	22.32	140.91
		fide bands becoming wider. Contact arbitrary.	1.5	4275	21.3	22.9	1.6	7.08	12.80	108.0			11.33	20.48	172.80
		NOTE: First 6.1 metres of run has pebbly core.	1.4	4276	22.9	24.4	1.5	4.83	9.95	80.57			7.25	14.93	120.86
		No gouge material noted. Poor recovery.	1.5	4277	24.4	25.9	1.5	5.63	12.29	98.74			8.45	18.44	148.11
			1.2	4278	25.9	27.4	1.5	4.33	8.66	72.69			6.50	12.99	109.04
19.8	35.0	MASSIVE SULFIDE (M) WITH SHORT POROUS AND BARITE IN	0.8	4279	27.4	29.0	1.6	4.70	9.19	81.60			7.52	14.70	130.56
		GROUNDMASS VARIETY (MV+Mb). Competent. Composi-	1.3	4280	29.0	30.5	1.5	5.46	11.48	94.63			8.19	17.22	141.95
		tional banding = 70-75°.	0.8	4281	30.5	32.0	1.5	3.30	5.66	42.51			4.95	8.49	63.77
		22.9-24.4: Barite in groundmass. Included here are	1.2	4282	32.0	33.5	1.5	4.88	8.86	80.57			7.32	13.29	120.86
		short runs of porous variety.	1.0	4283	33.5	35.1	1.6	3.65	7.82	61.37			5.84	12.51	98.19

LOGGED BY _____ D.D.H. Nº 76-U-147 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		29-31: Porous variety. Voids aligned = 75-80°. 25 5	1.8	4284	35.1	37.0	1.9	1.90	4.25	25.37					
		31.5-32: Bleached phyllite interval-broken ground.													
		33.4-33.7: Bleached phyllite interval with prominent													
		fuchsite laminae in buff bleached sericite		W.Av.	6.1	19.8	13.7	1.17	PbZn						
		groundmass. Foliation = 75°.		W.Av.	19.8	35.1	15.3	5.09	10.15	81.51			77.82	155.37	1247.1
		35.0: Gradual change to mineralized graphitic phyllite (PG).		W.Av.	25.9	29.0	3.1	4.52	8.93	77.29			14.02	27.69	239.60
				W.Av.	30.5	35.1	4.6	2.94	7.45	61.48			18.11	34.29	282.82
35.0	37.0	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken blocky core.													
		Foliation = 70-75°.													
		36.4-36.8: FAULT. Light gray gouge with bleached sericite													
		flakes.													
		37.0: Abrupt change to Bleached phyllite. Contact broken.													
37.0	50.3	BLEACHED PHYLLITE (Sb). Broken soft core. Generally buff	10.5		37.0	50.3	13.3								
		but some intervals have silvery white colour. Foliation =													
		70-75°. Prominent fuchsite spots. Sporadic Py xls/clusters													
		45.7-50.3: Broken and flakey. Could be a shear zone.													
		50.3: Change to Mineralized Graphitic Phyllite (PG).													
50.3	57.9	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken core. 60 5	1.3	4285	50.3	53.3	3.0	0.09	1.05	32.23			1.14	PbZn	
		Interval of sulfide breccia. Core mostly pebbles 50 4	1.0	4286	53.3	54.9	1.6	0.20	0.85	18.17			1.05	PbZn	

LOGGED BY _____ D.D.H. No 76-U-147 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		and short blocks = 2.5cm long. 50 4	0.9	4287	54.9	56.4	1.5	0.08	0.45	10.97			0.53	PbZn	
		51.4-52: Sulfide breccia (MXg) cemented by graphite. 30 4	0.8	4288	56.4	57.9	1.5	0.88	1.80	20.23					
		57.2-57.9: FAULT. Black sticky clay with sulfide fragments.		W.Av.	50.3	56.4	6.1	0.97	PbZn						
		Contact with graphitic phyllite (G).													
57.9	70.1	GRAPHITIC PHYLLITE (G). Broken core. Foliation in some	5.1		57.9	70.1	12.2								
		short run = 80-85° and F$_1$ = 0-5°. Greater part of run													
		(approximately 80%) composed of flakes and flake fragments.													
		62.4-62.6: Black sticky gouge.													
		68-68.6: Sandy to flakey core. No gouge.													
		70.1: Abrupt change to Bleached phyllite (Sb).													
		Contact broken ground.													
70.1	76.2	BLEACHED PHYLLITE (Sb). Broken blocky core from pebble to	4.5		70.1	76.2	6.1								
		3cm long. Foliation = 85-90°; F$_1$ = 0-10°. Groundmass has													
		trace calcite. Has tuffaceous (ash) appearance.													
	76.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-148 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,848.985 3N STARTED AUGUST 16, 1976

DEPARTURE 7,500.084 78W COMPLETED AUGUST 17, 1976

ELEVATION 1,124.874 PROPOSED DEPTH 225' - 68.6m

ULTIMATE DEPTH - 68.6m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	047° 24'	-36° 28'

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 90%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	12.2	CHLORITIC SERICITE PHYLLITE (Sc). Competent. Calcite in	5.5		0	6.1	6.1								
		some interval @ 1.5-1.9. Foliation F_2 = 5°; F_1 = 5-10°.													
		F marked by ribbon-like alignment of quartz.													
		^{1}4.6-9.5: Quartz-sulfide interval. Sulfides as thin laminae.													
		Foliation F (?) = 0°. Contacts gradual. 20 3	3.0	4182	6.1	9.1	3.0	1.63	2.65	23.31					
		^{1}4.5; 6.0; 7.2; 8.3: Fold noses. 4 Tr.	2.9		9.1	12.2	3.1								
		10-10.7: Chloritic bleached phyllite. Buff with green													
		stripe. Foliation = 50°. Contacts gradual.													
		12.2: Gradual change to dark sericite phyllite (S).													
12.2	27.3	DARK SERICITE PHYLLITE (S). Competent. Foliation = 0-5°	14.5		12.2	27.3	15.1								
		mainly because of series of small F fold noses. Drill													
		could be following or parallel F_1 trend.													
		21-21.3: Bull quartz with galena ^{2}train-short and discon-													
		tinuous. Pb: 5%, Py: 3%													
		27.3: Gradual increase in sulfidelaminae. Rx becoming													
		quartz sulfide (P).													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
27.3	47.2	QUARTZ-SULFIDE (P). Competent. Foliation = 15-20° 20 7	3.1	4183	27.3	30.5	3.2	2.08	2.65	33.26					
		marked by regularly spaced sulfide laminae. F = 80- 20 7	3.0	4184	30.5	33.5	3.0	2.35	4.10	34.29					
		85°. Drill must be approaching big F nose. 4 Tr.	3.5		33.5	38.1	4.6								
		30 8	1.3	4185	38.1	39.6	1.5	3.68	3.95	46.29			5.52	5.93	69.44
		38.1-41.1: Broken core. Pebble size. No gouge. 30 9	1.0	4186	39.6	41.1	1.5	2.93	3.50	36.34			4.40	5.25	54.51
		44.2: Introduction of graphitic laminae in groundmass 40 7	0.9	4187	41.1	42.7	1.6	3.20	4.70	41.49			5.12	7.52	66.38
		Persists until 48.8m - then gradually decrease. 40 10	1.2	4188	42.7	44.2	1.5	5.94	7.87	73.71			8.91	11.81	110.57
		40 10	1.5	4189	44.2	45.7	1.5	5.77	6.85	77.83			8.66	10.28	116.75
		47.2: Gradual change to sericite phyllite (S). 40 8	1.0	4190	45.7	47.2	1.5	2.28	3.10	32.23					
47.2	51.8	SERICITE PHYLLITE (S). Soft flakey core. Foliation = 30°.	4.0		47.2	51.8	4.6								
		Sporadic sulfide showing = 2% mostly as leaf Py and spots		W.Av.	38.1	45.7	7.6	4.29	5.37	55.0			32.61	40.79	417.65
		of Cpy.		W.Av.	38.1	42.7	4.6	3.27	4.07	41.38			15.04	18.70	190.33
		50-51: Flakey core. Could be a shear.		W.Av.	42.7	45.7	3.0	5.86	7.36	75.77			17.57	22.09	227.32
		51.8: Increase in sulfides and graphite. Rx becoming													
		quartz-sulfide with graphite laminae (PG).													
51.8	64.0	QUARTZ-SULFIDE WITH GRAPHITIC LAMINAE (PG). Competent.													
		Foliation = F = 30°; F = 0-5°. Sulfides following 25 5	2.6	4191	51.8	54.9	3.1	2.68	4.20	38.40			8.31	13.02	119.04
		both foliation. 25 6	1.5	4192	54.9	56.4	1.5	2.30	5.15	40.46			3.45	7.73	60.69
		53-53.4: FAULT. Black sticky gouge with graphitic 30 8	1.5	4193	56.4	57.9	1.5	3.70	7.13	62.40			5.55	10.70	93.60
		phyllite flakes. 30 8	1.5	4194	57.9	59.4	1.5	4.00	7.00	66.51			6.00	10.5	99.77
		64.0: Gradual decrease in mineralization. Rx be- 30 9	1.5	4195	59.4	61.0	1.6	3.38	6.10	59.31			5.41	9.76	94.90

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		coming more of simple graphitic phyllite (G). 25 5	1.3	4196	61.0	62.5	1.5	4.13	5.51	55.54			6.20	8.27	83.31
		20 4	1.2	4197	62.5	64.0	1.5	2.13	2.90	28.46					
64.0	65.5	GRAPHITIC PHYLLITE (G). Fissile, easily breaks into poker	1.5		64.0	65.5	1.5								
		chips. Foliation = 40°; F 1 = 0-5°. Sulfide trains in some		W.Av.	51.8	62.5	10.7	3.26	5.61	51.6			34.92	59.90	551.71
		felsic laminae.		W.Av.	51.8	56.4	4.6	2.56	4.51	39.07			11.76	20.75	179.73
		Py: = 1% PbZn: Trace.		W.Av.	56.4	59.4	3.0	3.85	7.07	64.46			11.55	21.2	193.77
		65.5: Gradual decrease in graphite. Rx becoming		W.Av.	59.4	62.5	3.1	3.75	5.82	57.49			11.61	18.03	178.21
		sericite phyllite (S).		W.Av.	56.4	62.5	6.1	3.80	6.43	60.98			23.16	39.23	371.98
65.5	68.6	SERICITE PHYLLITE (S). Fissile, easily breaks into flakes	2.8		65.5	68.6	3.1								
		and chips. Foliation = plane of fissility = 25-30°.													
		F 1 = 0-5° (oppisite direction of fissility).													
	68.6	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-149 PAGE 1

PROPERTY GRUM JOINT VENTURE

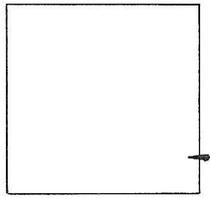
LATITUDE 10,939.533 80W STARTED AUGUST 18, 1976

DEPARTURE 7,502.629 80 X-CUT 5N + 6m COMPLETED AUGUST 20, 1976

ELEVATION 1,116.928 PROPOSED DEPTH 600' - 182.9m

ULTIMATE DEPTH - 182.9m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	0	-90°
106.6m	197	-84°
152.4m	192	-83°



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 93%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	25.9	QUARTZ-SERICITE SULFIDE (P). Competent. Foliation = 5 2	2.1	4289	0	4.6	4.6	0.73	0.85	9.94			3.36	3.91	45.72
		80-85°; F = 0-5°. Sulfide more in F and less than 5 2	2.6	4290	4.6	7.6	3.0	1.83	1.13	19.20			5.49	3.39	57.6
		1 2 in the F with the ratio of 3:1. Short interval of 5 2	2.9	4291	7.6	10.7	3.1	0.58	0.78	7.20			1.80	2.42	22.32
		1 calcitic-chloritic phyllite. 10 4	3.3	4292	10.7	14.0	3.3	1.13	2.10	16.11			3.73	6.93	53.16
		13.6-14.0: Calcitic-chloritic phyllite (SC+K). Com- 10 8	2.5	4293	14.0	16.8	2.8	1.68	4.38	30.17			4.70	12.26	84.48
		petent. Green groundmass with white 10 7	1.5	4294	16.8	18.3	1.5	0.73	2.55	20.23			1.1	3.83	30.35
		stripes. Foliation = 85-90°. No clear F noted. 1st 10 8	1.3	4295	18.3	19.8	1.5	1.78	4.20	35.31			2.67	6.30	52.97
		1 contact = 85°; 2nd contact = 90°, but not sudden and 15 6	1.2	4296	19.8	21.3	1.5	2.90	6.15	48.34			4.35	9.23	72.51
		sharp, more like inter-lamination with gradual de- 10 5	1.4	4297	21.3	22.9	1.6	2.60	4.35	44.23			4.16	6.96	70.77
		crease in the calcitic-chloritic unit. 15 10	1.3	4298	22.9	24.4	1.5	5.11	9.54	97.72			7.67	14.31	146.58
		25.3-25.9: Bleached sericite phyllite. Silvery white 10 8	1.2	4299	24.4	25.9	1.5	3.70	6.60	58.63			5.55	9.90	87.95
		colour. Foliation = 85°. First contact sharp = 80°; 2 Tr.	2.0		25.9	28.0	2.1								
		Second contact broken ground. 20 8	2.4	4300	28.0	30.5	2.5	1.93	2.20	31.20			0.97	1.10	15.60
		25.9: Rock changed to Mineralized Graphitic phyllite 30 12	2.4	4601	30.5	33.0	2.5	5.49	9.95	90.86			13.73	24.13	227.15
		(PG).		W.Av.	14.0	19.8	5.8	1.46	3.86	28.9			8.47	22.39	167.80
25.9	33.0	MINERALIZED GRAPHITIC PHYLLITE (PG). Short blocky core ave:		W.Av.	19.8	22.9	3.1	2.75	5.22	46.22			8.51	16.19	143.28
		3cm. long. Foliation = 80-85°; F = 0-5°.		W.Av.	22.9	25.9	3.0	4.41	8.07	78.18			13.22	24.21	234.53
				W.Av.	19.8	25.9	6.1	3.56	6.62	61.94			21.73	40.40	377.81
				W.Av.	30.0	33.0	3.0	4.9	8.41	80.92			14.70	25.23	242.75

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Barite in cavity walls.		W.Av.	28.0	33.0	5.0	3.71	5.93	61.03					
		30.7-31.7: Wide Massive sulfide band with quartz inclusion													
		(MIq). Compositional band = 80°; both contacts													
		gradual.													
		33.1: Change to Sericite Phyllite (S). Contact marked by													
		4cm. bleached phyllite. Contact plane = 75°.													
33.1	96.2	SERICITE PHYLLITE (S). Blocky short core. Ranging from	4.8		33.0	38.1	5.1								
		flakes to 3cm. long. Foliation = 80-85°; F_1 = 0-10°. 15 5	1.7	4602	38.1	40.0	1.9	2.30	2.80	36.34					
		Short bleached phyllite interval.	54.7		40.0	96.2	56.2								
		38.1-40: Mineralized interval. Broken ground (P).													
		49.7-50: Bleached phyllite (Sb). Competent. Buff with													
		dark to light brown stripe-biotite laminae. Cal-													
		cite in groundmass. Foliation = 85°; F_1 = 0°.													
		1st contact gradual; second = 80°.													
		50.3-56.4: Po blebs in general foliation plane = 1%.													
		54.6-54.9: Chloritic calcitic phyllite. Green with white													
		stripe. Foliation = 85°; F_1 = 0-5°. First													
		contact clean and sharp = 80°; 2nd contact =													
		interlamination = 80°.													
		70.1-73.2: Rx more of sericite with trace graphite (SG).													
		Gradual increase and decrease of graphitic													
		laminae.													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		74.8-75.0: Bleached phyllite (Sb). Buff. Foliation = 75°.													
		Contact sharp and clean = 75°.													
		78.8-79.3: Bleached phyllite. Trace calcite in groundmass.													
		Foliation = 85-90°. Contacts gradual interlami-													
		nation of bleached sericite and felsic minerals.													
		79.2: Sporadic blebs of Po = 1%.													
		83.5-84.0: Chloritic phyllite interval (C). Chlorite													
		laminae alternating with felsic minerals (no													
		trace of calcite). Foliation = 80-85°; F is S-													
		shaped marked by quartz = 10°. Chl: 50%, Qtz: 50													
		Contacts gradual. Short biotite bearing interval													
		at 89.9-91.4													
		89.6-89.7: FAULT. Thick sticky dark gray gouge.													
		94.5-94.8: Calcitic sericite phyllite. Calcite in ground-													
		mass. Contacts gradual.													
		96.2: Gradual change to bleached phyllite (Sb).													
96.2	97.4	BLEACHED PHYLLITE (Sb). Competent. Foliation = 75-80°;	1.2		96.2	97.4	1.2								
		F = 0-5°. White with bleached sericite laminae. Sporadic													
		Po blebs/laminae = 1%.													
		97.4: Sharp clean contact with Mineralized graphitic													
		phyllite. Contact = 90°.													

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Interval From	Interval To	DESCRIPTION		Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
97.4	100.0	MINERALIZED GRAPHITIC PHYLLITE (SG). Competent.	7 4	2.6	4603	97.4	100.0	2.6	0.73	0.68	14.06					
		F = 85-90°; F = 0-5°. Prominent Po blebs = 5%.	5 1	4.3		100.0	104.5	4.5	0.5 PZ, est,							
		2 1 100.0: Sharp change to bleached phyllite (Sb) = 85°.	30 8	1.5	4604	104.5	106.4	1.9	2.05	3.60	30.17			3.90	6.84	57.32
			75 12	1.6	4605	106.4	108.2	1.8	6.57	8.48	107.0			11.83	15.26	192.55
			75 6	1.5	4606	108.2	109.7	1.5	2.23	2.75	34.29			3.35	4.13	51.44
100.0	104.4	BLEACHED PHYLLITE (Sb). Competent. With chloritic	75 6	1.4	4607	109.7	111.3	1.4	2.90	3.20	40.46			4.06	4.48	56.64
		intervals. White groundmass with spot fuchsite.	75 5	1.5	4608	1113.	112.8	1.5	2.65	1.55	48.34			3.98	2.33	72.51
		Foliation = 80-85°; F = 5-10°.	5 1	7.5		112.8	121.0	8.2	(1 PZ @ 114.3-115.8m)							
		1 102.1-104: Chloritic interval. Rx has light gray	75 8	1.0	4609	121.0	122.0	1.2	4.80	7.40	70.63					
		felsic groundmass and green stripe.	2	1.0		122.0	123.0	1.0		NIL						
		Foliation = 80-85°; F = 0-5°.	75 8	1.0	4610	123.0	124.0	1.0	3.78	3.40	50.40					
		1 104-104.4: Decrease in chlorite and increase in	1	1.2		124.0	125.3	1.3		NIL						
		bleached sericite.	60 6	2.5	4611	125.3	128.0	2.7	4.30	5.50	64.46			11.61	14.85	174.04
		104.4: Sharp contact with Mineralized Graphitic	75 8	1.4	4612	128.0	129.5	1.5	3.18	4.85	47.31			4.77	7.28	70.97
		phyllite (PG) = 80°.	60 7	2.0	4613	129.5	131.6	2.1	5.20	8.17	79.54			10.92	17.16	167.03
			30 6	2.1	4614	131.6	134.1	2.5	1.45	2.03	25.37					
104.4	106.4	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.	25 4	2.6	4615	134.1	137.2	3.1	0.63	1.00	9.94					
		Foliation F = 75-80°; F = 0-10°. Sulfide mostly	50 6	1.5	4616	137.2	138.7	1.5	2.28	4.00	43.54			3.42	6.00	65.31
		2 1 following F rahter than F with 3:1 ratio.	50 8	1.5	4617	138.7	140.2	1.5	4.93	8.89	82.63			7.40	13.34	123.95
		2 1	20 3	1.5	4618	140.2	141.7	1.5	0.38	0.20	19.20					
		106.4: Gradual increase in Massive sulfide with porous			W.Av.	104.5	108.2	3.7	4.25	5.97	67.5			15.73	22.16	249.87
					W.Av.	105.2	108.2	3.0	4.76	6.53	76.3			14.29	19.58	228.75
		and banded variety (MV+MB).			W.Av.	108.2	112.8	4.4	2.59	2.49	41.04			11.39	10.94	180.59

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
106.4	112.7	MASSIVE SULFIDE WITH BANDED AND POROUS VARIETIES (MV+MB).		W.Av.	125.3	129.5	4.2	3.9	5.27	58.34			16.38	22.13	245.01
		Competent. Compositional bands = 80-85°. Barite filled		W.Av.	125.3	131.6	6.3	4.33	6.24	65.40			27.30	39.29	412.04
		fracture = 5°.		W.Av.	128.6	131.6	3.0	4.59	7.18	69.9			13.78	21.53	209.61
				W.Av.	137.2	140.2	3.0	3.61	6.45	63.09			10.82	19.34	189.26
		106.5-106.7: Porous. Voids aligned 75°.													
		106.7-108.2: Barite in groundmass (Mb).													
		112.7: Sharp contact with Graphitic Phyllite (G) = 75°.													
112.7	121.0	GRAPHITIC PHYLLITE (G). Competent. Slight trace calcite													
		in groundmass = 2% also marking F_1.													
		F_1 = 85-90°; F_2 = 0-5°.													
		114.3-115.8: Mineralized interval: Py: 10%, PbZn: 1%													
		121.0: Change to Massive sulfide. Contact has 1.5cm													
		chloritic bleached phyllite. Contact = 75°.													
121.0	122.0	MASSIVE SULFIDE (M). Almost structureless except for faint													
		Py/Sph-Pb compositional banding = 85-90°. Po in 121.2-121.3.													
		121.4-121.6: Barite in groundmass (Mb).													
		122.0: Sharp contact with Graphitic Phyllite (G) = 75°.													
122.0	123.0	GRAPHITIC PHYLLITE (G). Competent. Similar to 112.7-121.0													
		run. Series of small F_1 noses. NOTE: Appear that the													
		inter band of Graphitic and Massive unit is being intersected													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
123.0	124.0	MASSIVE SULFIDE ZONE. Barite in groundmass. Faint compo-													
		sitional Py/Sph-Pb band = 90°. Essentially same characteris													
		tic as 121-122 run.													
		124.0: Sharp contact with Chloritic Bleached Phyllite													
		similar to 102.1-104 run. Contact clean = 80°.													
124.0	125.3	CHLORITIC BLEACHED PHYLLITE (Sbc). Competent. White ground-													
		mass with green stripes. Foliation = 75-80°; F_1 = 10-25°.													
		125-125.3: Chlorite replaced by Fuchsite as green consti-													
		tuent.													
		125.3: Sharp contact with Massive sulfide = 65°.													
125.3	131.6	MASSIVE SULFIDE (M) WITH INTERVALS HAVING BARITE IN GROUND-													
		MASS (Mb) & CALCITE/QUARTZ INCLUSIONS (MI k+q). Competent.													
		Faint compositional band = 75-80°.													
		126.5-128: Barite in groundmass variety. Barite = 20%.													
		125.7-126.0: Bleached phyllite interval. Prominent fuchsite													
		spots laminae. F_2 = 75-80°; F_1 = 5-10°, both													
		contacts sharp = 75°.													
		131.6: Abrupt change to Mineralized graphitic phyllite = 60°													

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Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
131.6	141.7	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. F_1 = 80-85°													
		F_2 = 10-15°. With intervals of Mineralized Bleached Phyllite													
		(P_1-Sb) and barite in groundmass (Pb).													
		134.8-136.7: Mineralized bleached phyllite (P-Sb). Com-													
		petnet. Buff with sulfide laminae = 70°.													
		138-139: Barite in groundmass. Ba: =30%.													
		NOTE: In P-Sb and Pb run, both cases have grada-													
		tional contacts.													
		141.7: Gradual change to Calcitic-chloritic phyllite (CK).													
		Transition zone = 5cm. marked by Bleached Sericite													
		and bull quartz.													
141.7	144.4	CALCITIC CHLORITIC PHYLLITE (CK). Competent. White with	2.6		141.7	144.4	2.7								
		green stripes (wide), 2cm. Calcite in groundmass both in													
		F_1 & F_2. Chlorite mostly F_2. Chlorite: =45%; Calcite: 40%;													
		Quartz: 10%; Sulfides and other felsics: 5%.													
		F_2 = 80-85°; F_1 = 0-10°													
144.4	145.1	MINERALIZED BLEACHED PHYLLITE (P-Sb). Competent. 20 6	1.9	4619	144.4	146.3	1.9	1.28	1.45	22.29					
		F_2 = 85-90°; F_1 = 0-5°. Bleached sericite laminae 35 5	1.5	4620	146.3	147.8	1.5	0.53	0.93	17.14					
		alternating with sulfides and quartz. Sulfides: 15% Quartz: 60% 60 10	1.6	4621	147.8	149.4	1.6	5.71	9.55	79.54			9.14	15.28	127.26
		Both contacts - gradational the second one with 70 8	1.5	4622	149.4	150.9	1.5	1.60	3.20	30.17			2.40	4.80	45.26

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		mineralized graphitic phyllite (PG). 60 8	1.5	4623	150.9	152.4	1.5	1.58	3.50	28.46			2.37	5.25	42.69
		60 7	1.5	4624	152.4	153.9	1.5	1.33	1.73	30.17			2.00	2.60	45.26
145.1	155.4	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 45 6	1.3	4625	153.9	155.4	1.5	2.03	2.60	36.34			3.05	3.90	54.51
		Regular interlamination of sulfides, felsics and graphite:													
		Graph: 30%, Felsics: 20%. F_2 = 85-90°; F_1 = 0-3°.		W.Av.	147.8	150.9	3.1	3.72	6.48	55.65			11.54	20.08	172.52
		149-150.9: Wider bands of sulfides with compositional		W.Av.	149.4	155.4	6.0	1.64	2.76	31.29			9.82	16.55	187.72
		banding = 80-85°. Appear almost like Massive		W.Av.	150.9	152.4									
		sulfides except for some quartz and Bleached													
		sericite constituents as thin laminae/intervals													
		(=10cm.).													
		155.4: Sharp contacts with Graphitic Phyllite (G) = 80°.													
155.4	157.0	GRAPHITIC PHYLLITE (G). Very fissile, breaks easily into	1.3		155.4	157.0	1.6								
		poker chips. F_2 = 75-80°; F_1 = 0-10°.													
		157.0: Gradual change to Sericite phyllite (S).													
157.0	168.8	SERICITE PHYLLITE (S). Competent. F_2 = 75-80°; F_1 not	11.1		157.0	168.8	11.8								
		clearly developed.													
		159-159.5: Bleached phyllite (Sb). Buff. F_2 = 70°; F_1 = 0°													
		Gradational contacts.													
		161.9-162.4: Po band. Massive structureless. With blebs			(161.9	162.4)		= 1%	PZ, est						
		of Py & Zns. PY: 4, Po: 95, ZnS: 1%													

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		168.8: Gradual increase in graphite. Rx is now becoming													
		Graphitic Phy-lite (G).													
168.8	175.0:	GRAPHITIC PHYLLITE (G). Very fissile, easily breaks into	6.0		168.8	175.0	6.2								
		poker chips. F_2 = 80-90°; F_1 = 0-5°. Py: 1%.													
		175.0: Sharp contact with Bleached Phyllite (Sb) = 85°.													
175.0	178.8	BLEACHED PHYLLITE (Sb). Competent. F_2 = 70-80°; F_1 = 0-5°.	3.8		175.0	178.8	3.8								
		Biotite in some laminae @ 177.5. Biotite = 1% of entire run.													
		178.8: Sharp contact with Graphitic Phyllite (G) = 65°.													
178.8	180.4	GRAPHITIC PHYLLITE (G). Fissile. F_2 = 70-75°; F_1 = 0-10°.	1.5		178.8	180.4	1.6								
		179-179.2: Shear. Sericite flakes. Plane = 80°.													
		180.4: Sharp contact with Massive Sulfide (M) = 80°.													
180.4	181.6	MASSIVE SULFIDE WITH BARITE IN GROUNDMASS (Mb). 75 5	1.2	4626	180.4	181.6	1.2	4.50	4.40	59.31					
		Barite = 10%. Compositional band = 85-90°. Po + Mgtt in													
		thin laminae = 5% and following the 85-90° banding.													
		181.6: Sharp change to Graphitic Phyllite (G) = 80°.													
181.6	182.9	GRAPHITIC PHYLLITE (G). Competent. F_2 = 70-75°; F_1 = 0-5°.	1.0		181.6	182.9	1.3								
		Sulfide sporadically distributed = 2% mostly Py blebs, no													

LOGGED BY _____ D.D.H. Nº 76-U-149 PAGE 10

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		trace of PbZn noted.													
	182.9	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-150 PAGE 1

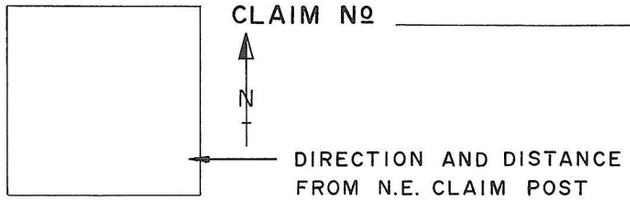
PROPERTY GRUM JOINT VENTURE

LATITUDE 10,880.398 80W
2N + 21m
DEPARTURE 7,445.206 remuck station

ELEVATION 1,112.592

STARTED AUGUST 18, 1976
COMPLETED AUGUST 21, 1976
PROPOSED DEPTH 500' - 152.40m
ULTIMATE DEPTH - 152.40m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	218° 15'	73° 29'
60.9m	217°	-77°
121.9	202°	-84°



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 88%

Interval From	Interval To	DESCRIPTION			Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	26.4	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.	25	6	1.9	4198	0	3.0	3.0	3.78	5.00	41.49					
		Foliation F_2 = 80-85°; F_1 = 0-5°. Sulfides in both	25	6	2.3	4199	3.0	6.1	3.1	2.30	1.83	25.37					
		foliation.	20	4	2.6	4200	6.1	9.1	3.0	1.04	0.35	16.11			1.39	PbZn	
		10.8; 12.1; 12.2: Po band. Following F_2 foliation.	20	3	3.1	4701	9.1	12.2	3.1	0.65	0.35	13.03			1.00	PbZn	
		11.8-12: Bleached phyllite. Laminated fuchsite and	20	2	3.0	4702	12.2	15.2	3.0	0.40	0.63	6.17			1.03	PbZn	
		felsic minerals. Contacts sharp and clean	30	6	3.0	4703	15.3	18.3	3.1	1.65	2.23	20.23			5.12	6.91	62.71
		= 85°. NOTE: Series of F_2 noses. Drill appear perenldicular to F_2.	25	3	2.9	4704	18.3	21.3	3.0	2.23	2.35	26.40			6.69	7.05	79.2
		26.4: Gradual widening of sulfide bands. Rx be-	30	5	1.6	4705	21.3	22.9	1.6	1.70	3.80	20.23			2.72	6.08	32.37
		coming massive in nature (M).	30	7	1.3	4206	22.9	24.4	1.5	1.20	1.85	17.14			1.80	6.08	25.71
			35	8	1.4	4207	24.4	25.9	1.5	5.19	7.49	70.63			7.79	11.24	105.95
26.4	31.5	MASSIVE SULFIDE (M) W/SHORT POROUS SULFIDE VARIETY (MV)	60	8	1.4	4208	25.9	27.4	1.5	1.20	1.10	30.17			1.80	1.65	45.26
		Hard, dense and brittle. Compositional banding =	75	10	1.2	4209	27.4	29.0	1.6	4.60	5.10	71.66			2.30	2.55	35.83
		75-80°.	75	10	2.3	4710	29.0	31.5	2.5	6.52	9.90	110.1			16.30	24.75	275.15
		28.8-29.1: Bleached phyllite. Prominent fuchsite laminae				W.Av.	0	6.1	6.1	3.03	3.39	36.7					
		alternating with felsic and thin sulfide laminae.				W.Av.	6.1	15.2	9.1	1.14	PbZn						
		Foliation = 70-75°. First contact sharp and				W.Av.	18.3	22.9	4.6	2.05	2.85	24.3			9.41	13.13	111.57
		clean, = 85°; second contact = 70°.				W.Av.	27.4	31.5	4.1	5.77	8.03	95.08			23.66	32.91	389.81
						W.Av.	24.4	27.4	3.0	3.20	4.30	50.4					
						W.Av.	28.5	31.5	3.0	6.20	9.10	103.66			18.60	27.30	310.98

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		31-31.2: Sulfide bx Ø = 1mm-1cm cemented by graphite.													
		31.5: Sharp contact with graphitic phyllite (G). Contact													
		bx'ted and marked by 2cm of bleached phyllite with													
		fuchsite.													
31.5	57.9	GRAPHITIC PHYLLITE (G). Broken, very fissile ground.	14.7		31.5	47.5	16.0								
		Foliation F_2 = plane of fissility = 85-90°; F_1 = 0-10°.													
		Sporadic sulfides - leaf Py with F_2 foliation.													
		33.5-37: Pebbles. Poor recovery: 0.5/3.5. No gouge.													
		47.5-49.4: Mineralized interval with barite in ground 35 8	1.9	4711	47.5	49.4	1.9	4.88	10.51	91.89			9.27	19.97	174.59
		mass (Pb) - not massive, but interlamination of	7.9		49.4	57.9	8.5								
		sulfide/barite ruch bands. Foliation = 80-85°.													
		Mineralization appears to follow F_2. No F_1			47.5	50.5	3.0	3.09	6.66	58.20					
		development noted. Contacts clean and sharp = 80													
		55.2-55.4: Bleached phyllite. Buff. Foliation = 65-70°.													
		First contact broken ground; second contact													
		sharp and clean = 75°.													
		54.0: Changing F_2 = 70-75°; F_1 = 5-10°.													
		57.9: Rx changing to graphitic sericite phyllite (SG).													

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
57.9	65.5	GRAPHITIC SERICITE PHYLLITE (SG). Fissile easily breaks into poker chips. Foliation = 75-80°; no well defined F_1 noted except at 62 = 0-2°. 65.5: Rx slowly changing to calcitic-chloritic sericite phyllite. Decreasing graphitic laminae.	7.3		57.9	65.5	7.6								
65.5	92.9	CALCITIC-CHLORITIC SERICITE PHYLLITE (Sc+K). Competent. Dark gray with green laminae (chlorite). Foliation F_2 = 75-80°; F_1 = 5-10°. Calcite as thin laminae in both F_1 and F_2. 77.3-78: Calcitic graphitic interval. Contacts are gradual with introduction of graphitic laminae. Foliation = 75-80°. 85.3-86.9: With fine laminae bio laminae. 86.9: Decreasing chlorite laminae but calcite is still present. Foliation = 85-90°; F_1 = 0-5°. 92.9: Sharp contact with mineralized graphitic phyllite (PG) Contact marked by 3.5cm by calcitic-chloritic bleached phyllite. Contact plane = 90°.	27.0		65.5	92.5	27.0								
92.9	94.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. Foliation F_2 = 75°; F_1 = 0-5°. Sulfides as thin laminae 20 4 following F_1 foliation.	1.3	4712	92.5	94.5	2.0	1.53	2.78	23.31			3.06	5.56	46.62

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		93-93.5: Series of small F_1 fold closures.													
		94.5: Abrupt change to Calcitic sericite phyllite. Contact marked by thin laminae of buff sericite and has 5cm long interval. Contact plane = 85°.			92.5	95.6	3.1	0.99	1.79	15.04					
94.5	115.8	CALCITIC SERICITE PHYLLITE (SK). Competent. Foliation = 85-90°; F_1 = 0-5°. Calcite as thin laminae parallel to F_1 and as S-shaped folds marking F_2.	20.5		94.5	115.8	21.3								
		115: Fold nose. Closure characterized by chloritic bleached phyllite surounded by Sph rich band with blebs of Po.													
		115.8: Increasing graphitic laminae. Rx becoming K-graphitic sericite phyllite (SK+G).													
115.8	137.2	CALCITIC-GRAPHITIC SERICITE PHYLLITE (SK+G). Competent. Foliation = 75-80°; F_1 = 5-10°. Graphite as thin laminae, calcite marking F_1. Graphite: 15%, K: 30%.	10.7		115.8	137.2	11.4								
		120-120.5: Bleached phyllite. Competent. Greenish-chloritic. Foliation = 80°. Contacts sharp and clean = 85°.													
		121-121.1: Massive Py band. Contact = 85°. Py: 80 PbZn: Trace.													

LOGGED BY _____ D.D.H. Nº 76-U-150 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		121.3-121.9: Bleached phyllite. Chloritic, calcitic. Foliation = 80°. Contacts = 85°. Light green stripes with buff to white groundmass.													
		137.2: Abrupt change to Massive sulfide. Contact is wavy and marked by 2cm wide mineralized bleached phyllite Plane of contact = 80° approximately.													
137.2	141.6	MASSIVE SULFIDE ZONE. Banded and with quartz inclu- 60 7	1.5	4713	137.2	138.7	1.5	2.08	4.10	31.20			3.12	6.15	46.80
		sions varities (MB+MIq). Compositional bands = 80°. 75 12	1.5	4714	138.7	140.2	1.5	9.19	16.37	143.3			13.79	24.56	214.98
		75 8	1.5	4715	140.2	141.7	1.5	2.60	6.26	46.29			3.90	9.39	69.44
		140.5-141: Calcite in groundmass.													
		141.6: Abrupt change to Graphitic phyllite (G). Contact		W.Av.	137.2	141.7	4.5	4.62	8.91	73.60			20.81	40.10	331.22
		wavy approximately = 75° and with 1cm bleached		W.Av.	138.7	141.7	3.0	5.90	11.32	94.81			17.69	33.95	284.42
		phyllite transitional zone.													
141.6	143.3	GRAPHITIC PHYLLITE (G). Competent. Foliation = 75°.	1.6		141.7	143.3	1.6								
		F = 5-10°. Sporadic Py/Po blebs = 1%.													
		143.3: Gradual decrease in graphitic constituent. Rx be-													
		coming graphitic sericite phyllite (SG).													
143.3	152.4	GRAPHITIC SERICITE PHYLLITE (SG). Competent. Has short	8.6		143.3	152.4	9.1								
		bleached phyllite interval. Foliation = 70-75°; F = 0-5°.													

LOGGED BY _____ D.D.H. No 76-U-150 PAGE 6

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Sporadic Po blebs = 1%.													
		145-146: Bleached phyllite. Contacts gradual. Foliation													
		F_2 = 65-70°. No clear F_1 developed. Has 5cm wide Po band at 145.7.													
		148.8-149.9: Gradual change to Calcitic bleached phyllite													
		with thin biotite laminae. F_2 = 75°; F_1 = 0-5°													
		149.9-152.4: Calcite persisting in groundmass. Rx is (SG+K)													
		with fine calcite laminae both in F_2 and F_1.													
		F_2 = 85-90°; F_1 = 0-5°.													
	152.4	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-151 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,879.287 80W STARTED AUGUST 21, 1976

DEPARTURE 7,443.319 80W REMUCK STATION 2N + 17M COMPLETED AUGUST 22, 1976

ELEVATION 1,115.771 PROPOSED DEPTH 250 - 76.2m

ULTIMATE DEPTH - 76.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	+43°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 86%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	20.4	MINERALIZED GRAPHITIC PHYLLITE (PG) W/MASSIVE SULFIDE 40 8	0.8	4627	0	1.5	1.5	5.58	9.55	86.74			8.37	14.33	130.11
		INTERVALS (M). Competent. F_2 = 25-30°; F_1 = 40-45°. 80 10	1.2	4628	1.5	3.0	1.5	8.25	11.51	113.1			12.38	17.27	169.71
		Sulfides following both foliation. 75 8	1.1	4629	3.0	4.6	1.6	10.42	15.28	143.3			16.67	24.45	229.31
		1.5-6.1: Massive sulfide interval with porous variety 75 9	1.4	4630	4.6	6.1	1.5	12.23	20.76	185.5			18.35	31.14	278.24
		(M+MV). Compositional banding = 70-75°. 25 5	1.2	4631	6.1	7.6	1.5	1.40	3.00	23.31			2.10	4.5	34.97
		Contacts gradational. 25 4	1.4	4632	7.6	9.1	1.5	2.25	4.30	35.31			3.38	6.45	52.97
		13.1-13.2: Bleached phyllite. White with fuchsite 25 6	1.6	4633	9.1	10.7	1.6	2.58	4.25	37.37			4.13	6.80	59.79
		laminae. Foliation = 25°. Clean contacts 30 6	1.5	4634	10.7	12.2	1.5	2.53	4.50	39.43			3.80	6.75	59.15
		parallel to foliation. F_1 parallel to F_2 30 10	1.5	4635	12.2	13.7	1.5	3.10	5.95	51.43			4.65	8.93	77.15
		NOTE: Change in F_1/F_2 relationship from first 1.5m 25 9	1.5	4636	13.7	15.2	1.5	2.28	4.35	39.43			3.42	6.53	59.15
		of run $1\ 2$ attributed to drilling penetrating the upper limb of a big fold. 60 10	1.5	4637	15.2	16.8	1.6	9.19	11.71	132.0			14.70	18.74	211.20
		13.7-15.2: F_1 parallel to F_2 = 30°. 75 10	1.5	4638	16.8	18.3	1.5	6.17	5.80	94.63			9.26	8.70	141.95
		16.8-19: Massive sulfide interval. Compositional 70 8	2.0	4639	18.3	20.4	2.1	4.05	4.65	60.34			8.51	9.77	126.71
		banding Py/Sph-Pb = 60°.		W.Av.	0	20.4	20.4	5.49	8.06	79.92			111.95	164.36	1630.41
		20.4: Gradual change to graphitic phyllite (G).		W.Av.	0	6.1	6.1	9.14	14.29	132.4			55.77	87.19	807.37
				W.Av.	7.6	15.2	7.6	2.55	4.67	40.55			19.38	35.46	308.21
				W.AV.	15.2	20.4	5.2	6.24	7.16	92.28			34.7	37.21	479.86
20.4	24.4	GRAPHITIC PHYLLITE (G). Broken blocky core from flakes to	3.8		20.4	24.4	4.0								
				W.Av.	15.2	18.3	3.1	7.73	8.85	113.92			23.96	27.44	353.15

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		3cm long. Foliation = 50-55°. No clear F_1 /F_2 relationship noted.													
		24.4: Gradual change to sericite phyllite (S).													
24.4	26.0	SERICITE PHYLLITE (S). Competent. F_2 = 50°; F_1 = 0-5°. Short interval of tuffaceous looking bleached phyllite = 10cm.	1.5		24.4	26.0	1.6								
		26: Gradual change to chloritic-calcitic phyllite (CK).													
26.0	30.5	CHLORITIC-CALCITIC PHYLLITE (CK). Competent. F_2 = 50-55°; F_1 = 0-10°. Tuffaceous looking.	4.3		26.0	30.5	4.5								
		30.5: Decrease in calcitic chloritic constituent. Rx be-cominb sericite phyllite with trace calcite (S+K).													
30.5	42.6	SERICITE PHYLLITE WITH TRACE OF CALCITE. Competent. F_2 = 45-50°; F_1 = 10°. Calcite marking F_1 crenulations.	10.7		30.5	42.6	12.1								
		41.1-42.7: Broken core. Pebbly-no gouge.													
		42.6: Abrupt change to tuffaceous looking unit (Sb)? Contact broken ground.													
42.6	47.0	BLEACHED PHYLLITE (Sb). Broken, hard, siliceous. Cream white to buff, very fine grain. Has some lapille size	3.9		42.6	47.0	4.4								

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		fragments = 2% of volume. Foliation = 55-60°. Barite prism													
		in cavity walls. *Note: T. section specimen taken.													
		47.0: Abrupt change to calcitic-chloritic unit (Sc+K).													
47.0	51.8	CALCITIC-CHLORITIC SERICITE PHYLLITE (Sc+K). Broken,	4.0		47.0	51.8	4.8								
		blocky core. F_2 = 65-70°. No clear F_1 /F_2 relationship													
		noted. Calcite as very thin laminae in groundmass.													
		Chlorite = 20%; Calcite = 5%.													
		51.8: Gradual change to sericite phyllite (S). Contact													
		broken ground.													
51.8	54.5	SERICITE PHYLLITE (S). Broken core, pebbles to 3cm. long.	2.5		51.8	54.5	2.7								
		Foliation = 65°. No F_1 /F_2 relationship noted.													
		53.3: Shear.													
		54.5: Sharp contact with Massive sulfides (M). Contact													
		marked by 2cm. bleached phyllite (Sb). Contact													
		plane = 30°.													
54.5	65.1	MASSIVE SULFIDE W/QUARTZ INCLUSIONS AND SULFIDE 75 8	1.8	4640	54.5	56.4	1.9	4.89	3.70	71.66			9.29	7.03	136.15
		BRECCIA VARIETY (MIq + MXs). Competent, hard and 75 5	1.3	4641	56.4	57.9	1.5	1.93	2.30	47.31			2.90	3.45	70.97
		brittle. Compositional band Py/ZnS+PbS = 45°. 75 8	1.4	4642	57.9	59.4	1.5	4.80	4.70	70.63			7.2	7.05	105.95
		55.5-56: Barite in groundmass (Mb). 59-59.5: Sulfide Bx (MXs). Sulfide angular frag- 75 5	1.3	4643	59.4	61.0	1.6	10.44	8.57	124.5			16.70	13.71	199.14
		ments Ø = 1mm-1cm cemented by sulfide													

LOGGED BY _____ D.D.H. No 76-U-151 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		and trace calcite. Bands Po and Mgtt. 75 10	1.0	4644	61.0	62.5	1.5	15.89	12.42	192.7			23.84	18.63	289.04
		65.1: Abrupt change to graphitic phyllite (G). 75 9	2.0	4645	62.5	65.1	2.6	6.62	5.00	111.1			17.21	13.00	288.83
		Contact broken core.													
				W.Av.	59.4	65.1	5.7	10.13	7.95	136.3			57.75	45.34	777.01
				W.Av.	59.4	62.5	3.1	13.08	10.43	157.5			40.54	32.34	480.18
				W.Av.	54.5	59.4	4.9	3.96	3.58	63.89			19.39	17.53	313.07
65.1	68.4	GRAPHITIC PHYLLITE (G). Broken core - rangin from flakes	2.1		65.1	68.4	3.3								
		to blocks about 4cm long. F_1 is parallel to F_2 = 25°, @ 66.													
		Foliation turn = 0° @ 68 - fold nose.													
		68.4: Fault contact with bleached phyllite. Black and													
		bleached sericite gouge material with quartz pebbles													
		and sericite flakes.													
68.4	73.2	BLEACHED PHYLLITE (Sb). Broken, blakey core. Foliation =	4.0		68.4	73.2	4.8								
		45°. No F_1 / F_2 relationship noted.													
		73.2: Abrupt change to graphitic sericite phyllite (SG).													
73.2	76.2	GRAPHITIC SERICITE PHYLLITE (SG). Broken core.													
		74.7-76.2: Bx. Bleached phyllite and quartz fragments	2.1		73.2	76.2	3.0								
		well cemented by graphite and silica.													
	76.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-152 PAGE 1

PROPERTY GRUM JOINT VENTURE

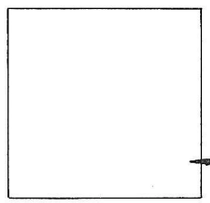
LATITUDE 10,939.202 80W STARTED AUGUST 23, 1976

DEPARTURE 7,502.377 80 X-CUT 5N + 7M COMPLETED AUGUST 24, 1976

ELEVATION 1.121.601 PROPOSED DEPTH 61m

ULTIMATE DEPTH 61m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	141° 20'	+87° 22'



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 94%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	13.9	SERICITE PHYLLITE (S). Competent. F_2 = 70-80°; F_1 = 0-5°.	13.1		0	13.9	13.9								
		Sporadic blebs of Py = 1%. Short bleached interval @ 7.0-													
		7.5. Contacts gradual.													
		13.9: Gradual change to bleached sericite phyllite (Sb).													
13.9	15.3	BLEACHED PHYLLITE (Sb). Competent. Buff with fuchsite	1.4		13.9	15.3	1.4	1 PZ	est.						
		spots. Foliation = 75°. No clear F /F relationship													
		noted. Sulfides: Py = 1%, PbZn = 1%.													
		15.3: Sharp contact with chloritic phyllite (C) = 75°.													
		Contact marked by bull quartz.													
15.3	18.7	CHLORITE PHYLLITE (C). Blocky core averages 3cm long.	3.0		15.3	18.7	3.4								
		Foliation = 85-90°; F_1 = 0-10°. Rock with green stripes and													
		ribbon like felsic laminae.													
		18.7: Contact with mineralized graphitic phyllite. Contact													
		appear like a fold nose with closures marked by													
		sulfides as the chloritic unit as the closure's core material.													

LOGGED BY _____ D.D.H. Nº 76-U-152 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
18.7	19.8	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 25 6	2.3	4743	18.7	21.3	2.6	1.33	2.58	17.14					
		Foliation F_2 = 80-85°; F_1 = 0-10°. Sulfides in 20 7	2.5	4744	21.3	24.4	3.1	2.88	3.30	33.26					
		both foliation. 15 4	2.9	4745	24.4	27.4	3.0	0.78	0.90	9.94			1.68	PbZn	
		19.8: Gradual change to quartz-sulfide with 10 2	3.1	4746	27.4	30.5	3.1	0.33	0.43	5.14			0.76	PbZn	
		decrease of graphitic laminae. 8 1	3.0		30.5	33.5	3.0								
		20 4	2.8	4747	33.5	36.6	3.1	1.68	2.68	25.37					
19.8	24.4	QUARTZ-SULFIDE (P). Very siliceous groundmass. 35 6	1.4	4748	36.6	38.1	1.5	2.43	4.00	35.31			3.65	6.00	52.97
		Core brittle, blocky averages 2.5cm long. 35 5	1.5	4749	38.1	39.6	1.5	2.48	4.95	42.51			3.72	7.43	63.77
		Foliation = 85-90°; F_1 = 0°. Sulfides more in 35 6	1.5	4750	39.6	41.1	1.5	2.45	5.40	45.26			3.68	8.10	67.89
		F_2 than F_1. 35 7	1.5	4751	41.1	42.7	1.6	1.65	3.15	28.46			2.64	5.04	45.54
		20.9-21.3: Chlorite unit interval. Similar to 40 8	1.5	4752	42.7	44.2	1.5	3.13	4.00	47.31			4.70	6.00	70.97
		15.3-18.7 run. Contacts sharp = 85°. 40 10	2.2	4753	44.2	46.6	2.4	6.74	9.04	99.77			16.18	21.70	239.45
		24.4: Gradual change to Mineralized graphitic phyllite (PG).													
				W.Av.	24.4	30.5	6.1	1.21	PbZn						
				W.Av.	36.6	41.1	4.5	2.46	4.78	41.1			11.05	21.53	184.83
				W.Av.	36.6	44.2	7.6	2.42	4.29	39.65			18.39	32.57	301.34
				W.Av.	41.1	44.2	3.1	2.37	3.56	37.6			7.34	11.04	116.51
24.4	46.6	MINERALIZED GRAPHITIC PHYLLITE (PG). Short blocky core		W.Av.	43.6	46.6	3.0	6.02	8.03	89.28			18.06	24.10	267.84
				W.Av.	43.3	46.6	3.3	5.76	7.67	85.46			19.00	25.30	283.03
		averages 2.5cm. Foliation = 80-85°; F_1 = 0-10°. Sulfides		W.Av.	36.6	43.3	6.7	2.32	4.32	42.4			15.57	28.97	284.19
		in both foliation.													
		31.7-32.2: Chloritic phyllite interval. Contacts sharp and													
		clean = 85°. F_2 = 80°; F_1 = 0°.													
		46.6: Sharp clean contact with graphitic phyllite (G) = 85°.													

LOGGED BY _____ D.D.H. No 76-U-152 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
46.6	51.8	GRAPHITIC PHYLLITE (G). Blcoky core 3cm long. Foliation	5.0		46.6	51.8	5.2								
		= 80-85°; F_1 = 0-5°.													
		51.8: Sharp change to bleached phyllite (Sb) = 80°.													
51.8	53.3	BLEACHED PHYLLITE (Sb). Competent. Trace calcite.	1.4		51.8	53.3	1.5								
		Foliation = 75-80°.													
		53.3: Shear contact with Sericite phyllite with trace													
		Calcite (S+K).													
53.3	59.2	SERICITE PHYLLITE WITH TRACE CALCITE (S+K). Competent.	5.7		53.3	59.2	5.9								
		F_2 = 85-90°; F_1 = 0-10°. Calcite as thin laminae.													
		53.3-54: Shear. Sericite flakes/sand. No gouge.													
		59.2: Sharp change to bleached phyllite (Sb) = 90°.													
59.2	61.0	BLEACHED PHYLLITE. Competent. Buff with calcitic intervals	1.8		59.2	61.0	1.8								
		(Sbk). Calcite as laminae alternating with bleached													
		sericite. F_2 = 85-90°; F_1 = 0-5°.													
	61.0	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-153 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,879.100 80W STARTED AUGUST 21, 1976

DEPARTURE 7,443.537 2N + 17m COMPLETED AUGUST 22, 1976

ELEVATION 1,113.226 PROPOSED DEPTH 61m

ULTIMATE DEPTH 61m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	223° 22'	-17° 13'

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 87%

Interval From	Interval To	DESCRIPTION	Py	PbZn	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	42.2	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.	30	7	0.5	4716	0	1.5	1.5	4.42	9.69	63.43			6.63	14.54	95.15
		F = 35-40°; F = 0-5°. Series of small F noses.	30	7	1.2	4717	1.5	3.0	1.5	5.78	9.47	78.86			8.67	14.21	118.29
		2 1 1 Closures form ellipsoidal conic section (drill per-	25	6	1.5	4718	3.0	4.6	1.6	2.88	5.78	44.23			4.61	9.25	70.77
		haps intersecting F at almost tangential angle).	30	8	1.5	4719	4.6	6.1	1.5	5.82	9.22	94.63			8.73	13.83	141.95
		1 23.0-27: Massive sulfide, structureless. Contacts	35	9	1.5	4720	6.1	7.6	1.5	3.60	8.50	50.40			5.40	12.75	75.6
		gradual.	35	9	1.5	4721	7.6	9.1	1.5	6.07	12.53	80.57			9.11	18.80	120.86
		30-32: Massive sulfide with porous variety. Voids	30	10	1.6	4722	9.1	10.7	1.6	6.19	12.47	80.57			9.90	19.95	128.91
		aligned = 80° (MV).	25	9	1.5	4723	10.7	12.2	1.5	4.30	7.37	59.31			6.45	11.06	88.97
		37-38.1: Sulfides (Mb) impregnated in barite ground-	30	8	1.3	4724	12.2	13.7	1.5	4.55	8.95	64.46			6.83	13.43	96.69
		mass. Not massive sulfide but more like dissemination	30	10	1.2	4725	13.7	15.2	1.5	3.50	8.10	55.54			5.25	12.15	83.31
		Ba = 30%; Sulfides = 65% 38.1-39.9: Bleached phyllite interval. Buff with	30	8	1.5	4726	15.2	16.8	1.6	2.13	3.83	33.26			3.41	6.13	53.22
		prominent fuchsite laminae. Foliation =	40	6	1.2	4727	16.8	18.3	1.5	1.40	1.90	22.29			2.10	2.85	33.44
		35-40°. 1st contact sharp = 30°, 2nd =35°	30	6	1.5	4728	18.3	19.8	1.5	1.68	3.75	30.17			2.52	5.63	45.26
		42.2: Sharp contact with graphitic phyllite (G).	30	5	1.1	4729	19.8	21.3	1.5	2.15	4.55	35.31			3.23	6.83	52.97
		Contact marked by 10cm bleached phyllite.	30	7	1.0	4730	21.3	22.9	1.6	3.38	7.26	48.34			5.41	11.62	77.34
		Plane = 45°.	70	4	0.9	4731	22.9	24.4	1.5	1.18	1.40	24.34					
42.2	61.0	GRAPHITIC PHYLLITE (G). Broken fissile core.	75	3	1.3	4732	24.4	25.9	1.5	0.53	0.93	15.09					

LOGGED BY _____ D.D.H. Nº 76-U-153 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Foliation F_2 = 45-50°; F_1 = 10-15°. 75 7	1.4	4733	25.9	27.4	1.5	1.85	2.70	35.31					
		Sporadic sulfide laminae: Py = 2%; PbZn = 1% 40 10	1.2	4734	27.4	29.0	1.6	4.40	8.25	60.34			7.04	13.20	96.54
		49.4: Sulfide showing decreasing from this point on. 60 8	1.3	4735	29.0	30.5	1.5	2.15	2.70	33.26			3.23	4.05	49.89
		Foliation = 15°; F_1 = 45-55°. F_2 fold nose 75 10	1.2	4736	30.5	32.0	1.5	8.41	11.16	124.5			12.62	16.74	186.69
		@ 53.3 40 10	1.4	4737	32.0	33.5	1.5	7.06	9.10	104.9			10.59	13.65	157.38
		70 10	1.3	4738	33.5	35.1	1.6	12.69	22.34	195.8			20.30	35.89	313.23
		55.8: F_2 = 45-5°; 70 10	1.2	4739	35.1	36.6	1.5	6.47	11.46	98.74			9.71	17.19	148.11
		F_1 = 0-5°. 70 8	1.4	4740	36.6	38.1	1.5	5.27	6.58	86.74			7.91	9.87	130.11
		57.4-57.9: Bleached phyllite. Buff to green 20 3	1.5	4741	38.1	39.6	1.5	0.95	0.80	16.11			1.43	1.20	24.17
		Foliation = 15°. 40 4	1.9	4742	39.6	42.2	2.6	5.42	7.19	90.86			14.09	18.69	236.24
		59.4-61: Foliation changes again to F_2 = 35-40°; F_1 =													
		0-20° (opposite dip of F_2).	17.7		42.2	61.0	18.8								
	61.0	END OF HOLE.		W.Av.	0	15.2	15.2	4.71	9.21	67.14			71.58	139.97	102.05
				"	4.6	10.7	6.1	5.43	10.71	76.61			33.14	65.33	467.32
				"	15.2	19.8	4.6	1.75	3.18	28.68			8.03	14.61	131.92
				"	19.8	22.9	3.1	2.79	5.95	42.04			8.64	18.45	130.31
				"	27.4	42.2	14.8	5.87	8.82	90.7			86.92	130.48	1342.4
				"	30.5	36.6	6.1	8.72	13.68	132.0			53.22	83.47	805.41
				"	27.4	30.5	3.1	3.31	5.56	47.2			10.27	17.25	146.43
				"	30.5	38.1	7.6	8.04	12.28	123.1			61.13	93.34	935.52
				W.Av	38.1	42.2	4.1	3.79	4.85	63.5			15.52	19.89	260.41

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-154 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,879.524 80W STARTED AUGUST 23, 1976

80 X-CUT

DEPARTURE 7,465.137 3N + 11m COMPLETED AUGUST 24, 1976

ELEVATION 1,119.956 PROPOSED DEPTH 61m

ULTIMATE DEPTH 61m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	200° 10'	+82° 30'

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 90.5%

Interval From	Interval To	DESCRIPTION	Pb+ Py	Pb+ Zn	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	26.8	MINERALIZED GRAPHITIC PHYLLITE (PG). COMPETENT.	30	8	1.9	4646	0	3.0	3.0	3.13	6.01	44.23			9.39	18.03	132.69
		F_2 = 75-80°; F_1 = 0-5°. Series of small F_1 fold	30	7	1.5	4647	3.0	4.6	1.6	3.35	4.55	46.29			5.36	7.28	74.06
		noses. Sulfides in both foliation.	45	10	1.5	4648	4.6	6.1	1.5	4.45	8.14	70.63			6.68	12.21	105.95
		6.0-7.5: Massive sulfide interval. Compositional	75	10	1.5	4649	6.1	7.6	1.5	9.34	14.83	136.1			14.01	22.25	204.18
		banding Py/PbZn = 75°.	35	8	1.4	4650	7.6	9.1	1.5	2.03	3.70	34.29			3.05	5.50	51.44
		17.9-18.6: Chloritic phyllite interval. F_2 = 85°;	25	4	1.4	4651	9.1	10.7	1.6	1.30	2.53	22.29			2.08	4.05	35.66
		F_1 =0°. Contacts abrupt-broken ground.	35	6	1.2	4652	10.7	12.2	1.5	2.50	5.10	39.43			3.75	7.65	59.15
		26.8: Abrupt change to Graphitic phyllite (G) = 85°.	35	8	1.5	4653	12.2	13.7	1.5	3.80	7.04	55.54			5.70	10.56	83.31
			35	8	1.5	4654	13.7	15.2	1.5	4.65	9.90	68.57			6.98	14.85	102.86
26.8	33.2	GRAPHITIC PHYLLITE (G). Very fissile, easily breaks	45	7	1.5	4655	15.2	16.8	1.6	1.63	3.83	30.17			2.61	6.13	48.27
		into poker chips. F_2 = plane fissility = 75-80°.	25	5	1.3	4656	16.8	18.3	1.5	3.68	6.51	52.46			5.52	9.77	78.69
		F_2 = 0-5°.	25	4	1.5	4657	18.3	19.8	1.5	0.63	1.05	12.00			0.95	1.58	18.00
		28.9-29: Shear. Graphite flakes. No gouge.	35	8	1.5	4658	19.8	21.3	1.5	4.80	8.74	78.86			7.2	13.11	118.29
		33.2: Sharp clean contact with Calcitic-chloritic	40	10	1.6	4659	21.3	22.9	1.6	3.88	6.34	68.57			6.21	10.14	109.71
		sericite phyllite (SK+c) = 80°.	35	6	1.4	4660	22.9	24.4	1.5	1.55	2.03	27.43			2.33	3.05	41.15
			40	7	2.3	4661	24.4	26.8	2.4	4.05	6.06	69.60			9.72	14.54	167.04
33.2	36.1	CALCITIC-CHLORITIC SERICITE PHYLLITE (SK+C). Blocky ave.			5.5		26.8	33.2	6.4								

LOGGED BY _____ D.D.H. Nº 76-U-154 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		3cm long cores. Calcite as thin laminae alternating with	2.5		33.2	36.1	2.9								
		ribbon-like chlorite stripes and sericite.		W.Av.	7.6	10.7	3.1	1.65	3.08	28.1			5.13	9.55	87.10
				W.Av.	7.6	12.2	4.6	1.93	3.74	5.67			8.88	17.20	146.25
		F_2 = 75°; F_1 = 0-5°.		W.Av.	0	4.6	4.6	3.21	5.50	44.95			14.75	25.31	206.75
		36.1: Gradual change to Bleached phyllite (Sb).		W.Av.	4.6	7.6	3.0	6.90	11.49	103.4			20.69	34.46	310.13
				W.Av.	0	7.6	7.6	4.66	7.86	68.01			35.44	59.77	516.88
36.1	36.6	BLEACHED PHYLLITE (Sb). Competent. Buff to creamy white.	0.5		36.1	36.6	0.5								
		Trace calcite as thin laminae, F_2 = 50°; F_1 = 0°.		W.Av.	12.2	18.3	6.1	3.41	6.77	51.33			20.81	41.31	313.13
				W.Av.	22.9	26.8	3.9	3.09	4.51	53.4			12.05	17.59	208.19
				W.Av.	19.8	22.9	3.1	4.33	7.5	73.55			13.41	23.25	228.00
		36.6: Gradual change to calcitic-chloritic-sericite		W.Av.	15.2	19.8	4.6	1.97	3.80	31.5			9.08	17.48	144.96
				W.Av.	12.2	15.2	3.0	4.23	8.47	62.06			12.68	25.41	186.17
		phyllite (SK+C).		W.Av.	15.2	22.9	7.7	2.92	5.29	48.4			22.49	40.73	372.96
				W.Av.	12.2	22.9	10.7	3.29	6.18	52.3			35.17	66.14	559.13
				W.Av.	10.7	26.8	16.1	3.17	5.68	51.3			50.97	91.38	826.47
36.6	56.0	CALCITIC-CHLORITIC SERICITE PHYLLITE (SK+C). Competent.	18.7		36.6	56.0	19.4								
		F_2 = 85-90°; F_1 = 0-10°.													
		Calcite as F_2 laminae = 10%; chlorite in groundmass mixed													
		with sericite giving rx greenish hue - chlorite = 35%.													
		Intervals of tuffaceous looking unit @ 56-57 run.													
		56: Decreasing chloritic content from this point on.													
		Change to Bleached phyllite (?).													
56.0	57.1	BLEACHED PHYLLITE (Sb?). Competent. Light brownish colour.	1.0		56.0	57.1	1.1								
		Tuffaceous looking. F_2 = 85-90°. Doesn't appear like the													
		normal bleached buff phyllite.													

LOGGED BY _____ D.D.H. Nº 76-U-154 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		57.1: Shear contact with mineralized bleached phyllite (PG).													
57.1	58.1	MINERALIZED BLEACHED PHYLLITE. Broken ground. Mixture of	0.5		57.1	58.1	1.0	2 PZ, est.							
		pebbles and flakes composed of sulfides and buff bleached													
		sericite. Py: 15; PbZn: 2%.													
		58.1-58.8: FAULT. Gray gouge with sericite flakes and quartz													
		grains. Also act as contact with sericite													
		phyllite with trace calcite (S+K).													
58.1	61.0	SERICITE PHYLLITE WITH TRACE CALCITE (S+K).	2.0		58.1	61.0	2.9								
		Broken core. F_2 = 85-90°; F_1 = 0-10°.													
		Calcite in groundmass in trace quantity.													
	61.0	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO

D.D.H. Nº 76-U-155 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE * 10,578 2N+5NE STARTED AUGUST 24, 1976

DEPARTURE 7,744.5 66W COMPLETED AUGUST 25, 1976

ELEVATION 1,177.4 PROPOSED DEPTH 61m

ULTIMATE DEPTH 61m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-56°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 77.2%

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	38.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.	20 3	0.8	4754	1.5	4.6	3.1	0.10	0.30	5.14					
		Changing foliation. 0-16.8: Foliation = 15-20°	25 2	1.7	4755	4.6	7.6	3.0	0.20	1.00	8.23					
		and at 16.9-21.3: Foliation = 45-50°.	30 6	1.3	4756	7.6	9.1	1.5	1.78	1.95	30.17					
		F /F very well shown at 19.8-22.9.	30 6	1.6	4757	9.1	10.7	1.6	1.23	2.30	17.14					
		1 2 0-1.5: No core recovered.	35 4	1.4	4758	10.7	12.2	1.5	1.30	2.25	18.17					
		1.5-4.6: Broken core. No gouge. Poor recovery.	35 4	1.3	4759	12.2	13.7	1.5	0.55	1.35	12.00					
		5-6: Bx. Phyllite, quartz with sulfide fragments Ø	35 2	1.2	4760	13.7	15.2	1.5	0.43	0.58	10.97					
		= 1mm-2cm cemented by graphite.	30 3	1.1	4761	15.2	16.8	1.6	0.08	0.98	4.11					
		16-16.8: Barite prisms in cavity wall. Small fissure	25 4	2.4	4762	16.8	19.8	3.0	0.18	0.60	8.91					
		= 7°. 34.0: Shear.	25 4	2.9	4763	19.8	22.9	3.1	0.05	0.98	4.11					
		38.1: Gradual change to Quartz-sulfide (P).	25 4	2.5	4764	22.9	25.9	3.0	0.18	0.73	8.23					
			30 4	2.3	4765	25.9	29.0	3.1	0.48	0.73	8.91					
38.1	53.0	QUARTZ-SULFIDE (P). Competent. Very siliceous ground	30 3	2.7	4766	29.0	32.0	3.0	0.05	0.78	9.94					
		mass. Bands of Po and Mgtt at 39-41.1.	35 3	2.8	4767	32.0	35.1	3.1	0.10	1.13	12.00					
		Foliation = 60°. Compositional banding in wider	45 4	2.4	4768	35.1	38.1	3.0	0.13	2.08	13.03					
		sulfide run = 65-70°.	45 3	2.9	4769	38.1	41.1	3.0	0.20	1.65	14.06					
		50.6-51.3: Graphitic phyllite interval (G).	35 3	2.5	4770	41.1	44.2	3.1	0.63	1.88	22.9					

LOGGED BY _____ D.D.H. Nº 76-U-155 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Broken core. Contact apparently sharp = 30° (?) 40 4	2.8	4771	44.2	47.2	3.0	0.20	1.33	15.09					
		(Based on fragmentary core). 40 5	3.0	4772	47.2	50.3	3.1	1.08	1.53	22.29					
		53.0: Sharp change to Graphitic Phyllite (G) = 35°. 50 6	2.3	4773	50.3	53.0	2.7	1.80	3.65	38.40			4.86	9.86	103.68
53.0	61.0	GRAPHITIC PHYLLITE (G). Broken, flakey core. Flakes	5.2		53.0	61.0	8.0								
		appear to break parallel to F (?) = 10-15°.													
		59.5: Small fault. Balck gouge with graphite flakes.		W.Av.	1.5	7.6	6.1	0.79	PbZn						
				W.Av.	7.6	12.2	4.5	3.68	PbZn						
				W.Av.	12.2	35.1	22.9	1.06	PbZn						
	61.0	END OF HOLE.		W.Av.	35.1	50.3	15.2	2.15	PbZn						
				W.Av.	50.3	53.0	3.0	1.73	3.44	36.79			5.18	103.2	110.37

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-156 PAGE 1

PROPERTY GRUM JOINT VENTURE

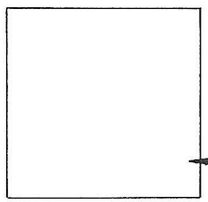
LATITUDE 10,879.563 80W (80 X-CUT) STARTED AUGUST 25, 1976

DEPARTURE 7,465.076 3N + 11m COMPLETED AUGUST 26, 1976

ELEVATION 1,116.254 PROPOSED DEPTH 76.2m

ULTIMATE DEPTH 76.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR		-90°



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

CLAIM Nº

TOTAL CORE RECOVERY: 90.6%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	9.1	QUARTZ-SULFIDE (P). Competent. Very siliceous ground 15 6	1.6	4662	0	4.6	4.6	2.68	2.59	32.23			12.33	11.91	148.26
		mass. F = 75-85°; F = 0-10°. Sulfides // mostly in 10 6	1.4	4663	4.6	6.1	1.5	1.80	2.83	22.29			2.70	4.25	33.44
		F (2). F (1). Short bleached phyllite intervals. 10 4	1.3	4664	6.1	7.6	1.5	1.30	2.00	16.11			1.95	3.00	24.17
		6.1-6.3: Bleached phyllite. Buff with prominent (1) 15 6	1.4	4665	7.6	9.1	1.5	0.98	1.68	10.97			1.47	2.52	16.46
		fuchsite laminae. F = 90°; F = 0-5° with F													
		(2) (1) (1) fold nose. Contacts sharp and clean = 85°.		W.Av.	0	6.1	6.1	2.46	2.65	29.79			15.03	16.16	181.70
		6.6-7.0: Bleached phyllite. Similar to preceding described		W.Av.	6.1	9.3	3.0	1.14	1.84	13.54			3.42	5.52	40.63
		interval (could be the same band going or folding													
		in-and-out.)													
		9.1: Gradual change to Sericite phyllite with trace graphite													
		(S+G).													
		NOTE: Above run characterized by small F (1) fold noses.													
9.1	39.6	SERICITE PHYLLITE WITH TRACE GRAPHITE (S+G). Short, blocky	29.2		9.1	39.6	30.5								
		core from flakes to 3cm long. F = 75-80°; F = 0-5°.													
		Trace calcite usually marking shallow - S F (2) (1) folds.													
		18.3-19.8: Mineralized interval. Py: 5%, PbZn: 1% (1)			(18.3	19.8)	←	1 Pz	Est.						

LOGGED BY _____ D.D.H. Nº 76-U-156 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		27.4-29.0: Blebs of Po and Mgtt.													
		39.6: Abrupt change to Chloritic sericite phyllite with trace calcite (Sc+K) = 85°.													
39.6	47.2	CHLORITIC SERICITE PHYLLITE WITH TRACE CALCITE (Sc+K).	7.2		39.6	47.2	7.6	Trace, est.							
		Competent. F_2 = 80-85°; F_1 = 0-10°.													
		Calcite as thin dicontinuous stringer; in groundmass and													
		usually associated with F folding. Some sulfide showing													
		Py: 1%, PbZn: 1%.													
		47-47.2: Bleached phyllite interval. Prominent fuchsite													
		laminae in lieu of chlorite. Sharp contact with													
		mineralized bleached sericite phyllite (PSb).													
		Contact = 40°.													
47.2	48.7	MINERALIZED BLEACHED PHYLLITE (P-Sb). Competent. 15 3	3.0	4666	47.2	50.3	3.1	1.28	1.85	19.20					
		White with laminae of buff bleached sericite alter- 30 6	1.4	4667	50.3	51.8	1.5	3.90	3.10	45.26					
		nating with sulfides. F_2 = 75-80°; F_1 = 5-10°. 80 6	1.2	4668	51.8	53.3	1.5	0.18	0.45	14.06					
		48.7: Gradual change to mineralized graphitic 75 7	1.0	4669	53.3	54.9	1.6	4.75	6.33	72.69			7.60	10.13	116.30
		phyllite (PG). 75 10	1.1	4670	54.9	56.4	1.5	6.15	9.89	80.57			9.23	14.84	120.86
		60 10	1.4	4671	56.4	57.9	1.5	5.00	7.28	88.80			7.50	10.92	133.20
48.7	51.6	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken, very 75 12	1.5	4672	57.9	59.4	1.5	6.25	9.99	98.74			9.38	14.99	148.11
		fissile unit. F_2 = 85-90°; F_1 = 10°. 60 9	1.6	4673	59.4	61.0	1.6	4.25	7.79	80.57			6.80	12.46	128.91

LOGGED BY _____ D.D.H. No 76-U-156 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		51.6: Gradual increase in mineralization and decrease 60 8	1.5	4674	61.0	62.5	1.5	4.28	7.39	84.69			6.42	11.09	127.04
		in graphitic constituents. Rx becoming 75 10	1.5	4675	62.5	64.0	1.5	5.00	7.46	92.92			7.50	11.19	139.38
		Massive sulfide (M). 20 3	1.3	4676	64.0	65.5	1.5	1.65	2.88	38.40					
51.6	64.0	MASSIVE SULFIDE ± POROUS, barite and banded varieties (MB,													
		Mb, MV). Generally competent except in porous variety run.		W.Av.	54.9	64.0	9.1	5.15	8.3	87.6			46.83	75.49	797.5
		Compositional band = 50-70°. Voids aligned = 50°.		W.Av.	53.3	64.0	10.7	5.09	8.00	85.40			54.43	85.62	913.80
		53-53.3: FAULT. Greenish gouge with sulfide sub-angular													
		fragments.													
		59.4-61.3: Barite in groundmass. With included short run													
		of porous sulfide = 5cm.													
		64.0: Sharp change to Graphitic phyllite (G). Contact													
		marked by 10cm bleached sericite phyllite (Sb).													
		Contact = 30°.													
64.0	76.2	GRAPHITIC PHYLLITE (G). Competent. F_2 = 70-75°; F_1 = 0-5°.	10.5		65.5	76.2	10.7								
		65-65.5: Massive sulfide band with wide Po and Mgtt laminae.													
		Contacts = 85°.													
		69.1-69.5: Bleached phyllite (Sb). F_2 = 90°. With Po blebs													
		= 1%. Contacts sharp = 85°.													
	76.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-157 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,579 2N + 6.8NE STARTED AUGUST 25, 1976

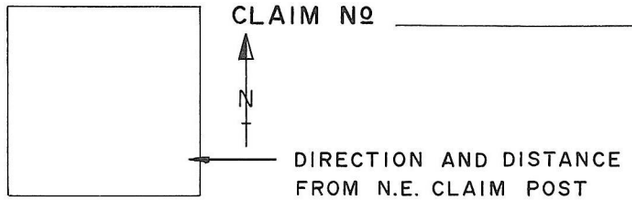
DEPARTURE 7,745.5 66W COMPLETED AUGUST 27, 1976

ELEVATION 1,177.4 PROPOSED DEPTH 405'

ULTIMATE DEPTH 435' - 132.6

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR		-90°
385'	N 47° E	-79°
185'	N 73° E	-84°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 71.3%

Interval From	Interval To	DESCRIPTION			Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	42.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken blocky	20	6	0.8	4774	0	4.6	4.6	0.53	1.80	10.97			2.44	8.28	50.46
		core. F_2 = 70-75°; F_1 = 10°. Sulfides in both	25	4	1.3	4775	4.6	6.1	1.5	0.83	1.70	16.11			1.25	2.55	24.17
		foliation.	30	5	1.4	4776	6.1	7.6	1.5	2.25	2.75	30.17			3.38	4.13	45.26
		13.6-16.8: Sulfide Bx. Sub-angular fragments 1mm-	35	5	1.3	4777	7.6	9.1	1.5	1.30	1.08	22.29			1.95	1.62	33.44
		2cm cemented by graphite.	25	3	1.2	4778	9.1	10.7	1.6	0.45	1.18	8.91			2.61	PbZn	
		18.3: Foliation changing to 80-85°, F_2; F_1 = 0-5°.	25	2	1.2	4779	10.7	12.2	1.5	0.08	0.40	4.11			0.72	PbZn	
		30.5-33: Quartz - sulfide (P) interval. Very sili-	45	5	0.5	4780	12.2	13.7	1.5	0.13	1.95	7.20			3.12	PbZn	
		ceous grdmass. Contacts gradual.	20	2	0.8	4781	13.7	15.2	1.5	0.15	1.00	7.20			1.73	PbZn	
		34-34.5: Bleached phyllite (Sb). F_2 = 80°. No F_1	20	2	0.9	4782	15.2	16.8	1.6	0.13	0.63	10.97			1.22	PbZn	
		noted. Contacts gradual.	20	4	1.1	4783	16.8	18.3	1.5	0.65	1.10	22.29			2.63	PbZn	
		42.5: Abrupt change to Massive sulfide (M). Contact	15	2	2.1	4784	18.3	22.9	4.6	0.10	0.18	6.17			1.29	PbZn	
		broken ground.	10	3	1.2	4785	22.9	24.4	1.5	0.13	0.13	6.17			0.39	PbZn	
42.5	46.0	MASSIVE SULFIDE, BANDED (MB). Broken core.	30	2	2.8	4786	24.4	27.4	3.0	0.10	1.35	5.14			4.35	PbZn	
		Compositional banding = 80-85°.	20	2	2.7	4787	27.4	30.5	3.1	0.02	0.18	3.09			0.62	PbZn	
		NOTE: Run characterized by pebble size fragments	15	2	3.0	4788	30.5	33.5	3.0	0.05	0.63	4.11			2.04	PbZn	
		with some blocks 3 cm long. No gouge noted.	15	2	2.9	4789	33.5	36.6	3.1	0.02	0.33	5.14			1.09	PbZn	
		46.0: Abrupt change to Chloritic bleached phyllite(Sb)	20	3	2.8	4790	36.6	39.6	3.0	0.02	0.20	3.09			0.60	PbZn	

LOGGED BY _____ D.D.H. No 76-U-157 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		contact = 65°. 20 3	1.1	4791	39.6	42.7	3.1	0.05	0.23	2.06			0.87	PbZn	
46.0	46.3	CHLORITIC BLEACHED PHYLLITE (Sbc). Broken blocky 75 4	0.9	4792	42.7	44.2	1.5	1.15	2.80	20.23			1.73	4.20	30.35
		core. F_2 = 75-80°; F_1 = 0-5°. 75 5	1.2	4793	44.2	46.0	1.8	2.50	3.15	40.46			4.50	5.67	72.83
		46.3: Sharp contact with Graphitic Phyllite (G) = 85°.	0.3		46.0	46.3	0.3								
46.3	54.9	GRAPHITIC PHYLLITE (G). Very fissile, easily breaks into	8.2		46.3	54.9	8.6								
		poker chips. F_2 = plane of fissility = 80-90°;													
		F_2 = 0-5°.		W.Av.	0	9.1	9.1	0.99	1.82	16.85			9.02	16.58	153.33
		S_1 Sulfides = 1% as leaf Py and Po blebs.		W.Av.	9.1	42.7	33.6	0.69	PbZn				23.28	PZ.	
		54.9: Gradual change to Graphitic sericite phyllite (SG).		W.Av.	42.7	46.0	3.3	1.89	2.99	31.27			6.23	9.87	103.18
54.9	85.3	GRAPHITIC SERICITE PHYLLITE (SG). Fissile, but not as much	28.1		54.9	85.3	30.4								
		as preceeding run. Core breaks into short blocks. F_2 =													
		80-85°; F_1 = 0-5°.													
		61-61.8: FAULT. Dark gray gouge with graphite and sericite													
		flakes.													
		76.2-79.1: FAULT. Gray gouge with sericite flakes.													
		82.3-83.8: Bleached phyllite interval (Sb). Buff.													
		F_2 = 75°, no clear F_1 / F_2 relationship. Contacts broken core													
		83.9-85.3: FAULT. Gray gouge with phyllite fragments.													
		85.3: Abrupt change to Graphitic Phyllite (G). Contact													
		broken core.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
85.3	93.0	GRAPHITIC PHYLLITE (G). Fissile, easily breaks into poker chips. F_2 = 85-90°; F_1 = 0°. 85.5-86.8: Bleached phyllite interval, light gray with buff sericite laminae. Trace calcite in groundmass. F_2 = 50°; F_1 = 0-10°. Contacts sharp and clean equal to 45°. 87.8-88: Bleached phyllite interval. Similar to preceeding run. Could be the same band. Contacts sharp and clean = 85°. 93.0: Gradual change to Sericite Phyllite (S).	6.3		85.3	93.0	7.7								
93.0	94.5	SERICITE PHYLLITE (S). Broken core - from fragmented flakes to 2.5cm long cores. Foliation = 80°; F_1 = 0°. 94.5: Abrupt change to Bleached sericite phyllite (Sb). Contact broken ground.	0.5		93.0	94.5	1.5								
94.5	121.3	BLEACHED SERICITE PHYLLITE (Sb). Competent. F_2 = 80-85°; F_1 not clearly developed. Prominent Po and Mgtt laminae @ 108.4-115.8 = 3%. 94.5-105.2: Very poor recovery: 0.3/10.7. No sign of weak ground - more likely drilling error.	10.1		94.5	121.3	26.8								

LOGGED BY _____ D.D.H. Nº 76-U-157 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		121.3: Sharp clean change to Massive sulfide with barite													
		and quartz groundmass (MQ + Mb) = 75°.													
121.3	127.0	MASSIVE SULFIDE W/BARITE AND QUARTZ GROUNDMASS(MQ+Mb). 20 8	2.1	4794	121.3	123.4	2.1	6.00	9.39	108.0			12.6	19.72	226.80
		Competent. Faint compositional banding = 45-50°. 30 8	1.6	4795	123.4	125.0	1.6	6.30	7.78	100.8			5.67	7.00	90.72
		40 5	2.0	4796	125.0	127.0	2.0	2.28	2.45	35.31					
		121.9-124: Barite in groundmass = 40% ba. 1 Tr.	2.1		127.0	129.4	2.4	0.33	0.38	6.17			0	0	0
		125-127: Mgtt in blebs and wispy laminae. Mgtt=10%. 8 3	0.8	4797	129.4	131.1	1.7								
		127.0: Sharp and clean contact with Bleached phyllite = 60°.		W.Av.	121.3	125.0	3.7	6.13	8.69	104.9			22.68	32.17	388.08
				W.Av.	121.3	124.3	3.0	6.09	8.91	105.8			18.27	26.72	317.52
127.0	129.4	BLEACHED PHYLLITE (Sb). Broken, blocky core. Foliation F													
		= 70-75°; F_2 = 0-5°. Sulfide showing mostly Py (1%) with													
		trace of $PbZn_1$.													
		129.4: Abrupt change to Mineralized graphitic phyllite (PG).													
		Contact broken ground.													
129.4	131.1	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. Foliation													
		= 65°. No clear F_1 /F_2 relationship noted.													
		131.1: Sharp change to bleached phyllite (Sb). Contact													
		marked by bull quartz (3cm long) = 80°.													

LOGGED BY _____ D.D.H. Nº 76-U-157 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
131.1	132.6	BLEACHED PHYLLITE (Sb). Soft core. Buff with greenish hue.	1.3		131.1	132.6	1.5								
		Foliation = 50-55°. With thin sulfide laminae.													
		PY: 1% PbZn: Trace.													
	132.6	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXNADER YOUNG-PO D.D.H. Nº 76-U-158 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,930.919m N 3N STARTED AUGUST 26, 1976

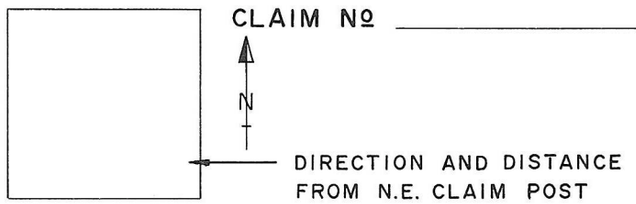
DEPARTURE 7,409.542 82W COMPLETED AUGUST 27, 1976

ELEVATION 1.108.329 PROPOSED DEPTH 175m - 53.3m

ULTIMATE DEPTH 144m - 74.3m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	+45°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 84%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	16.8	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 25 9	1.4	4677	0	3.0	3.0	3.03	5.95	46.29			9.09	17.85	138.87
		Foliation = 85-90°; F_1 = 0-10°. Drill appear to be 30 8	1.2	4678	3.0	4.6	1.6	2.98	6.03	48.34			4.77	9.65	77.34
		penetrating perpendicular to F_1. Series of F_2 fold 40 10	1.5	4679	4.6	6.1	1.5	7.68	10.09	124.1			11.52	15.14	186.18
		noses followed by sulfides. 50 12	1.2	4680	6.1	7.6	1.5	9.45	16.21	138.2			14.18	24.32	207.26
		10.5-10.7: Bleached Phyllite. Broken core. White 40 10	0.9	4681	7.6	9.1	1.5	5.30	11.85	78.86			7.95	17.78	118.29
		with prominent fuchsite laminae. 25 9	1.0	4682	9.1	10.7	1.6	1.93	3.40	34.29			3.09	5.44	54.86
		15-15.4: Bleached Sericite Phyllite. Very fragmented 30 9	1.0	4683	10.7	12.2	1.5	3.95	6.71	60.34			5.93	10.07	90.51
		core. Prominent fuchsite. 35 10	0.8	4684	12.2	13.7	1.5	3.93	9.69	58.63			5.90	14.54	87.95
		16.8: Gradual decrease in minealization. Rx becoming 30 7	1.2	4685	13.7	16.8	3.1	1.53	2.60	25.37					
		Graphitic phyllite (G).													
16.8	22.9	GRAPHITIC PHYLLITE (G). Broken, fissile rx. Foliation =	5.2		16.8	22.9	6.1								
		45-50°; F_1 = 0-5°.		W.Av.	0	4.6	4.6	3.01	5.98	47.00			13.86	27.50	216.21
		18-18.5: Sheared.		W.Av.	4.6	9.1	4.5	7.48	12.72	113.7			33.65	57.24	511.73
				W.Av.	9.1	13.7	4.6	3.24	6.53	50.7			14.92	30.05	233.32
		22.9: Gradual change to Sericite Phyllite (S).		W.Av.	0	13.7	13.7	4.56	8.38	70.16			62.43	114.79	961.26
				W.Av.	10.7	13.7	3.0	3.94	8.20	59.5			11.83	24.61	178.46
22.9	35.1	SERICITE PHYLLITE (S). Competent. Intervals with trace													
		calcite (SK). Foliation = 40°. Calcite as thin laminae.	11.9		22.9	35.1	12.2								
		No clear F_1/F_2 relationship noted.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		35.1: Start gradual increase in graphite. Rx becoming													
		Graphitic Phyllite (G).													
35.1	39.8	GRAPHITIC PHYLLITE (G). Short blocky core ave: 2.5cm long.	3.0		35.1	38.9	3.8								
		F_2 = 65°; F_1 = 10-15°.													
		38.9: Abrupt change to Bleached Phyllite (Sb). Contact													
		re-drilled, can't make contact plane determination													
39.8	62.5	BLEACHED PHYLLITE (Sb) W/INTERCALATED INTERVAL OF 1 Tr.	0.6		38.9	39.5	0.6								
		BARITE RICH AMBER TO BLACK SPH (Mb). Bleached unit, 20 4	3.1	4686	39.5	42.7	3.2	2.00	1.78	25.37					
		competent, buff with greenish hue and weakly minera- 4 2	1.6		42.7	45.5	1.8								
		lized usually Po, Mgtt and Py = 2% (combined). 40 10	1.7	4687	45.5	47.2	1.7	6.30	6.45	95.66			10.71	10.96	162.0
		Foliation = 40°; F_1 = 0-5°. 2 Tr.	14.8		47.2	62.5	15.3								
		39.6-42.1: Series of small F_1 fold noses. Increase in			44.2	47.2	3.0	3.57	3.65	54.0					
		mineralization (see estimates).													
		45.5-47.2: Barite in groundmass with amber and dark													
		sphalerite dissemination.													
		62.5: Gradual change to chloritic phyllite (Sc).													
62.5	70.2	CHLORITIC PHYLLITE (Sc). Competent. Foliation is varying.	5.8		62.5	68.6	6.1								
		64-65.5: F_2 = 40°; F_1 = 0-10°. The F_1 like a "Z" with the													
		legs parallel to the F_2. At 67.1-68.5, the F_1 = 80-85°,													

LOGGED BY _____ D.D.H. Nº 76-U-158 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		marked by ribbon like crenulation of Chlorite-sericite with													
		trace calcite. F_2 = 40° marked by thin chlorite laminae.													
		68.6-70.2: Mineralized interval characterized by wide 15 2	1.5	4688	68.6	70.2	1.6	0.75	0.58	10.97					
		Po and Mgtt. band.													
		70.2: Contact with Bleached Sericite (Sb) = 80°.													
70.2	74.3	BLEACHED SERICITE-CHLORITE PHYLLITE (Sbc). Broken, blocky	3.0		70.2	74.3	3.1								
		core. Buff with green (chlorite) laminae. F_2 = 75-80°;													
		F_2 = 0-5° "S" shaped crenulation between F_2.													
		F_1 Blebs/clusters of Po with Py = 1%. PbZn: F_2 Trace.													
	74.3	END OF HOLE.													
		NOTE: This hole was stopeed because the driller was report-													
		ing squeezing ground. This was also reported in the													
		presence of the might D.D. Shifter who agreed that													
		the ground condition was bad.													
		Logging, however, show no bad ground, nor sight of it													
		in the cores.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-159 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 2N STARTED AUGUST 27, 1976

DEPARTURE 66W COMPLETED AUGUST 28, 1976

ELEVATION 1,181.58 (approx.) PROPOSED DEPTH 200' - 61.0m

ULTIMATE DEPTH 250' - 76.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	32° 20'	66° 53'

CLAIM Nº

NOTE: Hole stopped - sign of hitting overburden

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 68%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	8.0	SERICITE PHYLLITE (S). Broken flakey core. Foliation =	5.0		0	8.0	8.0								
		plane of fissility = 70-75°.													
		4.5: Shear.													
		8.0: Abrupt change to Bleached Phyllite (Sb). Contact broken													
		core marked by bull quartz.													
8.0	10.6	BLEACHED PHYLLITE (Sb). Soft core. Buff with prominent	2.1		8.0	10.6	2.6								
		fuchsite laminae/spots. Foliation = 85-90°.													
		10.7: Gradual change to Sericite Phyllite (S).													
10.6	16.9	SERICITE PHYLLITE (S). Broken, flakey. Foliation = 80-85°.	4.8		10.6	16.9	6.3								
		13.7-15: Shear zone. Plane marked by Dark Sericite flakes =													
		85°.													
		16.8: Abrupt change to Bleached Phyllite (Sb).													
16.9	19.7	CHLORITIC BLEACHED PHYLLITE (Sbc). Broken, blocky. Buff	2.5		16.9	19.7	2.8								
		with green stripes/spots. Foliation = 75-80° (F ?);													

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		F (?) = 0-5° (based on fold nose closures).													
		19.7: Sharp clean contact with mineralized graphitic													
		phyllite (PG) = 90°.													
19.7	32.0	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken, pebbly core.													
		Foliation = 80-85°; F = 0-5°. Sulfides in both 20 4	1.3	4846	19.7	21.3	1.6	0.20	0.20	8.91			0.40	PbZn	
		foliation (shown by bigger blocky core). 20 3	1.0	4847	21.3	22.9	1.6	0.18	1.05	15.09			1.23	PbZn	
		20 3	0.9	4848	22.9	25.9	3.0	0.05	0.25	9.94			0.30	PbZn	
		30-31: Massive sulfide interval. Porous variety 20 8	0.8	4849	25.9	29.0	3.1	1.45	2.08	25.37					
		Voids aligned = 80-85°. Contacts= 85°. 60 15	0.8	4850	29.0	30.5	1.5	6.76	9.76	82.63			10.14	14.64	123.95
		60 15	0.7	4851	30.5	32.0	1.5	5.81	11.17	93.94			8.72	16.76	140.91
		32.0: Abrupt change to Bleached Phyllite. Contact broken													
		ground.													
32.0	35.1	BLEACHED PHYLLITE (Sb). Soft broken ground. Buff to silvery	2.5		32.0	35.1	3.1								
		gray. Foliation = 0° at 33.5. Series of small F fold													
		noses.		W.Av.	19.7	25.9	6.2	0.57	PbZn						
		34.8-35.1: FAULT. Soft light gray core composed of		W.Av.	29.0	32.0	3.0	6.29	10.47	88.29			18.86	31.40	264.86
		bleached sericite flakes and gouge.		W.Av.	28.3	32.0	3.7	5.37	8.88	76.4			19.88	33.86	282.62
		35.1: Abrupt change to Sericite Phyllite (S).													

LOGGED BY _____ D.D.H. Nº 76-U-159 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
35.1	39.6	SERICITE PHYLLITE (S). Broken, flakey core. Foliation = fissility = 40°. 39.6: Abrupt change to Bleached Phyllite (Sb). Contact broken ground.	2.6		35.1	39.6	4.5								
39.6	41.1	BLEACHED PHYLLITE (Sb). Soft, broken ground. Buff to light gray. Foliation = 40-45°. 41.1: Abrupt change to sericite phyllite (S). Contact broken ground.	1.0		39.6	41.1	1.5								
41.1	51.8	SERICITE PHYLLITE (S). Soft, flakey core. Foliation = 0-5°	8.1		41.1	51.8	10.7								
		42.7-43.4: Broken, flakey fragments - shear.													
		44-44.5: FAULT. Gray thick sticky gouge.													
		45.7-47.2: Pebble size bull quartz fragments - extreme low core recovery. 0.10/1.5													
		47.2-51.8: Broken, blocky to pebble size core fragments of full quartz and sericite phyllite. Some fragments show foliation = 0°.													
		51.8: Change to Mineralized Graphitic Phyllite. Contact marked by bull quartz, pebble size.													

LOGGED BY _____ D.D.H. Nº 76-U-159 PAGE 4

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
51.8	71.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken, blocky core.														
		Foliation = 80-85°. Compositional banding in wider	15 10	1.0	4852	51.8	53.3	1.5	4.20	5.96	50.40			6.30	8.94	75.6
		sulfide intervals = 70-75°.	15 10	0.9	4853	53.3	54.9	1.6	5.00	7.00	66.51			8.00	11.20	106.42
		Barite prisms in cavity walls. Graphite in laminae.	20 8	1.2	4854	54.9	56.4	1.5	1.05	2.68	22.29			1.58	4.02	33.44
		67.1-67.2: Sand of sericite phyllite and sulfides.	20 6	1.5	4855	56.4	57.9	1.5	2.75	2.85	49.37			4.13	4.28	74.06
		71.5: Gradual change to Quartz-Sulfide (P). Contact	30 6	1.3	4856	57.9	59.4	1.5	1.28	2.95	22.29			1.92	4.43	33.44
		arbitrary with decrease in graphitic consti-	30 8	1.4	4857	59.4	61.0	1.6	3.88	5.20	58.63			6.21	8.32	93.81
		tuents.	40 8	1.4	4858	61.0	62.5	1.5	1.63	3.68	26.40			2.45	5.52	39.6
71.5	76.2	QUARTZ-SULFIDE (P). Broken, blocky ground.	40 9	0.8	4859	62.5	64.0	1.5	1.55	4.55	25.37			2.33	6.83	38.06
		Foliation = 60-65°; F^{1} = 30-40°.	30 4	1.4	4860	64.0	65.5	1.5	0.50	1.13	10.97			0.75	1.7	16.46
		Sulfides in both foliation.	40 6	0.7	4861	65.5	67.1	1.6	1.50	2.63	26.40			2.40	4.21	42.24
		NOTE: Hole stopped . About to hit overburden.	50 8	1.4	4862	67.1	68.6	1.5	2.53	3.60	48.34			3.8	5.4	72.51
		Rx showing sign of weathering.	50 7	1.1	4863	68.6	70.1	1.5	1.05	2.10	21.26			1.58	3.15	31.89
			40 8	0.9	4864	70.1	71.6	1.5	1.20	3.20	20.23			1.80	4.80	30.35
			15 10	1.0	4865	71.6	73.2	1.6	2.45	5.84	30.17			3.92	9.34	48.27
			15 10	0.9	4866	73.2	74.7	1.5	2.30	5.30	33.26			3.45	7.95	49.89
			15 15	0.8	4867	74.7	76.2	1.5	3.23	7.57	47.31			4.85	11.36	70.97
	76.2	END OF HOLE.														
					W.Av.	51.8	54.9	3.1	4.61	6.50	58.72			14.30	20.14	182.02
					W.Av.	59.4	64.0	4.6	2.39	4.49	37.28			10.99	20.67	171.47
					W.Av.	71.6	76.2	4.6	2.66	6.23	36.77			12.22	28.65	169.13
					W.Av.	54.9	71.6	16.7	1.73	3.15	30.29			28.95	52.66	505.86

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-160 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,930.319mN 3N STARTED AUGUST 27, 1976

DEPARTURE 7,409.153 82W COMPLETED AUGUST 28, 1976

ELEVATION 1.105.88 PROPOSED DEPTH

ULTIMATE DEPTH 240' - 73.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-15°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 83.2%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	33.5	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 25 8	1.2	4689	0	4.6	4.6	2.43	2.55	28.46			11.18	11.73	130.92
		Foliation F_2 = 55-60°; F_1 = 0-10°. Wider band of 25 10	1.8	4690	4.6	7.0	2.4	2.73	4.75	32.23			6.55	11.40	77.35
		sulfides show compositional banding Py/Sph-Gal = 20 5	2.0	4691	7.0	10.0	3.0	1.13	2.45	18.17			3.39	7.35	54.51
		parallel to F_2. 40 6	2.0	4692	10.0	12.2	2.2	3.30	6.18	52.46			7.26	13.60	115.41
		19.6-22.9: Bleached sericite-chlorite phyllite (Sbc). 25 8	1.5	4693	12.2	13.7	1.5	4.95	6.78	66.51			7.43	10.17	99.77
		Competent. Green stripes and spots of chlorite 30 10	1.5	4694	13.7	15.2	1.5	5.20	7.98	75.77			7.80	11.97	113.66
		together with blue-green fuchsites in white groundmass. 30 10	1.6	4695	15.2	16.8	1.6	5.48	8.74	75.77			8.77	13.98	121.23
		F = 35-40°; with series of ellipsoidal F_2 fold nose 40 12	1.5	4696	16.8	18.3	1.5	7.18	8.73	119.0			10.77	13.10	178.46
		closures. 35 8	1.2	4697	18.3	19.6	1.3	7.42	13.21	110.1			9.65	17.17	143.08
		33.5: Abrupt change to Graphitic phyllite (G). 5 Tr.	3.0		19.6	22.9	3.3								
		Contact broken core. 25 8	1.5	4698	22.9	24.4	1.5	2.00	4.45	34.29			2.00	6.68	51.44
33.5	36.0	GRAPHITIC PHYLLITE (G). Broken flakey core. 30 9	1.5	4699	24.4	25.9	1.5	2.13	4.30	38.40			3.20	6.45	57.6
		F = 60°; F_1 = 0-5°. 25 8	1.5	4700	25.9	27.4	1.5	4.88	7.59	75.77			7.32	11.39	113.66
		33.6-33.9: FAULT. Dark sticky thick gouge. 25 8	1.5	4798	27.4	29.0	1.6	2.30	4.45	37.37			3.68	7.12	59.79
		30 8	1.5	4799	29.0	30.5	1.5	4.08	6.08	67.54			6.12	9.12	101.31
		36.0: Abrupt change to Massive sulfide. Contact 30 8	1.5	4800	30.5	32.0	1.5	5.00	8.25	75.77			7.50	12.38	113.66
		marked by 20cm. long sulfide Bx cemented by graphite. 25 5	1.0	4801	32.0	33.5	1.5	2.28	4.88	40.46			3.42	7.32	60.69

LOGGED BY _____ D.D.H. Nº 76-U-160 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
36.0	37.1	MASSIVE SULFIDE (M) WITH SHORT INTERVAL OF SULFIDE BX (MXq)	1.3		33.5	36.0	2.5								
		from 36-36.2. Rest of run almost structureless except 60 3	1.0	4802	36.0	37.1	1.1	5.34	7.08	84.69					
		for some faint compositional banding = 40°.		W.Av.	0	10.0	10.0	2.11	3.05	26.3			21.12	30.48	262.78
				W.Av.	4.0	7.0	3.0	2.67	4.31	31.5			8.01	12.93	94.43
		37.1: Sharp change to Graphitic Phyllite (G) = 40°.													
37.1	38.4	GRAPHITIC PHYLLITE (G). Broken flakey core. F_2 = 15-30°;	0.9		37.1	38.4	1.3	Trace, est.							
		F_2 = 90° - could have been shifted by faulting. Calcite as		W.Av.	10.0	19.5	9.5	5.38	8.33	80.38			57.68	79.99	771.61
		^{1} short discontinuous stringers in random orientation. Thin		W.Av.	12.2	19.6	7.4	6.00	8.97	88.7			44.42	66.39	656.20
				W.Av.	13.7	19.6	5.9	6.27	9.53	94.3			36.99	56.22	556.43
		sulfide laminae Py: 1%; PbZn: Trace.		W.Av.	22.9	33.5	10.6	3.23	5.70	52.66			34.24	60.46	558.15
				W.Av.	22.9	25.9	3.0	2.07	4.38	36.35			6.2	13.13	109.04
		38.4: Abrupt change to Massive sulfide. Contact wavy with		W.Av.	29.0	32.0	3.0	4.54	7.17	71.66			13.62	21.50	214.97
		average plane = 75°.		W.Av.	25.9	32.0	6.1	4.04	6.56	63.7			24.62	40.01	388.42
				W.Av.	25.9	29.0	3.1	3.55	5.97	56.0			11.00	18.51	173.45
38.4	44.4	MASSIVE SULFIDE - banded and with barite ground mass variety													
		(MB+Mb). Competent. Compositional banding = 30°. 70 5	1.6	4803	38.4	40.2	1.8	3.30	3.95	49.03			5.94	7.11	88.25
		60 15	2.5	4804	40.2	42.7	2.5	8.76	14.98	145.0			21.9	37.45	362.58
		41.1-42.5; 43-44: Barite in groundmass. 60 12	1.7	4805	42.7	44.4	1.7	9.16	16.02	156.3			15.57	27.23	265.78
		44.4: Abrupt change to Bleached Phyllite (Sb).													
		Contact = 15°.		W.Av.	40.2	44.4	4.2	8.92	15.4	149.6			37.47	64.68	628.36
44.4	45.3	BLEACHED PHYLLITE (Sb); half of the core is with mariposite	0.9		44.4	45.3	0.9								
		and half with chlorite (lengthwise). Division marked by		W.Av.	38.4	44.4	6.0	7.24	11.97	119.4			43.41	71.79	716.61
		quartz = 5°. Series of F_2 fold noses													
		NOTE: Drill must be penetrating sub-parallel or tangential													
		F_2.													

LOGGED BY _____ D.D.H. No 76-U-160 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		45.3: Sharp contact with massive sulfide unit (M) = 35°.													
45.3	68.6	MASSIVE SULFIDE BANDED (MB) AND BARITE IN GROUNDMASS 40 5	1.9	4806	45.3	47.2	1.9	3.00	2.85	55.54			5.70	5.42	105.53
		VARIETY (Mb). Also interval with graphite laminae 40 6	2.6	4807	47.2	49.8	2.6	1.60	2.55	30.17			4.16	6.63	78.44
		(Mg). Competent. 65 10	2.0	4808	49.8	51.8	2.0	7.26	12.00	120.0			14.52	24.00	240.00
		45.3-45.7: Compositional band = 40°. 65 10	2.8	4809	51.8	54.9	3.1	5.45	10.35	100.8			16.90	32.09	312.48
		45.7-48.9: Foliation marked by graphitic consti- 60 15	3.0	4810	54.9	57.9	3.0	5.65	10.09	94.63			16.95	30.27	283.89
		tuent parall to core axis with series of 60 15	1.5	4811	57.9	59.4	1.5	5.80	9.85	80.57			8.70	14.78	120.86
		ellipsoidal fold nose closures. 65 15	1.6	4812	59.4	61.0	1.6	5.75	9.38	101.8			9.20	15.01	162.93
		50.3-59.4: Compositional bands Sulfides/barite sub- 65 15	1.5	4813	61.0	62.5	1.5	7.00	10.25	129.9			10.50	15.38	194.91
		parallel to core axis with gradual change. 65 12	2.4	4814	62.5	65.0	2.5	6.60	9.70	115.9			16.50	24.25	289.73
		NOTE: Long sample intervals - drill appear to be 1	0.3		65.0	65.3	0.3								
		penetrating same stratigraphic horizon. 60 4	0.4		65.3	65.7	0.4								
		57.9-59.4: Banding disposition changes. Transitional 1 NIL	1.4		65.7	67.1	1.4								
		zone. Sulfides like dissemination in 25 5	1.5	4815	67.1	68.6	1.5	3.88	6.23	69.60					
		barite groundmass.		W.Av.	38.4	44.4	6.0	7.24	11.97	119.4			43.41	71.79	716.61
		59.4-64.0: Compositional band = 20-40°.		W.Av.	45.3	49.8	4.5	2.19	2.68	40.88			9.86	12.05	183.97
		65-65.3: Chlorite-quartz interval. Contact abrupt and		W.Av.	49.8	65.0	15.8	6.14	10.25	105.6			93.27	155.78	1604.80
		clean = 40°. F_2 = 45-50°; F_1 = 0°.		W.Av.	38.4	65.0	26.6	5.51	9.00	94.0					
		Series of small F_1 fold noses.													
		65.7-67.0: Chlorite-quartz phyllite (C). Same general													
		characteristic as preceeding run. F_2 = 50°; F_1 = 0°.													

LOGGED BY _____ D.D.H. Nº 76-U-160 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		67.1-68.6: Transition zone. Rx becoming graphitic phyllite.													
		This run is mineralized graphitic phyllite (PG).													
		F_2 = 35°. Changing to Graphitic Phyllite (G).													
68.6	73.2	GRAPHITIC PHYLLITE (G). Fissile, breaking easily into poker chips. F_2 = 35-40° with F_1 = 10-20° @ 70.2m., (F_1 opposite dip direction F_2). Foliation changing to F_2 = 15-20°; F_1 perpendicular to F_2 @ 73.1m.	2.8		68.6	73.2	4.6								
	73.2	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-161 PAGE 1

PROPERTY GRUM JOINT VENTURE

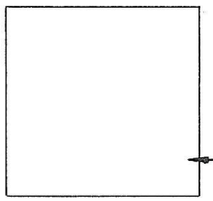
LATITUDE 2N STARTED AUGUST 28, 1976

DEPARTURE 66W COMPLETED AUGUST 29, 1976

ELEVATION 1177.484 PROPOSED DEPTH

ULTIMATE DEPTH 195-59.4m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	222° 51'	-31° 54'



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 77.6%

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	24.0	MINERALIZED GRAPHITIC PHYLLITE (G). Competent.	15 2	0.8	4816	0	4.6	4.6	0.33	0.58	10.97			4.19	PbZn	
		Varying foliation trend as hole progresses.	20 2	1.4	4817	4.6	7.6	3.0	0.18	0.80	8.91			2.94	PbZn	
		0-10.7: F_2 = 70-80°; F_1 = 10°.	20 2	1.3	4818	7.6	9.1	1.5	0.13	0.58	7.20			1.07	PbZn	
		10.7-18.3: F_2 = 45-50°; F_1 = 40° (oppisite dip dir.)	25 4	1.3	4819	9.1	10.7	1.6	0.55	1.10	12.00			2.64	PbZn	
		21.3-22.9: F_2 = 0° with series of fold noses on	25 6	1.1	4820	10.7	12.2	1.5	1.18	2.73	20.23			1.77	4.1	30.35
		F_2 oppisite sides of core.	25 6	1.3	4821	12.2	13.7	1.5	3.48	.348	52.46			5.22	5.22	78.69
		18.3-19.8: Bx. Sufldie and quartz fragments cemen-	50 5	1.4	4822	13.7	15.2	1.5	1.75	1.75	28.46			2.63	2.63	42.69
		ted by graphite.	40 12	1.6	4823	15.2	16.8	1.6	7.86	9.22	95.66			12.58	14.75	153.06
		24.0: Gradual build-up of mineralization. Rx be-	40 8	1.5	4824	16.8	18.3	1.5	3.18	3.60	44.23			4.77	5.40	66.35
		coming massive sulfide (M).	40 10	1.5	4825	18.3	19.8	1.5	1.70	0.78	30.17			2.55	1.17	45.26
24,0	32.0	MASSIVE SULFIDE OF BANDED (MB) WITH BARITE GROUNDMASS	30 9	1.5	4826	19.8	21.3	1.5	3.90	2.60	54.51			5.85	3.90	81.77
		VARIETIES (Mb). Competent. Compositional banding =	25 18	1.5	4827	21.3	22.9	1.6	7.66	10.30	103.9			12.26	16.48	166.22
		15-20°. Except at 29m: Foliation = 0°, fold nose.	30 18	1.5	4828	22.9	24.4	1.5	8.66	17.08	158.4			12.99	25.62	237.6
		28.4-31.5: Barite in groundmass.	60 10	1.5	4829	24.4	25.9	1.5	6.61	9.30	100.8			9.92	13.95	151.20
		32.0: Gradual change to quartz sulfide (P).	70 10	1.5	4830	25.9	27.4	1.5	6.10	10.70	108.0			9.15	16.05	162.0
32.0	35.2	QUARTZ-SULFIDE (P). Competent. Very siliceous ground	70 15	1.6	4831	27.4	29.0	1.6	9.20	10.60	140.2			14.72	16.96	224.37
		mass. Foliation = 25° (F ?)	70 12	1.5	4832	29.0	30.5	1.5	6.50	8.89	91.89			9.75	13.34	137.84

LOGGED BY _____ D.D.H. Nº 76-U-161 PAGE 2

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		35.2: Abrupt change to Mineralized Graphitic	60 10	1.5	4833	30.5	32.0	1.5	6.28	8.40	88.80			9.42	12.6	133.20
		Phyllite (PG). Contact broken core.	40 16	1.5	4834	32.0	33.5	1.5	7.20	9.65	96.69			10.8	14.48	145.04
35.2	53.3	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent.	40 15	1.5	4835	33.5	35.1	1.6	2.90	3.35	38.40			4.64	5.36	61.44
		F = 20°; F = 30-35° (oppisite dip direction).	30 15	1.4	4836	35.1	36.6	1.5	3.10	4.15	42.51			4.65	6.23	63.77
		F_2 F_1 Sulfides parallel to F .	30 17	1.3	4837	36.6	38.1	1.5	3.48	4.75	46.29			5.22	7.13	69.4
		F_2 38-38.2: Sheared. Porous graphitic sulfide.	30 10	1.4	4838	38.1	40.2	2.1	2.05	2.90	21.26			4.31	6.09	44.6
		42.7-46: Quartz-sulfide interval. Contacts gradual.	30 9	1.7	4839	40.2	42.2	2.0	3.25	4.65	34.29			6.50	9.30	68.6
			30 4	1.4	4940	42.2	44.2	2.0	0.23	0.30	8.23			0.53	PbZn	
		51.8-53.3: Broken blocky core. Poor recovery.	35 4	1.8	4941	44.2	46.2	2.0	0.08	0.48	9.94			0.56	PbZn	
53.3	59.4	GRAPHITIC PHYLLITE (G) W/SHORT MINERALIZED INTERVALS	35 4	2.0	4942	46.2	48.2	2.0	0.18	0.70	13.03			0.88	PbZn	
		(PG). F = 0°; F = 90°.	40 5	1.7	4943	48.2	50.2	2.0	0.88	1.00	20.23			1.88	PbZn	
		F_2 F_1 Sulfides parallel to F . Mgtt. @ 48.8-50.3.	40 8	1.2	4944	50.2	53.3	3.1	5.15	4.80	70.63			15.97	14.88	218.95
		F_2 54.4-54.9: Bleached phyllite interval. Silvery	1 NIL	0.9		53.3	54.4	1.1						0	0	0
		white colour with sulfide laminae. Foliation = 0° F ?	15 8	1.6	4945	54.4	56.1	1.7	6.01	8.40	72.69			10.22	14.28	123.57
		F_2 56.2-59.4: FAULT. Sericite and graphite flakes in dark		1.1		56.1	59.4	3.3								
		sticky gouge.														
					W.Av.	0	10.7	10.7	1.01	PbZn				10.48	PbZn	
					W. Av.	10.7	15.2	4.5	2.14	2.65	33.72			9.62	11.93	151.73
	59.4	END OF HOLE.			W.Av.	15.2	18.3	3.1	5.60	6.50	70.78			17.35	20.15	219.41
					W.Av.	16.8	21.3	4.5	2.93	2.33	34.08			13.17	10.47	153.38
					W.Av.	21.3	33.5	12.2	7.30	10.61	111.3			89.01	129.48	1357.4
					W.Av.	33.5	42.2	8.7	2.91	3.92	35.4			25.32	34.11	307.8
					W.Av.	42.2	50.2	8.0	0.96	PbZn						
					W.Av.	15.2	21.3	6.1	4.22	4.13	50.2			25.75	25.22	306.4
					W.Av.	50.2	56.1	5.9	4.44	4.94	58.1			26.19	29.16	342.52

DIAMOND DRILL RECORD

LOGGED BY ALEXNADER YOUNG-PO D.D.H. Nº 76-U-162 PAGE 1

PROPERTY GRUM JOINT VENTURE

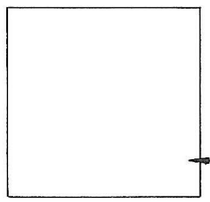
LATITUDE * 10,930.5 3N STARTED AUGUST 30, 1976

DEPARTURE *7,409.5 82W COMPLETED SEPTEMBER 1, 1976

ELEVATION *1.105 PROPOSED DEPTH

* - approximated ULTIMATE DEPTH 505' - 153.9m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-65°
38.1m	227°	-66°
77.7m	213°	-71°
123.4m	192°	-76°



CLAIM Nº

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 95.8%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	10.1	CHLORITE PHYLLITE (C). Competent. Regular green and white	9.2		0	10.1	10.1								
		stripes. F_2 = 85-90°; F_1 = 0-5°. Short intervals showing													
		mineralization @ 4.6-5; 7.0-7.2; 9.1-9.3.													
		PY: 15% PbZn: 1%													
		6.0-6.2: Interval of mineralized graphitic phyllite (PG).													
		Contact sharp and clean = 90°. PY: 5%, PbZn: Tr.													
		10.1: Sharp clean contact with mineralized Graphitic Phyl-													
		lite (PG) = 85°.													
10.1	27.6	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. 5 1	1.8	4868	10.1	12.2	2.1	1.90	0.43	27.43			2.33	PbZn	
		Foliation = 80-90°; F_2 = 0-5°. Series of small F_1 10 2	2.9	4869	12.2	15.2	3.0	0.63	0.33	12.00			0.96	PbZn	
		noses. Sulfides mostly confined in F_1 folds. 10 2	3.0	4870	15.2	18.3	3.1	1.55	0.98	24.34			8.53	PbZn	
		NOTE: Drill penetrating perpendicular to F_1 and 7 2	3.0	4871	18.3	21.3	3.0	0.78	1.25	9.94			2.03	PbZn	
		parallel to F_2. 10 4	3.0	4872	21.3	24.4	3.1	1.20	2.05	16.11			3.25	PbZn	
		19.7-23.0: Quartz-sulfide interval. F_1 = 90°; 15 6	1.4	4873	24.4	25.9	1.5	0.60	1.55	10.97			2.15	PbZn	
		F_2 = 0°. Contacts sharp and clean = 90°. 40 7	1.7	4874	25.9	27.6	1.7	4.18	5.93	67.54			7.11	10.08	114.82
		27.6: Abrupt change to Graphitic Phyllite (G). Contact		W.Av.	10.1	25.9	15.8	2.22	PbZn				35.01	PbZn	
				W.Av.	24.6	27.6	3.0	2.63	4.03	43.0			7.89	12.10	129.08

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		marked by Bleached Phyllite (Sb) - 3cm. long. Contact plane													
		= 75°.													
27.6	48.6	GRAPHITIC PHYLLITE (G). Very fissile, easily breaks into	6.5		27.6	34.6	7.0								
		poker chips. F_2 = 75-80°; F_1 = 5-10°.													
		34.6-35.5: Mineralized Bleached Phyllite with Barite 15 9	0.9	4875	34.6	35.5	0.9	4.48	8.93	85.72					
		in groundmass. Buff to white. Sulfide in disse	12.8		35.5	48.6	13.1								
		mination. Faint foliation (alignment of sulfide													
		xls) = 70°. Contact sharp = 70°.													
		35.5: Introduction of Calcite as thin laminae together with													
		wider bands of Graphite (GK).													
		35.5-48.6: Calcitic Graphitic Phyllite. Series of small													
		F_1 fold. F_2 = 85-90°; F_1 = 0-5°.													
		48.6: Sharp change to Sulfide with Barite groundmass (Mb).													
		Contact = marked by bleached sericite phyllite (Sb) =													
		plane = 75°.													
48.6	54.9	SULFIDES WITH BARITE GROUNDMASS (Mb). Competent. Composi-		W.Av.	49.2	54.9	5.7	6.80	12.79	132.9			38.77	72.92	757.56
		tional banding Py-Sph/Gal-Ba = 75-85°. 4 Nil	0.6		48.6	49.2	0.6								
		48.6-49.2: Bleached Sericite Phyllite. Competent. 20 10	1.1	4876	49.2	50.3	1.1	7.45	12.72	134.1			8.20	13.99	147.47
		Buff to silvery gray. Foliation = 80-85°. 20 18	1.5	4877	50.3	51.8	1.5	8.25	18.54	139.2			12.38	27.81	208.8
		Sharp contact = 80°. 15 12	1.5	4878	51.8	53.3	1.5	4.18	8.68	68.57			6.27	13.02	102.86

LOGGED BY _____ D.D.H. Nº 76-U-162 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		49.8-50.3: Intervals of sulfides and chlorite 15 10	1.5	4879	53.3	54.9	1.6	7.45	11.31	186.5			11.92	18.10	298.43
		phyllite unit. Contact - sharp and clean = 70°. F_2 = 60-70°													
		F_1 = 0-10°, series of small ellipsoidal F_1 fold noses in the													
		Chlorite unit. Chlorite unit ranges from 2.5cm. to 10cm lg.													
		51.8-52.3: Calcitic Graphitic Phyllite (GK). Fissile.													
		F_2 = 75°; F_1 = 0°. Contact = 70°.													
		52.7-53: Intervals of sulfides - chlorite unit similar to													
		49.8-50.3 run. Chlorite unit averages 5cm long.													
		53.9-54.9: Bleached Phyllite unit. Competent. Foliation =													
		75°. Partly mineralized. Transition to Graphi-													
		tic phyllite (G). First contact = 75°; Second													
		= 80°.													
54.9	58.5	GRAPHITIC PHYLLITE (G). Competent. F_2 = 70-75°; F_1 = 0-5°.	3.0		54.9	58.5	3.6								
		Blebs of Po = 1%													
		58.5: Gradual change to Dark Sericite Phyllite (S).													
58.5	68.6	DARK SERICITE PHYLLITE (S). Competent. Foliation = 70-75°;	10.1		58.5	68.6	10.1								
		F_1 = 0-10°.													
		66.8: Shear.													
		68.6: Introduction of Calcite. Rx becoming Calcitic													
		Sericite Phyllite (SK).													

LOGGED BY _____ D.D.H. Nº 76-U-162 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
68.6	100.4	CALCITIC SERICITE PHYLLITE (SK). Competent. F_2 = 65-75°;	30.5		68.6	100.4	31.8								
		F_1 = 0-10°. Sporadic clots of Po.													
		82.3-83.8: Small trace of Chlorite as thin laminae.													
		Chlorite = 10%.													
		84.2-85.3: Graphitic interval. Calcite as thin laminae.													
		91.1-92: Mineralized Bleached Phyllite interval (P-Sb).													
		Competent. Buff. F_2 = 80-85°; F_1 = 0°. Contacts													
		sharp and clean = 75-80°. Py: 15%, PbZn 2%.													
		100.4: Abrupt change to Quartz-Sulfide. Contact broken													
		ground, plane apparently = 85° (based on reconstruc-													
		ted fragments).													
100.4	112.8	QUARTZ-SULFIDE (P). Competent. Groundmass very 25 4	1.7	4880	100.4	102.1	1.7	1.55	2.18	21.26			2.64	3.71	36.14
		siliceous. Short intercalated Bleached Sericite 25 6	1.0	4881	102.1	103.6	1.5	2.00	2.75	28.46			3.00	4.13	42.69
		Phyllite (2-3cm) @ 105.5-107.0. 30 4	1.6	4882	103.6	105.2	1.6	1.05	1.28	15.09			2.33	PbZn	
		Foliation = 80-85° F_2; F_1 = 0-5°. 25 7	1.4	4883	105.2	106.7	1.5	2.00	2.70	28.46			4.70	PbZn	
		Sporadic blebs of Po with Py clusters 20 8	1.5	4884	106.7	108.2	1.5	0.93	1.08	15.09			2.01	PbZn	
		110-111.3: Bleached Phyllite (Sb). Buff with green- 20 3	1.5	4885	108.2	109.7	1.5	0.13	0.13	5.14					
		ish hue. F_2 = 80°; F_1 = 0°. Contacts 25 3	1.5	4886	109.7	111.3	1.6	0.98	1.03	10.97					
		sharp = 85°. 20 5	1.5	4887	111.3	112.8	1.5	1.68	2.50	23.31					
		112.8: Abrupt change to Sericite Phyllite (S). Contact													
		marked by bull quartz (2.5cm) = 75°.		W.Av.	100.4	103.6	3.2	1.76	2.45	24.6			5.64	7.84	78.83
				W.Av.	103.6	108.2	4.6	3 PZ							

LOGGED BY _____ D.D.H. No 76-U-162 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
112.8	116.8	SERICITE PHYLLITE (S). Competent. F_2 = 70-80°; F_1 = 0-10°.	3.5		112.8	116.8	4-	Trace	PbZn,	est.					
		Trace showing of Sulfides Py: 1%, PbZn 1%.													
		Trace calcite in groundmass.													
		113.4-114.3: Bleached Phyllite interval. Buff with greenish													
		hue. Foliation = 70-75°. Contacts gradual.													
		116.8: Rx becoming more Calcitic (SK).													
116.8	130.7	CALCITIC SERICITE PHYLLITE WITH TRAC E GRAPHITE (SK+G).	13.5		116.8	130.7	13.9								
		Fissile, breaking easily into poker chips. F_2 = 70-80°;													
		F_1 = 0-10°. Calcite as thin F_2 laminae but usually wider													
		as F_1 folds.													
		130.7: Gradual change to Bleached Sericite Phyllite (Sb).													
130.7	132.4	BLEACHED SERICITE PHYLLITE (Sb). Buff to silvery white.	1.7		130.7	132.4	1.7								
		F_2 = 65°; F_1 = 0° (with fold noses).													
		132.4: Sharp contact with Massive Banded Sulfide (MB).													
		Contact part of fold nose = 15°.													
132.4	133.0	MASSIVE BANDED SULFIDE. Competent. Compositional 60 8	0.5		132.4	133.0	0.6								
		banding = 80°.													
		132.7-132.8: Chlorite Phyllite interval (CK). Calcitic													
		Contacts = 75°, both sharp and clean.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		133.0: Sharp contact with Bleached Phyllite (Sb) = 75°.													
133.0	134.2	BLEACHED PHYLLITE (Sb). Competent. Light gray with greenish	1.2		133.0	134.2	1.2								
		hue and silvery white. Could possibly have interstacked													
		chlorite with sericite. F_2 = 75-80°.													
		134.2: Gradual change to Dark Sericite Phyllite (S).													
134.2	141.0	DARK SERICITE PHYLLITE (S). Competent. F_2 = 75-80°; F_1 not	6.7		134.2	141.0	6.8								
		well developed.													
		38.8-38.9: Chlorite unit (C). Clean sharp contact = 80°.													
		141.0: Gradual change to Bleached Phyllite (Sb).													
141.0	142.1	BLEACHED PHYLLITE (Sb). Soft core. Buff with greenish hue.	1.1		141.0	142.1	1.1								
		F_2 = 80°; F_1 note developed.													
		142.0: Shear.													
		142.1: Sharp clean contact with Massive Banded Sulfide (MB)													
		= 75°.													
142.1	142.9	MASSIVE BANDED SULFIDE (Mb). Competent. Compositional 30 6	1.4	4888	142.1	143.6	1.5	2.48	4.85	44.23					
		band = 75° (Py-Sph-Barite). 15 2	1.5	4889	143.6	145.1	1.5	1.00	2.35	16.11					
		142.9: Sharp change to Mineralized Graphitic Phyllite 60 9	1.5	4890	145.1	146.6	1.5	5.00	7.06	75.77					
		(PG) = 70°.		W.Av.	142.1	146.6	4.5	2.83	4.75	45.4					

LOGGED BY _____ D.D.H. Nº 76-U-162 PAGE 7

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
142.9	144.2	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. F_2 = 70°; F_1 = 0-5°. Sulfides in both foliation. 144.2: Change to Bleached Chloritic Phyllite.													
144.2	145.2	BLEACHED CHLORITIC PHYLLITE (Sbc). Competent. White with green stripes. F_2 = 75°; F_1 = 0-5°. Series of small fold noses. 145.2: Sharp contact with Massive Sulfides with barite in groundmass (Mb).													
145.2	146.6	MASSIVE SULFIDE WITH BARITE GROUNDMASS (Mb). Competent. Py-Sph/Gal-Barite banding = 75-80°. Short porous sulfide variety (= 10cm.). 146.6: Sharp contact with Chlorite Phyllite unit (C) = 35°.													
146.6	146.8	CHLORITE UNIT. Competent. White groundmass with chlorite spots/stripes. Foliation = 15°. 146.8: Sharp change to Sericite Phyllite (S). Contact broken ground.	0.2		146.6	146.8	0.2								
146.8	153.9	SERICITE PHYLLITE (S). Competent. Foliation = 35-40°; F_1 = 0-10°.	7.0		146.8	153.9	7.1								

LOGGED BY _____ D.D.H. Nº 76-U-162 PAGE 8

Interval		DESCRIPTION	Recovery	Sample	Interval		Sample	Assay					Assay x		
From	To			Nº	From	To	Length	Pb	Zn	Ag	Au	Cu	Pb	Zn	Ag
	153.9	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-162A PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 82W STARTED AUGUST 28, 1976

DEPARTURE 3N COMPLETED AUGUST 29, 1976

ELEVATION PROPOSED DEPTH

ULTIMATE DEPTH 47.2m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-70°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 86%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		NOTE: This hole was abandoned when the collar run collapsed.													
		A new set-up, U-162, was then drilled 3' SE off the													
		section line.													
		This hole was logged for record purposes only. For													
		assay and sampling results, please refer to 76-U-162.													
0	3.0	MINERALIZED GRAPHITIC PHYLLITE (PG). Broken, pebbly core.	0.20		0	3.0	3.0								
		Foliation in longer blocky core (2.5cm long) = 75-80°.													
		Py: 20, PbZn: 1%													
		3.0: Abrupt change to Chloritic Bleached Phyllite (Sb).													
		Contact broken ground.													
3.0	18.0	CHLORITIC BLEACHED PHYLLITE (Sbc). Blocky core. Foliation	13.3		3.0	18.0	15.0								
		= 85-90° marked by green stripes. F = 0-5°.													
		3.0-3.2: Prominent fuchsite.													
		10.7-11: Mineralized Graphitic Phyllite interval (PG).													
		Clean abrupt contact = 90°. Py: 10, PbZn: 1%.													

LOGGED BY _____ D.D.H. No 76-U-162A PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		13.7-15.2: Mineralized Graphitic Phyllite (PG). Series of small F_1 fold noses. F_2 = 85-90°; Contacts = 85° Py: 10%, PbZn: 1%.													
		18.0: Abrupt clean contact with mineralized graphitic phyllite = 85°.													
18.0	27.0	MINERALIZED GRAPHITIC PHYLLITE (PG). Competent. F_2 = 85-90° F_1 = 0-5°. Sulfides in both foliation. Series of small F_1 fold noses. Intervals of Massive Sulfides.	7.9		18.0	27.0	9.0								
		18.0-26.1: Py: 10 PbZn: 2%													
		26.1-27.0: Py: 50 PbZn: 3%													
		27.0: Abrupt change to Graphitic Phyllite (G) = 75°.													
27.0	47.2	GRAPHITIC PHYLLITE (G). Fissile, breaking easily into poker chips. F_2 = 75-80°; F_1 = 0°. Short intervals of Massive Sulfides and Bleached Phyllite @ 33.9-35.2. Py: 60 PbZn: 8%. Contacts between Graphitic Phyllite, Massive Sulfide, Bleached Phyllite are clean and sharp = 75-80°.	19.2		27.0	47.2	20.2								
		38.1: Introduction of calcite in laminae													
		38.1-47.2: Calcitic-Graphitic Phyllite interval. Foliation F_2 = 90° - very regular alternation of calcite and Graphite. F_1 = 0-5° marked by calcite.													

LOGGED BY _____ D.D.H. No 76-U-162A PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Series of small F_2 fold noses.													
		NOTE: Drill perpendicular to F_1 and parallel to F_2.													
	47.2	HOLE lost when driller pulled the rods for change of bit and the collar collapsed. Casing not very well done.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-163 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 64W STARTED AUGUST 31, 1978

DEPARTURE 2N COMPLETED SEPTEMBER 1, 1978

ELEVATION PROPOSED DEPTH 375' - 114.3m

ULTIMATE DEPTH 368' - 112.1m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	0°
61m	229°	0°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

NOTE: Hole stopped after passing target sulfide band.

TOTAL CORE RECOVERY: 79.5%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	8.0	QUARTZ-SULFIDE (P). Competent. Very siliceous ground 30 3	0.5	001B	0	3.0	3.0	0.10	1.68	6.17			1.78	PbZn	
		mass. Foliation = 80-85°, from 0-5m. Foliation 30 3	3.0	002B	3.0	6.1	3.1	0.33	1.13	13.03			1.46	PbZn	
		changes to 40-45° from 6-8m. 25 5	1.5	003B	6.1	8.0	1.9	2.15	3.75	35.31					
		8.0: Sharp contact with Sericite Phyllite. Contact wavy													
		= 10-15° marked by short bleached sericite (Sb) transi		W.Av.	0	6.1	6.1	1.62	PbZn						
		tional interval (=5cm.).													
8.0	25.9	SERICITE PHYLLITE (S). Competent. Foliation F_2 = 15°; F_1 =	16.3		8.0	25.9	17.9								
		45-50°. Drill appears to penetrate sub-parallel to F_2.													
		17.2-19.3: Bleached Sericite Phyllite (Sb). Silvery white													
		with minor chlorite flakes. Soft core. Folia-													
		tion = 15°.													
		19.3-20.0: Wide Po bands with quartz inclusions, trace PbZn													
		(=1%). First contact broken ground, second con-													
		tact = 75°.													
		21-21.7: Bleached Phyllite (Sb). Soft core. Buff to													
		silvery white. Foliation = 15-20°.													
		21.4: Shear. Contacts gradual.													

LOGGED BY _____ D.D.H. No 76-U-163 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		25.9: Introduction of Calcite. Rx becoming Calcitic Seri-													
		cite Phyllite (SK).													
25.9	38.1	CALCITIC SERICITE PHYLLITE (SK). Competent. Foliation = 10-	12.0		25.9	38.1	12.2								
		15° (F_2); calcite as short discontinuous stringers perpendi-													
		cular to F_2 (could be F_1). Series of long ellipsoidal fold													
		nose closures.													
		38.1: Introduction of Graphitic constituents. Rx becoming													
		Graphitic Sericite Phyllite (SG).													
38.1	57.0	GRAPHITIC SERICITE PHYLLITE (SG). Competent. Foliation = 0-	17.8		38.1	57.0	18.9								
		10° (F_2); F_1 = 90°. Series of ellipsoidal F_2 noses. F_2 is													
		apparently wavy plane. Small slips displacing the laminae													
		1-2cm. @ 60° plane.													
		57.0: Gradual change to Sericite Phyllite(S).													
57.0	60.5	SERICITE PHYLLITE (S). Competent. Gray colour. Trace cal-	3.5		57.0	60.5	3.5								
		cite in groundmass. Foliation = 15° (F_2).													
		60.5: Sharp contact with Massive Sulfide (M). Contact is a													
		slip plane with slickenside along dip direction = 30°.													

LOGGED BY _____ D.D.H. No 76-U-163 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
60.5	63.1	MASSIVE SULFIDE (M) WITH BARITE-IN-GROUNDMASS VARIETY 60 9	2.6	004B	60.5	63.1	2.6	4.75	8.64	77.83					
		(Mb). Competent. Faint compositional banding Py/Sph-Pb/Ba													
		=50°. Short runs of porous variety (MV) = 10cm. in the bar-													
		ite rich intervals.													
		61-62.5: Barite rich = 20%.													
		63.1: Abrupt change to Graphitic Phyllite. Contact marked													
		by 40cm long bull quartz interval. Plane = 70°.													
63.1	73.0	GRAPHITIC PHYLLITE (G). Broken, flakey to gougy core. Folia	4.2		63.1	73.0	9.9								
		tion = 30°. F_1 appears to be parallel to F_2.													
		64-65.5: Graphite flakes/sand trace of gougy materials;													
		could be FAULT. Low recovery: 0.2/1.5.													
		65.5-67.1: Gouge. FAULT. Black sticky gouge.													
		68.6-71.6: Intervals of solid and gougy core.													
		73.0: Change to Serictie Phyllite (S). Broken ground.													
		(Identification of Rx based on flakes and general dif-													
		ference in colour and streak.)													
73.0	86.9? 89.6	SERICITE PHYLLITE (S). Varying competency - from soft flakey	16.0		73.0	89.6	16.6								
		core to solid competent runs. Foliation = 15-20° (F_2).													
		F_1 = 45°.													
		73-77.7: Soft flakey core.													

LOGGED BY _____ D.D.H. No 76-U-163 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		86.4-86.5: Small fault.													
		86.9: Abrupt change to Banded Massive Sulfide (MB) and													
		Sulfide bx (MXsq). Contact broken ground.													
86.9?	96.0	BANDED MASSIVE SULFIDES (MB) WITH SHORT RUN OF SULFIDE 40 5	0.8	005B	86.9	90.1	3.2	2.50	1.90	33.26			1.50	1.14	19.96
		BX (MXsq). Broken, blocky core. Banding = 30-35°; 40 8	1.1	006B	90.1	93.1	3.0	3.95	2.40	39.43			11.85	7.20	118.29
		with narrow bands of bleached sericite. 40 4	2.5	007B	93.1	96.0	2.9	1.73	1.45	24.34					
		89.6-90: Sulfide Bx. Angular sulfide fragments Ø = 1mm-1.5		W.Av.	89.5	93.1	3.6	3.71	2.32	38.4			13.35	8.34	138.25
		cm. cemented by quart and sulfides. Contacts													
		broken ground.													
		94-94.8: Wide bands of Po = 15°.													
		96.0: Abrupt change to Graphitic Phyllite (G). Contact													
		broken ground.													
96.0	110.7	GRAPHITIC PHYLLITE (G). Broken, flakey core. Foliation F_2 =	7.2		96.0	110.7	14.7								
		15-20°; F_1 = 10-15° (oppisite direction F_2 or almost perpen-													
		dicular) @ 96-106.7.													
		Foliation change to F_2 = 0°; F_1 = 90° @ 108.													
		109.7: Shear.													
		110.7: Abrupt change to Bleached Phyllite (Sb) = 40°.													

LOGGED BY _____ D.D.H. No 76-U-163 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
110.7	112.1	BLEACHED PHYLLITE (Sb). Broken core, sheared. Buff with	0.2		110.7	112.1	1.4								
		prominent fuchsite spots. Foliation = 50°.													
	112.1	END OF HOLE. Difficult ground. Used mud.													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON D.D.H. Nº 76-U-164 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,931.554m N 3N STARTED SEPTEMBER 2, 1976

DEPARTURE 7,410.180 82W COMPLETED SEPTEMBER 2, 1976

ELEVATION 1.109.773m PROPOSED DEPTH

ULTIMATE DEPTH 50.0m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	+72°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION	Py PbZ	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	3.5	QUARTZ SULFIDE (P).	30 8	0.5	026B	0	3.0	3.0	4.45	5.83	61.37			13.35	17.49	184.11
		Interlaminated sulphides and granular quartz +	50 12	1.4	027B	3.0	4.6	1.6	5.39	7.17	89.83			8.62	11.47	143.73
		sulphides + grey phyllite.	70 15	0.7	028B	4.6	6.1	1.5	7.13	12.01	111.1			10.70	18.02	166.64
			60 10	1.5	029B	6.1	7.6	1.5	3.83	7.06	60.34			5.75	10.59	90.51
			10 5	1.5	030B	7.6	9.1	1.5	1.48	2.98	27.43			2.22	4.47	41.15
3.5	7.0	MASSIVE SULPHIDE (M).	60 10	1.4	031B	9.1	10.7	1.6	4.00	4.65	71.66			6.40	7.44	114.66
		Structureless. 20cm. of white quartz on second	70 8	1.4	032B	10.7	12.2	1.5	6.50	13.52	142.3			9.75	20.28	213.44
		contact (45°).														
					W.Av.	0	12.2	12.2	4.65	7.36	78.22			56.79	89.76	954.24
7.0	10.8	QUARTZ SULPHIDE (P).			W.Av.	3.0	6.1	3.1	6.23	9.51	100.1			19.32	29.49	310.37
		5cm. green gouge 7.0-7.1			W.Av.	9.1	12.2	3.1	5.21	8.94	105.8			16.15	27.72	328.10
		7.8-8.2: Chlorite sericite phyllite, F_2 = 70°.														
		8.2-10.8: Similar to 0-3.5, F_2 = 70°.														
10.8	12.2	MASSIVE SULFIDE (M) (MI?).														
		Mingled pyrite-rich and sphalerite-rich types plus crushed														
		white quartz inclusions?														

LOGGED BY _____ D.D.H. No 76-U-164 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		12.1-12.2: 10cm of black graphitic gouge at 80°.													
12.2	21.3	QUARTZ SERICITE PHYLLITE (S).	8.9/9.1												
		Gray colour. F_1 almost totally destroyed. F_2 strong @ 80°.													
21.3	41.1	QUARTZ CALCITE CHLORITE PHYLLITE (SKC).													
		Pale gray-green colour. Lenses and band of mixed quartz-													
		calcite parallel to F_2 = 85°. No identifiable F_1.													
41.1	42.7	BLEACHED SERICITE WITH SULPHIDE (Sb-P). 5 5	1.6	033B	41.1	42.7	1.6	1.13	0.93	15.09					
		Pale greenish-brown sericite with irregular streaks 70 15	1.5	034B	42.7	44.2	1.5	5.25	4.60	75.77					
		of Sph-Py-Galena. 15 8	1.5	035B	44.2	45.7	1.5	3.00	1.38	45.26					
				W.Av.	42.7	45.7	3.0	4.13	2.99	60.5					
42.7	44.0	MASSIVE SULPHIDES (Mb-MV).													
		Fine grained quartz-barite-pyrite-sphalerite mixture with													
		streaks (flow bands?) rich in galena.													
		43.0-43.2: Core of porous sulphide.													
44.0	45.3	BRECCIA (SbXm).													
		Rounded fragments of Bleached Sericite in a groundmass of													
		vuggy pyrite-galena. Most of the fragments have a rim of													

LOGGED BY _____ D.D.H. No 76-U-164 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		black sulphide (galena?).													
45.3	50.0	BLEACHED SERICITE PHYLLITE (Sb).			45.7	50.0	4.3	Trace	Pz, est.						
		Pale greenish-brown sericite with bands and 2-5cm. masses													
		of quartz and quartz-pyrite. Also scattered 1-5mm bands and													
		lenses of Py-PbZn.													
		F = 60-70°.													
		2													
	50.0	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG PO D.D.H. Nº 76-U-165 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 2N STARTED AUGUST 31, 1976

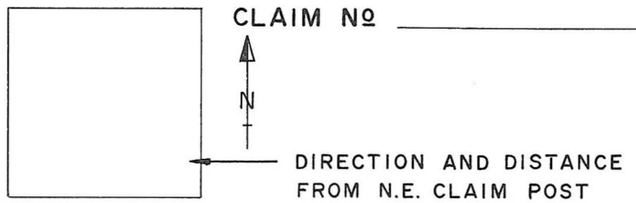
DEPARTURE 64W COMPLETED SEPTEMBER 1, 1976

ELEVATION PROPOSED DEPTH 175' - 53.3m

ULTIMATE DEPTH 175' - 53.3m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-41°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 88%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	9.5	QUARTZ-SULFIDE (P). Competent. Foliation = 0-15°. 40 7	1.8	008B	0	3.0	3.0	2.85	3.59	31.20					
		Sulfides confined in this foliation - probably F (?) 35 6	2.9	009B	3.0	6.1	3.0	0.75	1.15	9.94			1.90	PbZn	
		2.0: Ellipsoidal fold nose closure with Graphitic 35 4	1.4	010B	6.1	7.6	1.5	0.10	0.70	7.20			0.80	PbZn	
		Phyllite core. 30 3	1.5	011B	7.6	9.5	1.9	0.85	1.55	25.37					
		3.5-3.7: Sulfide Bx (MXq-s). Sub-rounded, 1m-1cm sulfides													
		cemented by quartz and fine grained sulfides.		W.Av.	3.0	7.6	4.6	1.53	PbZn						
		9.5: Sharp clean contact with Bleached Phyllite (Sb) = 40°.													
9.5	11.0	BLEACHED SERICITE PHYLLITE (Sb). Soft, fissile. Buff with	1.2		9.5	11.0	1.5								
		silvery white interval. Foliation = 30-35°.													
		11.0: Gradual change to Dark Sericite Phyllite (S).													
11.0	18.2	DARK SERICITE PHYLLITE. Fissile, easily breaks into flakes.													
		Foliation = 0-15°; F = 75°.	6.8		11.0	18.2	7.2								
		18.3: Shear. Contact with Massive Sulfide.													
18.2	41.6	MASSIVE SULFIDE (M). Blocky core from gravel size to 4cm.													

LOGGED BY _____ D.D.H. No 76-U-165 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		long. Very pyritic. Py in clustered aggregates and/or													
		closely spaced Py crystals. Groundmass partly made up of													
		amorphous silica. Po and Mgtt blebs widely distribu- 70 5	2.8	012B	18.2	21.3	3.1	0.73	0.78	23.31			1.51	PbZn	
		ted @ 22.9-24.4 60 3	2.7	013B	21.3	24.4	3.1	0.13	1.13	12.00			1.26	PbZn	
		25.9-27.4: Interval with narrow quartz-graphite 60 4	3.0	014B	24.4	27.4	3.0	1.15	1.30	25.37			2.45	PbZn	
		band (1cm. wide). Banding = 55-60°. 60 3	2.5	015B	27.4	30.5	3.1	0.08	0.70	13.03			0.78	PbZn	
		Barite prisms in cavity walls @ 18.4-26. 60 3	2.8	016B	30.5	33.5	3.0	0.03	0.48	10.97			0.51	PbZn	
		38.1-39.0: Porous variety. Voids = 25°. 50 5	2.8	017B	33.5	36.6	3.1	0.25	0.75	10.97			1.00	PbZn	
		41.6: Sharp clean contact with Graphitic Phyllite (G) 70 6	1.3	018B	36.6	38.1	1.5	2.23	2.95	38.40			3.35	4.43	48.35
		= 40°. 70 4	1.2	019B	38.1	39.6	1.5	1.83	2.23	32.23			2.75	3.35	48.35
41.6	53.3	GRAPHITIC PHYLLITE. Fissile, flakey to soft core. 75 4	2.0	020B	39.6	41.6	2.0	1.10	0.98	24.34					
		Foliation = 15-20°; series of ellipsoidal fold noses f (?)	10.3		41.6	53.3	11.7								
		45.7: FAULT. 10cm. of dark sticky gouge.		W.Av.	18.2	36.6	18.4	1.25	PbZn						
		47.0-47.3: Shear. Slip plane = 20°.		W.Av.	36.6	39.6	3.0	2.03	2.59	35.32			6.10	7.78	105.95
		50.3-50.5: Shear. Slip plane = 25°.													
	53.3	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON D.D.H. Nº 76-U-166 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE *11,020.25m N 7N STARTED SEPTEMBER 3, 1976

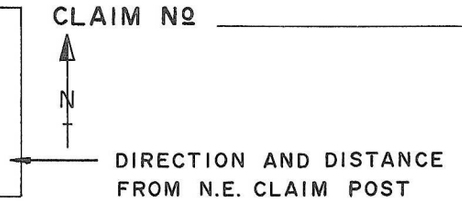
DEPARTURE * 7,495.5m 82W COMPLETED SEPTEMBER 5, 1976

ELEVATION * 1.105.5 PROPOSED DEPTH

* = approximated layout ULTIMATE DEPTH 182.9

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR		-90°
62.48m	214°	-84°
108.20m	184°	-83°
152.40m	150°	-84°

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	4.6	BLEACHED QUARTZ SULPHIDE (P-Sb).													
		Interbanded mix of gray brown sericite, dark gray 30 10	0.3/1.8	058B	0	1.8	1.8	2.23	4.48	52.46			4.01	8.06	94.43
		sericite, massive sulphide and quartz. Bands 15 10	1.2/1.2	059B	1.8	3.0	1.2	3.38	6.88	66.51			4.06	8.26	79.81
		parallel to F_2 @ 80°. 15 8	1.6/1.6	060B	3.0	4.6	1.6	0.83	1.13	15.09			1.33	1.81	24.14
				W.Av.	0	3.0	3.0	2.69	5.44	58.08			8.07	16.32	174.24
4.6	5.9	BLEACHED SILICEOUS SERICITE (Ss).	1.3/1.3		0	4.6	4.6	2.04	3.94	43.0					
		Gray brown colour. Fine grained granular texture. Brown													
		sericite and flecks of mariposite on both F_1 and F_2.													
		F_2 = 45°; F_1 = fold nose.													
5.9	6.9	GRAPHITIC PHYLLITE (G).	1.0/1.0												
		Contorted and sheared graphite phyllite with 1-2cm.													
		quartz sulphide bands.													
6.9	11.2	BLEACHED SILICEOUS SERICITE (Ss).	4.3/4.3												
		Similar to previous section but no F_1. F_2 = 70°.													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
11.2	15.2	QUARTZ SERICITE PHYLLITE (S).	4.0/4.0												
		Dark gray colour. Local blebs and bands of white quartz.													
		F_1 parallel to F_2 ? F_2 @ 80°.													
15.2	18.0	BLEACHED SERICITE (Sb).	2.8/2.8												
		Pale gray borwn colour. F_2 = 60°. Similar to section 6.9-													
		11.2 but less quartz. Contacts sharp at 60°.													
18.0	20.0	GRAPHITIC PHYLLITE (G).	2.0/2.0												
		Similar to previous graphitic section.													
20.0	32.0	QUARTZ SERICITE PHYLLITE (S).	12.0/12.0												
		Dark gray. F_1 destroyed except for numerous small sickle													
		shaped quartz blebs. Prominent F_2 @ 80°. Dark colour may													
		be due to talc.													
32.0	32.2	MASSIVE SULPHIDE (MI).													
		Fine grained Pyrite-Sphalerite-Galena mix with 70 15	0.2/0.2		32.0	32.2									
		siliceous inclusions. Contact sharp @ 80°.													
32.2	35.1	QUARTZ SERICITE PHYLLITE (S).	2.9/2.9												
		Similar to previous. F_2 = 80°.													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
35.1	40.2	QUARTZ SULPHIDE (P).													
		Interbanded quartz-sulphide, gray phyllite and 30 12	1.5/1.5	061B	35.1	36.6	1.5	4.45	7.34	67.54			6.68	11.01	101.31
		massive sulphide material. Bands generally parallel 30 8	1.5/1.5	062B	36.6	38.1	1.5	2.15	1.90	34.29					
		F_2 at 75°. 20 6	2.1/2.1	063B	38.1	40.2	2.1	1.73	2.18	25.37					
				W.Av.	35.1	38.1	3.0	3.30	4.62	50.9					
40.2	42.9	BLEACHED SERICITE (Sb).	2.7/2.7												
42.9	54.9	QUARTZ SERICITE PHYLLITE PLUS QUARTZ SULPHIDE (S-P).													
		Dark gray phyllite with wisps and laminae of red 3 2	4.6/4.6		42.9	47.5		est.	1 PZ.						
		sphalerite. Also scattered quartz sulphide bands. 5 5	1.5/1.5	064B	47.5	49.0	1.5	1.20	1.35	20.23					
		F_1 parallel to F_2 = 90°. 1 Tr.	2.6/2.6		49.0	51.6									
		5 3	1.7/1.7	065B	51.6	53.3	1.7	0.95	1.70	17.14			2.65	PbZn	
		5 5	1.6/1.6	066B	53.3	54.9	1.6	0.88	2.00	14.06			2.88	PbZn	
				W.Av.	51.6	54.9	3.3	2.76	PbZn						
54.9	62.5	QUARTZ SERICITE PHYLLITE (S).	7.6/7.6												
		Dark gray colour. Local quartz lenses. Tightly folded F_1													
		visible at 59.0, 59.6.													
62.5	70.4	CHLORITE BIOTITE PHYLLITE (Cb).	7.9/7.9												
		Pale gray-green colour with streaks of brown biotite.													
		F_2 = 80°.													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
70.4	84.6	QUARTZ SERICITE PHYLLITE (S).	14.2/14.2												
		Similar to 54.9-62.5. F = 80°.													
		2													
		Scattered blebs of magnetic pyrrhotite.													
84.6	85.5	CHLORITE BIOTITE PHYLLITE (Cb)	0.9/0.9												
85.5	95.5	QUARTZ SERICITE PHYLLITE (S).	10.0/10.0												
		F = 90°.													
		2													
95.5	110.0	QUARTZ SERICITE BIOTITE PHYLLITE (Sb).	14.5/14.5												
		Dark gray colour. Peculiar fine grained augen or granulite													
		type texture. 1mm. grains of quartz, biotite and pyrite in													
		aphanitic groundmass. F = 85-90°. Scattered irregular													
		2													
		quartz veins with traces of Py and Galena.													
110.0	112.8	QUARTZ SERICITE PHYLLITE (S).	2.8/2.8												
		Dark gray colour.													
112.8	114.1	QUARTZ SULPHIDE (P).													
		10-20cm. bands of quartz, sulphide, bleached quartz sulphide													
		and dark gray sericite phyllite. F = 85°.													
		2													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 5

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		5 2	1.2/1.2	067B	112.8	114.0	1.2	0.70	0.90	10.97					
114.1	120.2	MASSIVE SULPHIDE (M). 80 12	1.8/1.8	068B	114.0	115.8	1.8	3.18	4.75	59.31			5.72	8.55	106.76
		Very fine grained. Structureless except for 80 15	1.5/1.5	069B	115.8	117.3	1.5	3.53	4.40	53.49			5.30	6.60	80.24
		occasional streaks of sphalerite at 45°; 80 15	1.6/1.6	070B	117.3	118.9	1.6	3.18	3.85	49.03			5.09	6.16	78.45
		114.1-116.0: Contains up to 10% barite. 75 12	1.5/1.5	071B	118.9	120.4	1.5	2.78	4.10	50.40			4.17	6.15	75.60
		114.9-115.1: Bleached Sericite		W.Av.	114.0	120.4	6.4	3.17	4.29	53.29			20.28	27.46	341.05
		115.3-115.7: Bleached Sericite plus Mariposite.													
		119.3-119.6: Quartz Graphite Phyllite.													
		All contacts sharp at 60-80°.													
120.2	122.1	BLEACHED SERICITE AND BRECCIA.													
		Crushed fragments of white quartz and quartz sulphide in a													
		tan sericite groundmass with streaks of mariposite. F_2 = 80°													
122.1	123.6	QUARTZ SULPHIDE (P).	1.5/1.5	072B	122.1	123.6	1.5	0.98	1.68	15.09					
		Granular beaded texture. F_2 = 90°. Py: 15, PbZn: 5													
123.6	124.6	QUARTZ VEIN (Q-Sbm).													
		Includes masses of white quartz mingle with bleached													
		sericite and mariposite.													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 6

Interval From	Interval To	DESCRIPTION		Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
124.6	125.2	QUARTZ SULPHIDE (P).							Trace	PZ?						
125.2	128.5	QUARTZ SERICITE PHYLLITE (S).														
128.5	138.2	BLEACHED QUARTZ SERICITE-SULPHIDE (P-Ss).														
		Ragged bands of cherty quartz, bleached sericite,	5 1	2.6/2.6		128.5	131.1									
		and pyrite-sphalerite at 90°.	5 3	1.5/1.5	073B	131.1	132.6	1.5	0.58	0.55	9.94					
			8 5	1.5/1.5	074B	132.6	134.1	1.5	1.45	2.48	22.29			3.93	PbZn	
			5 3	1.5/1.5	075B	134.1	135.6	1.5	0.80	1.45	15.09			2.25	PbZn	
			2 1	2.6/2.6		135.6	138.2									
					W.Av.	132.6	135.6	3.0	3.09	PbZn						
138.2	148.3	QUARTZ SULPHIDE (P).														
		Ragged bands of massive Py-Sphalerite and coarse	20 8	2.0/2.0	076B	138.2	140.2	2.0	2.98	4.25	41.49			5.96	8.50	82.98
		granular quartz sericite-pyrite material.	20 8	1.5/1.5	077B	140.2	141.7	1.5	5.81	7.52	75.77			8.72	11.28	113.66
		Banding at 60°. Toward the end of section grades	20 10	1.6/1.6	078B	141.7	143.3	1.6	4.28	5.55	55.54			6.85	8.88	88.86
		into a breccia of large (5cm.) fragments of quartz-	40 10	1.5/1.5	079B	143.3	144.8	1.5	0.22	0.60	14.06			0.82	PbZn	
		sulphide in a sulphide groundmass.	50 10	1.5/1.5	080B	144.8	146.3	1.5	0.65	0.50	19.20			1.15	PbZn	
			60 8	2.0/2.0	081B	146.3	148.3	2.0	0.56	0.58	21.26			1.14	PbZn	
			80 6	1.4/1.4	082B	148.3	149.7	1.4	1.50	0.95	29.14			2.10	1.33	40.8
			50 10	0.8/0.8	083B	149.7	150.5	0.8	4.05	6.01	56.57			3.24	4.81	45.26

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 7

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
148.3	149.7	MASSIVE SULPHIDE (M).													
		Structureless, fine grained and pyritic. Contains		W.Av.	138.2	143.3	5.1	4.22	5.62	55.98			21.53	28.66	285.50
		occasional inclusions of quartz-sulphide.		W.Av.	140.2	143.3	3.1	5.02	6.50	65.33			15.57	20.16	202.52
				W.Av.	143.3	148.3	5.0	1.05	PbZn						
				W.Av.	147.5	150.5	3.0	1.93	2.20	34.4			5.79	6.60	103.07
149.7	150.5	QUARTZ SULPHIDE (P).													
		Similar to section 138.2-148.3													
150.5	161.5	QUARTZ SERICITE PHYLLITE (S).													
		Dark gray colour. F_1 destroyed; F_2 = 80°. Irregular													
		veins of quartz, scattered blebs of magnetic pyrrhotite.													
161.5	164.8	BLEACHED SERICITE BIOTITE PHYLLITE (SbB).													
		Gray-green quartz-sericite with 5-10mm. streaks of brown													
		biotite-pyrite-pyrrhotite.													
		164.5-164.8: FAULT GOUGE.													
164.8	165.8	QUARTZ SERICITE PHYLLITE(S)													
		F_2 = 80°.													
165.8	172.8	BLEACHED SERICITE WITH SULPHIDES (SbPo).													
		Gray-tan quartz-sericite with numerous blebs and bands up to													

LOGGED BY _____ D.D.H. No 76-U-166 PAGE 8

Interval From	Interval To	DESCRIPTION	Po	PZ	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		5cm. of magnetic phrrhotite with traces of sphalerite.	10	2	1.6/1.6	084B	169.1	170.7	1.6	0.70	0.75	8.91					
172.8	178.5	QUARTZ SERICITE PHYLLITE (S).															
		F parallel to F = 80°.															
		1 2															
178.5	182.9	BLEACHED SERICITE WITH SULPHIDE (Sb-P).															
		Pale tan sericite with irregular 5-10mm streaks of Py + PO.															
		Minor chlorite. F = 80°.	8	1	2.9/2.9		178.5	181.4	2.9								
		2	10	1	1.5/1.5		181.4	182.9	1.5								
	182.9	END OF HOLE.															

DIAMOND DRILL RECORD

LOGGED BY ALEXANDER YOUNG-PO D.D.H. Nº 76-U-167 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 2N STARTED SEPTEMBER 1, 1976

DEPARTURE 64W COMPLETED SEPTEMBER 2, 1976

ELEVATION PROPOSED DEPTH

ULTIMATE DEPTH 203' - 61.8m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	+38°

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

TOTAL CORE RECOVERY: 93%

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	6.1	QUARTZ-SULFIDE (P). Competent. Foliation = 55-65°. 25 3	1.8	4891	0	3.0	3.0	0.15	0.78	7.20					
		0-1.6: Sulfide bx (PXq). Ø = 1mm - 1cm. angular to 30 4	1.4	4892	3.0	4.6	1.6	0.78	1.28	22.29					
		sub-rounded sulfides cemented by quartz. 30 4	1.5	4893	4.6	6.1	1.5	1.63	2.68	29.14					
		2.5-3.0: Graphite as thin laminae (PG). Foliation = 70°.													
		6.1: Sharp wavy contact with Graphitic Sericite Phyllite													
		(SG) = 80°.													
6.1	13.7	GRAPHITIC SERICITE PHYLLITE (SG). Very fissile. Core breaks	5.1		6.1	11.6	5.5								
		easily to poker chips/flakes.													
		F = 70-75°; F is perpendicular to F .													
		2 1 2													
		9.5-10: Bleached Sericite Phyllite (Sb). Silvery white with													
		thin buff laminae. Foliation = 80°.													
		11.6-12.7: Quartz-sulfide interval with wide sulfide 45 8	1.0	4894	11.6	12.7	1.1	5.89	7.30	84.69					
		band. Banding = 75° (Po+Mgtt/quartz/Py-Sph-Gal).													
		First contact = 80°; 2nd - broken core - shear.	1.0		12.7	13.7	1.0								
		13.7: Gradual change to Sericite Phyllite (S).													

LOGGED BY _____ D.D.H. No 76-U-167 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
13.7	21.2	DARK SERICITE PHYLLITE (S). Fissile. Breaks into poker	7.0		13.7	21.2	7.5								
		chips. Foliation = 50-55°; F_1 is perpendicular to F_2.													
		21.2: Gradual change to Chlorite Phyllite Unit (C).													
21.2	22.5	CHLORITE UNIT WITH TRACE CALCITE (C+K). Competent.	1.3		21.2	22.5	1.3								
		Green and white stripes. F_2 = 50°; F_1 = 0-5°. Chlorite													
		marking F_1 folds.													
		22.5: Sharp contact with Sericite Phyllite with Trace of													
		Graphite (S+G) = 70°.													
22.5	25.6	SERICITE PHYLLITE WITH TRACE GRAPHITE (S+G). Competent.	3.0		22.5	25.6	3.1								
		F_2 = 75-80°; F_1 = 0-5°.													
		25.6: Gradual change to Bleached Sericite-Chloritic Phyl-													
		lite (Sbc).													
25.6	28.0	BLEACHED SERICITE-CHLORITIC (Sbc) PHYLLITE. Competent.	2.4		25.6	28.0	2.4								
		Buff with green stripes/spots. F_2 = 65°; F_1 = F_2 @ 25.9.													
		Foldnose closure at 26.1 with sulfides in the core.													
		28.0: Abrupt change to Dark Sericite Phyllite with trace of													
		Graphite.													
28.0	32.2	DARK SERICITE PHYLLITE WITH TRACE GRAPHITE (S+G).	4.0		28.0	32.0	4.0								

LOGGED BY _____ D.D.H. No 76-U-167 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Fissile, breaks easily into blocks/chips. F_2 = 70-75°; F_1 = 5-10°.													
		32.2: Shear contact with Massive Sulfides (M). Plane = 80°													
32.2	48.8	MASSIVE SULFIDE WITH POROUS, BANDED AND BARITE-IN 60 10	1.4	4895	32.0	33.5	1.5	5.40	9.79	73.71			8.10	14.69	110.57
		GROUNDMASS VARIETIES (MV, MB, Mb). Competent. 60 15	1.6	4896	33.5	35.1	1.6	4.73	6.76	68.57			7.57	10.82	109.71
		Compositional banding = 65° @ 33-34; 30° @ 35.1-37; 50 10	1.5	4897	35.1	36.6	1.5	4.65	7.92	68.57			6.98	11.88	102.86
		65-70° @ 39.4-42. Barite in groundmass @ 35.1-36; 60 8	1.5	4898	36.6	38.1	1.5	4.05	4.25	69.60			6.08	6.38	104.4
		39.6-42. 65 12	1.5	4899	38.1	39.6	1.5	4.58	6.41	82.63			6.87	9.62	123.95
		33.6-33.7: Chlorite unit. Contacts both clean and 50 7	1.5	4900	39.6	41.1	1.5	3.80	6.24	66.51			5.70	9.36	99.77
		sharp = 85°. 45 7	1.3	021B	41.1	42.7	1.6	4.30	6.93	73.71			6.88	11.09	117.94
		39.3-39.4: Bleached Phyllite (Sb) with prominent 50 7	1.3	022B	42.7	44.2	1.5	6.00	10.81	87.77			9.00	16.22	131.66
		fuchsite laminae. Foliation = 70°. Con- 70 8	1.4	023B	44.2	45.7	1.5	5.40	6.74	70.63			8.10	10.11	105.95
		tacts clean and sharp = 85°. 65 12	1.2	024B	45.7	47.2	1.5	8.70	13.62	124.1			13.05	20.43	186.18
		42.3-42.6: Graphitic Phyllite unit. Foliation = 45°. 70 12	1.3	025B	47.2	48.8	1.6	7.03	14.77	104.9			11.25	23.63	167.87
		Contacts broken ground.													
		46-46.5: Porous variety. Voids = 75°.		W.Av.	38.1	42.7	4.6	4.23	6.54	74.27			19.45	30.07	341.66
		46.7-46.9: Bleached Phyllite. Buff with prominent fuchsite.		W.Av.	42.7	48.8	6.1	6.79	11.54	96.99			41.40	70.39	591.66
		Foliation = 65°. Contacts = 65°.		W.Av.	32.0	48.8	16.8	5.33	8.59	81.00			89.58	144.23	1360.9
		48.8: Shear contact with Graphitic Phyllite (G).													
		Plane = 85°.													

LOGGED BY _____ D.D.H. No 76-U-167 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
48.8	61.8	GRAPHITIC PHYLLITE (G). Fissile, breaks easily into poker	12.5		48.8	61.8	13.0								
		chips. Trace of calcite. F_2 = 75-80°; F_1 = 0-5°. Series													
		of small F_1 fold noses. Sporadic Po blebs with Py.													
	61.8	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON

D.D.H. Nº 76-U-168 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 11,018.004m 82W STARTED

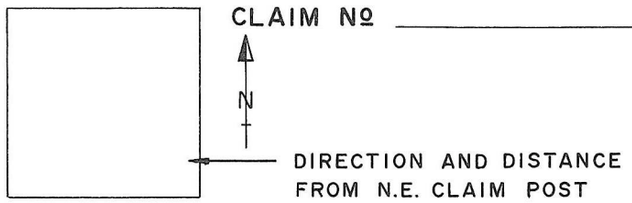
DEPARTURE 7,495.327 7N COMPLETED

ELEVATION 1,105.491m PROPOSED DEPTH

ULTIMATE DEPTH 166.7

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	-60°
62.58m	210°	-71°
100.58m	203°	-74°
131.08m	192°	-75°
161.54m	177°	-76° 30'

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	1.8	MASSIVE SULPHIDE (M).	80 10	0.3/1.8	B152	0	1.8	1.8	7.51	19.38	161.5			13.52	34.88	290.68
			15 8	1.6/1.9	153	1.8	3.7	1.9	2.58	8.03	48.34			4.90	15.26	91.85
1.8	9.1	QUARTZ SULPHIDE (P).	15 12	0.8/0.9	154	3.7	4.6	0.9	3.40	7.47	63.43			3.06	6.72	57.09
		Interbanded quartz sericite phyllite and sulphides.	15 8	1.5/1.5	B155	4.6	6.1	1.5	4.73	10.95	74.74			7.10	16.43	112.11
		Banding @ 45-80° (F ?).	15 6	1.5/1.5	156	6.1	7.6	1.5	2.43	7.95	44.23			3.65	11.93	66.35
		2	15 6	1.5/1.5	157	7.6	9.1	1.5	0.07	0.10	1.03			0.11	0.15	1.55
9.1	16.4	QUARTZ GRAPHITE PHYLLITE (G).			W.Av.	0	6.1	6.1	4.69	12.01	90.4			28.58	73.29	551.73
		Gray, black and white stripped. Drag folded F bands cut			W.Av.	0	7.6	7.6	4.24	11.21	81.33			32.23	85.22	618.08
		by F @ 70°. Scattered pyrite porphyroblasts 3-5mm.			W.Av.	1.8	4.6	2.8	2.84	7.58	53.19			7.96	21.98	148.94
		2														
16.4	17.6	BLEACHED SERICITE (Sb).														
		Tan colour. Contains much fine pyrite plus tan	10 10	1.1/1.1	B158	16.4	17.5	1.1	2.25	4.50	39.43			2.48	4.95	43.37
		ankerite? sphalerite?		/2.1		17.5	19.6									
			15 5	1.0/1.0	B159	19.6	20.6	1.0	0.40	0.73	12.00			0.40	0.73	12.00
17.6	19.6	QUARTZ GRAPHITE PHYLLITE (G).														
		F = 70°. Scattered pyrite.														
		2														

LOGGED BY _____ D.D.H. No 76-U-168 PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
19.6	26.5	BLEACHED SERICITE (Sb). Tan colour.													
		19.6-23.0: Massive and unfoliated with 1-2mm phenocrysts of													
		mariposite and feldspar (?). May be an igneous													
		dyke.													
		23.0-26.5: Similar to above but with strong F_2 foliation at													
		60°. Several 5-10cm irregular veins of massive													
		sulphide.													
26.5	30.9	QUARTZ SERICITE PHYLLITE (S).		W.Av.	30.9	38.1	7.2	3.75	7.15	61.73			26.99	51.46	444.42
				W.Av.	30.9	33.5	2.6	3.29	6.85	52.2			8.56	17.81	135.67
		F_2 = 60°.		W.Av.	33.5	36.6	3.1	4.32	7.83	72.22			13.4	24.26	223.89
30.9	32.0	MASSIVE SULPHIDE (MI).		W.Av.	30.9	36.6	5.7	3.85	7.38	63.1			21.96	42.07	359.56
		Fine grained pyrite-sphalerite mix with irregular 70 25	1.1/1.1	B160	30.9	32.0	1.1	6.47	13.80	107.0			7.12	15.18	117.67
		white inclusions. 10 5	1.5/1.5	B161	32.0	33.5	1.5	0.96	1.75	12.00			1.44	2.63	18.00
32.0	33.5	BLEACHED SERICITE (Sb). 50 12	1.6/1.6	B162	33.5	35.1	1.6	4.50	8.02	73.71			7.20	12.83	117.94
		F_2 = 45°. 50 12	1.5/1.5	B163	35.1	36.6	1.5	4.13	7.62	70.63			6.20	11.43	105.95
33.5	38.1	MIXED MASSIVE & QUARTZ SULPHIDE (M-P). 40 8	1.5/1.5	B164	36.6	38.1	1.5	3.35	6.26	56.57			5.03	9.39	84.86
		F_2 = 80°.													
38.1	44.2	QUARTZ SERICITE GRAPHITE PHYLLITE (Sg).													
		Weak and friable. F_2 = 75°.													

LOGGED BY _____ D.D.H. No 76-U-168 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
44.2	48.8	QUARTZ SERICITE PHYLLITE (S). Traces of sphalerite.													
		Gray sphalerite with 3% Py and 1% sphalerite in thin flakes													
		and bands parallel to F_2 . F_2 = 80°.													
48.8	63.0	QUARTZ SERICITE PHYLLITE (S).													
		Dark gray colour. Short sections of Sb. F_2 = 70°.													
63.0	67.0	QUARTZ SERICITE BIOTITE PHYLLITE (SB).													
		Dark gray-green phyllite with brown streaks of biotite.													
		Strong F_2 = 60°.													
		62.6-63.0: White quartz with specks of galena and arseno-													
		pyrite.													
67.0	82.0	QUARTZ CALCITE CHLORITE PHYLLITE (SKc).													
		Gray green colour. F_2 = 80°.													
82.0	106.0	QUARTZ CHLORITE PHYLLITE (Cb).	24.0/24.0												
		Flakey, drag folded chlorite phyllite cut by F_2 @ 70°.													
		Fine brown specks may be biotite. Local irregular masses of													
		white quartz.													

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
106.0	110.0	BLEACHED QUARTZ SERICITE (Sb).	4.0/4.0												
		Scattered streaks of Pyrite. F_2 = 70°.													
110.0	116.5	QUARTZ SULPHIDES WITH GRAPHITE (Pg).	6.0/6.5												
		Tightly folded F_1 quartz sulphide bands cut by 80° F_2													
		planes. Traces of graphite on F_2.		W.Av.	116.5	124.5	8.0	5.13	8.2	88.65			41.05	65.59	709.22
		Pyrite = 10%; PbZn: Trace?													
					110.0	115.0		Trace? (or 2%) est.							
116.5	124.5	MASSIVE SULPHIDE (Mb). 20 5	1.5/1.5	B324	115.0	116.5	1.5	1.15	1.43	21.26					
		Fine grained structureless with about 10% quartz 70 15	1.5/1.5	B325	116.5	118.0	1.5	4.65	7.65	79.54			6.98	11.33	119.31
		and perhaps up to 10% barite. 70 15	1.5/1.5	B326	118.0	119.5	1.5	5.00	8.68	87.77			7.50	13.02	131.66
		Contacts sharp @ 90°/ 70 15	1.5/1.5	B327	119.5	121.0	1.5	5.46	8.91	85.72			8.19	13.37	128.58
		Up to 30% interstitial gray barite. 70 15	1.5/1.5	B328	121.0	122.5	1.5	5.45	9.03	90.86			8.18	13.55	136.29
		70 15	2.0/2.0	B329	122.5	124.5	2.0	5.10	7.16	96.69			10.2	14.32	193.38
124.5	133.9	QUARTZ GRAPHITE PHYLLITE (G).													
		Black and gray colour. F_1 generally parallel to F_2 except													
		in fold nose areas at 127.5, 130.9, 133.8. F_2 = 80°.													
		Local irregular blebs of pyrrhotite.													
133.9	144.8	MASSIVE SULPHIDE (Mb). 95 5	1.7/1.7	B330	133.9	135.6	1.7	3.28	2.70	53.49			55.76	4.59	90.93
		Fine grained. Occasional sphalerite-rich bands 90 8	1.6/1.6	B331	135.6	137.2	1.6	2.13	1.30	33.26			3.408	2.08	53.21

LOGGED BY _____ D.D.H. No 76-U-168 PAGE 5

Interval From	Interval To	DESCRIPTION		Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		at 50°.	80 10	1.5/1.5	B332	137.2	138.7	1.5	4.50	7.08	65.49			6.75	10.62	98.24
		Up to 30% interstitial barite past 137.5.	70 15	1.5/1.5	B333	138.7	140.2	1.5	4.00	8.06	61.37			6.00	12.09	92.06
		Sharp contact at 60°.	70 15	1.5/1.5	B334	140.2	141.7	1.5	5.20	9.24	95.66			7.80	13.86	143.49
			70 15	1.6/1.6	B335	141.7	143.3	1.6	5.90	9.59	90.86			9.44	15.34	145.38
144.8	147.8	BRECCIATED QUARTZ SULPHIDE (PXq).	70 15	1.5/1.5	B336	143.3	144.8	1.5	5.00	8.01	83.66			7.50	12.02	125.49
		Angular 5-10mm fragments of quartz sulphide in	15 5	1.5/1.5	B337	144.8	146.3	1.5	0.63	1.05	13.03			1.68	PbZn	
		a barite quartz groundmass.	10 3	1.5/1.5	B338	146.3	147.8	1.5	0.20	0.55	9.94			0.75	PbZn	
					W.Av.	133.9	137.2	3.3	4.74	PbZn						
					W.Av.	137.2	144.8	7.6	4.93	8.41	79.56			37.49	63.93	604.66
147.8	150.0	BLEACHED SERICITE PHYLLITE (Sbm).			W.Av.	144.8	147.8	3.0	1.22	PbZn						
		Pale tan colour flecked with pale green mariposite.			W.Av.	138.7	144.8	6.1	5.04	8.74	83.0			30.74	53.31	506.42
		F = 80°.														
		2														
150.0	152.5	QUARTZ SULPHIDE.	20 5	0.9/0.9	B339	150.0	150.9	0.9	0.10	0.18	7.20					
		Coarse grained beaded quartz and pyrite with graphitic	20 5	1.5/1.5	B340	150.9	152.4	1.5	1.00	1.05	20.23					
		parlings at 60°.	80 10	1.5/1.5	B341	152.4	153.9	1.5	3.85	6.93	56.57			5.78	10.40	84.86
			80 15	1.5/1.5	B342	153.9	155.4	1.5	3.90	6.53	65.49			5.85	9.80	98.24
			70 15	1.1/1.1	B343	155.4	156.5	1.1	4.65	6.35	65.49			5.12	6.99	72.04
152.5	156.5	MASSIVE SULPHIDE.														
		Fine grained and pyritic to 154.0.			W.Av.	152.4	156.5	4.1	4.09	6.63	62.23			16.75	27.19	255.14
		154.0-156.5: Streaks of quartz sulphide at 60°; medium														
		grained with brown intersititial sphalerite.														

LOGGED BY _____ D.D.H. No 76-U-168 PAGE 6

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
		Sharp second contact at 50°.													
156.5	166.7	QUARTZ SERICITE PHYLLITE (S).													
		Gray colour. Fissile. No F_1, F_2 at 80°.													
		Scattered blebs and bands of magnetic pyrrhotite.													
	166.7	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON

D.D.H. Nº 76-U-169 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 10,484.50 N 2N STARTED SEPTEMBER 2, 1976

DEPARTURE 7.822.00 E 62W COMPLETED SEPTEMBER 2, 1976

ELEVATION 1,193.07 PROPOSED DEPTH

ULTIMATE DEPTH 45.7

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	044°	FLAT

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION		Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	7.6	QUARTZ SULPHIDE WITH GRAPHITE (Pg).														
		Alternating streaks and bands of graphitic		0.3/2.1		0	2.1									
		phyllite and coarse granular quartz-pyrite	30 2	0.3/1.9	036B	2.1	3.0	0.9	0.05	0.43	6.17					
		mixture. F_1 destroyed. F_2 = 45°.	30 2	1.0/1.6	037B	3.0	4.6	1.6	0.04	0.93	7.20					
7.6	7.9	BRECCIA (PXg).	30 2	1.4/1.5	038B	4.6	6.1	1.5	0.50	0.68	9.94				0.77	PbZn
		Angular, well defined fragments of quartz sulphide	30 2	1.1/1.5	039B	6.1	7.6	1.5	0.08	0.25	5.14					
		in a groundmass of graphitic material.	30 2	1.4/1.5	040B	7.6	9.1	1.5	0.08	0.58	8.91					
7.9	45.7	QUARTZ SULPHIDE WITH GRAPHITE (Pg).	30 2	.8/1.6	041B	9.1	10.7	1.6	0.05	0.50	9.94					
		Similar to previous run. F_2 = 45°.		.2/3.0		10.7	13.7									
		Core ground 10.7-13.7, 20.4-?	30 2	1.5/1.9	042B	13.7	15.2	1.5	0.04	0.18	7.20					
		Scattered blebs of chalcopyrite.	30 2	1.4/1.6	043B	15.2	16.8	1.6	0.15	0.38	8.91					
		30.0-37.0: F_1 at high angle to F_2. F_2 = 40-50°.	30 2	1.0/1.5	044B	16.8	18.3	1.5	0.05	0.15	5.14				0.32	PbZn
		Not sampled past 23.5.	30 2	1.4/1.5	045B	18.3	19.8	1.5	0.18	0.33	8.23					
		23.5-45.7: Py: 30, PbZn: 2	30 2	1.0/2.1	046B	19.8	21.9	2.1	0.13	0.18	5.14					
			30 2	1.5/0.8	047B	21.9	23.5	1.5	0.08	0.08	2.06					
		Recovery 23.5-45.7 ---------->		19.0/22.2												

LOGGED BY _____ D.D.H. No 76-U-169 PAGE 2

Interval		DESCRIPTION	Recovery	Sample	Interval		Sample	Assay					Assay x		
From	To			No	From	To	Length	Pb	Zn	Ag	Au	Cu	Pb	Zn	Ag
	45.7	END OF HOLE													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON D.D.H. Nº 76-U-170 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 11,021.845m N 5N STARTED SEPTEMBER 1, 1976

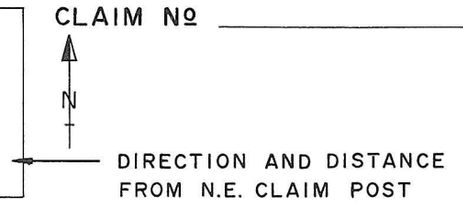
DEPARTURE 7,412.454m E 84W COMPLETED SEPTEMBER 10, 1976

ELEVATION 1,099.860 PROPOSED DEPTH 525' - 160m

ULTIMATE DEPTH - 96.3m

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	7° 35'	-88° 39'

CLAIM Nº



DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION	Py	PZ	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	30.5	QUARTZ SULPHIDE (P).	10	3	1.0/1.5	048B	0	1.5	1.5	3.08	4.50	57.60			4.62	6.75	86.4
		Interlaminated quartz-pyrite and gray sericite plus	15	5	1.5/1.5	049B	1.5	3.0	1.5	2.53	4.30	49.37			3.80	6.45	74.60
		2-5cm. bands of massive sulphide. F_1 banding trends	20	8	1.4/1.5	050B	3.0	4.6	1.6	5.60	7.77	83.66			7.2	12.43	133.86
		generally parallel to the core. F_1 folded and sliced	20	5	1.5/1.5	051B	4.6	6.1	1.5	2.38	3.25	41.49			3.57	4.88	62.24
		by F_2 @ 80-90°. Sulphides follow both F_1 and F_2.	15	5	1.4/1.5	052B	6.1	7.6	1.5	2.60	4.90	56.57			3.90	7.35	84.86
			15	5	1.5/1.5	053B	7.6	9.1	1.5	2.03	3.85	40.46			3.05	5.78	60.69
			15	5	1.4/1.5	054B	9.1	10.7	1.6	1.30	1.43	22.29			2.08	2.29	35.66
			15	5	1.5/1.5	055B	10.7	12.2	1.5	1.20	1.50	18.17			1.8	2.25	27.26
30.5	32.5	SAND & MUD SEAM - FAULT.	15	5	1.5/1.5	056B	12.2	13.7	1.5	2.55	2.80	40.46			3.23	4.2	60.69
		Most of core lost.	15	5	1.3/1.5	057B	13.7	15.2	1.5	2.03	4.00	35.31			3.05	6.0	52.97
			10	5	/1.6	165B	15.2	16.8	1.6	1.38	3.00	23.31			2.21	4.80	37.30
32.5	33.5	BRECCIA (PXp).	10	5	/1.5	166B	16.8	18.3	1.5	1.65	3.75	30.17			2.48	5.63	45.26
			8	3	/1.5	167B	18.3	19.8	1.5	1.60	3.68	26.40			2.4	5.52	39.60
			5	2	/1.5	168B	19.8	21.3	1.5	0.43	0.95	6.17			1.38	PbZn	
			5	1	/1.6	169B	21.3	22.9	1.6	0.60	1.23	9.94			1.83	PbZn	

LOGGED BY _____ D.D.H. Nº 76-U-170 PAGE 2

Interval From	Interval To	DESCRIPTION	Py	Pz	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
			5	1	1.5/1.5	B170	22.9	24.4	1.5	0.28	0.90	6.17			1.18	PbZn	
			15	3	1.4/1.5	B171	24.4	25.9	1.5	0.90	1.20	15.09			1.35	1.80	22.64
			10	2	1.4/1.5	B172	25.9	27.4	1.5	1.13	1.85	18.17			1.70	2.78	27.26
			5	2	1.5/1.6	B173	27.4	29.0	1.6	0.93	1.33	15.09			1.49	2.13	24.14
			5	2	1.5/1.5	B174	29.0	30.5	1.5	0.50	0.58	8.23					
					min?/2.0		30.5	32.5		NIL							
			10	5	0.7/1.0	B175	32.5	33.5	1.0	3.25	4.45	52.46			3.25	4.45	52.46
33.5	36.0	MASSIVE SULPHIDE (MI).	75	15	0.6/1.2	B176	33.5	34.7	1.2	7.88	18.48	136.1			9.46	22.18	163.34
		2-3cm. white quartz inclusions.	60	18	1.5/1.6	B177	34.7	36.3	1.6	4.38	7.55	81.60			7.01	12.08	130.56
			70	15	2.1/2.1	B178	36.3	38.4	2.1	3.90	7.20	70.63			8.19	15.12	148.32
36.0	36.9	BLEACHED SERICITE (Sb).	50	12	1.5/1.5	B179	38.4	39.9	1.5	3.88	4.95	56.57			5.82	7.43	84.86
			60	12	1.1/1.5	B180	39.9	41.4	1.5	6.00	7.22	95.66			9.00	10.83	143.49
36.9	37.9	MASSIVE SULPHIDE (MI).	50	8	1.6/1.6	B181	41.4	43.0	1.6	2.50	5.63	49.37			4.00	9.01	78.99
			70	10	1.5/1.5	B182	43.0	44.5	1.5	2.95	5.30	50.40			4.43	7.95	75.6
37.9	40.5	QUARTZ SULPHIDE (P).	70	10	1.5/1.5	B183	44.5	46.0	1.5	4.28	11.31	84.69			6.42	16.97	127.04
			50	8	1.6/1.6	B184	46.0	47.6	1.6	5.40	7.16	94.63			8.64	11.46	151.41
40.5	42.1	MASSIVE SULPHIDE (MI).	60	10	1.5/1.5	B185	47.6	49.1	1.5	5.90	6.64	99.77			8.85	9.96	149.66
			60	10	1.4/1.5	B186	49.1	50.6	1.5	2.20	3.95	35.31			3.30	5.93	52.97
42.1	42.7	BLEACHED SERICITE (Sb).	40	8	1.5/1.5	B187	50.6	52.1	1.5	5.63	7.37	80.57			8.48	11.06	120.86
			30	8	1.5/1.5	B188	52.1	53.6	1.5	4.05	4.35	57.60			6.08	6.53	86.40
42.7	46.6	MASSIVE SULPHIDE (MI).	50	12	1.6/1.6	B189	53.6	55.2	1.6	1.65	4.10	34.29					
		Second contact at 80°.															

LOGGED BY _____ D.D.H. No 76-U-170 PAGE 3

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
				W.Av.	0	7.6	7.6	3.04	4.98	58.1			23.09	37.86	441.42
46.6	55.2	QUARTZ SULPHIDE (P).		W.Av.	0	4.6	4.6	3.40	5.57	63.98			15.62	25.63	294.32
				W.Av.	0	9.1	9.1	2.87	4.8	55.2			26.14	43.64	502.11
		F = 70°.		W.Av.	1.5	4.6	3.1	3.55	6.09	67.1			11.00	18.88	207.92
		2		W.Av.	9.1	12.2	3.1	1.25	1.46	20.30			3.88	4.54	62.92
		Short sections of massive sulphide 5-10cm.		W.Av.	15.2	19.8	4.6	1.54	3.47	26.56			7.09	15.95	122.16
				W.Av.	12.2	19.8	7.6	1.84	3.44	31.0			13.97	26.15	235.82
				W.Av.	19.8	24.4	4.0	1.47	PbZn						
				W.Av.	24.4	29.0	4.6	0.99	1.46	16.10			4.54	6.71	74.04
55.2	64.3	QUARTZ SERICITE PHYLLITE WITH SCATTERED (S-P) BANDS OF QUARTZ		W.Av.	32.5	53.6	21.1	4.40	7.15	74.22			92.93	150.96	1565.96
		SULPHIDE parallel to F @ 85°.		W.Av.	33.5	36.5	3.0	5.75	11.90	102.68			17.25	35.70	308.03
		2		W.Av.	41.4	44.5	3.1	2.72	5.47	49.87			8.43	16.96	154.59
		Traces of sphalerite and galena. Py: 5 PbZn: Trace.		W.Av.	44.5	49.1	4.6	5.2	8.35	93.1			23.91	38.39	428.11
				W.Av.	33.5	53.6	20.1	4.46	7.29	75.3			89.68	146.51	1513.50
				W.Av.	50.6	53.6	3.0	4.85	5.86	69.1			14.56	17.59	207.26
				W.Av.	0	3.0	3.0	2.81	4.4	53.49			8.42	13.20	160.46
				W.Av.	33.5	49.1	15.6	4.60	7.88	80.3			71.82	122.99	1253.27
64.3	68.9	QUARTZ SERICITE PHYLLITE (S).		W.Av.	49.1	53.6	4.5	3.97	5.23	57.8			17.86	23.52	260.23
		Dark gray. Thinly laminated. F = 65°.													
		2													
68.9	75.2	FAULT GOUGE.	3.0/6.3												
		Black plastic gouge.													
75.2	81.3	BLEACHED QUARTZ SERICITE PHYLLITE (Sbm).													
		Quartz and kaolinized sericite with numerous specks and bands													
		of green mariposite.													

LOGGED BY _____ D.D.H. No 76-U-170 PAGE 4

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
81.3	85.6	FAULT GOUGE.													
		Dark gray. Plastic.													
85.6	96.3	BLEACHED QUARTZ SERICITE (Sb).													
		Streaks of Pyrite and Sphalerite locally.													
		Py: 3% PbZn: 1%.													
		86.6-87.5: Flecks of mariposite.													
	96.3	END OF HOLE.													

DIAMOND DRILL RECORD

LOGGED BY JIM PAXTON D.D.H. Nº 76-U-171 PAGE 1

PROPERTY GRUM JOINT VENTURE

LATITUDE 2N STARTED SEPTEMBER 2, 1976

DEPARTURE 62W COMPLETED SEPTEMBER 3, 1976

ELEVATION PROPOSED DEPTH

ULTIMATE DEPTH 30.5

HOLE SURVEY:		
DEPTH	BEARING	DIP
COLLAR	224°	FLAT

CLAIM Nº

N

DIRECTION AND DISTANCE FROM N.E. CLAIM POST

Interval From	Interval To	DESCRIPTION	Recovery	Sample Nº	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
0	6.6	MASSIVE SULPHIDE (MB).													
		Fine grained pyrite with streaksof sphalerite 80 8	1.1/1.5	085B	0	1.5	1.5	0.03	0.15	9.94			0.18	PbZn	
		at 30°. Numerous 1mm specks of magnetite. Lower 80 6	1.5/1.5	086B	1.5	3.0	1.5	0.04	0.30	10.97			0.34	PbZn	
		contact 45° slickenside. 80 6	1.6/1.6	087B	3.0	4.6	1.6	0.05	0.58	12.00			0.63	PbZn	
		80 6	1.9/2.0	088B	4.6	6.6	2.0	0.03	0.45	5.14			0.48	PbZn	
6.6	10.0	FAULT GOUGE.													
		Gray gouge with fragments of dark gray quartz sericite.		W.Av.	0	6.6	6.6	0.42	PbZn						
10.0	15.1	QUARTZ CALCITE SERICITE PHYLLITE (SK).													
		Dark gray colour. F_1 drag folds parallel to F_2. F_2 = 0-10°.													
		13.5-15.1: Gouge and breccia.													
15.1	18.3	BRECCIA ZONE (SbXm). 30 8	1.7/1.7	089B	15.1	16.8	1.7	1.60	1.70	27.43			2.72	2.89	46.63
		Bleached sericite and mariposite fragments mingled 25 6	1.5/1.5	090B	16.8	18.3	1.5	4.48	5.70	73.71			6.72	8.55	110.57
		with fine grained sulphides.		W.Av.	15.1	18.3	3.2	2.95	3.58	49.13			9.44	11.44	157.20

U-171

LOGGED BY _____ D.D.H. No ~~76-U-168~~ PAGE 2

Interval From	Interval To	DESCRIPTION	Recovery	Sample No	Interval From	Interval To	Sample Length	Assay Pb	Assay Zn	Assay Ag	Assay Au	Assay Cu	Assay x Pb	Assay x Zn	Assay x Ag
18.3	24.6	QUARTZ GRAPHITE PHYLLITE (G).													
		Dark gray colour. Drag folded F_1 bands sliced by F_2 at													
		0-30°.													
24.6	26.0	BLEACHED SERICITE PHYLLITE (Sb).													
		F_2 = 0°.													
26.0	30.5	QUARTZ SERICITE PHYLLITE (S).													
		Dark gray colour. Traces of graphite. F_2 = 0°.													
	30.5	END OF HOLE.													