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AN ASSESSMENT OF THE DY DEPOSIT
DIAMOND DRILLHOLE DATABASE

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SSESSMENT OF THE DY DEPOSIT DIAMOND DRILLHOLE DATABASE

INTRODUCTION

The Dy deposit is known through a database describing the results of studies of the core from 57 deep diamond drillholes spread over an area 1500 m long and 1100 m wide. These drillholes have penetrated a significant resource but hole spacing is not yet sufficient to provide a reliable estimate of its size and shape. Further work will be required to better understand the Dy deposit and it is imperative that the present database be workable and understandable at that time.

We have reviewed the Dy database, particularly in light of what we know of Grum and its database, and have found that the situation is quite manageable provided some ground rules are known. The Dy database is certainly in a much better position than Grum was one year ago and is probably one of the best in the district.

This is a brief assessment of each of the various files in the data base and an estimate of the needed revisions. A more complete statement of needed work, i.e. the ground rules noted above, is available separately.

R reference will be made to specialist geologist and non-specialist geologist. These are levels of personnel required to effect certain revisions.

Specialist geologist refers to a geologist trained or experienced in working with metamorphic tectonites with the experience of at least 2 months logging and mapping at and around Dy. This experience should include relogging a section with holes logged by each original worker and study of the reference core collection at Grum. No exceptions should be made, even for current staff.

Non-specialist geologist refers to someone with geological experience but no special familiarity with Dy.

THE DATABASE

CAMC's geological data is stored conventionally and in a computer database.

Organization of CAMC's diamond drill hole database is into several files keyed in general to downhole footage:

T collar location data
R downhole survey data
P assay sample and assay data
L lithologic data
S fold structural data
F fault structural data
C composites of assays

More detail of these files and an example of one drillhole is provided in Appendix 1.

Drillhole Master File

All holes have been surveyed for coordinates relative to UTM grid and NTS elevation datum. This and other data on the drillhole are stored in this file. This file, like all computer files, should be checked for entry errors but no changes will be required since adequate survey control was established early at Dy.

Downhole Survey File

All holes have been surveyed by Sperry Sun singleshot or gyroscopic survey. The data is stored in this file and, beyond routine checking, no changes are required. Survey disks and reports are stored at Faro and Vancouver.

Lithologic File

This file is a down the hole listing of lithologic units all keyed to a common alpha-numeric code. The Dy data is stored in an internally consistent way that, with the appropriate conversion tables, can be made to correlate fairly directly with current units at Grum.

The level of stored detail for this data has been enlarged in our new programs thus manual format changes will be needed. When these format changes are required, nomenclature changes can also be made. This is a job that should only be undertaken by a specialist- geologist, who will formulate the exact conversions to be made.

This is probably the file that will be perceived to be most in need of revision however, we emphasize two points which follow particularly from experience at Grum:

(a) Current nomenclature at Grum may not correspond to usage several years from now. If Dy is unlikely to be an active project for several years then it will do little good to change it now.

(b) The number of changes made to a database must be minimized otherwise future revisions will become increasingly difficult, indirect and unreliable.

We have prepared preliminary statements on the meaning of various units used at Dy and the correspondence to current usage at Grum as well as the reference core collection for the Vangorda Plateau. This preliminary review should be enlarged upon and kept up to date.

Assay File

There are 1705 assay samples for Dy. All sample intervals are keyed to logged lithology and are for 2m. or less intervals. The assays have all been determined at one laboratory using standards, derived from district ones, for quality control. Pulps are stored in a N_2 purged atmosphere at the analytical laboratory and rejects have been saved as well.

Assay intervals are all uniquely numbered and stored in the file cross indexed with footage, ore type, assay results, core recovery and in some cases specific gravity. Original data sources are secure in the Vancouver exploration office, hardcopies of the assay database are widespread in the Company.

This file needs to be checked for routine errors and discrepancies. For data retrieval purposes assays of mixed ore types must be indicated in the file to insure representative data is retrieved. To date, we have no data retrieval and manipulation software designed for this file and do not believe format changes to this file should be made until this is in hand.

A non-specialist geologist and data entry operator can make all needed revisions.

Structure File

Careful record was made of the vergence of D_2 folds and the angle to the core axis of the S_2 foliation. Other relevant structure data is collected.

The present file contains a data recording convention that circumvented plotting limitations in old programs. New programs make that format obsolete and data correction is required before computer plotting of data is possible. A non-specialist geologist or technical assistant can easily do this.

Fault File

This file organizes brittle, generally fault related, rock characteristics in a down the hole string to facilitate computer plotting.

This is a new development (necessitated by experience at Grum). Relevant data in Dy logs is recorded in lithology and structure portions of existing logs. This must be organized into F file format. This is a non-specialist geologist job but better done by specialist geologist and data entry operator.

Composites File

This is a new feature where the specialist geologist will organize composite assay intervals to suit his/her interpretation. This file is now empty. We feel it is best left that way until a specialist geologist is available. Manual composites are available from G. Simpson's work, they could be entered but we might request format changes. The composites will all have to be redone as interpretations change. This is best done by a specialist geologist and data entry operator.

Software changes will be needed for the composites program to produce meaningful data.

Summary

To summarize, the database is usable provided the ground rules are known. A trained geologist can easily learn these and make the required changes. We feel the database should be changed as few times as is possible, otherwise successive changes become more difficult.

Plotting

CAMC's new computer programs can carry out fairly unique projections of drillhole data to better reflect the geological structure.

This requires establishment of a projection direction. There would be no ready agreement on projection direction for Dy at this time. This is an area where further work by a specialist geologist is required. This should include field mapping around Dy to test new fault possibilities.

These new programs further require restructuring data to be effective. There is little point in restructuring now if plotting capabilities are likely to change again.

Post Dy Developments in District Geology

Since 1975 the importance of late, low angle faults was increasingly recognized in the Anvil District. These structures are known beneath Swim and Grum and preliminary data shows one or more is present at Dy. It was only in the last field season however that time has been available to apply this concept to a reinterpretation of the surface map pattern of the Vangorda Plateau. The results of this work show that large scale extensional faulting is indeed a major component of the structural style of the district and that these faults partly define the limits of the Grum and perhaps other deposits. (Figure 1).

It seems likely that one or more major low angle faults underlies part of Dy and further possible that the deposit is truncated at its northwest end by one of these faults. It is imperative that this concept be evaluated at Dy.

Once these late faults are dealt with then the fold pattern of the deposit should be reinterpreted. Just as metabasites structurally above Grum appear to mimic the deposits shape (figure 2) those above Dy can be expected to provide relevant if not constraining data. Sufficiently detailed mapping has not yet been done to define their geometry. A key to successful fold interpretation is the location of a particular lithologic interface which may provide a marker horizon to aid correlation of ore horizons. Current work at and around Grum and mapping planned for the Vangorda Plateau are better defining the criteria to recognize this interface, and some check relogging will be needed at Dy to fully apply these criteria. For now a best guess can be made and not all current interpretations account for the data (it was not deemed as potentially useful then as it is now). Figures 3 through 5 compare various interpretations available for Dy, none of these fits all the data and none is totally consistent with the shape of other deposits or structural relations of Vangorda Plateau rocks. Figure 6 is a conceptual model of what one horizon of Dy might look like drawing upon the known geometric constraints, the appearance of other deposits and the structural style of the district. If definition of a deposit like that shown in Figure 6 is required, then much additional drilling will be needed. For now only an approximation can be made to Dy and given the current control the approximation will not be substantially more believable than the existing polygonal calculation of tonnage and grade.

A season of mapping and check logging would address these issues and we believe that no further work should proceed on Dy until this is done.

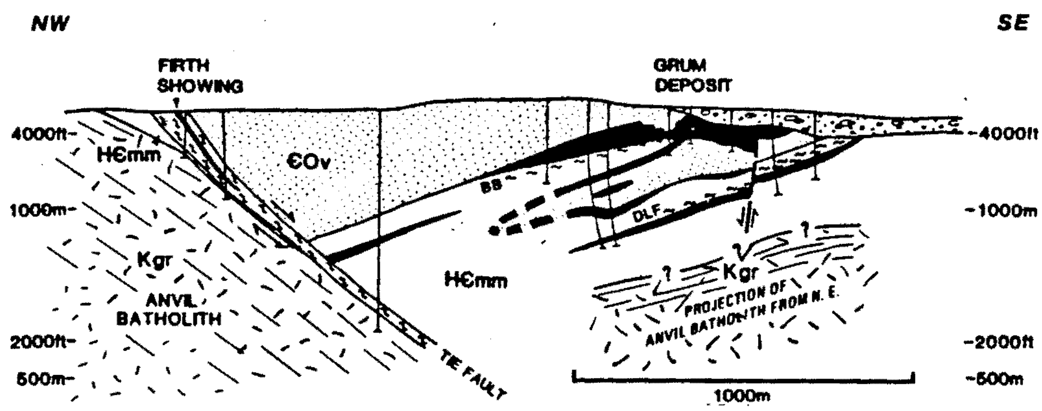

Figure 1 . A diagramatic long section showing the plunge of the Grum folded structure and the relation of the Grum deposit to th Firth showing. Firth appears to represent slivers of Grum caught in a large extensional fault, the Tie Fault, that separates footwall amphibolite facies metamorphic and granitic intrusive rocks from hangingwall greenschist facies

 all sulphide lithofacies

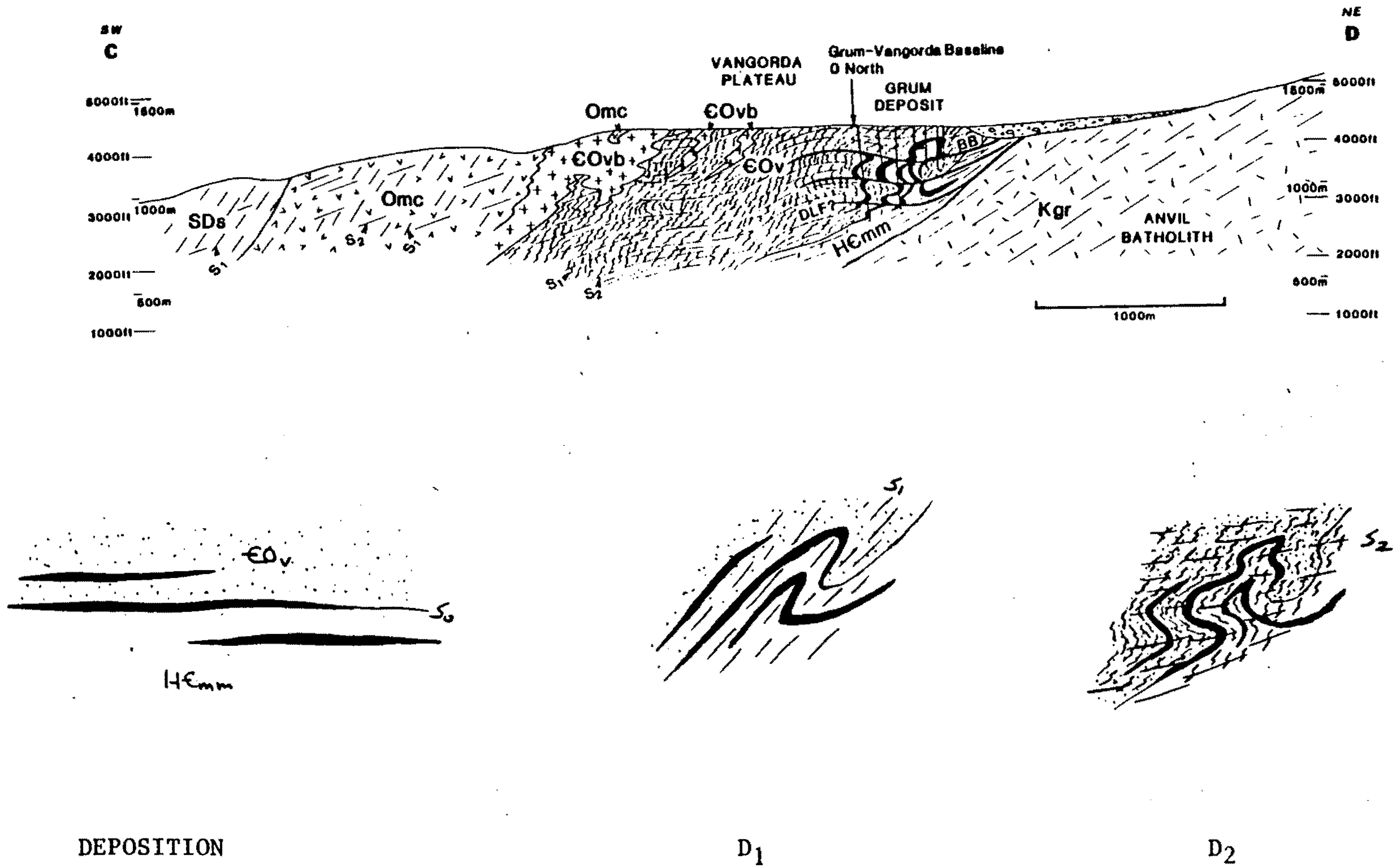

Figure 2. Cross section through Vangorda Plateau and Grum deposit (86 W). The Grum deposit provides the best example of the D_1/D_2 interference pattern in the district. The deposit is involved in a large Z (or N) shaped D_1 fold refolded by S shaped D_2 folds. The steeply dipping S_1 crenulated by shallowly dipping S_2 is typical of the structural relations on the Vangorda Plateau where greenschist facies rocks dominate. Post D_2 folds gently warp the S_2 foliation. The inserts show the sequential development of Grum from a sequence of stacked en echelon ore layers parallel to S_0 through D_1 and D_2 to produce the geometry observed today.

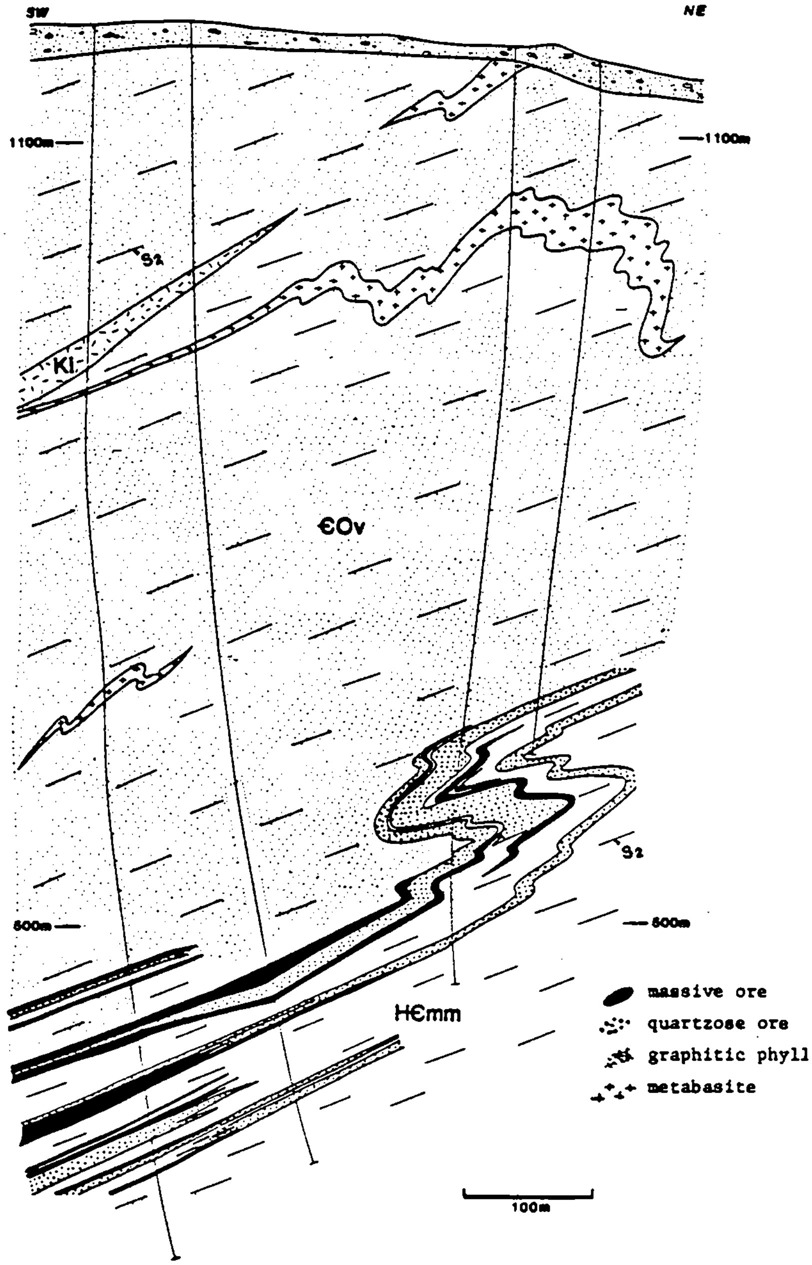

Figure 3 Dy cross-section 12+00E, near the northwest end of the deposit. This is an example of the sections used as the basis of the polygonal tonnage calculation. In general, these sections emphasize unit parallelism to S_2, show small amplitude D_1 folds particularly at the northeast end and down play D_2 folding. Distribution of probable Vangorda formation lithologies is not consistent with correlation of ore horizons, symmetric intersections are not considered fold repetitions and facing directions implied by Anvil Cycles are not followed. Interpretation by B.V. Hall (note that this particular section does not portray many of the above limitations since it was specifically selected not to in order to be suitable for other purposes).

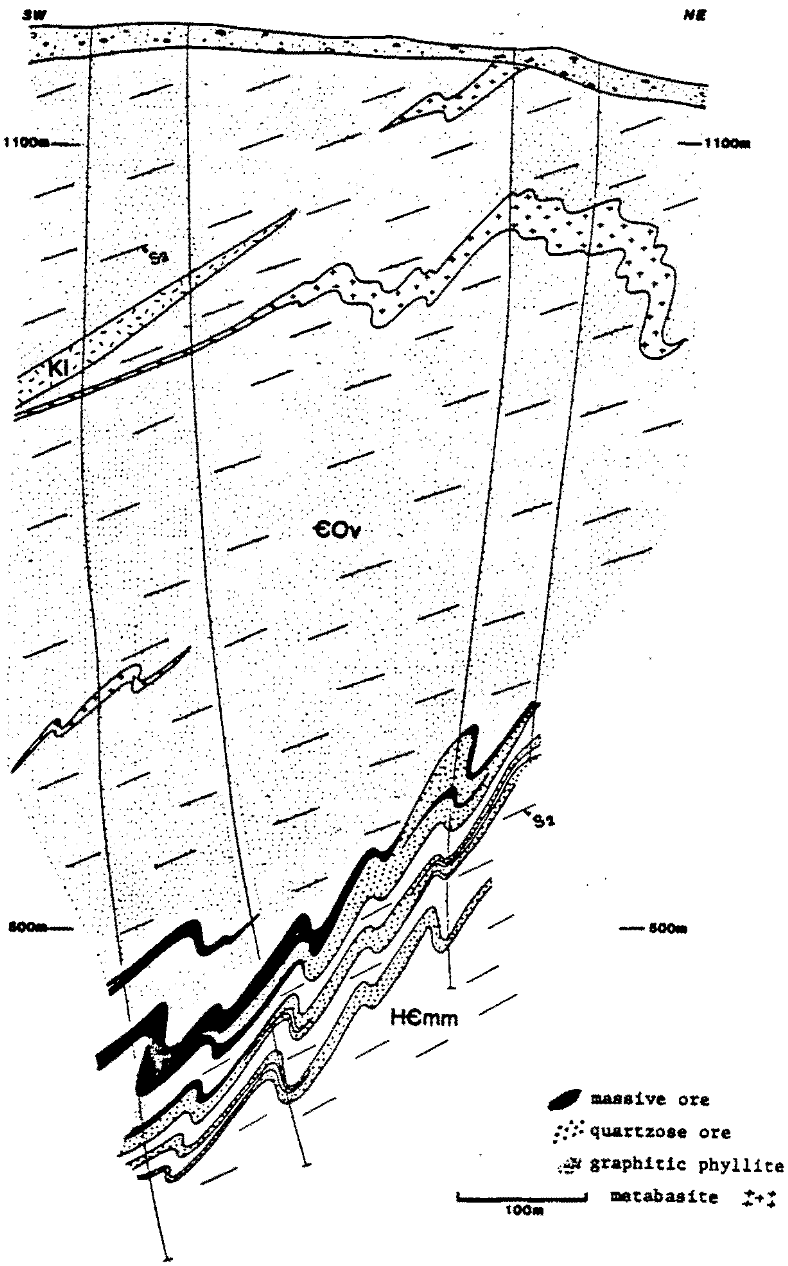

Figure 4 Another version of Dy 12+00E showing D_1 folds with moderately SW dipping axial planes as the dominant structure. These sections also downplay the importance of D_2 folds. As with the generation of sections illustrated in Figure 3, implications of symmetric intersections, Vangorda calcareous phyllites and Anvil Cycle facings are not always considered. Interpretation by J.G. Simpson.

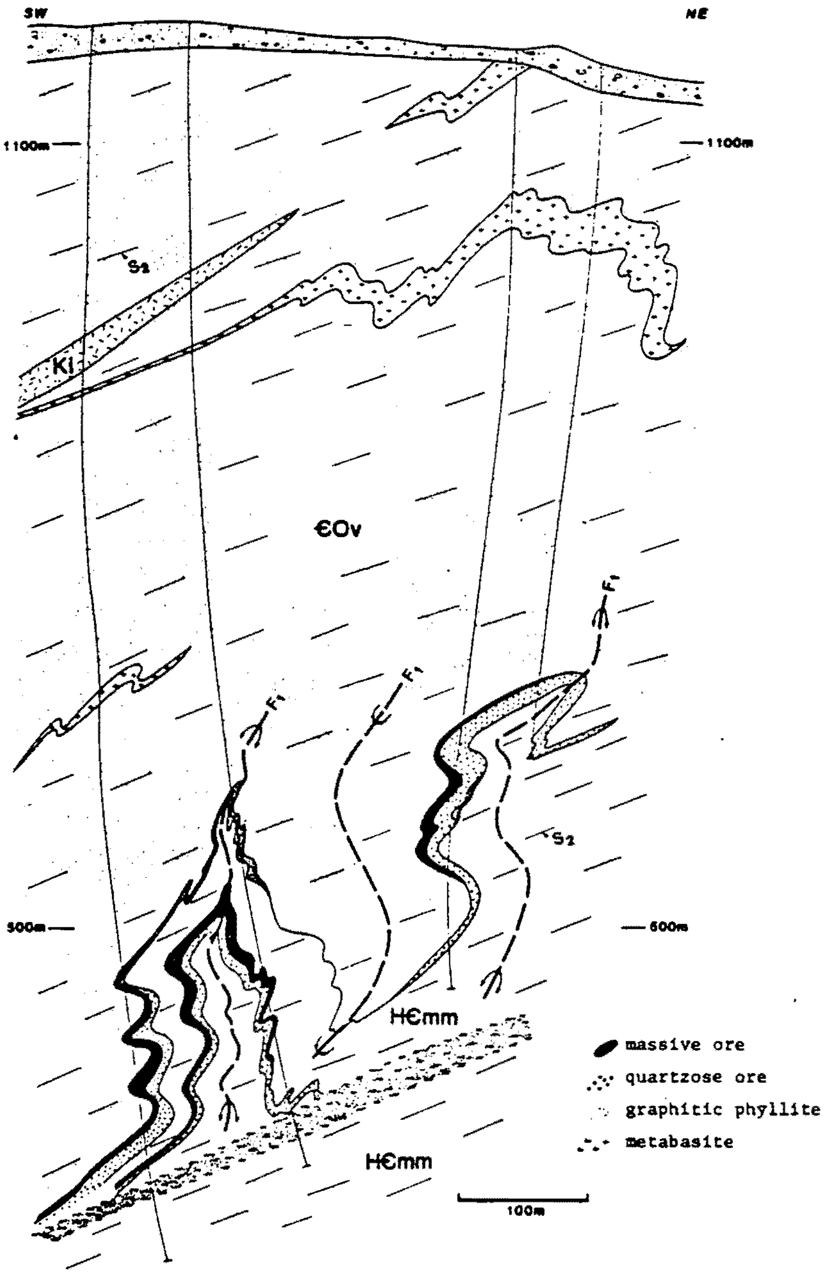

Figure 5. A version of Dy 12+00E designed to account for all the previous limitations and with the intention of mimicing Grum. Unfortunately, as more densely drilled sections toward the southeast show, this section does not look like Dy which is constrained to have significantly smaller amplitude D_1 folds resulting in units dipping shallowly southwest nearly parallel to S_2 and rolling over toward the northeast end. Interpretation by G.A. Jilson. The graphitic unit at the base of the deposit is a low angle fault.

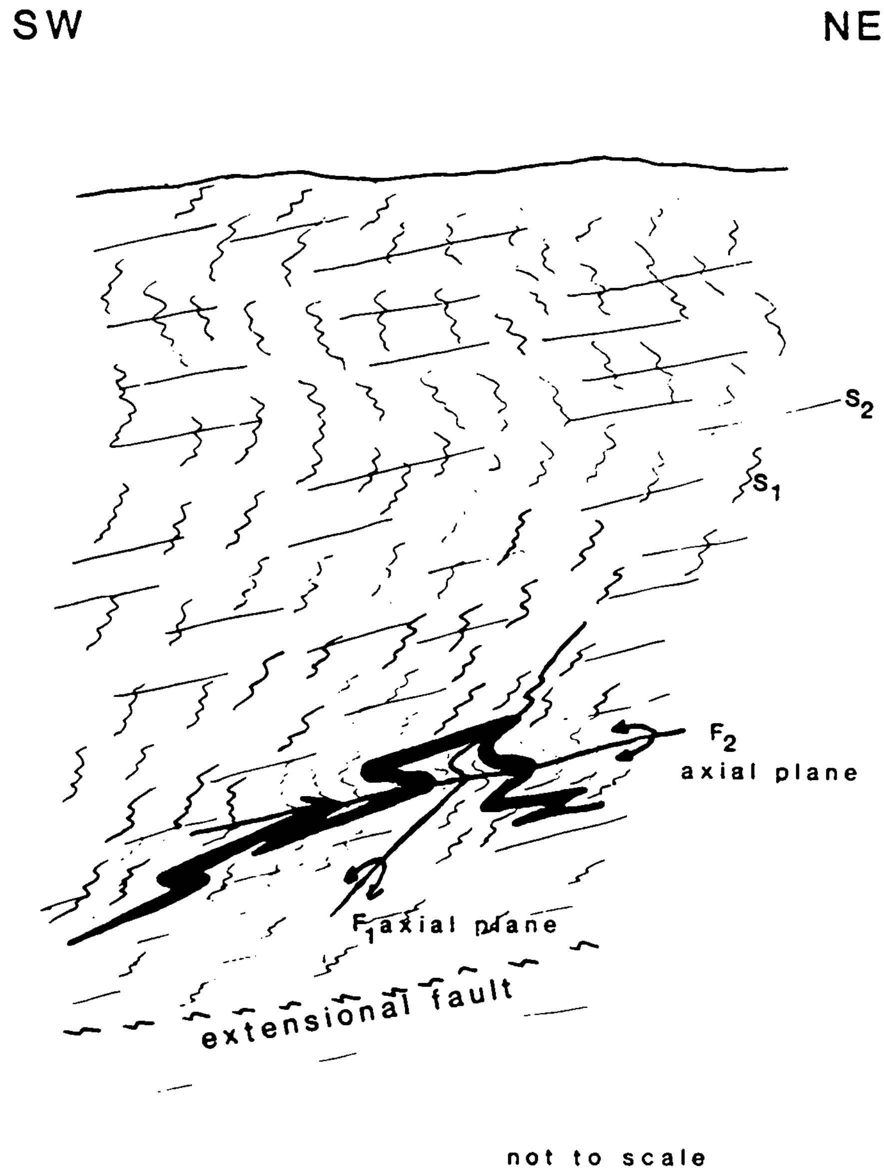

Figure 6. A conceptual model of what one horizon of Dy is expected to look like based on geometric constraints of drill density, structural style of the district and analogy to other deposits. D_1 fold amplitudes must be relatively small compared to Grum and, as is characteristic of D_1/D_2 relationships, D_2 folds should have about 1/3 this amplitude. In general, the interpretation of B.V. Hall is a conservative approximation of this geometry although it does not adequately display the structural style of the district. There are at least three large horizons at Dy and possibly several smaller ones; these appear to be the same three horizons present at Grum.

Conclusions

The Dy database should be left as is until more work is to be carried out on the deposit. While revisions will be needed they should be made at the time work resumes. For now, the groundrules needed to make these revisions have been laid out and in our estimation the database is stable.

Reinterpretation of Dy should be undertaken by a suitably trained geologist who must have a background of surface mapping around Dy. This individual should incorporate new concepts and constraints into the Dy interpretation to make the deposit more compatible with other district deposits and its own control.

CAMC's geological priorities now rest with the Grum and Faro deposits and initiation of Vangorda Plateau remapping. This work will occupy the current staff's attention through the 1985 field season. Until late 1985 no start could realistically be made on Dy. In this time frame significant advances could be made in CAMC's computer capabilities.

A tentative minimal schedule for a realistic and meaningful work program on Dy is given below:

a) hiring of a qualified specialist geologist or redesignation of current staff.

b) minimum 3 months to familiarize with database and district geology and to do preliminary sectional interpretations.

c) 4 month field season field mapping and at least check relogging.

d) 8 month plotting and complete deposit reinterpretation, identification of trouble spots. Petrographic and mineralographic studies.

e) 2 months check logging.

f) 8 month finalizing interpretation, initial summary statistical data compilation and writing up.

APPENDIX I

DDH SUBFILES
(DIAMOND DRILL HOLE DATA BASE)

1. Drill Hole Master Data

   location and elevation of drill hole

   other general information

2. Downhole Survey Data

   orientation of drill hole at specified downhole survey stations

3. Assay Data

   sample number, assay intervals, analyses, etc

4. Lithology Data

   lithologic units logged sequentially downhole

5. Structure Data

   structural measurements of planes (So bedding, S_1 S_2,... cleavages) recorded at intervals downhole

6. Fault Data

   location, extent, and orientation of faults logged sequentially downhole

7. Composites Data

   weighted averages of analytical data for specified intervals

DRILL HOLE	:	79X01
NORTHING	:	6,901,160.2
EASTING	:	597,289.3
ELEVATION	:	1,164.1
TOTAL DEPTH	:	772.2
SECTION	:	15+00E
R.F.E.	:	52
RFE DIRECTION:		185
PLUNGE ANGLE :		0
PLUNGE DIRECT:		0
DHD CALC:		1
SS CALC:		0

DETAIL RECORD COUNTS:

NOS ORE-SAMPLES:	34
NOS DOWN-H-SURVEYS:	26
NOS DOWN-H-LITHOLOGY:	104
NOS DOWN-H-STRUCTURE:	202
NOS DOWN-H-FAULTS:	0
NOS DOWN-H-SPLINES:	26
NOS COMPOSITES:	0

DDH: 79X01 UTM-N: 6901,16C.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+CCE
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 C DHD CALC: 1 SS CALC: 0

----DEPTHS--- FROM	TO	SAMPLE NO.	INT.	REC.	ROCK UNIT	S.G. PULP	CU %	PB %	ZN %	AG(AA) G/MT	AG(FA) G/MT	AU(FA) G/MT	PO %	PY %	TOT FE	BAO %	HG %	MN %	AS %	BA %	S.G. W.R.
509.8	511.4	0CC07	1.6	.0	4K9		.36	.06	.02	5.00											
511.4	512.9	0CC08	1.5	.0	4K9		.26	.22	.10	6.50											
512.9	514.9	0C009	2.C	.0	4K0		.13	.38	.14	7.00											
514.9	517.0	0C010	2.1	.0	4K0		.10	.C9	.02	4.00											
517.C	518.7	0C011	1.7	.0	4E0		.02	.48	.15	5.00											
518.7	520.7	0C012	2.C	.0	4C9		.35	.79	.46	18.00											
520.7	522.7	00C13	2.0	.0	4C9		.31	.52	.23	11.00											
522.7	524.3	0C014	1.6	.0	4C9		.24	.14	.06	5.00											
524.3	525.7	0C015	1.4	.0	4K0		.13	.10	.04	3.50											
525.7	526.7	00C16	1.C	.0	4L0		.02	.12	.08	4.C0											
526.7	528.1	00C17	1.4	.0	4L0		.02	.11	.04	6.C0											
528.1	528.8	0CC18	.7	.0	4K0		.C1	.C9	.02	4.C0											
528.8	530.4	0C019	1.6	.0	4A0		.C9	.C2	.02	.10											
532.3	532.9	0C020	.6	.0	4A0		.04	.01	.01	.10											
532.9	535.0	0C021	2.1	.0	4K0		.02	.11	.05	6.00											
535.0	536.0	00022	1.0	.0	4A0		.01	.C2	.01	.10											
536.0	536.7	0C023	.7	.0	4K0		.C2	.12	.06	8.00											
536.7	538.0	00C24	1.3	.0	4L0		.01	.04	.02	.10											
538.0	540.3	0C025	2.3	.0	4K0		.12	.07	.04	3.C0											
545.4	546.0	00026	.6	.0	4L0		.29	.08	.04	4.00											
547.3	549.2	0C027	1.9	.0	4C5		.15	.13	.06	2.50											
549.2	550.1	00C28	.9	.0	4D9		.39	2.07	1.88	27.00											
554.5	556.5	00029	2.0	.0	4A1		.08	2.20	3.19	39.00											
556.5	558.5	0CC30	2.0	.0	4A1		.06	1.3C	3.32	23.00											
558.5	560.5	0C031	2.0	.0	4A1	2.85	.07	2.02	3.81	30.00	26.C0	.51	1	7	9	.19					
560.5	561.6	0CC32	1.1	.0	4A1	2.74	.11	2.16	5.27	32.00	33.00	.38	3	6	9	.09					
650.9	652.9	0C033	2.C	.0	4A0	2.88	.05	2.45	4.95	49.C0	49.C0	.72		8	9	.13					
652.9	654.9	00C34	2.0	.0	4A0	2.76	.02	1.93	4.45	34.00	29.CC	.62	1	2	4	.1C					
654.9	656.9	0C035	2.C	.0	4A0		.02	1.65	3.65	27.50											
656.9	658.9	0C036	2.C	.0	4A0		.03	1.61	3.13	26.00											
658.9	660.9	0C037	2.C	.0	4A0		.03	1.4C	2.07	25.C0											
660.9	662.7	0CC38	1.8	.0	4A0		.04	.98	2.22	21.00											
681.3	682.6	0CC39	1.3	.0	4C5		.03	2.01	3.65	27.C0											
682.6	683.5	0C040	.9	.0	4G0		.06	2.05	3.71	40.00											

WEIGHTED AVERAGE

FROM	TO	INT.	REC.	S.G. PULP	CU %	PB %	ZN %	AG(AA) G/MT	AG(FA) G/MT	AU(FA) G/MT	PO %	PY %	TOT FE	BAO %
509.8	530.4	20.6	.0		.17	.26	.12	6.54						
532.3	540.3	8.0	.0		.04	.06	.03	3.17						
545.4	546.0	.6	.0		.29	.C8	.04	4.C0						
547.3	550.1	2.8	.0		.22	.75	.64	10.37						
554.5	561.6	7.1	.0	1.22	.07	1.88	3.72	30.87	12.43	.2C	1	3	4	.C6
650.9	662.7	11.8	.0	.95	.03	1.68	3.43	30.57	13.22	.22		1	2	.03
681.3	683.5	2.2	.0		.04	2.C2	3.67	32.31						

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 C DHD CALC: 1 SS CALC: 0

DEPTH	ZENITH	AZIMUTH
0.000	180.000	0.000
31.000	177.100	198.900
61.000	176.800	221.400
91.000	176.700	257.800
122.000	175.700	275.200
152.000	175.900	270.200
183.000	175.000	282.200
213.000	174.100	277.700
244.000	173.700	280.200
274.000	172.200	287.100
305.000	170.100	291.100
335.000	170.600	296.600
366.000	169.700	298.100
396.000	169.000	299.900
427.000	168.300	301.300
457.000	167.700	304.100
488.000	167.200	303.400
518.000	167.100	307.100
549.000	167.300	306.900
579.000	164.300	323.400
610.000	163.000	329.200
640.000	163.100	337.000
671.000	161.200	336.000
701.000	160.600	343.500
732.000	161.900	349.400
762.000	161.300	346.100

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: 52 RFE DIR: 185 PLUNGE ANGLES: 0 0 DHD CALC: 1 SS CALC: 0

DEPTH	UNIT	CODE	DESC	RECOVERY	INC
5.4	0001	#		0.0	1
16.0	0002	5B0		0.0	1
41.0	0003	5B6		0.0	1
80.3	0004	5B0		0.0	1
112.7	0005	5B6		0.0	1
113.8	0006	5B0		0.0	1
121.1	0007	5B6		0.0	1
127.2	0008	5B0		0.0	1
159.5	0009	5B6		0.0	1
172.1	0010	5B0		0.0	1
200.1	0011	5B6		0.0	1
239.2	0012	5B0		0.0	1
255.2	0013	0C6		0.0	1
281.3	0014	590		0.0	1
296.9	0015	5D0		0.0	1
309.7	0016	566		0.0	1
340.4	0017	5B0		0.0	1
348.8	0018	5B6		0.0	1
351.5	0019	5B0		0.0	1
354.3	0020	5B7		0.0	1
363.8	0021	5B0		0.0	1
365.9	0022	5B7		0.0	1
381.5	0023	5B0		0.0	1
385.9	0024	5B6		0.0	1
407.7	0025	5B0		0.0	1
411.7	0026	5B6		0.0	1
416.3	0027	5B0		0.0	1
419.9	0028	5B6		0.0	1
423.0	0029	5B7		0.0	1
427.3	0030	5D6		0.0	1
429.6	0031	5B6		0.0	1
477.4	0032	5B0		0.0	1
478.8	0033	5D3		0.0	1
484.9	0034	5B0		0.0	1
486.7	0035	5B7		0.0	1
501.0	0036	5B0		0.0	1
507.8	0037	5B7		0.0	1
509.8	0038	5A7		0.0	1
510.3	0039	4K0		0.0	1
510.6	0040	5D6		0.0	1
511.4	0041	4K0		0.0	1
512.9	0042	5D6		0.0	1
517.0	0043	4K0		0.0	1
518.7	0044	4E0		0.0	1
519.1	0045	5D3		0.0	1
524.0	0046	4C0		0.0	1
524.3	0047	5D9		0.0	1
525.2	0048	4K0		0.0	1
525.4	0049	5D3		0.0	1
525.7	0050	4E0		0.0	1
528.1	0051	4L0		0.0	1

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: 52 RFE DIR: 185 PLUNGE ANGLES: 0 0 DHD CALC: 1 SS CALC: 0

DEPTH	UNIT	CODE	DESC	RECOVERY	INC
528.4	0052	4K0		0.0	1
528.8	0053	4E0		0.0	1
530.4	0054	4A0		0.0	1
532.3	0055	5A0		0.0	1
532.9	0056	4A0		0.0	1
535.0	0057	4K0		0.0	1
536.0	0058	4A0		0.0	1
536.7	0059	4K0		0.0	1
538.0	0060	4L0		0.0	1
540.3	0061	4K0		0.0	1
545.4	0062	4L0		0.0	1
546.0	0063	4L7		0.0	1
547.3	0064	4L0		0.0	1
549.2	0065	4C5		0.0	1
550.1	0066	4D0		0.0	1
554.5	0067	4L7		0.0	1
561.6	0068	4A1		0.0	1
572.5	0069	5B0		0.0	1
578.8	0070	5D0		0.0	1
605.3	0071	5B0		0.0	1
608.3	0072	5D0		0.0	1
643.9	0073	5D7		0.0	1
650.9	0074	5A0		0.0	1
662.7	0075	4A0		0.0	1
670.2	0076	5A9		0.0	1
676.2	0077	4L7		0.0	1
678.7	0078	5A0		0.0	1
681.3	0079	4L7		0.0	1
682.0	0080	4C5		0.0	1
683.5	0081	4G0		0.0	1
684.0	0082	4L7		0.0	1
686.0	0083	5A0		0.0	1
695.8	0084	5B2		0.0	1
696.5	0085	5B6		0.0	1
703.3	0086	5B2		0.0	1
709.0	0087	5B6		0.0	1
716.3	0088	5B2		0.0	1
719.5	0089	5B2		0.0	1
721.9	0090	5B0		0.0	1
726.2	0091	5A0		0.0	1
728.1	0092	5D0		0.0	1
729.8	0093	5A0		0.0	1
733.0	0094	5C0		0.0	1
736.1	0095	5D6		0.0	1
737.3	0096	5B6		0.0	1
739.7	0097	5D0		0.0	1
741.4	0098	5A0		0.0	1
757.6	0099	5A*		0.0	1
765.8	0100	3G6		0.0	1
768.9	0101	3G7		0.0	1
770.6	0102	3G5		0.0	1

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+COE
RFE: 52 RFE DIR: 185 PLUNGE ANGLES: 0 C DHC CALC: 1 SS CALC: 0

DEPTH	UNIT	CODE	DESC	RECOVERY	IND
771.0	0103	307		0.0	1
772.3	0104	305		0.0	1

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 0 DHD CALC: 1 SS CALC: 0

DDH	F DEPTH	T DEPTH	FEAT	SYMTRY	S0 ANGLE	DIRECT	S1 ANGLE	DIRECT	S2 ANGLE	DIRECT	RFE CDE	DHDC	SDC	PROCESS
79X01	0.0	5.4	F2	S	0	0	0	0	0	0	0	1	0	0
79X01	0.0	9.3	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	12.0	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	14.1	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	17.6	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	22.9	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	30.0	CS2		0	0	0	0	68	185	0	1	0	0
79X01	0.0	34.2	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	37.5	CS2		0	0	0	0	70	185	0	1	0	0
79X01	0.0	43.5	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	50.3	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	52.6	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	56.8	CS2		0	0	0	0	50	185	0	1	0	0
79X01	0.0	59.1	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	63.4	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	68.9	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	69.5	CS2		0	0	0	0	90	185	0	1	0	0
79X01	0.0	75.0	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	79.6	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	83.2	CS2		0	0	0	0	60	185	0	1	0	0
79X01	0.0	86.3	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	88.4	CS2		0	0	0	0	83	185	0	1	0	0
79X01	0.0	89.4	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	92.2	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	95.0	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	101.2	CS2		0	0	0	0	84	185	0	1	0	0
79X01	0.0	107.3	CS2		0	0	0	0	73	185	0	1	0	0
79X01	0.0	114.1	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	120.0	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	126.2	CS2		0	0	0	0	83	185	0	1	0	0
79X01	0.0	126.2	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	133.3	CS2		0	0	0	0	76	185	0	1	0	0
79X01	0.0	139.4	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	145.1	CS2		0	0	0	0	70	185	0	1	0	0
79X01	0.0	151.2	CS2		0	0	0	0	70	185	0	1	0	0
79X01	0.0	157.3	CS2		0	0	0	0	73	185	0	1	0	0
79X01	0.0	157.3	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	160.0	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	163.3	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	169.5	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	176.0	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	182.1	CS2		0	0	0	0	76	185	0	1	0	0
79X01	0.0	186.3	CS2		0	0	0	0	90	185	0	1	0	0
79X01	0.0	192.0	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	193.0	CS2		0	0	0	0	56	185	0	1	0	0
79X01	0.0	198.4	CS2		0	0	0	0	63	185	0	1	0	0
79X01	0.0	207.6	CS2		0	0	0	0	63	185	0	1	0	0
79X01	0.0	214.5	F2	S	0	0	0	0	90	185	0	1	0	0
79X01	0.0	221.5	F2	S	0	0	0	0	90	185	0	1	0	0
79X01	0.0	226.5	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	233.9	CS2		0	0	0	0	70	185	0	1	0	0

DDH: 79X01 UTM-N: 6,901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 0 DHC CALC: 1 SS CALC: 0

DDH	F DEPTH	T DEPTH	FEAT	SYMTRY	S0 ANGLE	DIRECT	S1 ANGLE	DIRECT	S2 ANGLE	DIRECT	RFE CDE	DHCC	SDC	PROCESS
79X01	0.0	239.2	CS2		0	0	0	0	67	185	0	1	0	0
79X01	0.0	255.2	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	261.0	CS2		0	0	0	0	83	185	0	1	0	0
79X01	0.0	267.0	CS2		0	0	0	0	60	185	0	1	0	0
79X01	0.0	271.0	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	273.1	CS2		0	0	0	0	79	185	0	1	0	0
79X01	0.0	275.7	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	279.2	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	281.4	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	285.6	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	285.6	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	287.1	CS2		0	0	0	0	79	185	0	1	0	0
79X01	0.0	287.2	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	288.5	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	288.5	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	291.3	CS2		0	0	0	0	68	185	0	1	0	0
79X01	0.0	294.4	CS2		0	0	0	0	73	185	0	1	0	0
79X01	0.0	296.9	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	299.3	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	302.5	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	303.3	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	303.6	CS2		0	0	0	0	80	185	0	1	0	0
79X01	0.0	305.8	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	309.7	CS2		0	0	0	0	85	185	0	1	0	0
79X01	0.0	313.0	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	318.3	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	324.3	CS2		0	0	0	0	88	185	0	1	0	0
79X01	0.0	330.4	CS2		0	0	0	0	85	185	0	1	0	0
79X01	0.0	336.5	CS2		0	0	0	0	83	185	0	1	0	0
79X01	0.0	339.3	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	342.6	CS2		0	0	0	0	86	185	0	1	0	0
79X01	0.0	345.8	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	347.7	F2	Z	0	0	0	0	0	0	0	1	0	0
79X01	0.0	348.8	PS2		0	0	0	0	89	185	0	1	0	0
79X01	0.0	355.9	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	355.9	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	359.6	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	362.7	CS2		0	0	0	0	76	185	0	1	0	0
79X01	0.0	362.9	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	366.5	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	368.8	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	369.4	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	373.4	CS2		0	0	0	0	62	185	0	1	0	0
79X01	0.0	378.6	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	378.7	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	382.8	CS2		0	0	0	0	72	185	0	1	0	0
79X01	0.0	387.9	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	388.9	CS2		0	0	0	0	73	185	0	1	0	0
79X01	0.0	393.6	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	395.0	CS2		0	0	0	0	80	185	0	1	0	0
79X01	0.0	402.6	CS2		0	0	0	0	81	185	0	1	0	0

DDH: 79X01 UTM-N: 6901,16C.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+CCE
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 C DHD CALC: 1 SS CALC: 0

DDH	F DEPTH	T DEPTH	FEAT	SYMTRY	S0 ANGLE	DIRECT	S1 ANGLE	DIRECT	S2 ANGLE	DIRECT	RFE CDE	DHCC	SDC	PROCESS
79X01	0.C	409.0	CS2		C	0	0	C	70	185	C	1	0	C
79X01	0.0	416.3	CS2		0	0	C	C	75	185	0	1	0	C
79X01	0.C	418.5	F2	3	0	0	0	C	0	0	C	1	0	C
79X01	0.0	422.4	CS2		C	0	0	0	70	185	0	1	0	C
79X01	0.0	427.3	CS2		C	0	0	0	85	185	C	1	0	C
79X01	0.C	432.1	F2	E	0	0	0	C	0	0	C	1	0	0
79X01	0.0	433.4	CS2		0	0	0	C	75	185	0	1	0	C
79X01	0.C	433.5	F2	3	C	0	0	C	0	0	C	1	0	0
79X01	0.0	439.5	CS2		0	C	0	C	75	185	C	1	0	C
79X01	0.0	441.0	F2	E	0	0	0	C	0	0	C	1	0	C
79X01	0.C	446.1	CS2		0	0	0	0	75	185	C	1	0	C
79X01	0.C	451.4	CS2		0	C	0	C	83	185	C	1	0	0
79X01	0.C	455.9	CS2		0	0	0	C	80	185	C	1	0	C
79X01	0.C	463.3	CS2		0	0	0	C	76	185	0	1	0	0
79X01	0.C	469.7	CS2		0	0	0	C	81	185	C	1	0	0
79X01	0.C	476.0	F2	Z	C	0	0	C	0	C	C	1	0	0
79X01	0.C	476.0	PS2		0	0	0	0	88	185	0	1	0	C
79X01	0.C	478.9	F2	3	0	0	0	C	0	0	C	1	0	C
79X01	0.C	482.2	CS2		C	0	0	C	85	185	C	1	0	0
79X01	0.C	484.9	F2	E	0	0	0	0	0	0	C	1	0	C
79X01	0.C	486.4	F2	3	0	0	0	C	0	0	0	1	0	C
79X01	0.0	489.5	CS2		0	0	0	C	82	185	C	1	0	C
79X01	0.C	495.6	CS2		0	0	0	C	85	185	C	1	0	0
79X01	0.C	50C.0	F2	E	0	0	0	0	0	0	0	1	0	C
79X01	0.C	502.6	CS2		0	C	C	C	88	185	C	1	0	C
79X01	0.C	504.5	F2	3	C	0	0	C	0	0	C	1	0	0
79X01	0.C	509.0	CS2		C	C	0	C	71	185	C	1	0	0
79X01	0.C	510.4	F2	E	C	0	0	0	0	C	C	1	0	C
79X01	0.C	516.3	CS2		C	0	0	0	72	185	C	1	0	0
79X01	C.C	516.7	F2	3	C	0	0	C	0	0	C	1	0	C
79X01	0.0	519.6	F2	E	C	0	0	C	0	0	C	1	0	0
79X01	0.C	521.1	F2	3	0	0.	0	C	0	0	C	1	0	C
79X01	0.C	522.7	CS2		C	0	0	C	76	185	C	1	0	C
79X01	0.C	522.7	F2	E	0	C	0	C	0	C	C	1	0	C
79X01	0.0	525.4	F2	3	0	C	0	C	0	C	C	1	0	0
79X01	0.C	528.8	CS2		C	0	0	C	70	185	C	1	0	C
79X01	0.C	535.2	CS2		0	0	0	0	75	185	C	1	0	0
79X01	0.C	541.3	CS2		0	0	0	C	82	185	C	1	0	C
79X01	0.C	547.4	CS2		C	0	0	C	78	185	C	1	0	C
79X01	0.C	553.2	CS2		0	0	0	C	81	185	C	1	0	C
79X01	0.C	559.8	CS2		C	0	0	0	72	185	C	1	0	C
79X01	0.C	565.7	CS2		C	0	0	C	84	185	C	1	0	0
79X01	0.C	571.8	CS2		C	0	0	0	70	185	C	1	0	C
79X01	0.0	577.9	CS2		0	C	C	0	72	185	C	1	0	C
79X01	0.C	584.0	CS2		0	C	C	C	80	185	C	1	0	C
79X01	0.C	584.4	F2	E	0	C	0	0	0	0	C	1	0	C
79X01	0.C	585.3	F2	3	C	0	C	0	0	C	C	1	0	0
79X01	0.C	589.5	F2	E	C	0	C	C	0	C	C	1	0	C
79X01	0.C	591.1	F2	3	C	0	0	C	0	C	C	1	0	0
79X01	0.C	591.1	CS2		0	0	0	C	80	185	C	1	0	C
79X01	0.C	596.2	CS2		0	C	C	C	81	185	C	1	0	C

DDH: 79X01 UTM-N: 6901,160.2 UTM-E: 597,289.3 UTM-ELEV: 1,164.1 TOTAL DEPTH: 772.2 SECTION: 15+00E
RFE: S2 RFE DIR: 185 PLUNGE ANGLES: 0 0 DHD CALC: 1 SS CALC: 0

DDH	F DEPTH	T DEPTH	FEAT	SYMTRY	S0 ANGLE	DIRECT	S1 ANGLE	DIRECT	S2 ANGLE	DIRECT	RFE CDE	DHDC	SDC	PROCESS
79X01	0.0	602.3	CS2		0	0	0	0	69	185	0	1	0	0
79X01	0.0	608.4	CS2		0	0	0	0	80	185	0	1	0	0
79X01	0.0	614.6	CS2		0	0	0	0	85	185	0	1	0	0
79X01	0.0	620.5	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	626.6	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	632.7	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	638.8	CS2		0	0	0	0	73	185	0	1	0	0
79X01	0.0	644.9	CS2		0	0	0	0	76	185	0	1	0	0
79X01	0.0	651.0	CS2		0	0	0	0	86	185	0	1	0	0
79X01	0.0	653.1	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	657.1	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	657.1	CS2		0	0	0	0	79	185	0	1	0	0
79X01	0.0	657.8	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	658.4	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	660.2	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	661.3	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	663.4	CS2		0	0	0	0	76	185	0	1	0	0
79X01	0.0	664.4	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	669.6	CS2		0	0	0	0	66	185	0	1	0	0
79X01	0.0	672.6	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	678.9	CS2		0	0	0	0	70	185	0	1	0	0
79X01	0.0	684.1	CS2		0	0	0	0	64	185	0	1	0	0
79X01	0.0	684.1	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	686.0	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	691.2	CS2		0	0	0	0	68	185	0	1	0	0
79X01	0.0	694.7	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	696.7	CS2		0	0	0	0	81	185	0	1	0	0
79X01	0.0	697.7	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	702.8	CS2		0	0	0	0	64	185	0	1	0	0
79X01	0.0	706.7	CS2		0	0	0	0	66	185	0	1	0	0
79X01	0.0	711.4	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	712.0	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	712.8	CS2		0	0	0	0	82	185	0	1	0	0
79X01	0.0	714.8	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	717.8	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	718.0	CS2		0	0	0	0	74	185	0	1	0	0
79X01	0.0	722.0	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	723.5	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	724.2	CS2		0	0	0	0	68	185	0	1	0	0
79X01	0.0	730.4	CS2		0	0	0	0	75	185	0	1	0	0
79X01	0.0	735.3	CS2		0	0	0	0	65	185	0	1	0	0
79X01	0.0	740.5	CS2		0	0	0	0	65	185	0	1	0	0
79X01	0.0	742.6	F2	E	0	0	0	0	0	0	0	1	0	0
79X01	0.0	745.2	F2	3	0	0	0	0	0	0	0	1	0	0
79X01	0.0	746.0	CS2		0	0	0	0	33	185	0	1	0	0
79X01	0.0	750.7	CS2		0	0	0	0	31	185	0	1	0	0
79X01	0.0	757.0	CS2		0	0	0	0	70	185	0	1	0	0
79X01	0.0	763.2	CS2		0	0	0	0	78	185	0	1	0	0
79X01	0.0	769.3	CS2		0	0	0	0	72	185	0	1	0	0

RFE: 52 RFE DIR: 185 PLUNGE ANGLES: 0 C DHD CALC: 1 SS CALC: 0

DDH	SEGMENT NOS	COND INDICATOR
79X01	1	2
79X01	2	2
79X01	3	2
79X01	4	2
79X01	5	2
79X01	6	2
79X01	7	2
79X01	8	2
79X01	9	2
79X01	10	2
79X01	11	2
79X01	12	2
79X01	13	2
79X01	14	2
79X01	15	2
79X01	16	2
79X01	17	2
79X01	18	2
79X01	19	2
79X01	20	2
79X01	21	2
79X01	22	2
79X01	23	2
79X01	24	2
79X01	25	2
79X01	26	1

**THIS REPORT WAS REQUESTED BY: LEEP .GEOLOGY AT: 16:10:05

NOTES
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DY DEPOSIT DATABASE
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L.C. PIGAGE

INTRODUCTION
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GEOLOGICAL INFORMATION COLLECTED DURING DIAMOND DRILL EXPLORATION PROGRAMS REPRESENTS A LARGE INVESTMENT IN TIME AND MONEY. WITH THE DETAILED DRILLING REQUIRED TO DEFINE SIZE AND ECONOMIC POTENTIAL OF MASSIVE SULPHIDE DEPOSITS, THE AMOUNT OF GEOLOGICAL DRILL CORE INFORMATION FOR ANY MINERAL DEPOSIT RAPIDLY BECOMES IMMENSE. IT IS IMPERATIVE THAT THIS INFORMATION BE RECORDED IN A DETAILED, SYSTEMATIC, AND READILY USABLE MANNER.

CAMC GEOLOGISTS HAVE DEVELOPED A DRILL CORE LOGGING FORMAT WHICH IS FULLY COMPATIBLE WITH USING COMPUTER FILES FOR STORAGE AND RETRIEVAL OF DRILL HOLE INFORMATION. SINCE FEBRUARY 1983, STORAGE OF DRILL HOLE GEOLOGICAL INFORMATION HAS BEEN INCORPORATED INTO THE DIAMOND DRILL HOLE DATA BASE (DDHDB) ON THE HP 3000 COMPUTERS AT THE FARC AND VANCOUVER OFFICES. THIS DATA BASE SYSTEM ALLOWS FOR ENTRY, EDITING, AND SELECTIVE RETRIEVAL OF GEOLOGICAL INFORMATION FROM THE FIELD DRILL CORE LOGS. IN ADDITION, THE GEOLOGICAL INFORMATION CAN BE PLOTTED ON VERTICAL CROSS-SECTIONS OF ANY AZIMUTH ORIENTATION. IN ALL, THE DDHDB PROVIDES A POWERFUL TOOL FOR ORGANIZING AND DISPLAYING A WEALTH OF INFORMATION IN A USABLE FASHION.

CAMC FIRST BEGAN USING COMPUTERS FOR STORING AND PLOTTING DRILL HOLE INFORMATION IN 1976. BETWEEN 1976 AND 1983 THE COMPUTER PROGRAMS INVOLVED IN PLOTTING AND STORING THE DRILL HOLE DATA WENT THROUGH A RAPID EVOLUTION AS FIELD GEOLOGISTS BECAME FAMILIAR WITH USING THE COMPUTER. CONSEQUENTLY, FIELD CORE LOGGING TECHNIQUES AND CONVENTIONS ALSO WENT THROUGH A NUMBER OF CHANGES TO KEEP PACE WITH THE EVOLVING SERIES OF COMPUTER PROGRAMS. WITH DEVELOPMENT OF THE DDHDB SYSTEM IN 1983, BOTH THE COMPUTER PROGRAMS AND THE FIELD CORE LOGGING TECHNIQUES HAVE REMAINED RELATIVELY STATIC.

EXPLORATION DRILLING ON DY (1976-1981) COINCIDED WITH THE PERIOD WHEN THE COMPUTER PROGRAMS WERE RAPIDLY CHANGING. CONSEQUENTLY, THE DY DRILL HOLE DATA IS STORED IN THE DDHDB IN AN ABBREVIATED FORMAT WHICH IS NOT FULLY COMPATIBLE WITH OUR CURRENT PLOTTING PROGRAMS. THIS NOTE IS A BRIEF STATUS REPORT ON THE DY DATA BASE. IT PRESENTS A DESCRIPTION OF THE DDHDB FILES AND BRIEFLY INDICATES THE CHANGES NECESSARY TO THE DY DATA TO MAKE IT FULLY COMPATIBLE WITH THE PLOTTING PROGRAMS. IT INCLUDES A SHORT SUMMARY OF MANY OF THE "CONVENTIONS" USED IN LOGGING THE DY CORE.
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DY DATABASE - GENERAL
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THE DY DATABASE CONTAINS ALL THE RECORDED DOWN HOLE GEOLOGICAL

INFORMATION FOR 56 SURFACE EXPLORATION DIAMOND DRILL HOLES COMPLETED ON THE PROPERTY BETWEEN 1976 AND 1981. DURING THAT PERIOD ONLY 5 GEOLOGISTS WERE DIRECTLY INVOLVED IN LOGGING DY CORE: D. JENNINGS (1976-81), J. FRANZEN (1977), D. HANSON (1977-78) B. HALL (1979-81), AND L. PIGAGE (1979-80). BECAUSE OF THE FEW NUMBER OF GEOLOGISTS INVOLVED, CORE LOGGING FORMATS AND CONVENTIONS WERE CONSISTENT BETWEEN ALL THE VARIOUS DRILL HOLES. IN ADDITION THE DATABASE CLOSELY REFLECTS THE ORIGINAL FIELD LOGS BECAUSE THERE HAS NOT BEEN ANY MAJOR RELOGGING OF DY DRILL CORE. THIS ALL CONTRIBUTES TO MAKING FUTURE MODIFICATIONS SIMPLER. IN GENERAL, THE DY DATABASE MAY BE READILY UPGRADED TO CURRENT DDHDB STANDARDS USING THE INFORMATION RECORDED IN THE ORIGINAL FIELD LOGS.

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DY DATABASE - SPECIFIC
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GEOLOGICAL INFORMATION FOR EACH DRILL HOLE IS STORED IN SEVERAL SUBFILES WHICH DIVIDE THE DATA INTO DISTINCTIVE TYPES. TABLE I LISTS THE DIFFERENT SUBFILES FOR A PARTICULAR DRILL HOLE. IN THE FOLLOWING SECTIONS THE DIFFERENT SUBFILES ARE DISCUSSED AND MODIFICATIONS NEEDED TO UPGRADE THE INFORMATION IN THE FILES IS PRESENTED. FOR MORE INFORMATION ON THE CONTENT AND FORMAT OF THESE SUBFILES SEE PIGTAGE(1984), AND EARLIER VERSIONS.

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TABLE I
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DDH SUBFILES

(DIAMOND DRILL HOLE DATA BASE)
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1. DRILL HOLE MASTER DATA (T) PIGAGE (1984) P 7 & 8

LOCATION AND ELEVATION OF DRILL HOLE

OTHER GENERAL INFORMATION

2. DOWNHOLE SURVEY DATA (R) PIGAGE (1984) P 8-11

ORIENTATION OF DRILL HOLE AT SPECIFIED DOWNHOLE SURVEY STATIONS

3. ASSAY DATA (P) PIGAGE (1984) P 47-49

SAMPLE NUMBER, ASSAY INTERVALS, ANALYSES, ETC.

4. LITHOLOGY DATA (L) PIGAGE (1984) P 12-17 & APPEDIX II

LITHOLOGIC UNITS LOGGED SEQUENTIALLY DOWNHOLE

5. STRUCTURE DATA (S) PIGAGE (1984) P 18-40

STRUCTURAL MEASUREMENTS OF PLANES (S0 BEDDING, S1, S2,... CLEAVAGES) RECORDED AT INTERVALS DOWNHOLE

6. FAULT DATA (F) PIGAGE (1984) P 41-47

LOCATION, EXTENT, AND ORIENTATION OF FAULTS LOGGED SEQUENTIALLY DOWNHOLE

7. COMPOSITES DATA (C)

WEIGHTED AVERAGES OF ANALYTICAL DATA FOR SPECIFIED INTERVALS

$PAGE

T SUBFILE
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ALL DRILL HOLE COLLAR LOCATIONS HAVE BEEN SURVEYED USING THE 1979 ORTHOPHOTO CONTROL AS THE BASIS. THE 1979 ORTHOPHOTO SURVEY IS TIED INTO THE UTM GRID SYSTEM USING BOTH GROUND AND SATELLITE CONTROL. THEREFORE ALL COLLARS ARE LOCATED RELATIVE TO THE MOST CURRENT (1979) UTM CO-ORDINATES. THE ELEVATION DATUM FOR THE DISTRICT IS THE GEOID SURFACE BASED ON THE NORTH AMERICAN DATUM, 1927. THIS CLOSELY CORRESPONDS TO MEAN SEA LEVEL.

NO CHANGES ARE REQUIRED EXCEPT TO MAKE SURE THE CO-ORDINATES HAVE BEEN PROPERLY ENTERED INTO THE DATABASE. DRILL HOLE COLLAR CO-ORDINATES ARE ALSO STORED IN THE VANCOUVER AND FARO OFFICES.

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R SUBFILE
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ALL DY DRILL HOLES WERE DOWN-HOLE SURVEYED IN THE FIELD BY EITHER SPERRY SUN SINGLE SHOT OR SPERRY SUN GYROSCOPIC METHODS. SINGLE SHOT DISC AND GYROSCOPIC SURVEY REPORTS ARE STORED IN THE VANCOUVER OFFICE.

NO CHANGES ARE REQUIRED IN THE DATA BASE EXCEPT FOR ROUTINE CHECKING FOR DATA ENTRY ERRORS.

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ASSAY SUBFILE
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THE DY DATABASE CONTAINS 1705 ASSAY SAMPLES. THE ASSAYS HAVE ALL BEEN DETERMINED AT KAMLOOPS RESEARCH AND ASSAY LAB. QUALITY CONTROL WAS ENSURED BY USING STANDARDS PREPARED FROM ANVIL DISTRICT ORES. THE ASSAY SAMPLES ARE STORED IN NITROGEN PURGED, SEALED PLASTIC BAGS AT THE ANALYTICAL LABORATORY (KRAL).

ALL SAMPLES WERE ASSAYED FOR CU, PB, ZN AND AG. IN ADDITION, SOME SAMPLES WERE ASSAYED FOR BAO, INSOLUBLE FE, SOLUBLE FE, AU AND HG. SOME PULP S.G. RESULTS ARE ALSO REPORTED. THE ORIGINAL ASSAY SHEETS ARE STORED IN THE VANCOUVER OFFICE.

THE DY DATABASE CONTAINS ALL 1705 ASSAY SAMPLES. THE SAMPLES ARE CROSS-REFERENCED BY DRILL HOLE NAME AND DOWN-HOLE DEPTH, ORE TYPE, AND ASSAY SAMPLE NUMBER.

THIS SUBFILE NEEDS TO BE CHECKED FOR ANY ROUTINE ERRORS OR DISCREPANCIES. ASSAY RESULTS NEED TO BE COMPARED TO INDICATED ORE TYPES AND MEASURED SPECIFIC GRAVITIES TO CHECK FOR REASONABLE VALUES. FOR DATA RETRIEVAL PURPOSES, MIXED ORE TYPES NEED TO BE INDICATED IN THE DATABASE TO ENSURE THAT ONLY REPRESENTATIVE EXAMPLES OF A PARTICULAR ORE TYPE ARE USED. AT GRUM THIS HAS BEEN DONE THROUGH THE USE OF COMBINATIONS OF LETTERS FOR MAJOR ORE TYPES: I.E. 4EG = 4E AND 4G.

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LITHOLOGY SUBFILE

THE LITHOLOGY SUBFILE CONTAINS DOWN-HOLE DEPTHS OF THE BASE OF MAJOR LITHOLOGIC UNITS ENCOUNTERED IN A PARTICULAR DRILL HOLE. DESCRIPTIONS OF THE ROCK UNITS ARE ALL KEYED TO AN ALPHANUMERIC CODE WHICH WAS DEVELOPED FOR THE ENTIRE ANVIL DISTRICT. LITHOLOGY DESCRIPTIONS FOR DY DRILL HOLES DID NOT GREATLY VARY BETWEEN THE DIFFERENT CAMC GEOLOGISTS LOGGING THE CORE. THIS RESULTED LARGELY BECAUSE OF THE SMALL NUMBER OF GEOLOGISTS INVOLVED COMBINED WITH THEIR CLOSE CO-OPERATION DURING THE CORE LOGGING.

AFTER THE DY LOGGING WAS COMPLETED, EXTENSIVE WORK HAS BEEN COMPLETED (1980-83) ON LITHOLOGIC LOGGING OF DRILL CORE FROM THE GRUM DEPOSIT. BECAUSE OF THE CLOSELY SPACED DRILLING ON GRUM, THE POSSIBLE VARIATIONS AND ALTERATION PATTERNS FOR THE ANVIL DISTRICT ROCK TYPES ARE MORE READILY AND CONFIDENTLY INTERPRETED. WITH THIS INCREASED INFORMATION, THE LITHOLOGIC CODE FOR GRUM (AND THE DISTRICT) WAS MODIFIED TO TAKE INTO ACCOUNT THE INCREASED INFORMATION AVAILABLE ABOUT THE DIFFERENT LITHOLOGY TYPES.

WITH THE RETURN OF L. PIGAGE TO ANVIL DISTRICT GEOLOGY IN 1983, IT BECAME FEASIBLE TO COMPARE THE 1979 DY LITHOLOGY CODING CONVENTIONS WITH THE 1983 GRUM LITHOLOGY CODING FOR THE SAME ROCK TYPES. A SUMMARY OF THE MOST SIGNIFICANT LITHOLOGIC EQUIVALENCES BETWEEN THE TWO CODING PRACTICES IS PRESENTED IN TABLE II. IT CAN BE SEEN THAT MOST OF THE DIFFERENCES IN THIS TABLE ARE NOT SUBSTANTIAL; CHANGES TO THE EXISTING DATABASE IN MANY CASES CAN BE COMPLETED AS A SINGLE "TRANSLATION" USING THE DESCRIPTIVE COMMENTS IN THE DY FIELD LOGS. AMBIGUOUS SITUATIONS WILL OCCUR AND CAN ONLY BE RESOLVED BY DOING CHECK RELOGGING OF THE CORE IN QUESTION.

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TABLE II

1979 DY	1982-83 GRUM
5B6	LOCALLY 3GC
5B6	LOCALLY 5B6*
5D3	5D0
5D3(5) "LEOPARD ROCK"	5C*
5A3	5A0
5B7(3)	5B80
5B2	5B20

5A* FAULT BXA

OQO VEIN (BULL) QUARTZ 10Q0

0E)
0D)

0C) DICKSON CREEK DYKE SWARM 10F
0F)

4L76	3G0 STRINGER
4L1	5D4*
4L1	4C5 OR 4D5 OR
	4C0 OR 4D0
4K	IN SOME INSTANCES 4E*
	BXA

GENERAL COMMENT:

IN READING LOGS FOR THE DY AND GRUM DEPOSITS, I HAVE BEEN "STRUCK" BY THE ABSENCE OF 4CD TYPE ORES AT DY COMPARED TO GRUM AND THE ABUNDANCE OF 4L TYPE "ORES" AT DY COMPARED TO GRUM. THIS POSSIBLE EQUIVALENCY SHOULD BE REMEMBERED WHEN USING AND INTERPRETING DY DRILL LOGS.
SPACE

TABLE II CONTAINS A PARTIAL LIST OF SUGGESTED LITHOLOGIC "EQUIVALENCES" BETWEEN DY CORE LOGGING AND MORE CURRENT GRUM LOGGING. THIS LIST IS BASED LARGELY ON COMPARISON OF CODING CONVENTIONS AND LOGGING TECHNIQUES AS REMEMBERED BY L. PIGAGE FROM 1979 LOGGING (DY) AND 1983 LOGGING (GRUM). ADDITIONAL COMMENTS AND NOTES ON THE DY LOGGING PRACTICES ARE PRESENTED IN THE FOLLOWING PARAGRAPHS.

VANGORDA FORMATION/MOUNT MYE FORMATION CONTACT:

IN THE EARLY PHASE OF DY LOGGING, IT WAS NOTED THAT A BLACK CARBONACEOUS UNIT CONTAINING ABUNDANT QUARTZ AUGEN AND PALE GREEN 5D3 CLASTS CONSISTENTLY OCCURRED NEAR THE TRANSITION ZONE BETWEEN THE CALCAREOUS PHYLLITES OF THE VANGORDA FORMATION (5B0) AND THE NONCALCAREOUS PHYLLITES OF THE MOUNT MYE FORMATION (3G0). THIS HORIZON WAS CALLED 5A*; IT WAS INTERPRETED AS BEING A STRATIGRAPHIC HORIZON OCCURRING BENEATH ALL OF THE MAJOR ORE HORIZONS.

BY CONVENTION 5A* WAS TAKEN AS THE LOWERMOST UNIT OF THE VANGORDA FORMATION. ALL UNITS ABOVE 5A* WERE LOGGED AS UNIT 5 AND ALL UNITS BELOW 5A* WERE LOGGED AS UNIT 3. FOR EXAMPLE, NONCALCAREOUS PHYLLITES ABOVE 5A* WERE LOGGED AS 5B6.

DETAILED CORE LOGGING AND FIELD MAPPING ON THE GRUM-FIRTH PROPERTIES HAVE SUBSEQUENTLY SHOWN THAT 5A* IS A COHERENT FAULT BRECCIA. INSTEAD OF BEING A STRATIGRAPHIC HORIZON MARKING THE BASE OF UNIT 5,IT IS A MAJOR DETACHMENT ZONE SEPARATING TWO PACKAGES OF UNITS. THE LOWER PACKAGE CONSISTS LARGELY OF UNIT 3 (MOUNT MYE FORMATION); THE UPPER PACKAGE CANNOT BE UNEQUIVOCALLY CONSIDERED UNIT 5. THEREFORE,

EXTENSIVE SECTIONS OF NONCALCAREOUS PHYLLITE ABOVE 5A* WAS LOGGED IN 1979 AS 5B6; THESE SAME ROCK UNITS SHOULD ALSO BE CONSIDERED AS STRATIGRAPHICALLY BEING THE NONCALCAREOUS PHYLLITES OF UNIT 3 (3G0).

IN THE ABSENCE OF 5A* AS A MARKER UNIT (DEFINING THE LOWERMOST PART OF THE VANGORDA FORMATION), LITHOLOGIC CODING WAS MORE AMBIGUOUS. GENERALLY, ANY UNIT WHICH CONTAINED A FAIRLY WELL DEVELOPED MICROLITHON TEXTURE WAS CODED AS UNIT 5B. - CALCAREOUS VERSIONS WERE 5B0 AND NONCALCAREOUS VERSIONS WERE 5B6. UNIT 3 CONSISTED OF ALL THE HOMOGENEOUS, NONCALCAREOUS PHYLLITES WITHOUT A WELL DEVELOPED MICROLITHON TEXTURE; THESE PHYLLITES WERE CODED AS 3G0.

RECENT GRUM LOGGING HAS EMPHASIZED LARGELY THE CALCAREOUS VERSUS NONCALCAREOUS NATURE OF THE PHYLLITES. GRUM LOGGING HAS ALSO SHOWN THAT LOCALLY 3G PHYLLITES DO CONTAIN INTERVALS OF QUARTZONE SILTSTONE WHICH CONTAIN WELL DEVELOPED MICROLITHON TEXTURES. BECAUSE OF THE PROBLEMS ASSOCIATED WITH DIFFERENTIATING BETWEEN 3G0 AND 5B6, THESE UNITS MUST BE CONSIDERED FULLY EQUIVALENT. THE OVERRIDING VARIABLE IS CALCITE CONTENT IN THE PHYLLITES. LARGE INTERVALS OF NONCALCAREOUS PHYLLITE MAY BELONG TO THE MOUNT MYE FORMATION, WHETHER THEY HAVE BEEN CODED AS 5B6 OR 3G0! THE IMPORTANT LIMITATION TO BEAR IN MIND IS THAT NO ONE HAS SUCCEEDED IN MAKING A RELIABLE FORMATION ASSIGNMENT FROM THE COREBOX, THIS IS A CROSS-SECTION CONCEPT. ONE IS FREE TO VARY FORMATION ASSIGNMENT IN WAYS THAT ARE CON-SISTENT WITH THE STRUCTURAL STYLE OF THE DISTRICT AND LITHOLIGICAL NATURE OF THE FORMATIONS.

CARBONATE SPECIES:

DY LOGGING WAS NOT SYSTEMATIC ABOUT CONVENTIONS CONCERNING CALCITE CONTENT OF DRILL CORE. CALCAREOUS 5B PHYLLITES WERE TYPICALLY CODED AS 5B0 (SIMILAR TO GRUM CODING). BUT CALCAREOUS 5A AND 5D LITHOLOGIES WERE TYPICALLY CODED AS 5A3 AND 5D3. CURRENT GRUM CODING FOR THESE LITHOLOGIES IS 5A0 AND 5D0 SINCE THESE UNITS ARE NORMALLY CONSIDERED TO BE CALCAREOUS AND 5A3, 5D3 ARE TAKEN TO MEAN EXTRAORDINARILY CALCAREOUS.

DURING DY LOGGING CARBONATE CONTENT OF THE CORE WAS CHECKED USING 5% HCL OR 10%HCL. THE ONLY CARBONATE TO READILY FIZZ WITH THESE CONCENTRATIONS WAS CALCITE. THIS PROBLEM WAS FURTHER COMPOUNDED BECAUSE OF THE COMMON COLD WEATHER ON MANY LOGGING DAYS. CONSEQUENTLY THE CARBONATE MODIFIER GENERALLY REFERRED STRICTLY TO CALCITE. UNIT 5B6 WAS A NON-CALCITE VARIANT OF THE PHYLLITES.

WITH GRUM FIELD LOGGING IT BECAME STANDARD PRACTICE TO USE 20%HCL ACID SOLUTIONS AS WELL AS 10% TO TEST FOR CARBONATE. WITH THIS CONCENTRATION DIFFERENT CARBONATE SPECIES CAN BE DIFFERENTIATED. CALCITE REACTS VIOLENTLY. DOLOMITE GENERALLY FIZZES IN A SUBDUED MANNER. ANKERITE FIZZES ONLY WITH DIFFICULTY. DIFFERENT MODIFIERS ARE USED TO DELINEATE THESE SPECIES. THEY ARE AS FOLLOWS; CALCITE (3 OR #), DOLOMITE ($), AND ANKERITE (&), NON-SPECIFIED NON-CALCITE CARBONATE (*). THIS USAGE (#, $, &, *) HAS ALSO BEEN EXTENDED TO THE ORE (UNIT 4) AND ALTERATION (UNIT 4L) FACIES.

AT GRUM IT WAS FOUND THAT MANY VANGORDA (UNIT 5) LITHOLOGIES CONTAIN CARBONATE SPECIES OTHER THAN CALCITE. A TYPICAL LAMINATED,

GREY VANGORDA PHYLLITE WITH DOLOMITE AS THE ONLY CARBONATE SPECIES WOULD BE LOGGED AS 5B6$. BECAUSE DY LOGGING GENERALLY ONLY DETECTED CALCITE, THE DY CODING FOR THIS SAME UNIT WAS 5B6. AS A RESULT, DY 5B6 MAY REFER TO GRUM 5B6 (=3G0), 5B6*, 5B6$, OR 5B6@. THE DY 5B6 LITHOLOGIES WILL HAVE TO BE RELOGGED FOR POSSIBLE NON-CALCITE, CARBONATE SPECIES.

CALCITE WAS ALSO MORE READILY DIFFERENTIATED FROM OTHER CARBONATES AT GRUM BECAUSE THE FIELD LOGGING WAS FOR WEATHERED CORE. AFTER EXPOSURE TO GENERAL WEATHERING FOR A YEAR OR TWO ANKERITE AND DOLOMITE TURN PALE TAN TO BROWN AND CALCITE REMAINS WHITE.

IN CONTRAST, THE DY LOGGING WAS CONSISTENTLY DONE ON FRESH CORE. BECAUSE THE DY PROJECT HAS REMAINED INACTIVE FOR SOME YEARS, THE DY CORE IS NOW ALSO WEATHERED. THEREFORE RELOGGING ADVENTURES AT DY FOR CARBONATE SPECIES IN CORE ORIGINALLY LOGGED AS 5B6 WILL BE MUCH EASIER.

NOTE ALSO THAT 5A* AT DY HAS A COMPLETELY DIFFERENT MEANING THAN 5A* AT GRUM. AT GRUM IT WOULD BE A GRAPHITIC PHYLLITE CONTAINING A CARBONATE OTHER THAN CALCITE BUT WHOSE EXACT IDENTITY IS NOT KNOWN. AT DY IT REFERS TO A BLACK GRAPHITIC FAULT BRECCIA OR MYLONITE.

INTRUSIVE ROCKS:

DY DEPOSIT CONTAINS SEVERAL INTRUSIVE DYKES. LOCALLY TO THE SOUTHEAST, THESE DYKES PROVIDE MAJOR INTERFERENCE PROBLEMS WITH CONTINUITY OF THE ORE HORIZONS. PREVIOUSLY THESE DYKES WERE LOGGED AS 10C, 10D, 10E, OR 10F DEPENDING ON HOW THE GEOLOGIST FELT THEIR COMPOSITION RANGED BETWEEN QUARTZ DIORITE TO MONZONITE. IN ALL CASES, THESE DYKES WERE CONSIDERED TO BE PART OF THE DICKSON CREEK DYKE SWARM.

MORE RECENT LOGGING CONVENTIONS FOR GRUM HAVE ESSENTIALLY DIVIDED THE INTRUSIVE ROCKS INTO TWO MAIN IGNEOUS SUITES. LITHOLOGIES CONSIDERED PART OF THE MEGACRYSTIC ANVIL BATHOLITH (MOUNT MYE PHASE) ARE LOGGED AS 1CAB. ALL OTHER SUITES (INCLUDING THE DICKSON CREEK DYKES ARE LUMPED UNDER THE CODING 10F). THE DOMINANT UNIT IN THIS 10F CATEGORY IS A QUARTZ-FELDSPAR PORPHYRY (MARJORIE PHASE OF ANVIL PLUTONIC SUITE). (THIS REQUIRES FURTHER ELABRATION TO BE REALLY CLEAR I.E. 10F AT MINE..)

GREEN LAMINATED VANGORDA PHYLLITES:

LOCALLY, IN ASSOCIATION WITH THE PALE OLIVE GREEN 5D UNITS, THE CALCAREOUS VANGORDA PHYLLITES LOSE THEIR TYPICAL STEEL GREY COLOUR AND ASSUME A GREEN TO GREY-GREEN COLOUR. THIS PARTICULAR LITHOLOGY STILL HAS A LAMINATED/MICROLITHON TEXTURE. IT IS INTERMEDIATE BETWEEN 5D AND 5B LITHOGIES AND COMMONLY HAS GRADATIONAL CONTACTS WITH BOTH OF THESE UNITS. BECAUSE OF THE MICROLITHON/ LAMINATED TEXTURE IT IS CONSIDERED TO BE A VARIANT OF THE 5B PHYLLITES. IN DY LOGGING IT WAS CODED AS 5B73 TO EMPHASIZE ITS CHLORITE LAMINATIONS AND CALCAREOUS NATURE. IN GRUM LOGGING, IT WAS CODED AS 5B80 TO DENOTE THE GREEN CHLORITE CONTENT; THE LAMINATED CALCAREOUS NATURE IS IMPLIED BY ITS INCLUSION IN THE 5B PHYLLITES.

METABASITE LEOPARD ROCK:

ASSOCIATED WITH THE 5D UNITS IS A DISTINCTLY STRIPED GREY UNIT. IT GENERALLY CONSISTS OF A GREY CALCAREOUS MATRIX WITH ANASTAMOSING DARK GREEN CHLORITIC STRIPES DEFINING A CRUDE S2 FOLIATION. IN DY LOGGING THIS UNIT WAS COLLOQUIALLY TERMED "LEOPARD ROCK" AND CODED AS 5D35. MORE ABUNDANT OCCURRENCES OF THIS UNIT IN THE GRUM DEPOSIT INDICATE THAT THIS UNIT IS A STRONGLY ALTERED AND CARBONATED VARIANT OF THE 5C METABASITES. CONSEQUENTLY IN GRUM PARLANCE THIS UNIT IS CODED AS 5C* OR 5C#.

4L ROCK TYPES:

4L ALTERATION CODING FORMS A SIGNIFICANT PORTION OF THE DY LOGS. THIS PARTICULAR SUITE OF LITHOLOGIES WAS EVOLVED LARGELY IN RESPONSE TO RECOGNITION OF MAJOR ALTERATION TYPES IN DY CORE. EMPHASIS IN THE DY LOGGING WAS ON RECORDING THE ALTERATION ASSEMBLAGE PRESENT. SUBSEQUENT WORK WITH GRUM CORE EMPHASIZED MORE THE ORIGINAL PROTOLITH FOR THE ALTERATION LITHOLOGY. THE DY 4L LITHOLOGIES IN MANY CASES ARE AMBIGUOUS IN TERMS OF THE STRATIGRAPHIC PROTOLITH FOR THE ALTERATION FACIES. RELOGGING OF THE DY 4L LITHOLOGIES IS RECOMMENDED AS A NECESSARY ADJUNCT TO UPGRADING THE DY DATABASE.

CERTAINLY TYPICAL DY 4L76 WEAK CONSISTS OF PYRRHOTITE-CHLORITE STRINGERS AND VEINS IN A NONCALCAREOUS CHLORITE-MUSCOVITE PHYLLITE. IN MOST RECENT GRUM CODING THIS IS EQUIVALENT TO 3GO STRINGER. THE VARIOUS DY 4L1 UNITS PROBABLY WOULD BE VARIOUSLY CLASSIFIED AS 4C5, 4C5, 4CO, 4DO, OR 5D4* UNITS IN GRUM CODING. THE AMBIGUITIES INHERENT IN THIS TRANSLATION CAN ONLY BE SOLVED BY RELOGGING THE DY CORE.
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DY CORE.

STRUCTURE SUBFILE
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DURING THE DY CORE LOGGING, CAREFUL RECORDS WERE KEPT OF THE VERGENCE OF PHASE 2 MINOR FOLDS (Z OR S) AND THE ORIENTATION OF THE PHASE 2 CLEAVAGE WITH RESPECT TO THE DRILL CORE AXIS. THIS INFORMATION WAS RECORDED IN A SHORTHAND NOTATION WHICH IS DESCRIBED ON PAGES 15-26 AND 31-37 OF THE 1981 FIELD LOGGING MANUAL.

NEW COMPUTER PLOTTING CAPABILITIES IN THE DDHDB HAVE REPLACED THE PLOTTING PROGRAMS USED WHEN DY LOGGING WAS ONGOING. THE CURRENT PLOTTING PROGRAMS MAKE THE ORIGINAL STRUCTURAL LOGGING FORMAT OBSOLETE; CORRECTION OF THE ORIGINAL DATA BASE IS REQUIRED BEFORE STRUCTURAL INFORMATION CAN BE PLOTTED AND UNDERSTOOD USING CURRENT DDHDB DOCUMENTATION.

CORRECTION OF THE STRUCTURAL DATA SUBFILE IS AN UNCOMPLICATED, STRAIGHTFORWARD PROCEDURE. COMPARISON OF 1981 AND 1983 FIELD LOGGING MANUALS DELINEATES THE DIFFERENT CORE LOGGING CONVENTIONS. IN 1981, ZONE OBSERVATIONS WERE OFTEN INDICATED USING A 3 AND E POINT OBSERVATION NOTATION. IN 1983, THE ZONE OBSERVATIONS WERE ALWAYS

RECORDED AS ZONES WITH A 'FROM AND TO' DOWNHOLE DEPTH.

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FAULT SUBFILE

THIS SUBFILE DESCRIBES FAULT-RELATED ROCK CHARACTERISTICS FOR DOWNHOLE DEPTH INTERVALS OF A PARTICULAR DRILL HOLE. THE INFORMATION IN THIS SUBFILE IS PLOTTED ON INDIVIDUAL DRILL HOLE PLOTS. IT IS A NEW FEATURE CREATED AFTER DY CORE LOGGING WAS COMPLETED.

THIS SUBFILE MUST BE CREATED FROM THE EXISTING DY FIELD LOGS. RELEVANT INFORMATION IN THE DY LOGS IS RECORDED IN THE LITHOLOGY AND STRUCTURE PORTIONS OF THE FIELD LOGS. THE INFORMATION CAN BE READILY TRANSCRIBED FROM THE EXISTING DATA AND ENTERED INTO THE COMPUTER USING THE APPROPRIATE FAULT SUBFILE FORMAT.

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COMPOSITES SUBFILE

THIS SUBFILE IS ALSO A NEW FILE CREATED AFTER DY FIELD LOGGING WAS COMPLETED. IT PROVIDES A WEIGHTED AVERAGING PROGRAM FOR DEFINING COMPOSITED ASSAY SAMPLES FOR EACH DRILL HOLE. THE LENGTH AND DOWN HOLE DEPTH OF EACH COMPOSITE SAMPLE IS CHOSEN BY THE GEOLOGIST.

AT PRESENT THIS SUBFILE FOR DY IS EMPTY. ANY COMPLETION OF THIS SUBFILE IS HIGHLY DEPENDENT UPON THE PARTICULAR SEQUENCE OF CORRELATIONS BETWEEN DRILL HOLES. AT PRESENT IT IS FELT THAT GEOLOGICAL INFORMATION IS TOO SPARSE AND WIDELY SPACED TO CONSTRAIN THE COMPOSITE TO A UNIQUE SOLUTION. FOR THIS REASON IT IS SUGGESTED THAT THE SUBFILE REMAIN EMPTY UNTIL FURTHER WORK IS WARRANTED.

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SUMMARY

THE ABOVE DISCUSSION DESCRIBES THE STATUS OF THE DY DATABASE. FIELD LOGGING OF DY DRILL CORE WAS CONDUCTED CONSCIENTOUSLY FOR THE ENTIRE 1976-81 DRILLING INTERVAL. CONSEQUENTLY, THE DY DATABASE IS INTERNALLY CONSISTENT AND ONLY NEEDS SOME MODIFICATIONS TO BE UPGRADED TO 1982-83 GRUM DATABASE STANDARDS AND CONVENTIONS.

THE T, R, ASSAY, STRUCTURE AND FAULT SUBFILES MAY BE READILY MODIFIED BY COMPARISON OF 1981 AND 1983 FIELD LOGGING MANUALS. ALL THESE FILES NEED TO BE CHECKED FOR DATA ENTRY ERRORS. CORRECTIONS AND MODIFICATIONS MAY BE COMPLETED BY ANY NON-SPECIALIST GEOLOGIST.

UPGRADING OF THE LITHOLOGY AND COMPOSITE FILES, HOWEVER, WILL REQUIRE A SPECIALIST GEOLOGIST FAMILIAR WITH METAMORPHIC TECTONITES. THIS PERSON SHOULD INVOLVE HIMSELF IN A TWO MONTH PROGRAM OF CORE LOGGING AND SURFACE MAPPING OF THE DY DEPOSIT TO BECOME FAMILIAR WITH THE PROPERTY GEOLOGY (NO EXCEPTIONS). THE LOGGING SHOULD INCLUDE RELOGGING A SECTION CONTAINING DRILL HOLES LOGGED BY EACH OF THE ORIGINAL GEOLOGISTS TO BECOME FAMILIAR WITH THE EARLIER

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BY LOGGING CONVENTIONS.
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DY DEPOSIT SUMMARY

A. STRONG POINTS

Well known hole locations

Well known downhole surveys

Assays carefully split out and analysed

Systematic structural logging

Internal consistency high for lithologic logging

This is good stable basic data. Some editing will be required and detailed explanation is needed, particularly for lithologies.

B. WEAK POINTS

Database does not use current format for all files

Some files, particularly lithology, do not use current nomenclature

Plotting of DDH's does not take account of deviations from plane of section

No current interpretation reflects the structural style of the district

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These items are all intrepretative and follow from A. These can be changed at will provided sufficiently detailed explanation is at hand and sufficiently qualified personel are available