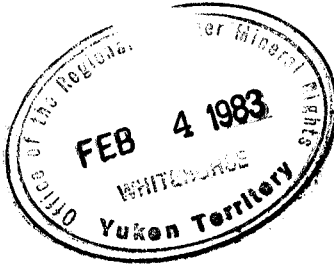


COMINCO LTD.

EXPLORATION

N.T.S. 105 0/1&2

WESTERN DISTRICT



ASSESSMENT REPORT

DIAMOND DRILLING, TRENCHING AND ROADBUILDING

on the

NIDD CLAIMS

Situated at:

63°11'N, 130°21'W

Mayo Mining District

Yukon Territory



December 2, 1982

M.R. Murrell

091421

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VI. Trenching	2
VII. Roadbuilding.	2

ATTACHMENTS

	<u>Scale</u>
Plate A - Location Map - Nidd Property	1:500,000
Plate B - Claim Map - Nidd Property, with approximate Road Location	1:25,000
Plate C - Location Map - Drill Holes and Trenches	1:5,000

Drill Logs for holes on claim Nidd 316 (N82-3, N82-4)
(only claim on which drill assessment credits are requested)

Appendix A - Affidavit	
Appendix B - Statement of Expenditures	
Appendix C - Statement of Qualifications	

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS 105 0/1&2

December 2, 1982

ASSESSMENT REPORT

DIAMOND DRILLING, TRENCHING AND ROAD BUILDING REPORT

ON THE

NIDD CLAIMS

MAYO MINING DISTRICT

YUKON TERRITORY

I INTRODUCTION

The Nidd claims were staked between 1976 and 1981 to cover the westerly strike extension of the stratigraphy which hosts the nearby Tom and Jason lead-zinc-silver deposits.

The property is underlain by the Ordovician-Silurian Road River Group and the Devono-Mississippian Earn Group. This latter group is divided into the Canol and Imperial formations.

This report covers numerous groups of claims on the Nidd group.

II. SUMMARY

Field work on the Nidd property was carried out during the period June 2 to October 8. The trenching and roadbuilding was conducted sporadically through this period whereas the drilling was confined to July 15 to October 8.

III. LOCATION AND ACCESS

The Nidd Property is located approximately 390 km northwest of Whitehorse, Yukon Territory, and 24 km west of MacMillan Pass at 63°11'N, 130°21'W on NTS sheets 105 0/1&2. Access to the property is by good gravel road (North Canol Road) to the MacMillan Pass airstrip; then by helicopter to the camp which is central to the claim group. A 4x4 access road has been constructed to connect the camp to the Canol Road. Numerous "wet" spots are present, and additional work will be required to bring it to a driveable state.

IV. TENURE

The Nidd property consists of 703 claims. Assessment work is being claimed on most of them, the details of which are contained on associated reporting forms.

2.

V. DIAMOND DRILLING

A total of 1242 metres of HQ and NQ diamond drilling was completed in 4 holes by Heath and Sherwood Drilling of 5445 Yonge Street, Willowdale, Ontario. The four holes form a fence across claims Nidd 84, 91 and 316. Their purpose was to test for the possibility of Zn/Pb mineralization similar to that on the nearby Jason property, and to test for down dip extensions of known surface mineralization. The rocks penetrated belong to the middle Devonian, lower Earn group of rocks, which is often referred to as the Canol Formation. Although the rocks comprise mudstones, volcanics, debris flows and grits, the greatest volume is made up of conglomerates. Sphalerite mineralization is often contained sporadically interstitially in the conglomerate - see details in the attached drill logs.

VI. TRENCHING

Three hand trenches and 28 cat trenches were dug during 1982. The hand trenches were put in on the Bog showing in an attempt to better expose lead and zinc mineralization that was discovered this year. The hand work was carried out by a contractor - McCrory Holdings Ltd. of Whitehorse who utilized an Atlas Copco rock drill and explosives. The other work was done with a D6C cat owned and operated by L.D. Munro also of Whitehorse. Its purpose was to better expose surface mineralization, to test for possible extensions of this mineralization, to expose bedrock for mapping purposes, and to expose float that may have included mineralized boulders. The cat program was variably successful as numerous difficulties were encountered due to the extensive permafrost cover. Trenches had to be re-visited with the cat on a weekly basis to cut through the recently-thawed layer. As a result, most trenches did not reach bedrock. In the future, a cat equipped with a ripper-tooth, or a backhoe with a "frost bucket" should be considered for trenching purposes.

VII. ROADBUILDING

Access to the Nidd property drilling area during 1982 was by helicopter. To offset this expense in coming years, a road was built from an existing road at the east end of the property to the drilling area at Boundary Creek. Contractors involved were L.D. Munro of Whitehorse utilizing a D6 and Gillespie Construction of Dawson City utilizing a D8 cat with a ripper-tooth. Although the road has been completed, it is not yet driveable by a 4x4 truck. Numerous wet spots must be allowed to dry, a few bridges and culverts will be necessary, and slides will have to be removed before this road is useable in 1983. Only a portion of the road was surveyed, so much of it is sketched on the attached map.

3.

Report by: M.R. Murrell
M.R. Murrell, Project Geologist

Endorsed by: Derek Rhodes
D. Rhodes, Senior Geologist

Approved for
Release by: Jon A. Collins
for G. Harden, Manager,
Exploration
Western District

MRM/skm
Distribution
Mining Recorder (2)
Western District (1)

APPENDIX A

IN THE MATTER OF THE YUKON QUARTZ MINING ACT
AND IN THE MATTER OF GEOLOGICAL & GEOCHEMICAL SURVEYS & ROADBUILDING
CARRIED OUT ON MINERAL CLAIMS OF THE NIDD PROPERTY
LOCATED IN THE MAYO MINING DIVISION, YUKON TERRITORY
MORE PARTICULARLY N.T.S.: 105 0/1,2

A F F I D A V I T

I, MICHAEL R. MURRELL, OF THE DISTRICT OF NORTH VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, GEOLOGIST, MAKE OATH AND SAY:-

1. THAT I am employed as a geologist by Cominco Ltd. and, as such have a personal knowledge of the facts to which I hereinafter depose;
2. THAT annexed hereto and marked "Appendix B" to this my affidavit is a true copy of expenditures on diamond drilling, trenching, and roadbuilding carried out on mineral claims on the Nidd property.
3. THAT the said expenditures were incurred between the 2nd day of June 1982, and the 8th day of October 1982, for the purpose of mineral exploration on the above noted property.

Signed:



M.R. Murrell, Project Geologist

APPENDIX B

NIDD PROPERTY - ASSESSMENT REPORT

STATEMENT OF EXPENDITURES

I. Diamond Drilling

Diamond drilling direct - Contract and Supplies - 1242 m		182,821
Site Preparation and drill support - D6 Cat - 170 hrs. @ \$65		11,050
Helicopter Support - 106.8 hrs. @ \$547.08		58,428
Staff Time:		
M.R. Murrell - 73 days @ \$222	16,206	
D. Rhodes - 23 days @ \$252	5,796	
F.J. Ferguson - 18 days @ \$163	2,934	
A.P. Roberts - 19 days @ \$163	3,097	
A.L. MacGregor, P. Scott, P. Sorbara, etc. - 5 days @ \$162	810	
<u>Total: 138 days</u>	<u>\$28,843</u>	28,843
Assays & Analyses:		
Analyses - 325 Cu, Fe, Pb @ \$3.25	1,056.25	
- 269 Zn @ \$.75	201.75	
Preparation - 325 @ \$3.25	1,056.25	
Assays - 127 Zn @ \$5.00	635.00	
	<u>\$ 2,949.25</u>	2,949
Domicile - 138 man days @ \$79		10,902
Transportation - freight	8,230	
- fixed wing	9,920	
- truck & fuel	6,073	
	<u>\$24,223</u>	24,223
Communications		9,993
Geological Supplies		2,147
Mobilization - Personnel		3,000
Expediting		<u>1,471</u>
	Total (Diamond Drilling):	<u>\$335,827</u>

Therefore cost per metre = \$270.40

Cost distribution:

claim Nidd 84 - 23%	=	77,240
Nidd 91 - 51%	=	171,272
*Nidd 316 - 26%	=	<u>87,315</u>
		<u>\$335,827</u>

*Note: Only the charges on Nidd 316 are being claimed for assessment credits on this report.

II. Trenching

Direct Contract Costs:	Cat	7,022	
	Hand	<u>2,756</u>	
		\$9,778	9,778
Helicopter support - 3.75 hrs. @ \$547			2,052
Staff Time:			
M.R. Murrell	- 6 days @ \$222	1,332	
D. Rhodes	- 2 days @ \$252	504	
B.C. Waters	- 2 days @ \$206	412	
A.P. Roberts	- 7 days @ \$163	1,141	
F.J. Ferguson	- 1 day @ \$163	163	
A.C. MacGregor	- 2 days @ \$163	<u>326</u>	
		\$3,878	3,878
Domicile - 39 days (incl. cat driver) @ \$79			3,081
Transportation - freight		137	
	- fixed wing	165	
	- truck & fuel	<u>486</u>	
		\$ 788	788
Miscellaneous supplies & services			400
Communications			571
Assays and Analyses			100
Expediting			<u>415</u>
	Total (Trenching):		\$ 21,062

Trenching work spread evenly through claims Nos. Nidd 29, 78, 83, 84, 89, 90, 91, 92, 93, 316, 317.

III. Roadbuilding

Direct Contract Costs		68,465
Helicopter Support - 13.5 hrs. @ \$547.08		7,385
Staff Time:		
M.R. Murrell - 10 days @ \$222	2,220	
D. Rhodes - 2 days @ \$252	504	
F.J. Ferguson - 10 days @ \$163	1,630	
A.L. MacGregor - 14 days @ \$163	2,282	
A.P. Roberts - 13.8 days @ \$163	2,245	
B.C. Waters - 1 day @ \$206	206	
	<u>\$9,087</u>	9,087
Domicile - 168 days (incl. cat driver) @ \$79		13,272
Transportation - freight	549	
- fixed wing	661	
- truck & fuel	729	
	<u>\$1,939</u>	1,939
Communications		571
Expediting		557
	Total (Roadbuilding):	<u>\$101,276</u>

Claims on which road work was carried out:

Nidd 217	174	328	101
204	428	330	92
202	171	332	93
203	169	334	316
201	154	336	84
184	152	337	83
185	153	339	317
183	140	85	318

<u>Summation:</u>	I. Diamond Drilling	\$335,827
	II. Trenching	21,062
	III. Road Construction	<u>\$101,276</u>
	<u>TOTAL:</u>	<u>\$458,165</u>

Note: Current laws in the Yukon permit the recording of only \$165,800 of the above amount.

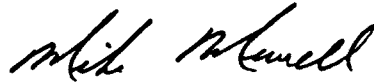
Signed: *M.R. Murrell*
M.R. Murrell, Project Geologist

APPENDIX C

STATEMENT OF QUALIFICATIONS

I, Michael R. Murrell of 1662 Ralph Street, in the District of North Vancouver, British Columbia, hereby state that I was graduated from the University of Alberta, Edmonton, with a B.Sc. (Hon-Geology) in 1966. During my undergraduate summers, I worked for B.A. Oil (now Gulf Oil), and a small mining company. Upon graduation, I joined Cominco Ltd. and have worked on many aspects of mining exploration since that time.

Signed:



M.R. Murrell, Project Geologist

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Mayo M.D.	Hole No.	N82-3		
Commenced	August 27, 1982	Location	Boundary Creek Area	Tests at	82.3(-46°), 173.7(-45°) 265.2(41.5), 356.6(-38°)	Hor. Comp.	260 m
Completed	September 13, 1982	Core Size	HQ, NQ	Corr. Dip	-43°(End to end)	Vert. Comp.	249 m
Co-ordinates	Surveyed: Lat. 100,603.95	Dep.	- 108,277.87	True Brg.	210° at surface	Logged by	M.R. Murrell
Objective	To continue a stratigraphic test in the Boundary Creek area where scattered Zn surface showings are known.			% Recov.		Date	Sept 7-13, 1982

Metres From	To	Description	Sample No.	Length	Analysis				
					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
0	5.8	Casing - Overburden - includes a 1 metre long boulder of coarse hornblende granodiorite.							
5.8	32.8	Conglomerate - medium to coarse grained. White, medium grey, with minor black rounded pebbles. As usual, the coarser fragments are well rounded - the black mudstone pebbles well rounded, the white and grey chert sub-rounded. Finer grained matrix (10-30%) is subrounded to sub-angular. Varies somewhat in grain size, colour, siderite and pyrite content, and amount of breaking. Short sections pyritic or very sideritic.							
	5.8 - 7.3	- mainly medium grained, suggestion of bedding at 50° (subtle)							
	7.3 - 11.8	- Broken, oxidized (surface weathering). Otherwise as above.							
	11.8 - 15.4	- Starts off coarse, dark, but rapidly grades to medium, with scattered larger components. Mainly the speckled. Contains at least one clast (interval to mudstone?) of greenish talc (13.3 m).							
	15.4 - 17.1	- Pyrite clast conglomerate. Coarse grained contact with upper flow abrupt at approx. 60°. This section has longer rounded pebbles of fine grained (but not muddy) pyrite, and subrounded grey chert clasts with variable. Percent pyrite disseminated through (Total 15%).							
	17.1 - 17.4	- Massive pyrite - fine and very fine grained at top, medium at bottom. Has elongate enclosed shards of conglomerate. Diffuse contacts at top, fairly sharp on bottom. Possibly deposited as a sediment, and could be showing soft sediment deformation (flowage).							
		Sample 17.1 - 17.4	27475	0.3	162	34.4	32.4	74	

Claim Nidd 84
T Brg. 210° (Surface)
Collar Dip -46°
Elev. 1162.29 m
Length 361.2 m
Hole No. N82-3 Sheet 1

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
17.4 - 19.6	- Sideritic conglomerate. Med. grained. Overall yellow-tan and grey speckled colour. Siderite occurs as fine pin-point specks throughout in both the matrix and disseminated (almost massively) in rounded chert and mudstone pebbles. In the mudstone pebble, has the same texture as the sphalerite bearing pebbles seen often in N82-2. Overall siderite content approximately 25%.							
	Sample 17.4 - 19.6	27476	2.2	18	19	41	64	
19.6 - 21.6	- Conglomerate med. to coarse grained. Locally contains larger clasts of mudstone with disseminated yellow siderite, or disseminated pin points of ZnS, (?-Possibly oxidized siderite?). Fine muddy pyrite clasts (rounded) content increases after 21.0.							
	Sample 19.6 - 21.6	27477	2.0	14	5.45	34	65	
21.6 - 22.5	- Core ground up and lost - Only about 30 cm remain. Pieces of white quartz vein with massive coarse pyrite, few pieces of med.-coarse conglomerate (Note: reduce from HQ to NQ at 21.6 m).							
	Sample 21.6 - 22.5	27478	0.9	53	194	58	159	
22.5 - 26.9	- Conglomerate. Medium to slightly coarse grained, dark grey overall - Subrounded to subangular. Starts off sideritic and with small rounded muddy pyrite clasts; with only a trace number of mudstone fragments containing a small percent of disseminated siderite. Numerous fractures parallel or semi-parallel to core.							

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

N82-3

Sheet

2

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District		Hole No.	N82-3	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	N82-3	Sheet	3
Commenced		Location		Tests at		Hor. Comp.		Vert. Comp.		Logged by		Date							
Completed		Core Size		Corr. Dip		% Recov.													
Co-ordinates		True Brg.		Objective															
Metres	Description		Sample No.	Length	Analysis					Zn %									
From	To				Cu	Fe	Pb	Zn	Zn										
					bpm	%	ppm	ppm	%										
	26.9 - 28.0	- Sideritic conglomerate. Fine to medium, with up to 25% interstitial fine yellow siderite locally. Scattered muddy yellow pyrite pebbles as well. Small 1cm py. vein cuts at 45°. Very broken over last 40 cm.																	
	28.0 - 32.8	- Fine to medium grained conglomerate, with fine component dominating overall, but grading to medium over the last 1/2m. Subrounded to rounded, speckled texture throughout. Numerous broken zones, but no faulting indicated. Several qtz. filled tension fractures cut the core at 30-60°, with later qtz. veins at 20°. Trace diss. siderite at 30.2 - 30.3.																	
	32.8 - 40.7	Sideritic conglomerate - Coarse grained dark grey. Numerous short broken sections. Fragments subrounded to locally subangular. Fine muddy pyrite pebbles variable in quantity, but always in minor amounts. Siderite is interstitial, in the matrix as fine to very fine yellow-tan grains, and locally "replaces" mudstone pebbles in disseminated fashion. Pebble contacts are usually normal, but the occasional sutured contact or occasional stylolite, is also present. A few thin, wavy 1cm pyrite beds are also present. Quite broken locally, with qtz. on fractures. A few "hairline" late wispy fractures (25-30°) appear to be siderite(?) filled.																	
		Samples 32.8 - 35.8	27479	3.0	10	18.7	38	3600											
		35.8 - 38.8	27480	3.0	16	21.3	32	819											
		38.8 - 40.7	27481	1.9	20	23.3	647	3340											

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. N82-3
Sheet 5

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
51.6 - 58.3	Mudstone - black, no silt, very fine grained, massive. Very carbonaceous with black graphite on all slickensided surfaces. Completely broken into small chunks throughout. Slickensides at various angles - some parallel to core, raking 45° across the surface, others at 80° to core axis. Bedding subtly displayed at 45°. <u>Note: high core loss over this section (Est. 50%)</u>							
58.3 - 65.8	Mudshale - Overall black, but with very thin light grey laminations of siltstone (<10% by volume) cutting the core at a bedding angle of 75°. Few thin granular pyrite beds from 64.2 - 65.0. Some slight flowage - soft sed. deformation at 63.8, but bedding usually consistent at + 70°. Very carbonaceous, and soft (possibly faulted?) at 62.8 - 63.1.							
65.8 - 82.5	Conglomerate-Sideritic throughout, but variable in intensity from low percentage at top of section to very sideritic at bottom. Fine muddy yellowish pyrite pebbles at top, gradually grading out down-hole. Several short broken sections, but not severe.							
65.8 - 69.8	Upper contact rather diffuse, with pyrite surrounding pebbles of the lower conglomerate, but supported by mudstone over a few cm. Contact approximately + 90°. - Mainly pyrite pebble conglomerate. Py pebbles 20%. Some are actually light - medium grey chert rimmed by very fine muddy pyrite, and occasionally by slightly coarser pyrite. Most is medium grained, subrounded							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						N82-3	8
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Metres	Description	Sample No.	Length	Analysis					Zn%		
From To				Cu ppm	Fe %	Pb ppm	Zn ppm				
	90.6 - 94.7 - Mainly coarser conglomerate, rounded pebbles. Local pyrite disseminated in light grey chert.										
	94.7 - 95.8 - Medium grained, with 3-4% small rounded muddy pyrite pebbles.										
	95.8 - 97.1 - Medium grained conglomerate, minor larger pebbles. Several 20° fractures										
	Sample 95.8 - 97.1	27486	1.3	20	5.36	50	104				
	97.1 - 97.7 - Sideritic medium-fine grained conglomerate with muddy pyrite pebbles, and a 2 cm diffuse reddish ZnS band occurring interstitially at an angle of 70°.										
	Sample 97.1 - 97.7	27487	0.6	30	26.9	35	13850	1.29			
	97.7 - 99.0 - Medium to coarse conglomerate, with abundant larger rounded light grey chert pebbles; some are rimmed with darker grey pyritic chert.										
	Sample 97.7 - 99.0	27488	1.3	23	4.03	48	189				
	99.0 - 99.5 - Fine to medium conglomerate, with minor interstitial siderite, several yellow-tan rounded muddy pyrite pebbles, a 2 cm diffuse ZnS band at the bottom (like the previous band) and a few thin (1-2 mm) qtz-sphalerite- siderite veins cutting at 40-45°. Few small scattered ZnS clasts.										
	Sample 99.0 - 99.5	29489	0.5	55	8	175	9200	1.02			
	99.5 - 100.8 - Fine to medium grained conglomerate, becoming coarser down holes. Scattered (5-10%) pyrite pebbles as both the usually muddy yellowish type, and a few rimmed trace pyrite pebbles. Contains a wispy thin ZnS stringer.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property NIDD	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 9
Commenced	Location	Tests at	Hor. Comp.								
Completed	Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates	True Brg.		Logged by								
Objective	% Recov.		Date								
Metres	Description	Sample No.	Length	Analysis							
From	To			Cu	Fe	Pb	Zn	Zn%			
				ppm	%	ppm	ppm				
				22	7.45	54	2574				
	Sample 99.5 - 100.8	27490	1.3								
	100.8 - 103.6 - Pyrite pebbles in a coarse conglomerate that has a central 500 cm zone with minor ZnS as interstitial clots or clasts, and a 2 cm diffuse band. A broken 6 cm wide massive pyrite band in broken conglomerate present at 102.8.										
	Sample 100.8 - 103.6	27491	2.8	40	5.24	50	8990				
	103.6 - 104.0 - Broken quartz zone - possible fault. Leached and broken, and is 50% muddy conglomerate fragments mixed with the quartz. Contains a 10 cm wide massive pyrite band.										
	Sample 103.6 - 104.0	27492	0.4	38	7.12	74	575				
	104.0 - 105.4 - More typical medium-coarse conglomerate, but has a disseminated diffuse pyrite - ZnS band (4 cm at 45°) and a few small red ZnS clasts. Other micro fractures at 45° occasionally has a few specks of ZnS. This qtz vein has a dark green tremolite looking patchy mineral enclosed.										
	Sample 104.0 - 105.4	29493	1.4	35	3.87	37	6080				
	105.4 - 106.3 - Very sideritic conglomerate. Grades from medium-coarse to fine. Overall light yellow colour with grey rounded chert clasts, and clasts of siderite. (Ratio chert:siderite is 1:2). Minor rounded muddy pyritic looking pebbles may actually be siderite. Trace of scattered ZnS clasts - small.										
	Sample 105.4 - 106.3	27494	0.9	39	13.2	18	E13570	1.29			
	106.3 - 108.6 - Coarse conglomerate grading down to medium. Multilithic. Rounded to										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							N82-3	11
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
Metres		Description	Sample No.	Length	Analysis							
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%			
		amount of stylolites are present, inferring some dissolving. ZnS seen internally to a chert fragment at 118.5, with fine pyrite, and as one small interstitial clast. At 119.4 - 119.5, a diffuse, disseminated band of ZnS cuts at 75° - 2 cm wide. Broken over 124.0 - 125.5.										
		Sample 119.4 - 119.5	27499	0.1	40	2.1	46	5630				
125.5 - 126.8		Grit - Quite fine, bordering on coarse sandstone, medium grey locally has small pebbles of medium grey rounded chert, or black siliceous mudstone (10 cm actually a sandstone supported conglomerate). Upper contact diffuse at 45°, lower is relatively sharp at 45°. Fractures moderate at 25°.										
126.8 - 136.3		Conglomerate - Usually coarse grained, but locally grades to medium, and one 30 cm section is actually fine grained. Usually much as previous, but occasionally a pyritic chert pebble is present, and even a few dark pyritic fine grained, muddy pebbles are occasionally seen. ZnS present as a few <1 cm wide bands, and occasional small clasts, all in trace amounts only. Fracturing usually at low (20°) angles. Bedding not well displayed, but in finer grained sections is at 40°.										
		Samples 128.3 - 129.3	27500	1.0	20	.99	34	863				
		129.3 - 129.7	60053	0.4	50	2.14	12	E22900	2.30			
		129.7 - 130.7	60054	1.0	20	1.58	30	1790				
		One - 1 cm wide ZnS band at 132.5 - Not sampled.										
		Minor siderite (interstitial) at 134.3 - 134.7. 2 cm quartz/pyrite/mudstone "vein at 136.3										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						N82-3	12
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Metres	Description	Sample No.	Length	Analysis					Zn%		
From To				Cu	Fe	Pb	Zn				
				ppm	%	ppm	ppm				
136.3 - 141.3	Conglomerate - fine grain changing to coarse by 138.5, back to medium by 139.6. Finer grained portion at the start is medium grey with local interstitial yellowish pin point siderite, and has a 2 cm wide orange-yellow diffuse ZnS vein cutting at 45°. Appears to penetrate the surrounding chert pebbles to some degree. One nearby 1 cm qtz. vein at 20° also has a few grains of orange ZnS.										
	Sample 137.0 - 138.0	60055	1.0	140	.7	28	9620	0.46			
	138.0 - 139.0 - Few specks ZnS, minor disseminated pyrite.										
	139.0 - 139.7 - White Qtz. vein. Cuts at 15°, has enclosed minor chlorite, sericite, py										
	139.7 - 140.0 - Somewhat leached, carbonaceous, possibly a minor fault (assoc. with qtz.)										
	140.0 - 141.3 - Mainly dark medium grained conglomerate, with a few rubbly breaks.										
	No bedding apparent in this section.										
141.3 - 163.0	Conglomerate - Overall medium, but has a few coarser sections, and a minor amount of fine grained. Most sections are rounded to subrounded, but becomes slightly more angular where grain size is smaller. Multilithic, but slight colour variations due to ratio of the different coloured chert pebbles. No pyritic pebbles seen, however the upper surfaces of some mudstone pebbles are quite rounded, but lower surfaces are eroded. ZnS is present in minor amounts only, seen as thin semi-massive undulatory or disseminated bands spaced over 5 or 6 metres, or more. Only sampled where two or more are fairly close together. The locations of these are: 147.2, 150.2, 151.4, 155.6(minor), 157.5, 158.2, 158.8, 161.4, 161.6. Most cut the core at angles of 45-80°, with majority at 45°.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
Metres	Description	Sample No.	Length	Analysis								
From To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%				
	Many areas of this section are broken or shattered, some even are oxidized (148.3, 152.7) and minor faulting is likely on some. Quartz veining very minor, however. Pyrite can be present, usually where more carbonaceous soft mudstone is seen (ie. 153.7).											
	Samples - 149.6 - 150.1 - No visible ZnS	60056	0.5	22	.6	43	141					
	150.1 - 150.3 - 3 cm band yellow-orange	60057	0.2	120	1.44	97	E78000	8.20				
	157.5 - 158.8 - encompasses 3 bands	60058	1.3	80	.74	55	E20100	2.03				
	158.8 - 161.4	60059	2.6	20	.67	48	4320					
	161.4 - 161.7	60060	0.3	130	2.06	64	E44900	4.40				
	Bedding - Suggested in finer grained sections at 70°.											
163.0 - 169.0	Conglomerate - medium-coarse, light grey. Boundaries between many grains quite indistinct. Pebbles are the usual assortment, mainly chert, but occasional black mudstone. Much of this section is broken, sometimes slightly leached. Slickensides on some surfaces. Planes are 30°, slicks at 15° to core axis. ZnS seen in a variety of modes.											
	(1) Diffuse yellow-orange bands @ 164.4 - $\frac{1}{2}$ cm; 165.0 - 2 cm irreg. band. 166.7 - $\frac{1}{2}$ cm diffuse band. 166.9 (irreg. over 10 cm)											
	(2) Clasts internal (core-like) to black sil. mudstone pebbles(165.6)											
	(3) Trace disseminated grains or clasts.											
	Sample 166.6 - 166.9	60061	0.3	280	.97	47	E45100	4.95				
	166.9 - 167.7	60079	0.8	15	.98	35	763					
	167.7 - 167.9	60080	0.2	170	2.26	79	E71200	6.8				

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						N82-3	14
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Metres	Description		Sample No.	Length	Analysis						
From To					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%		
169.0 - 175.0	Dark conglomerate - Coarse to very coarse grained. Large pebbles mainly medium grey chert and subrounded, with occasional very round black mudstone pebbles. Trace wispy pyrite or pyritic chert pebble. Few minor stylolites. Locally well fractured, some with rust. Very shattered, with quartz veining at 173. Few very thin quartz veins cut at 170.7, 171.4 contain few specks ZnS, and may have nearby small clasts.										
175.0 - 183.9	Conglomerate - Mixed medium and fine grained. Medium grey, with occasional black mudstone pebble. Quite broken and blocky, occasional mild leaching. Contains several short, but to 2 cm wide, quartz veins cutting at 45°, or almost parallel to core. One appears fault associated at 179.7. Pyrite not significant but ZnS seen with one short, undulatory quartz vein (cuts at 35°). Appears distributed along thin fractures over about 4 cm (perhaps 3%) at 175.2										
		Sample 175.2 - 175.3	60062	0.1	30	1.49	25	6400			
183.9 - 187.6	White quartz with sideritic medium grained conglomerate. Medium grey and white, splotchy, or yellow and white where siderite content is high. Siderite can occur as large pebbles in this section - well rounded. Quartz forms a real stockwork, with veins from $\frac{1}{4}$ cm to 2-3 cm wide, and contains several small clots of reddish ZnS. Local stylolites										
		Samples 183.9 - 185.5 - to ZnS disseminated	60063	1.6	40	1.38	15	3000			
		185.5 - 187.8 - very sideritic over much of section.	60064	2.1	67	3.29	10	1264			

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres		Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To											
187.6	216.9	Debris flows - Mainly dark mudstone supported conglomerate debris flow, but contains short sections of siltstone, mudstone, and clean "typical" conglomerate. Pyrite sporadic throughout either as large fine grained clasts (in debris flow) as wide (5-10 cm) massive to semi-massive beds (in mudstone), as granular disseminated bands or laminations (in mudstone), or as wider muddy disseminated to wavy zones (cleaner conglomerate). Bedding usually 45° but locally variable.									N82-3	15
		187.6 - 190.4 - Black carbonaceous mudstone with wavy white quartz to 6 cm wide and a few zones (to 20 cm) of semi-massive dark medium to fine grained pyrite, often in a lace type arrangement with qtz. + mudstone. At 180.0 - 180.3 is black carbonaceous fault gouge.										
		190.4 - 193.5 - Conglomerate - medium grey, but no real distinct pebble boundaries, as if the grains have been pressured together. Minor amount of stylolites. Central 20 cm has yellowish sideritic colour, and a few angular yellowish sideritic pebbles. Only a few thin quartz veins, one with a greenish sericite tinge. Has 3 cm massive pyrite, and 10 cm disseminated pyrite at end.										
		193.5 - 196.4 - Black carbonaceous mudstone. Most is soft, but short (10 cm) sections are slightly siliceous. Pyrite in minor amounts found throughout as a few granular laminations (2-3 mm wide), or as minor disseminations. Bedding well displayed at 55°. Broken (fault?) zone 194.3 - 194.8										
		196.4 - 197.7 - Pyritic sandstone - Medium grained, carbonaceous, black and yellow (pyrite) coloured. Pyrite evenly disseminated throughout, and as										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District		Hole No.	N82-3	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	N82-3	Sheet	16
Commenced		Location		Tests at		Hor. Comp.		Vert. Comp.		Logged by		Date							
Completed		Core Size		True Brg.		% Recov.													
Co-ordinates		Objective																	
Metres	Description		Sample No.	Length	Analysis					Zn%									
From	To				Cu	Fe	Pb	Zn	Zn%										
		granular aggregates and clusters. Would average 15%. Last 20 cm a medium grained debris flow.			ppm	%	ppm	ppm											
		Sample 196.4 - 197.7	60065	1.3	33	8.5	99	187											
	197.7 - 199.3	- Pyrite laminated mudstone. Mainly siliceous black mudstone grading to black siltstone and a thin debris flow, and abruptly back to laminated pyritic mudstone. Contains a 10 cm carbonaceous soft (faulted?) zone. Pyrite laminations spaced at 1-2 cm and are granular, bedding plane laminations at 60°. At bottom, an elongate 4 cm long pyrite "nodule" has thin pyrite lamination flowing around it.																	
	199.3 - 200.4	- Debris flow - Black mudstone supported pyritic conglomerate, with 20% mudstone matrix, 50% angular to subangular chert, and the rest as fine grained pyrite pebbles or granular disseminations, becoming more abundant at the bottom.																	
	200.4 - 203.8	- Black slightly siliceous mudstone laced with white quartz and minor disseminated smears of granular pyrite. Carbonaceous and pyritic with 40% irregular white quartz over first 40 cm. Red mixture. Rest of section has less quartz, but is present in wavy, undulatory fashion, as is the pyrite. Suggests soft sediment deformation, with pyrite lenses, and later passive introduction of white quartz, or quartz sweated out of the mudstone into low-pressure areas(?).																	
	203.8 - 207.4	- Pyrite pebbled debris flow, grading downward to a cleaner, but still pyritic, conglomerate. Coarse grained, but the rounded pyrite pebbles																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 17
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							

Metres		Description	Sample No.	Length	Analysis				
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
		are much coarser than the chert and mudstone pebbles. (Up to 4-5 cm long). Mudstone pebbles, as usual, are silicic but local broken sections are quite carbonaceous. Many of the pyritic pebbles appear to be chert pebbles with a central diffuse core of fine pyrite. ZnS is present as a few scattered irregular small clots, and as a 3 cm diffuse band beneath a 4 cm massive pyrite band at 203.9. Minor qtz. veining, sometimes with enclosed green talc.							
		Sample: 203.8 - 205.5	60066	1.7	40	5.38	111	E11020	1.16
		205.5 - 207.4	60067	1.9	28	4.22	83	1548	0.15
		207.4 - 208.4 - Two ZnS mineralized fine grained conglomerate units separated by 35 cm of silty mudstone and debris flow. Contacts diffuse at approx. 45°. First 20 cm is impregnated by reddish ZnS grains at approx. 30%, and lower conglomerate is similar with about 5% ZnS.							
		Sample: 207.4 - 207.8	60068	0.4	150	1.52	40	E194000	18.6
		207.8 - 208.4	60069	0.6	70	2.55	47	E15340	1.85
		208.4 - 215.5 - Intermixed beds of cleaner (but not typical) conglomerate, pebble rich debris flows, and minor silicic mudstone. Overall colour dark grey to black. Conglomerate (which dominates) is medium grained, close packed, subangular, with numerous sutured pebble contacts. Pyrite, which is present throughout as small wispy interstitial stringers, becomes more abundant towards the bottom of the section as pyrite pebbles or as diffuse wispy flows that sometimes contain green talc. (ie. 215.2).							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres		Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To											
		Seem to be at 45° to core axis. At 209.6 - 209.7, internal bedding at 35°. Contacts at 80°.										
		209.7 - 209.8 - White qtz vein cuts at 30°, has light green talc at contacts.										
		215.5 - 216.9 - Dark debris flow - very pyritic as pebbles, (60%) set in black silicic mudstones. Local lineations of pebbles, at 60°. Note - some pebbles are rimmed type pyrite nodules. Normal conglomerate 216.3 - 216.9.										
		Trace yellowish-red Zn in ½ cm disseminated band at 216.6.										
216.9	231.2	Mixed black carbonaceous debris flows and mudstone. Debris flows vary from just a few angular pebbles to almost a packed conglomerate with black mudstone matrix. Sections very variable in thickness, but usually less than a metre. Gradational one to the other. Pyrite abundant over the first metre as rounded pebbles. (As 215.4 - 216.3).										
		218.6 - 218.9 - Fault zone - shattered and healed with quartz and minor talc soft. Numerous crumbly carbonaceous broken zones (graphitic) with often slickensides throughout rest of section. 223.9 - 224.1 - Rusty volc. (Clast vs. flow?) as reddish-green speckled unit cutting at 25°. Fine grained (tuff?).										
		At 230.1 - Fault Gouge (3 cm) as rusty red hematitic mud. Also present at end of section at 231.2. Last metre silty in angular blocks.										
231.2	233.3	Talc Rock and fault zone - Medium grey, fairly massive looking, but speckled with light brown pin point specks (possibly siderite?) at 3-4% locally. All is soft and soapy. Last 30 cm is very gouge-like, and a definite fault zone. No bedding, but breaks easily										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres From To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	at 60°.									
233.3 - 238.2	Mudstone - Overall is black and fairly massive to laminated, but in detail grades through slightly differing rock type or accessories.									
	233.3 - 233.8 - Light grey siltstone, with fine subtle pyrite laminations (4%) that have been displaced by healed microfaults - displacement approx. 2cm, faults cut at 35° and could be semi-consolidated fractures (slumpage).									
	233.8 - 234.0 - Laminated granular pyrite wisps form 15% - bedding @ 65°.									
	234.0 - 237.2 - Massive black sil. to semi-sil. black mudstone, with minor enfolded white qtz. locally, pyritic over last 30 cm as irregular aggregates, or wispy disseminations. May be some relationship to a thin qtz. vein running parallel to core.									
	237.2 - 238.2 - Core becomes pyritic & silty laminated much as at start of this section. Bedding at 75°.									
238.2 - 240.2	Conglomerate - Grades from a medium grit to a medium or medium-coarse at end. Otherwise is quite typical of much of the conglomerate seen higher up the hole. Multilithic, sub-rounded to subangular pebbles or grains jumbled together. Has a few large clasts of mudstone at the bottom, and a vuggy leached quartz vein with a greenish-yellow enclosed mineral, and crystalline quartz in cavities. Vein is only 3 cm wide. Also has trace hematite staining.									
	Bedding in finer grained grit is 85°.									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 20
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
Footage From	To	Description	Sample No.	Length	Analysis							
					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn %			
240.2 - 246.8		Mudstone, with short sections of debris flow conglomerate, and some sections with silty laminations or bands. Mudstone is variably silicious, black carbonaceous, and very subtly bedded at 55°, occupies the first few metres; then interbedded with supported debris flows (several) varying from 10 cm to 40 cm wide. Contains a control section (243-244.5) that has wavy banded fine silty showing slight flowage texture. Some of the debris flows show sorting from fine or medium at the top to coarse down-hole. A few light muddy yellow pyrite bands are present, but otherwise pyrite not abundant. Zn S seen in conglomerate at 242.0 as a thin (½ cm) light orange band, somewhat smeared out, at 90° to core axis. Possible minor fault at 246.0.										
247.8 - 250.9		Volcaniclastic units with black mudstone and debris flows. Mudstone and debris flows much like previous, with less % of pebbles. Volcaniclastic units are: 247.8 - 247.9, 248.5 - 249.0, 250.8 - 250.9. They are greenish yellow sideritic units, looking like medium grained conglomerate with angular to subangular dark green-grey fragments set in a finer matrix of the same material, and siderite. Thicker unit is cut by numerous light yellow quartz veins at 10°, which are cut and displaced by a cross cutting healed fracture at 10°. White quartz fills the sigmoidal gap left at each crossing. Upper contact of the thicker unit is at 50° and quite sharp.										
		Sample 248.5 - 249.0 Volcanic unit	60070	0.5	54	14.1	9	175				

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 21
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
Footage From To	Description	Sample No.	Length	Analysis								
				Cu	Fe	Pb	Zn	Zn%				
				ppm	%	ppm	ppm					
250.9 - 258.9	Mixed mudstone and debris flows. Mudstone dominates at top of section (with only thin, 10 cm debris flows) and debris flows dominate at bottom - gradual change occurs. Mudstone is black, carbonaceous but competent silty bands only present in the centre 50 cm of the section, and these only as a few minor wisps. The debris flows, which range from a few cm to 30 cm wide is the usual chaotic jumble of angular to subangular light grey, medium grey chert, with trace sil. mudstone pebbles, all averaging a medium conglomerate in size. Pyrite present only as a large clast at 253.8, and as small grains in a disseminated band at 254.9 Bedding in mudstone consistent at 45° at start, 70° at end; but is quite variable down to 30° in the debris flows.											
258.9 - 260.2	Volcanoclastic unit - Light yellow-green spotted with darker green-black fragments. Becomes coarser towards the bottom. Cut by a few quartz-siderite veins at 45 - 55°, and one crystalline white quartz vein (vuggy) with ladder-like siderite. Gaphitic contacts at 70°											
	Sample 258.9 - 260.2	60071	1.3	79	13.4	21	80					
260.2 - 273.3	Mudstone and minor debris flows. Mudstone is typically black, carbonaceous and silicious and non-calcareous, and dominates this section. Debris flows have more muddy matrix than usual, especially over the latter part of the core. 260.2 - 262.5 - Debris flow - medium coarse, angular, close packed fragments include one 4 cm wide volcanic clastic fragment.											

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage From	To	Description	Sample No.	Length	Analysis						
					Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	
		262.5 - 268.9 - Mudstone as described. Few Minor silty bands are pyrite. Graphitic over last 30 cm. Bedding 75° at start, 15° at end.									
		278.9 - 273.3 - Debris flowing with 75% average mud matrix and relatively small light grey pebbles in bedded pattern at 40-45°. Graphitic on fracture surfaces, and very graphitic in fault gouge zone over 30 cm at end.									
		273.0 - 273.3 - Fault Zone.									
		223.3 - 274.1 Volcanoclastic unit - Similar to the short previous ones, but slightly coarser grained and locally stained hematite red. Less yellowish matrix as well. Contains a few wispy yellow fractures at 70°. Medium grained greenish fragments are quite angular. No bedding, but contacts are at 35 - 40°.									
		274.1 - 295.3 Black carbonaceous mudstone and Debris Flows. Almost all is black, fragmented, silicious, non-calcareous mudstone that is broken into 5-10 cm pieces or less - sometimes just rubble. Very subtle banding can be distinguished in the mudstone, usually at 75-80°. Locally contains light blue (phosphatic ?) staining on fracture surfaces, and occasionally may show minor graphite. Several minor variations are: 274.1 - 277.6 - Very carbonaceous, graphitic, with a few specks of chert, and minor irregular pyrite. 277.6 - 278.2 - Debris flow - clearly packed. Few sideritic (?) specks in chert. 278.2 - 287.0 - Typical mudstone. Contains 3 disseminated pyrite bands, and a 10 cm volcanic band at 278.9									

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Sheet

N82-3

Hole No.

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3
Commenced	Location	Tests at	Hor. Comp.	
Completed	Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates		True Brg.	Logged by	
Objective		% Recov.	Date	

Footage From	To	Description	Sample No.	Length	Analysis						
					Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	
		287.0 - 287.7 - Debris flow - mainly the mud matrix, with 30% chert grains.									
		287.7 - 291.6 - Black mudstone - silicious, non-calcareous; carbonaceous. Locally graphitic, especially on slickensides as at 290.8. Slickenside planes cut core at 40°, and rake across surface at 30°.									
		291.6 - 291.9 - Pyrite debris flow. - Mainly pebbles of pyrite, or zoned pyrites ranging from sand sized to 7 cm across, and minor chert (at contacts), and minor mud matrix. Faulted contact at top. Slickenside plane at 50°, rake at 90°.									
		291.9 - 292.7 - Pyritic mudstone. Black mudstone with a few irregular wisps of pyrite, and a undulatory 2-5 cm wide fine grained massive band at 30 and 45°. This pyritic debris flow at end.									
		292.7 - 294.6 - Black mudstone slightly broken, slickensides with greenish talc powder with graphitic in fracture surface.									
		294.6 - 295.3 - Carbonaceous mudstone supported grit grades downward to slightly coarse. Bedding at 40°, but contact with underlying unit is 80°.									
		295.3 - 301.8 Conglomerate - Medium grained, multi-lithic, light grey, medium grey and occasional black pebbles. Could be bimodal (?). Has a trace amount of small rounded pyrite pebbles, and numerous chert pebbles partially replaced (?) by fine pyrite. Pebbles are subrounded to subangular.									

 Sheet 22
 Hole No. N82-3

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 23
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates		True Brg.	Logged by									
Objective		% Recov.	Date									
Footage From To	Description	Sample No.	Length	Analysis								
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%				
	Only a few thin quartz veins, ore shows associated pyrite (15° at 298.7), and quartz filled tension gashes at 301.6. Zn S seen as minor interstitial red grains between 300.6 and 300.9.	Sample 300.6 - 300.9	60072	0.3	110	2.49	46	32300	3.50			
301.8 - 303.5	Laminated black and grey siltstone and mudstone. Overall black colour, carbonaceous, with up to 50% dark grey granular to laminations and subtle bands of siltstone that locally are up to 2 cm wide, but mixed with mudstone. Silicious, non-calcareous. Overall, the bedding is consistent at 65-75°, but at the start and end is somewhat wavy. Last 30 cm is a chert clast mud supported debris flows with rounded to angular pebbles, some with enclosed disseminated pyrite.											
303.5 - 318.2	Conglomerate, with a few less than 1 m bands of black slightly pyritic mudstone. 303.5 - 307.0 - Conglomerate. Starts off medium to coarse but grades sporadically downward to medium-fine, with occasional coarse pebble. Consists of the usual multilithic chert and sil. mudstone combination, rounded to sub-angular, with no apparent bedding. Has scattered small rounded fine grained pyritic pebbles in very minor amounts, but two short sections (304.4-304.8 and 306.0 - 306.3) have numerous pyrite pebbles, and interstitial pyrite grains forming 7% of the core. Minor stylolites also present quartz filled tension gashes are present from 304.9 - 305.3, cutting the core at 30°.											

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Footage	Description	Sample No.	Length	Analysis							
From	To			Cu	Fe	Pb	Zn	Zn%			
				ppm	%	ppm	ppm				
	307.0 - 308.5 - Mudstone-pyritic, slightly silty with a 20 cm section (307.2 - 206.4) of very fine grained, light tan coloured probably sideritic band of pyritic mudstone, followed by a 10 cm clean coarse conglomerate, with mudstone chips. Siderite band has thin wispy semi-bedded streaks of mudstone, and irregular patches of pyrite, as well as disseminated fine grained pyrite. Subtle pyrite banding below this shows slight displacement - either healed micro faults, or minor soft sed. deformation.										
	Sample 307.2 - 307.4	60073	0.2	57	20	43	136				
	308.5 - 318.2 - Mudstone chip conglomerate. Gradational contact with above at $\pm 45^\circ$. A medium grained, matrix supported conglomerate with large angular, often broken clasts of soft to slightly siliceous or silty mudstone enclosed. Quantity of these appears to diminish down-hole (Question-could up-section be down-hole?), with the mudstone clasts being rip-ups from the presently overlying mudstone?) Otherwise the conglomerate is medium to fine grained, speckled appearance, light grey to black, subrounded to angular pebbles, and contains a few short sideritic zones. Some probable between flow erosional tops also seen to indicate tops are down hole - i.e. at contact at end of the section. Main siderite sections is 315.1-315.5, after which the conglomerate is a dark colour and coarse grained for 1 m, before returning to the medium-fine variety. Bedding suggested at $45^\circ \pm$.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3
Commenced	Location		Tests at	Hor. Comp.
Completed	Core Size		Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage From	To	Description	Sample No.	Length	Analysis				
					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
		pebbles, and trace disseminated Zn S. is present at 325.4 - 325.6. Becomes coarse grained, with mudstone fragments at 326.3 to 328.2.							
		Broken, probable fault zones, with major core loss at 328.2 - 332.5.							
		Rock type in this section is mainly shattered looking fragments of conglomerate but broken as muddy surfaces. Some show disseminated siderite, most show a greenish powder colouration (clay?). A fairly intact section from 329.5 to 330.6 (50 cm of core) is mainly sideritic (10%) medium grained conglomerate, and 20 cm of graphitic pyritic (wisps and stretched out? pebbles) mudstone, "bedded" at 40°.							
331.9 - 338.0		Black carbonaceous mudstone with numerous thin 1 cm to 20 cm wide conglomerates or grit units (they make up 15% of section). Mudstone, is black, subtly bedded occasionally with very thin (to wispy) light grey silt or grit, or fine pyrite. Silicious throughout, and non calcareous. Often broken over short intervals, with graphitic surfaces at ± 50°. The conglomerates are more typical of the "clean" conglomerates than the debris flows, but fragments are more angular, and a siderite matrix usually is present between the fragments i.e. 333.1 - 333.5. Very sideritic (20%) matrix with fine grained conglomerate.							
		Sample 333.1 - 333.5	60076	0.4	28	4.5	80	67	
		Bedding overall is 55°.							

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

N82-3
Sheet
26

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						N82-3	27
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Footage	Description	Sample No.	Length	Analysis							
From To				Cu	Fe	Pb	Zn	Zn%			
				ppm	%	ppm	ppm				
338.0 - 340.2	Sideritic Conglomerates - Light yellow-tan speckled with fine to medium grained conglomerate pebbles of subangular light to medium grey chert. First and last 30 cm is coarse grained conglomerate. Interstitial fine grained siderite comprised up to 30% at this section. White quartz makes up 40% of the core over first 20 cm. Few fractures semi-parallel to the core, show greenish mud on surfaces.										
	Sample 228.0 - 340.2	60077	2.2	16	15.83	24	189				
340.2 - 351.5	Mixed section of clean conglomerate, and mudstone, with minor grit and debris flows and a few bands of massive pyrite.										
	340.2 - 341.6 - Coarse conglomerate. Mainly coarse sub-rounded chert, sometimes with sutured edges, with a finer matrix of chert and mudstone. Occasionally the mudstone shows fine pin-point disseminations of siderite or minor pyrite. No bedding apparent.										
	341.6 - 343.2 - Mudstone - black, carbonaceous, graphitic. Bedding at 45°. Has a 20 cm wide coarse grit to fine conglomerate band, and ends with 40 cm of angular pebbled debris flow - graphitic.										
	343.2 - 343.8 - Conglomerate medium to coarse grained. Few pyritic clast pebbles. One large (5 cm) fine muddy pyrite "pebble", and minor interstitial pyrite.										
	Sample 342.8 - 343.8	60081	1.0	20	4.05	33	35				
	343.8 - 344.1 - Massive pyrite. Appears to be made up of angular fine grained pyrite pebbles (medium grained conglomerate), cemented by interstitial slightly coarser pyrite. Contains a few mudstone clasts.										
	Sample 343.8 - 344.1	60078	0.3								

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-3	Sheet 28
Commenced		Location	Tests at	Hor. Comp.								
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
Footage From	To	Description	Sample No.	Length	Analysis							
					Cu	Fe	Pb	Zn	Zn%			
					ppm	%	ppm	ppm	%			
		344.1 - 344.3 - Conglomerate - much as previous.										
		344.3 - 344.4 - Massive pyrite, much as previous.										
		344.4 - 344.8 - 10 cm conglomerate, then 15 cm mudstone, then 10 cm and grit, 10 cm mudstone. Bedding at 55°, graphite on parting planes. Grit has 2% siderite (very fine grains) and trace pyrite.										
		Sample 344.1 - 344.8										
		344.8 - 345.0 - Pyritic medium to coarse conglomerate. Pyrite as pebbles, or rimming chert.	60082	0.7	41	10.64	134	123				
		345.0 - 347.2 - Mudstone, black, carbonaceous, silicious, with a few thin silty bands at 50°.										
		347.2 - 347.6 - Conglomerate-bimodal-medium grained, with several very large pyritic chert pebbles. Minor suturing. Trace pyrite.										
		347.6 - 348.0 - Mudstone with silty bands (60:40). Bedding at 70°.										
		348.0 - 350.0 - Conglomerate. Coarse grained, with fine matrix (74=25). Coarser pebbles rounded. Fine matrix is angular and consists of fine chert chips of very small amounts of black mudstone, (sil) interstitial. Only a few fine grained, rounded pyrite pebbles.										
		350.0 - 350.7 - Black carbonaceous mudstone. Bedding at 70°.										
		350.6 - 351.1 - Conglomerate starts as coarse grit grades rapidly to medium coarse conglomerate, then back to medium conglomerate.										
		351.1 - 351.2 - Black carbonaceous mudstone.										
		351.2 - 351.5 - Grit - fine grained, with mudstone partings, and a leached quartz vein.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	Nidd	District	Hole No.	N82-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Footage		Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To											
351.5	361.2	Black mudstone, with one conglomerate section, and a few very thin debris flow intersections. Mudstone is black, usually silicious, but contains a few softer, non-silicious sections. Contains a scattering of granular to wispy siltstone to sandstone stringers (almost hair-like) at a consistent bedding angle at 75°. Very carbonaceous throughout, but no slickensided graphite fractures seen. Few minor pyrite grains to disseminated beds (1-3 mm) also present.										
		353.3 - 353.4 - Pyrite pebble conglomerate. Consists entirely of small (0.1 - 0.4 cm) pyrite pebbles, with 10% mudstone matrix on other mudstone pebbles.										
		354.1 - 354.8 - Conglomerate - Looks somewhat between a clean conglomerate and a debris flow - could be re-deposited conglomerate. Medium grained conglomerate, with clasts and shears of mudstone.										
		Few sed. features to bottom of hole again suggest that the stratigraphic top maximum be down the hole (i.e. at 558.9)										
		Debris flow, some broken core at 360.0 - 360.2, and a few more to end of hole.										
		End of Hole - 361.2										
		Bearing of Hole from Sperry-Sun tests: 82.3 m (208°), 173.7 m (201°), 265.2 m (213°).										
		Note: Magnetic susceptibility readings over all core in hole do not give any readings.										

D. Hole Record



Property NIDD PROPERTY District Mayo, M.D. Hole No. N82-4
 Commenced September 16, 1982 Location Boundary Creek Area Tests at 91.5m(-47°), 182.9m(-44°) Hor. Comp. 202.8 m
 Completed October 7, 1982 Core Size HQ, NQ Corr. Dip -45° overall Vert. Comp. 202.8 m
 Co-ordinates Latitude: 100,387.02 N; Longitude: 108,177.56 E True Brg. Surface - 214° Logged by M.R. Murrell
 Objective To continue stratigraphic fence test, and to test for a % Recov. Date Sept. 24 - Oct. 7, 1982
 possible eastward extension of the Boundary Creek Showing

Claim NIDD
 T Brg. Surface 214°
 Collar Dip -47°
 Elev. 1161.88 m
 Length 277.7 m
 Hole No. N82-4
 Sheet 1

Metres From To	Description	Sample No.	Length	Analysis					
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%	
0 - 31.7	Overburden, but much is recovered.								
	0 - 7.0 No recovery								
	7.0 - 24.4 Semi-consolidated overburden consisting of angular to rounded pebbles of mudstone, and conglomerate, with occasional grit or volcanic. Most are small chips to pebbles, (<1cm - 2 cm) but occasional larger block (to 15 cm long) are present. Matrix is black to dark grey mud, likely caused by weathering of mudstone. Ratio matrix:pebbles = 3:1								
	24.4 - 31.7 Most mud washes out until 29.0 leaving mainly large intersections (to 20 cm) of various intrusive boulders (granodiorite-monzonite). 29.0 - 31.2 is similar mud and pebble matrix as before.								
	Reduce from HQ to NQ at 28.7.								
	31.6 Sideritic 4 cm volcanic clast - possibly sphalerite mineralized in O/B								
31.7 - 41.5	Dark chert pebble conglomerate, mudstone, and short sections of massive pyrite pebble conglomerate. Very poor core recovery over much of this section, especially near the beginning.								
	31.7 - 37.5 Is 60 cm of broken core - dark medium grained subangular conglomerate, followed by black slightly silty mudstone and minor debris flows.								
	37.5 - 39.0 75% recovery. First 40 cm is pyrite pebble conglomerate. Rounded to sub-rounded pyrite pebbles becoming closer packed down-hole. Lower contact at approximately 20°. Followed by medium to coarse debris flow (subangular).								
	Sample: 37.5 - 37.9	60083	0.4	118	25.5	474	26		

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4					
Commenced		Location	Tests at	Hor. Comp.					
Completed		Core Size	Corr. Dip	Vert. Comp.					
Co-ordinates			True Brg.	Logged by					
Objective			% Recov.	Date					
Metres	Description		Sample No.	Length	Analysis				
From	To				Cu	Fe	Pb	Zn	Zn%
					ppm	%	ppm	ppm	
		Sample: 37.9 - 39.0	60084	1.1	32	3.71	57	67	
	39.0 - 41.5	1 metre recovered, Mainly black mudstone, but contains a 6 cm wide band of fine grained massive pyrite cutting at 45°.							
		Sample: 49.0 - 40.5	60085	1.5	50	6.5	120	27	
		40.5 - 41.5	60086	1.0	81	9.13	103	79	
41.5 - 42.1		Pyritic talcose volcanic - possibly a volcano clastic. Overall dark green with evenly disseminated grains of pyrite - up to ½ cm across, at 30%. Very soft overall, and cuts like talc; likely an alteration of the original volcanic constituents. No bedding seen. Contains minor gouge.							
		Sample: 41.5 - 42.1	60087	0.6	136	15.03	94	79	
42.1 - 43.6		Black mudstone and minor debris flows. Black, carbonaceous and siliceous. Contains minute pin-point disseminations of pyrite and a few minor interstitial smears. Quite broken. Has 10 cm of talcose rock similar to previous (clast?). Graphite common over the last 15 cm on broken slickensided surfaces.							
43.6 - 49.3		Talcose Volcanic Zone - light grey, fine grained soapy feeling, talcose zone, with a few short mudstone bands, and a few probable fault gouge zones. Talc pieces very often have volcanic texture.							
	43.6 - 44.1	Dark and light green somewhat streaky, with disseminated pyrite (10%) much like 41.5 - 42.1.							

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. N82-4
Sheet 2

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres		Description	Sample No.	Length	Analysis				
From	To				Cu	Fe	Pb	Zn	Zn%
				ppm	%	ppm	ppm		
	44.1 - 45.3	Black siliceous carbonaceous mudstone. Only 30 cm recovered of broken material.							
	45.3 - 46.2	Light grey fine grained talc volcanic rock with stylolitic looking mudstone and minor pyrite. Fault gouge.							
	46.2 - 47.0	Broken black siliceous mudstone.							
	47.0 - 49.3	Mottled textured, mixed light grey talcose volcanic rock and black siliceous mudstone. In most instances appears to be soft-sediment infolding, but occasionally the talc is sharply angular with mudstone forming a black matrix. Could be breccia or fragmental in nature; the talc looks distinctly volcanic. Sometimes quite broken, usually within the mudstone, which then shows graphite on short slickensides (ie. 48.3).							
	49.3 - 53.3	Mudstone with several thin fine grained, closed packed debris flows. Overall black and siliceous. Carbonaceous and broken over the first half of this section, but becoming quite competent over the latter half. Conglomerates (debris flow) at 50.3 - 50.9 is medium to coarse grained chert pebble with minor pyrite pebbles, semi-supported by a low percentage of black mudstone. Has minor quartz veining. Rest of the section is banded by interlayered fine, chert-rich debris flows or coarse grit, and black mudstone containing thin silty wispy laminations. Contacts are at various angles, and enfolding is common suggesting soft sediment slumpage. At 52.3 is a thin (3 cm) vuggy quartz vein, adjacent to it the gritty "pebbles" have been replaced (?) by fine muddy pyrite. Overall bedding variable, would average + 55°.							

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

N82-4

Sheet

3

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
53.3 - 60.1	"Dark conglomerate" debris flow - A chert pebble rich debris flow that has a black mudstone matrix, and is therefore mudstone supported. Could likely be an original unconsolidated flow that has been re-deposited as a relatively local debris flow. Pebbles are mainly light grey to medium grey in colour, and angularity decreases with increasing pebble size, so that it ranges from subrounded down to angular. Contains three sections of talcose tuffaceous material (light grey, fine to medium grained) at 54.9 - 55.4, 57.5 - 57.8, 58.6 - 58.9 - Possible beds? Fine grained pyrite pebble - 7 cm long, at 58.0. A volcaniclastic "boulder" (or possible thin bed?) is present at 59.2 - 59.4; it is medium grained and speckled dark green - black, and light green, with very irregular boundaries. Core is much more matrix rich from then on and becomes to resemble more the usual debris flow. Bedding not well displayed, but suggested at 45°?? The talcose zones, and other small boulders or layers look much like thin laminated ash layers and are distinctly tuffaceous or agglomeritic. ZnS is present as disseminated pin-points in a few small mudstone or chert pebbles, or as a few minor granular clasts.							
	Sample: 53.3 - 54.8	60088	1.5	61	1.52	30	2220	
	54.8 - 56.3	60089	1.5	90	1.46	25	1630	
	56.3 - 57.8	60090	1.5	96	1.3	16	5030	
	57.8 - 59.3	60091	1.5	74	5.29	33	107	
	59.3 - 60.1	60092	0.8	46	2.21	25	67	
60.1 - 71.6	Debris flows; interbedded with a few minor mudstone beds, and minor volcanic clasts. Debris flow is the usual mixture of approximately 20-25% rounded chert and mudstone pebbles, locally more, suspended in black carbonaceous mudstone, non-calcareous throughout. The main mudstone							

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					N82-4	4

Scale

Colour Plot
& Dip

Drill Hole Record



Property	N1DD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. N82-4

Sheet 5

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	ZnS
	units are: 60.1 - 63.3, 65.2 - 65.8, 66.3 - 68.7. The latter units are quite broken and sheared, so core is small chunks - graphite is very common on fracture surfaces of these pieces. Minor quartz veining also present. Probable minor faulting from 66.2 - 71.6 (gouge seen at 69.2). Pyrite pebble debris flow at 61.2. Bedding of debris flows at 40-65° (Variable). 68.5 - 71.6 2-10% <1 to 30 mm volcanic clasts - sideritic sometimes sphaleritic; some grains/disseminations of ZnS @ 70.5 - 71.0. Some clasts are tuff, agglomerate in character ie. - a large clast at 71.3 has irregular "flamed" edges.							
71.6 - 74.0	Mudstone - Black, fine grained, carbonaceous. Fairly competent, but breaks along graphitic bedding planes at 35° very consistently. Contains locally minor fine wispy quartz veins, and towards the bottom, a few thin bedded silty bands. Minute drag folding seen at 73.1. A few of the <1 cm silty units contain trace amounts of pin-point disseminated ZnS.							
74.0 - 89.8	Debris flows and minor mudstone, with enclosed blocks or boulders of various volcanics. ZnS is present as disseminations or small clasts in the debris flows, and especially as high grade disseminations in the volcanics.							
	74.0 - 77.7 Debris flow - Overall black with 10-15% medium grained light grey chert pebbles (angular to subrounded), which locally are coarser. Other variable size fragments or pebbles of black siliceous mudstone, and specks and blebs of pyrite. Matrix is not jet black, but medium grey and sandy or granular, fine grained looking - possible presence of very fine siderite disseminated throughout. Contains numerous small (2 cm) and a few large (15 cm) chunks or clasts of fine							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NTDD	District	Hole No.	N82-4	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							

Metres From	To	Description	Sample No.	Length	Analysis					
					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn %	
		(tuffaceous to medium (volcaniclastic) volcanics. The finer grained variety are spotted with red specks of ZnS and some boulders could grade up to 15% Zn. Other small clasts or specks of ZnS are disseminated sporadically through the flows.								
		Samples: 74.0 - 75.5	60093	1.5	993.19	22	e22400	2.12		
		75.5 - 77.0	60094	1.5	1334.53	20	e35200	3.56		
		77.0 - 77.7	60095	0.7	547.41	11	250			
	77.7 - 79.8	Black mudstone - Jet black, carbonaceous, competent. Unstructured except for very subtle silty wools locally (soft sediment deformation?). Bedding not seen, but some graphitic fractures at 45°.								
		Samples: 77.7 - 79.2	60096	1.5	460.96	10	154			
		79.2 - 79.8	60097	0.6	521.24	16	44			
	79.8 - 86.6	Debris flow much as previous, but matrix is more dominant, and mineralized volcanic pebbles-boulders are usually the tuffaceous variety with spotted disseminated red ZnS. Locations of these are: 80.8 - 81.1 (2) 81.3 - 81.5, 81.8 - 82.1, and a quartz veined agglomerate with minor patchy pyrite and trace Zn. A coarse grained volcaniclastic boulder present at 85.5 - 85.7 that contains est. 10% Zn over 10 cm. Talcose volcanic - coarse, dark green and light green (similar to previous talc zones) present at 86.2 - 86.5.								
		Samples: 79.8 - 81.3	60098	1.5	1882.16	19	e52400	4.94		
		81.3 - 82.8	60099	1.5	741.79	13	e17100	1.63		
		82.8 - 84.3	60100	1.5	1921.83	16	e29800	2.94		

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. N82-4
Sheet 7

Metres		Description	Sample No.	Length	Analysis				
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
		Samples: 84.3 - 85.8	75801	1.5	77	7.63	8	3950	
		85.8 - 86.6	75802	0.8	118	2.28	15	617	
		86.6 - 88.1 Mudstone - Black, carbonaceous, massive, fine grained. Unstructured except for a few thin disseminated pyrite bands at 65°.							
		Samples: 86.6 - 88.1	75803	1.5	46	2.79	41	9920	
		88.1 - 89.8 Debris flows - medium grained to locally coarse grained chert and mudstone pebbles. Subangular to angular and densely packed. The section from 88.3 to 88.7 is interbanded to almost laminar siliceous mudstone and medium to fine grained sandstone with minor interstitial siderite(?) Well bedded at 80°.							
		Debris flow conglomerate locally has disseminated clasts of ZnS, and fine grained disseminations along a few minor fractures semi-parallel to core. Contact with underlying "unit" at 40°.							
		Samples: 88.1 - 89.8	75804	1.7	56	2.32	17	8690	
		89.8 - 92.1 Talcose Zone, volcanoclastic, and thin high grade ZnS zone - Possibly all a large clast that's tumbled into this overall debris flow area.							
		89.8 - 91.0 Talc Zone - Dark green black overall with a light tannish colour fine spotted to mottled distinctly volcanic texture, with trace fine pyrite. Subtle foliation at 35-40°.							
		Samples: 89.8 - 91.0	75805	1.2	105	14.7	8	3960	
		91.0 - 92.0 Volcanoclastic - Sideritic. Light green-yellow overall, but spotted with rounded to subrounded small (1/2 cm) siliceous mudstone pebbles, and minor small clasts of red ZnS. Competent (1 piece) Upper contact sharp at 45°, lower one							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4						
Commenced		Location	Tests at		Hor. Comp.					
Completed		Core Size	Corr. Dip		Vert. Comp.					
Co-ordinates			True Brg.		Logged by					
Objective			% Recov.		Date					

Metres From	To	Description	Sample No.	Length	Analysis					
					Cu ppm	Fe %	Pb ppm	Zn ppm	Zn %	
		more indistinct, goes to a tuffaceous, pyritic "unit", then debris flow, over 30 cm.								
		Samples: 91.0 - 92.0	75806	1.0	158	17.8	14	e53100	5.18	
	92.0 - 92.1	High grade ZnS - Light tan-orange fine sandy looking section (probably a clast) with fine black speckles (<1%), consisting almost entirely of fine ZnS and siderite. Diffuse boundaries.								
		Samples: 92.0 - 92.1	75807	0.1	319	8.03	54	e156200	14.82	
	92.1 - 107.0	Black mudstone laminated or banded with pyrite or siltstone and pyrite. Black, fine grained and siliceous throughout. Very broken (along bedding planes) so that only rarely do pieces exist >10 cm long. Graphite and truly broken (possible faults) exist only at a few places scattered through this section.								
	92.1 - 94.2	Debris flow - could be the "tail end" of the previously described debris flow that contained the talc, volcanoclastic, and Zn as enclosed clasts. This portion is typical except that pyrite is present as a few fine grained muddy pyrite pebbles, as a few clasts, and as a few "rims" on mudstone or chert pebbles.								
		Samples: 92.1 - 93.6	75808	1.5	50	5.64	16	300		
		93.6 - 94.2	75809	0.6	52	4.88	28	219		
	94.2 - 107.0	Black mudstone. Very well banded with .05 mm to locally 3 cm silt, but more commonly fine to coarse sands and locally with thicker bands grits and conglom- erates. Most thin pyritic or silty bands range from wisp size to (very rarely) 1 cm in width. Bedding varies from 60 to 90°, but would average overall at 70°.								

Hole No. N82-4
Sheet 8

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at							N82-4	9
Completed		Core Size	Corr. Dip								
Co-ordinates			True Brg.								
Objective			% Recov.								

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
	Pyrite and grit would make up perhaps 10-15% of the section. A few notable variations to the overall section: 97.4 - 97.8 - Broken and graphitic							
	98.3 - 98.6 - Bedding contortions							
	99.5 - 99.8 - 15 cm of massive pyrite, 15 cm of 70% pyrite as layers or pebbles							
107.0 - 110.3	Muddy volcanic debris flows and volcanics.							
	107.0 - 107.8 Light yellow-green fine grained probably tuffaceous and sideritic volcanic with a central 35 cm of a speckled volcanic. It is dark green-black and completely shot through with light grey-tan stubby crystals (35%). Whole section is quite talc-rich (soft, soapy) but has no associated fault gouge. Contacts of this overall section on either side, are intermixed with the enclosing mudstone over several cm. On down hole side it forms a soft sedimentary debris flow.							
	107.8 - 109.5 Mudstone and debris flow. Mudstone is black, carbonaceous and moderately silty. Some breaking, with graphitic slickensides. Breaks at 25°, with slickensides at 90° to core axis, on the fracture face, or parallel to core. Debris flow contains no chert pebbles or fragments - just tan brown rounded muddy sideritic(?) balls, or minor pebbles of the previous volcanic. Suggestion of bedding at 55°							
	109.5 - 110.3 Sideritic volcanoclastic - Light green, with minor darker green very fine pebbles throughout. Very competent and fine grained, but is cut by one gouge fault at 109.7.							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
110.3 - 121.3	Black mudstone with minor volcanic boulders, grading to carbonaceous siltstone towards the end of the section. Much of the section is broken into small irregular chunks, but core recovery is good usually. Mudstone is black, and enclosed scattered lighter yellow-grey silty "pebbles" or enfolding (may be sideritic). More competent sections show subtle (colour banded) bedding at 45°. Volcanic boulders are more typical probably tuffaceous or volcaniclastic types up to 20-30 cm wide and may be pyritic. Coarser ones are light green matrix with coarser green grains. Only a few present in upper part of section. Has a small chert rich debris flow at 116.5.							
110.3 - 114.7	Mudstone with silty bands, and pebbles to boulders of volcanics.							
114.7 - 121.3	Mudstone (definitely of Canol characteristics), with siltstone, sandstone, and occasional conglomerate bands as in the preceeding section.							
	Locally poor recovery (ie. 115.2 - 115.7 - 20 cm). From approximately 117.0 to 119.1 core becomes gradually more silty, and contains very fine grained pyrite. Lighter grey colour overall, and fine bedded at a consistent 65°.							
	From 119.1 - 121.3 changes back to the more typical mudstone with a minor (<5%) amount of thin wispy to hairline fine silt, again showing bedding at 75°.							
	Carbonaceous on bedding surfaces, and locally graphitic where irregularly broken.							
121.3 - 126.2	Slightly sideritic debris flows, with intermixed mudstone and a few short sections of mudstone. Debris flow is medium to coarse, with minor small light grey pebbles, larger grey-black siliceous mudstone pebbles, all with a matrix of black mudstone that often has fine greyish siderite mixed with it. Debris flow dominates from 121.3 - 125.1. Colour is overall dark but locally							

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. N82-4	Sheet 10
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Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4					
Commenced		Location	Tests at		Hor. Comp.				
Completed		Core Size	Corr. Dip		Vert. Comp.				
Co-ordinates			True Brg.		Logged by				
Objective			% Recov.		Date				

Metres From To	Description	Sample No.	Length	Analysis					
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%	
	and smaller pebbles are almost completely replaced. The main mineralized sections are: 130.4 - 130.5 (10%); 132.6 - 133.2 (9%); 133.5 - 135.1 (4% as fine disseminations); 136.3 - 136.5 (fine grained, mixed with pyrite 10%); Quartz veining with 3% ZnS from 135.7 - 136.3 - broken, possible minor fault. Short sideritic sections at 136.9 - 137.1, 138.2 - 138.7.								
	Samples: 130.3 - 131.8	75813	1.5	55	2.62	19	8830		
	131.8 - 133.3	75814	1.5	279	1.38	31	e83200	9.08	
	133.3 - 134.8	75815	1.5	45	3	15	e21200	2.04	
	134.8 - 136.3	75816	1.5	116	2.03	32	e44500	4.03	
	136.3 - 137.8	75817	1.5	66	5.89	28	e26100	2.34	
	137.8 - 138.8	75818	1.0	25	5.51	15	1474		
	138.8 - 139.6 Mudstone - black, carbonaceous. Siliceous to moderately siliceous with a few enfolded irregular sandy bands, and minor very fine grained muddy brownish-tan pyritic bands (one is 5 cm wide, and bedded at 45°). Most is broken into short irregular chunks, some with graphitic surfaces.								
	Samples: 138.8 - 139.6	75819	0.8	40	5.46	15	266		
	139.6 - 146.9 Chert Pebble Conglomerate - Variable in grain size over short sections from medium coarse to coarse, dark colour overall due to amount of mudstone matrix and mudstone clasts. Locally bimodal due to sandy size matrix with larger rounded chert or mudstone pebbles. Appears to be a dusting of fine siderite throughout, that is gradually increasing down hole, and may be up as much as 7% over 10 cm sections. Few broken sections - ie. 142 - 142.4, 144.8 - 145.2. Bedding								

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres From To	Description	Sample No.	Length	Analysis					
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%	
	locally developed (in enclosed mudstone ie. at 145.5). Most is cherty with sandy to muddy matrix and local siderite enrichment.								
	Samples: 139.6 - 141.1	75820	1.5	30	1.79	68	735		
	141.1 - 142.6	75821	1.5	25	3.29	21	106		
	142.6 - 144.1	75822	1.5	19	4.31	13	72		
	144.1 - 145.6	75823	1.5	30	4.66	16	121		
	145.6 - 146.9	75824	1.3	26	4.35	16	296		
	146.9 - 150.9 Debris flow mixed with short mudstone sections, grading to the chert pebble conglomerate of previous. More mudstone rich portions are black, carbonaceous(?), and occasionally banded by narrow grit units (½ cm +), and a few fine mineralized conglomerate bands (ie. 147.3 - 147.4, 147.8 - 147.9) as small red-orange grains that are actually replaced fine chert grains - some of which are only partially replaced. Bedding well displayed at 55°. Much of this section is broken into small chunks. Has a 20 cm wide white quartz vein at 149.6 - 149.7 containing stylolitic wisps and patchy green sericite. Massive broken fine grained pyrite over the last 30 cm.								
	Samples: 146.9 - 148.1	75825	1.2	55	1.16	17	e25000	2.26	
	148.1 - 149.6	75826	1.5	20	2.49	17	828		
	149.6 - 150.9	75827	1.3	67	4.53	52	686		
	150.9 - 159.8 Medium grained chert pebble conglomerate, with large mudstone clasts and local minor coarser sections, or short grit sections. Most of the core is bimodal with a fine conglomerate (coarse grit) matrix of mud supported chert grains								

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
					N82-4

Sheet
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N82-4

Scale

Colour Plot
& Dip

Drill Hole Record



Property		District	Hole No.				Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
NIDD			N82-4										
Commenced		Location	Tests at		Hor. Comp.								
Completed		Core Size	Corr. Dip		Vert. Comp.								
Co-ordinates		True Brg.		Logged by									
Objective		% Recov.		Date									
Metres		Description	Sample No.	Length	Analysis								
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%				
		varying from 10 to 20%. Larger pebbles are rounded, black mudstone or chert. Large 1-5 cm angular to rounded (average subangular mudstone clasts are common in interval and not that usual in most CPC). On dry surface the conglomerate is white to light grey colour with darker pebbles throughout. No pyrite or ZnS apparent, except a few muddy pyrite pebbles at 152.5. Several broken zones, including slickensides at 154.0.											
		Samples: 150.9 - 152.4	75828	1.5	23	2.55	14	94					
		Interstitial siderite in fine grained conglomerate at 157.1 - 157.2 (20%). Disseminated pyrite in fine grained muddy grit (2%) at 157.6 - 157.9, after which conglomerate becomes cleaner (less mudstone matrix) than previous.											
		Samples: 158.3 - 159.8	75829	1.5	23	1.35	20	187					
		159.8 - 161.3 Coarse grit and minor fine conglomerate, grading locally to fine grit. Most pebbles or grains are rounded to sub-rounded. Contains a few muddy pyrite pebbles, and a trace amount of ZnS as small scattered grains or clasts, and along a few wispy short (1-2 cm) healed fractures, or as partial replacement of small chert grains.											
		Samples: 159.8 - 161.3	75830	1.5	23	1.39	52	3150					
161.3 - 165.4		Black Mudstone with light grey diffuse muddy enfoldings. Slightly siliceous. Massive and competent, but carbonaceous (especially seen on broken surfaces. Shows local soft sediment deformation, and stretching or lighter portions in boudin shaped bodies. Several healed micro-faults locally. Bedding at 75° where apparent. One pyrite blob (2 cm wide) central to											

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Metres	Description		Sample No.	Length	Analysis						
From	To				Cu	Fe	Pb	Zn	Zn%		
					ppm	%	ppm	ppm			
		one lighter band. Non-calcareous.									
		Samples: 161,3 - 162,8	75831	1.5	61	4.55	10	102			
165,4 - 206,0	Conglomerate Section - Starts off as a few metres of true muddy debris flow which rapidly changes to a chert pebble conglomerate by 167,0, then gradually changes to a cleaner conglomerate with a matrix of silica, siderite, minor mudstone, and variable ZnS by 170,0. After 170,0, becomes very bimodal with a grit or fine grained conglomerate matrix, at 50-60%, with the remainder of medium sized rounded to subrounded light grey to medium grey chert. Coarser pebble percentage gradually increases so that by 177,5, it is mainly medium grained sideritic conglomerate. After this is a long section of medium to coarse variably sideritic and variably mineralized conglomerate.										
	165,4 - 167,0 Debris flow - Mainly black carbonaceous mudstone with a scattering of light grey chert grains that locally increase to give a mud supported conglomerate. Bedding suggested at 65°.										
	167,0 - 170,0 Chert Pebble Conglomerate. Mud supported conglomerate, gradually becoming more chert rich and mud poor. Lower boundary arbitrary. Has a 7 cm wide fine grained muddy pyrite bed at 168,3 with bedding at 75°. Becomes sideritic (5%) with trace pin point interstitial pyrite and a few specks of red ZnS at 169,3 to 169,8.										
		Samples: 168,5 - 170,0	75832	1.5	25	2.15	18	364			
	170,0 - 173,9 Mainly medium grained chert pebble conglomerate with scattered larger pebbles. Siderite present throughout as 1% disseminations, but short sections contain										

N82-4
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Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres		Description	Sample No.	Length	Analysis				
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn% %
		Samples: 180.9 - 182.4	75841	1.5					
		182.4 - 183.1	75842	0.7	19	6.31	132500		
		183.1 - 183.8 Coarser chert pebble conglomerate with high grade ZnS. Conglomerate is typical coarse multilithic and sideritic, but the first 20 cm has a 50% matrix of granular reddish to reddish orange sphalerite, and a massive patch of pure ZnS exists 20 cm further on. The rock surrounding these two patches has low percentages of interstitial and partial-replacement ZnS. Estimated 12% overall.							
		Samples: 183.1 - 183.8	75843	0.7	288	6.21	19e139500	13.08	
		183.8 - 186.8 Sideritic coarse to locally medium chert pebble conglomerate, with scattered grains and disseminations of reddish ZnS. Usually the ZnS is grain like partial replacement of chert, with siderite comprising the matrix. Amounts are variable, but don't reach >4% over any 10 cm section. Few thin white quartz veins (at 30 ⁰) also contain a few grains of ZnS.							
		Samples: 183.8 - 185.3	75844	1.5	50	7.61	19e21300	2.12	
		185.3 - 186.8	75845	1.5	36	9.6	19e11230	1.22	
		186.8 - 206.0 Variably sideritic medium to locally coarse chert pebble conglomerate. Coarser pebbles are usually sporadically distributed black siliceous well rounded mudstone, or lesser light grey chert. Siderite content varies from none to perhaps 7-10% over 10-15 cm sections, as interstitial yellow grains. No pyrite, ZnS or bedding is in evidence, except at end of section. Occasionally the core is broken, but not shattered, with a muddy brownish, or greenish looking non-calcareous coating on fractures at 10 ⁰ -30 ⁰ . Few minor wispy quartz or siderite							

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No.

N82-4

Sheet

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Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District		Hole No.	N82-4	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	N82-4	Sheet	18
Commenced		Location		Tests at															
Completed		Core Size		Corr. Dip															
Co-ordinates				True Brg.															
Objective				% Recov.															
Metres		Description	Sample No.	Length	Analysis														
From	To				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%										
		filled fractures at 45°. Few 1 cm pyrite cubes at 202.4, 204.0, 205.3.																	
		Samples: 186.8 - 188.3	75846	1.5	17	6.19	10	118											
206.0	213.6	Grit grading downward to a mixture of grit and medium grained chert pebble conglomerate.																	
		206.0 - 210.1 Fine grained grit overall is medium grey speckled with 20-30% yellowish siderite.																	
		First metre is interbedded with medium grained sideritic conglomerate in 10-20 cm wide bands. Last metre has a few scattered light grey chert fragments. Whole section is fairly competent, bedding occasionally displayed at 55°.																	
		210.1 - 213.6 Medium grained chert conglomerate with a gritty siderite matrix comprising up to 30%. Pebbles are matrix supported. Core is overall competent, showing no bedding. Few large (1-2 cm pyrite cubes are present. No apparent ZnS.																	
		Samples: 206.0 - 207.5	75847	1.5	17	2.73	17	23											
		207.5 - 209.0	75848	1.5	14	7.73	12	44											
		209.0 - 210.5	75849	1.5	26	6.41	15	41											
		210.5 - 212.0	75850	1.5	11	12.6	12	54											
		212.0 - 213.6	88251	1.6	14	12.1	18	45											
213.6	277.7	Sideritic Chert Pebble Conglomerate. Overall medium grained, with a few scattered coarser pebbles of black rounded mudstone. Pebbles are subrounded to subangular, usually floating in a matrix of fine grained yellowish siderite, so overall the core has a yellowish cast spotted with light grey to dark grey chert. Pebble size and siderite content somewhat variable, of course, but would range between 5 and 15%. Several sections are broken and locally the core																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					N82-4	19

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
	recovery is low, but overall is quite good. Whole section is fairly similar, and only the more significant changes will be noted. Assay intervals are random samplings of this sideritic zone.							
219.8	A few large (1-2 cm) pyrite cubes.							
220.8 - 221.2	Slightly broken							
222.8	Broken, with fractures at 30°, followed by 10 cm of disseminated pyrite cubes, to 1 cm wide, (20%). Band crosses the core at 25-30°.							
223.3 - 225.5	Quartz vein zone. About 30% white quartz veins ½ cm to 3 cm wide criss-crossing the core at various angles. Sometimes contains scattered greenish sericite on contacts. Core is quite broken; may be a small fault at this location.							
225.9 - 226.9	Broken with fractures semi-parallel to core greenish powder on surfaces, but no gouge.							
228.2	Broken zone with a thin quartz vein at 45° that has sericitic gouge at contacts, and probable slickensides at 45° to plane.							
	Samples: 215.5 - 217.0	88252	1.5	327.58	28	35		
	227.0 - 228.5	88253	1.5	2210.2	<4	41		
230.8 - 234.0	Very broken, with very poor recovery at 231.5 - 232.6 - a probable fault at this location.							
235.0	Fault gouge over a few cm - mainly greenish muddy sericite.							
235.8 - 236.1	Another badly broken area - probable fault.							
236.8 - 247.9	Core is quite competent - only a few low angle (25-35°) fractures and a couple of thin quartz veins at 50°, one of which is vuggy, with small well formed							

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No.	N82-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

Metres From To	Description	Sample No.	Length	Analysis				
				Cu ppm	Fe %	Pb ppm	Zn ppm	Zn%
	crystals of quartz (244.0). Another thin (2 mm) quartz vein at 243.1 - 243.5 cuts at 10 ⁰ , is 50% vuggy or void. Broken with sericitic quartz vein at 246.1 to 246.2.							
248.7 - 249.3	Broken zone, with a few large quartz crystals, and white quartz. Could be a small fault, or a wider vuggy quartz vein. Very high flow of water from this zone.							
249.5 - 250.0	Some type of broken zone.							
251.5 - 251.6	Broken and sericite cemented vuggy sericitic quartz zone. Sideritic content appares to be slightly increasing at this point.							
	Samples: 235.0 - 236.5	88254	1.5	9	10.1	<4	279	
	245.0 - 246.5	88255	1.5	19	9.1	<4	22	
254.6 - 254.7	Minor vuggy quartz with green sericite, small calcite blades, quartz crystals, and disseminated pyrite.							
255.4 - 255.6	2 cm wide white quartz vein crosses at 45 ⁰ . Start to get a low percentage of small (1-2 cm) rounded light tan siderite pebbles scattered through at this depth (<1%).							
257.0 - 257.6	Low angle (parallel to 20 ⁰) fractures start to increase, ending in a short broken zone.							
260.8 - 262.2	Two stages of quartz veining in evidence - an earlier grey quartz filling short tension type fractures, and a later white quartz up to 4 cm wide with diffuse boundaries. White is at 45 ⁰ , chite cuts the grey, also at 45 ⁰ to core axis. Quartz veining makes up 15% of this section - rest is sideritic chert pebble conglomerate.							

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					N82-4	20

Scale

Colour Plot
& Dip

Drill Hole Record



Property	NIDD	District	Hole No. N82-4		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						N82-4	21
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Metres	Description	Sample No.	Length	Analysis							
From To				Cu	Fe	Pb	Zn	Zn%			
				ppm	%	ppm	ppm				
	265.6 - 266.0 Broken Zone, could be a small fault.										
	267.0 - 267.3 Slightly broken										
	268.2 - 268.4 Quite broken at 40-45°.										
	269.3 - 269.5 Broken.										
	270.2 - 271.6 White subangular to subrounded chert pebbles are present at 10% of core, and overall pebble size is slightly less than previous. Still has sideritic matrix, and occasionally the yellowish siderite has replaced edges of chert pebbles.										
	271.7 - 273.4 Very badly broken zone. Most of the core is as previous, perhaps with less white chert, but is completely broken into pieces only a few cm or less across. No gouge seen, but a few quartz veins are present, sometimes with trace sericite.										
	Samples: 255.0 - 256.5	88256	1.5	13	12	<4	34				
	265.0 - 266.5	88257	1.5	7	8.4	<4	17				
	273.8 - 274.0 Broken Zone.										
	274.8 - 275.3 Broken Zone.										
	275.8 - 277.7 Broken Zone - Pebble size is decreasing to medium or fine grained, and fine grained siderite content is up to 20% locally. Most fractures 35-40°.										
	Samples: 275.0 - 276.5	88258	1.5	31	8.8	<4	25				
	END OF HOLE - 277.7 - HQ & NQ casing left in so hole could be deepened.										

FROM: Mining Recorder at MAYO

TO: Supervising Mining Recorder at Whitehorse, Y.T.



FOR ACTION ARE:

NEW APPL'N for PLACER LEASE to PROSPECT: Name:

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name:

Lease No.

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name:

Lease No.

ASSIGNMENT of PLACER LEASE No.

From:

To:

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.

Owner:

DIAMOND DRILL LOGS: TRENCHING & ROADBUILDING

Claims: "NIDD" Group

Claim sheet no:

105-0-1/2

QUARTZ ASSESSMENT REPORT:

Claims:

Claim sheet no.

Type of report:

Submitted by:

Cls. work performed on:

\$ Req. for ren. application

4 HOLES - 1242 METRES
31 TRENCHES
CORE STORED AT CAMP 8
(NIDD #318)

[Signature]
Signature

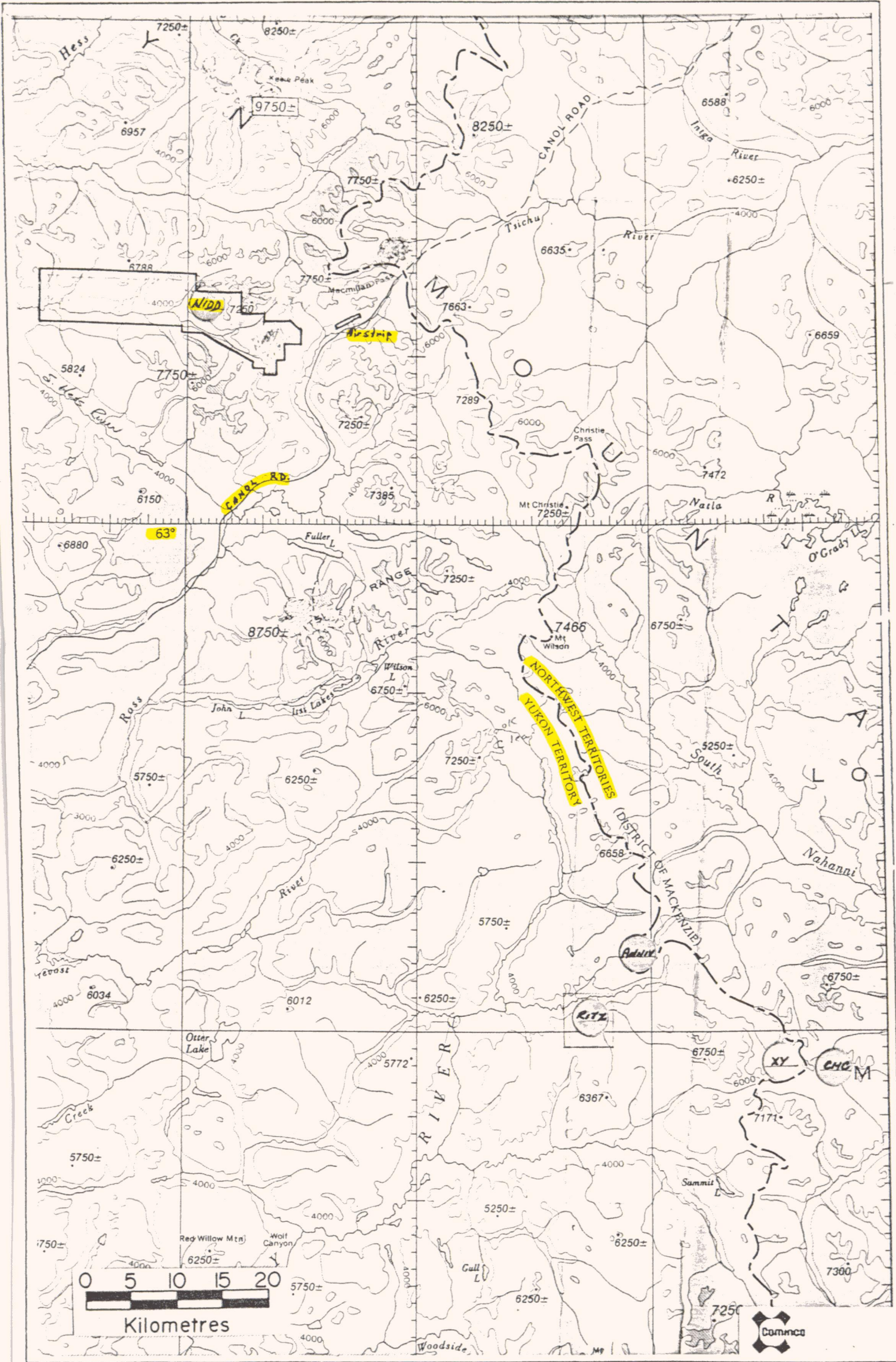
REPLY ACTION:

Date Ret.

CC GEOLOGY

091421

Signature



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

091421

LOCATION MAP
NIDD PROPERTY

Mike Marshall

Scale: 1:500,000 Date: Dec / 82 Plate: A

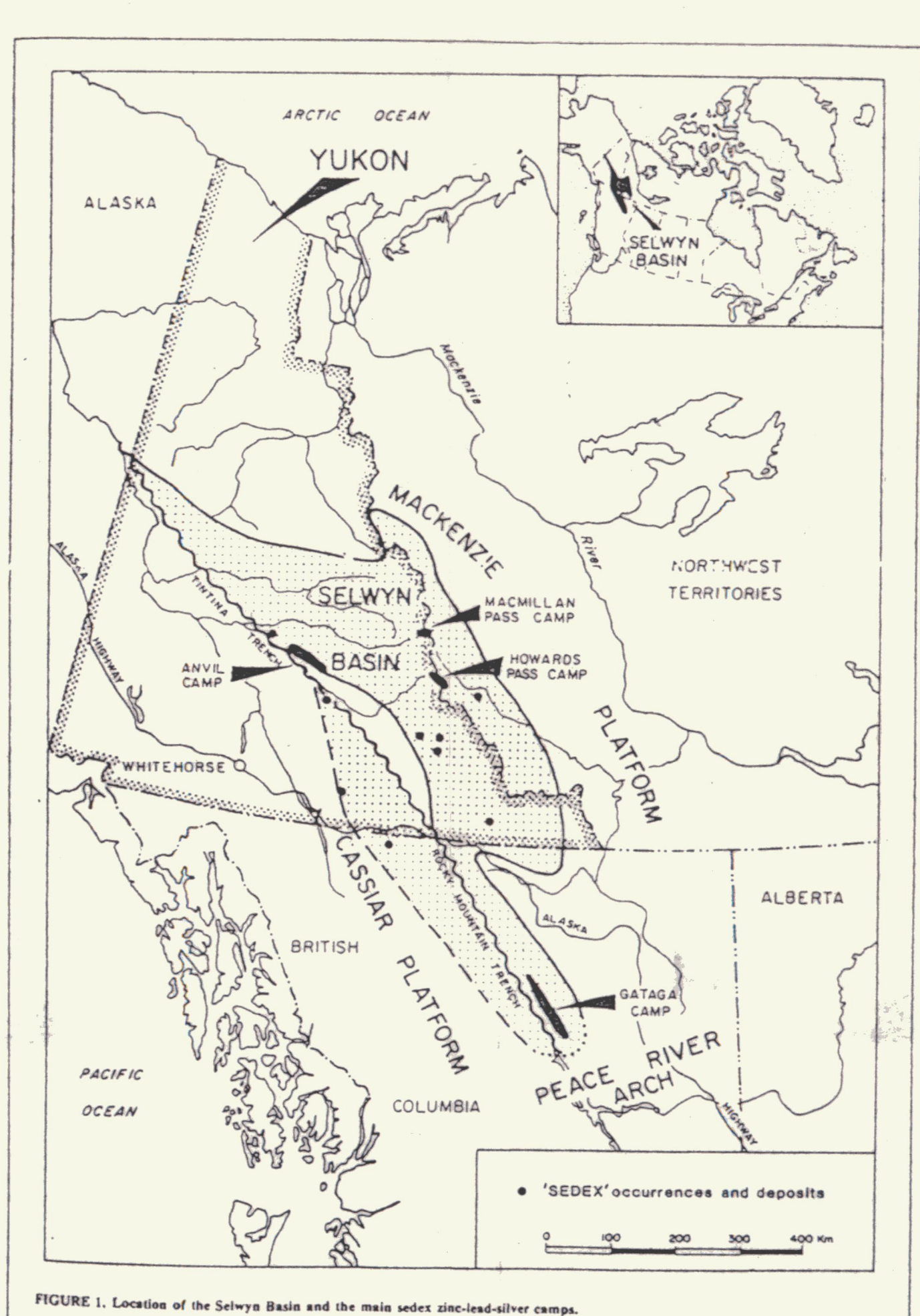
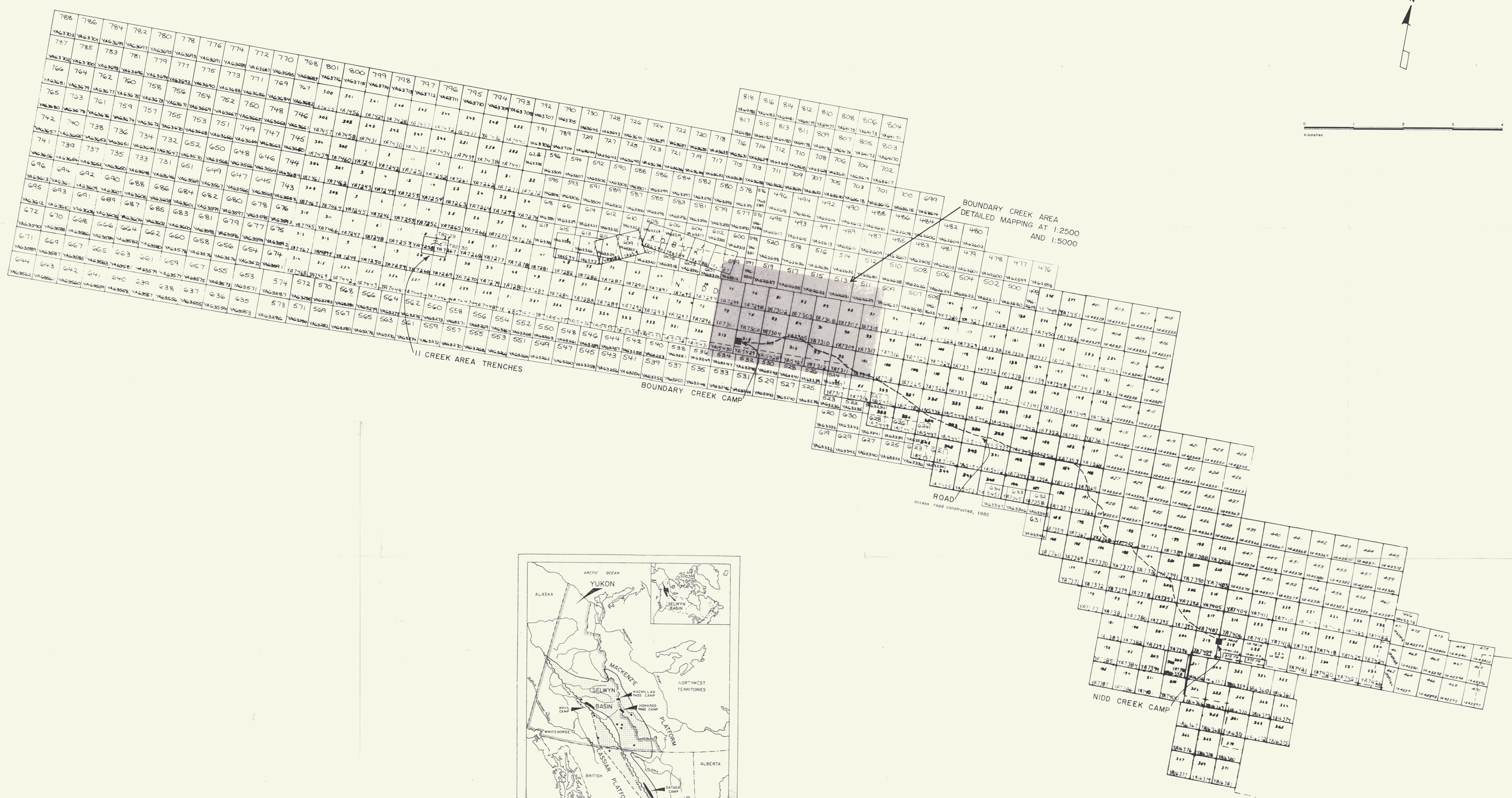
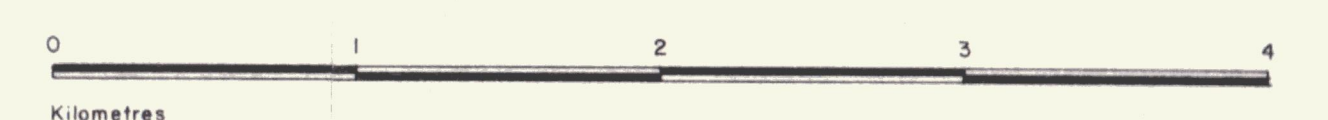


FIGURE 1. Location of the Selwyn Basin and the main index sites lead-zinc-copper.

091497

NIDD PROPERTY

Drawn by: _____	Traced by: _____
Revised by: _____	Revised by: _____
Date: _____	Date: _____

Road Construction and Trenching Areas 1982

NTS 105/O 1B2

Scale: 1:25,000 Date: Dec. 1982 Plate: 2



DRILL COLLAR LOCATIONS

From	To	Length	Bearing
I.P. Nidd 316	N82-1	700 m	19°
	N82-2	425 m	13°
	N82-3	225 m	0°
	N82-4	125 m	270°

- LEGEND**
- Trenches
 - Diamond Drill Holes
 - Approximate Claim Post Position



Mike Howard

NIDD PROPERTY

Boundary Creek Area
Drilling and Trenching - 1982

Scale 1:5,000 Date NOV 1982 Plate C

