JUNE, 1986

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ABERFOYLE RESOURCES LIMITED

CLEVELAND DIVISION

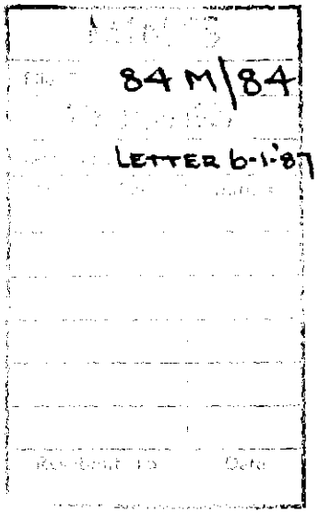
GEOLOGICAL RESOURCE ASSESSMENT

CLEVELAND TIN MINE

AS AT

END OF MILLING-MINING OPERATIONS

12TH JUNE, 1986



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1. SUMMARY

Total geological in situ resources ≥0.35% SnT as at the 12th June, 1986 were 6.5 million tonnes at 0.70% SnT, 0.29% Cu.

TABLE 1 MEASURED AND INDICATED RESOURCES

LENS	June, 1986 @ 0.35% SnT Tonnes	% SnT	% Cu	May, 1985 @ 0.35% SnT Tonnes	% SnT	% Cu
Hall's	3,400,000	0.71	0.33	3,400,000	0.71	0.32
Henry's	450,000	0.81	0.47	500,000	0.79	0.45
Khaki + Lucks	680,000	0.70	0.22	750,000	0.73	0.22
B-South + Battery	620,000	0.57	0.22	650,000	0.57	0.22
GRAND TOTAL	5,200,000	0.70	0.31	5,300,000	0.70	0.31

TABLE 2 FOLEY ZONE W/Sn/Mo

% Wo_3 Cut-Off	Tonnes	% Wo_3	% SnT	% MoS_2
0.20	3,800,000	0.28	0.05	0.02
0.30	1,200,000	0.35	0.05	0.02
0.40	140,000	0.43	0.05	0.02

TABLE 3 INFERRED RESOURCES

LENS	June, 1986 @ 0.35% SnT Tonnes	% SnT	% Cu	May, 1985 @ 0.35% SnT Tonnes	% SnT	% Cu
Hall's	1,100,00	0.69	0.20	1,100,000	0.69	0.20
Henry's	0	-	-	0	-	-
Khaki + Lucks	40,000	0.73	0.15	40,000	0.73	0.15
B-South + Battery	190,000	0.86	0.35	190,000	0.86	0.35
TOTAL	1,300,000	0.72	0.22	1,300,000	0.72	0.22

* All figures rounded to 2 significant figures.

1.3 RESOURCE POTENTIAL

1.3.1 Battery Lens

1.3.2 Foley Zone W/Sn/Mo

1.4 MILL FEED - GEOLOGICAL RESOURCE RECONCILIATION

Reconciliation between mill feed and geological resource removed during the Period May, 1985 - June, 1986 indicates a tonneage increase on 37% and a grade decrease of 10%.

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2. INTRODUCTION

This report documents the assessment and calculation, of the geological resources at Cleveland Mine as at 12th June, 1986 (end of all mining/milling operations).

The objective of modelling all lenses into the 10m x 10m kriged estimate format has been achieved apart from the following:

(a) Hall's A Lens South of G Section;

(b) Hall's B Lens (Ratchet-Nadir) North of O Section;

(c) B-South Lens South of G Section Above 11 Level.

This means that almost all known mineralization within the Cleveland deposit has been evaluated.

3. GEOLOGICAL RESOURCE DEFINITIONS

3.1 GEOLOGICAL RESOURCE

The accumulation of a naturally occurring materials in or on the earth's crust in such form that extraction of a mineral or energy commodity is technically feasible and potentially beneficial.

3.2 SUB-ECONOMIC RESOURCES

That portion of a geological resource which is of quality too low to allow it to be included in projected exploitation.

3.3 MEASURED CATEGORY

Materials for which estimates of the quality and quantity have been computed from sample analyses and measurements from closely spaced and geologically well known sample sites such that

(a) the pattern of ore continuity is very well understood;

(b) the actual metal content will have a high probability of being in the range 90% to 110% of the predication.

The measured category requires no additional sampling before production, apart from normal grade control measures.

3.4 INDICATED CATEGORY

Materials for which estimates of the quality and quantity have been computed partly from sample analyses and measurements, and partly from reasonable geologic projections such that

(a) the pattern of ore continuity is understood though surprises are still possible;

(b) the actual metal content will have a high probability of being in the range 70% to 130% of the predication.

Except cases of extreme high grade and clear viability, additional sampling is required before production plans can be finalised. Normally medium to long range planning would be based on an indicated ore reserve.

3.5 INFERRED CATEGORY

This category does not apply to ore reserves. Quantitative estimates are based largely on broad knowledge of the geological character of the deposit and for which there are few sample measurements. The estimates are based on an assumed continuity or repetition of which there is geologic evidence; this evidence may include comparison with deposits of similar type.

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4. CALCULATION PROCEDURES

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4.1 DATA CUT OFF

The geological resource is an assessment as at 12th June, 1986 at the end of all tin operations. Any data received after that date has been ignored. The last drill hole completed before that date was C2028. All drill holes up to the last one drilled have been used in this assessment.

4.2 LODE INFORMATION WITHOUT ASSAYS

In few instances, where drill holes were completed but assays not received, the logged position and horizontal width of lode has been used to assist the geological interpretation and for calculation of width estimates (and therefore tonneage).

4.3 CUT OFF GRADE

In accordance with previous practice, one single geological cut-off has been used in this assessment. The cut-off value of 0.35% SnT represents an absolute minimum value whereby in situ materials of that grade, once diluted by mining processes, could never be mined and treated at a profit.

Despite varying metallurgical recoveries ascribed to each lens or part of lens, one single cut-off has been used throughout. Effects of the varying recoveries are taken into account in the calculation of the Ore Reserve.

In this report, grade categories are referred to as below:

(i) Geological resource 0.35% SnT
(ii) Sub-economic resource 0.35% Snt

4.4 GEOLOGICAL INTERPRETATION

Interpretation has been carried out on 1:200 and 1:500 cross sections and longitude projections by Cleveland Geologist - E. V. Dronseika.

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4.5 CALCULATION OF INTERSECTION DATA

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4.5.1 Drill Holes

The method used in the 1981 report has not been changed for this assessment.

An inventory of drill hole and face sample intersections is stored in a sequential ASCII file (? D Lens :: 23) in the HP1000 computer. This inventory is updated regularly as new data or new correlations come to hand. (See Appendix I for a full listing of data used in this assessment, "-1.00" indicates data not available.) See Table (4) for increases in data since the last assessment.

4.5.2 Face Samples

The calculation method as detailed in the 1981 assessment has been adopted to toto for this calculation.

4.6 INTERPOLATION TECHNIQUES

4.6.1 Introduction

As with the last assessment, the geological resource has been calculated on a 10m x 10m grid basis, in the long projection view. Each 10m x 10m block was ascribed a horizontal width, % SnT, % SnS and % Cu, according to estimates derived by a recognized interpolation method. % internal waste has not been calculated in this assessment due to excessive variability. Only whole blocks were considered and categorizing (e.g. geological resource, sub-economic resource) was applied strictly to completed blocks. The entire interpolation process was computed on the HP1000 computer via the HP2648A terminal sited in the Cleveland Geology office. (See Appendix II, Appendix III for details of computer processing.)

4.6.2 Grid Layouts

The 10m x 10m grid was applied to all lenses down to 26 level with blocks arbitrarily centred on even 10m co-ordinates. For Hall's and Henry's lenses, Hall's grid northings were used with G section defined as 5000N; while for Khaki, B-South and Battery lenses, Battery grid northings were

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used with Fa section defined as 5000N. In all cases, the mine reduced level system was used such that sea level is 1000 R.L. Those less well-known areas below 26 level were covered by a 40m x 40m grid, with 16 10m x 10m blocks exactly coinciding with a larger lower block.

Limits for each grid were chosed by selecting the minimum size rectangular area that covered the existing explored region for each lens. Forced extrapolation beyond drilling information has not been applied and generally grid limits are within 10m of drilling/development information boundary.

TABLE 4

Lens Description	File Code	Northing Limits	R L Limits	No. of Intersections 6/1986	No. of Intersections 6/1985	No. of Estimates* 6/1986	No. of Estimates* 6/1985
Henry's Pod 1	HNY1	5155-5315	1475-1325	145	145	58	72
" " 2	HNY2	5235-5325	1455-1335	82	82	29	29
" " 3	HNY3	5065-5235	1435-1305	117	117	43	43
" " 3A	HN3A	5045-5095	1365-1295	34	34	6	6
" " 5	HNY5	4945-5035	1386-1265	77	77	34	34
" " 6	HNY6	5105-5215	1345-1245	100	110	29	29
" " 11	HNYV	5205-5275	1295-1224	28	28	18	18
" West Below Nadir	HNYW	5225-5335	1145- 965	93	93	100	100
" East " "	HNYE	5225-5315	1165- 995	108	108	63	63
" Below Nadir, South of Qa	HNY	5055-5265	1165- 965	109	109	153	153
Hall's A Above W Fault	HAAW	4995-5255	1475-1345	57	57	81	91
" A1 Ratchet to Nadir	HA1	5105-5195	1255-1205	34	34	8	8
" A2 " " "	HA2	5065-5215	1245-1165	104	104	47	47
" A3 " " "	HA3	5065-5185	1235-1155	84	84	43	43
" A West Below Nadir	HAW	5165-5275	1115-1005	67	67	72	70
" A East " "	HAE	5165-5305	1105- 975	85	85	140	140
" B Above W Fault	HBAW	4995-5225	1455-1295	157	157	186	186
" B W to Ratchet	HBWR	5045-5405	1455-1195	107	107	101	130
" B Ratchet to Nadir, South to Culshaw	HBRN	5065-5175	1235-1145	99	99	26	32
" B West En - Tulip	HBW	5075-5255	1165-1125	29	29	25	25
" B East " "	HBE	5195-5305	1175-1115	39	39	36	26
" B Below Tulip to 26L	HBBT	4995-5395	1105- 965	162	162	324	324
" B Below 26L	HBL	5095-5335	965- 765	-	-	35	35
" C Above Ratchet	HCAR	4995-5415	1445-1235	167	167	309	309
" C Ratchet to Nadir	HCRN	5125-5305	1255- 115	65	65	90	90
" C West En - Tulip	HCW	5145-5375	1165-1085	81	81	81	81
" C Est En - Tulip	HCE	5265-5375	1155-1065	45	45	45	45
" C Below Tulip to 26L	HCBT	5095-5385	1095- 965	86	86	234	234
" C " 26L	HCL	5135-5335	965- 765	-	-	27	27

TALE 4 (Cont)

Lens Description	File Code	Northing Limits	R L Limits	No. of Intersections 6/1986	No. of Intersections 6/1985	No. of Estimates* 6/1986	No. of Estimates* 6/1985
Hall's C Hanging Wall Enrichment	HCHW	5135-5335	965-765	21	21	18	18
" D Above Tatchet	HDAR	5015-5405	1425-1225	202	202	369	369
" D Ratchet to Nadir	HDRN	5155-5285	1235-1155	27	27	39	39
" D En - Tulip	HDET	5175-5345	1145-1015	80	80	76	76
" D Below Tulip to 26L	HDBT	5215-5365	1065- 965	39	39	98	98
" D Below 26L	HDL	5215-5335	965- 645	-	-	15	15
" E Above Ratchet	HEAR	5205-5315	1285-1165	40	40	40	40
" E En - Tulip	HEET	5215-5375	1125-1015	28	28	61	61
Khaki West	KHKW	4715-4975	1415-1195	127	127	189	189
" East	KHKE	4745-5065	1475-1185	267	267	236	199
Luck's Lode	LUCK	4975-5035	1465-1395	67	67	32	32
B-South	BSTH	4685-4925	1275-1125	97	97	164	164
Battery West Above 17L	BATW	4745-4955	1385-1175	35	35	122	122
" East " "	BATE	4745-4945	1365-1175	26	26	117	117
TOTALS				3427	3427	4019	4029

+ 40m x 40m Blocks

* Does not include Blcoks completely mined out.

4.6.3 Width and Grade Estimation

Horizontal width, % SnT, % SnS and % Cu were all interpolated from the available drill hole and development sample data using the kriging multiple regression technique, as in the 1982 assessment.

4.6.3.1 Variograms

The kriging interpolation used variograms as calculated by the CVAR variogram program. (See Appendix IV).

Directional variograms were calculated where number of samples was sufficient to minimize fluctuations in the experimental variogram.

From the variogram parameters, the following summary can be made:

(a)	LOW SAMPLING ERROR	Horizontal Width
	↓	% SnT
		% Cu
	HIGH SAMPLING ERROR	% SnS
(b)	LOW NATURAL VARIABILITY	% SnT
	↓	% Cu
		% SnS
	HIGH NATURAL VARIABILITY	Horizontal Width
(c)	LOW ESTIMATE ERROR	% SnT
	↓	% Cu
		% Horizontal Width
	HIGH ESTIMATE ERROR	% SnS
(d)	SHORT DISTANCE INFLUENCE	% SnS
	↓	% SnT
		% Cu
	LONG DISTANCE INFLUENCE	Horizontal Width
(e) *	MOST PREDITABLE LENS	Hall's B Ratchet - Nadir
	↓	Hall's B W - Ratchet
		Henry's Easts
	MOST UNPREDICTABLE LENS	Hall's D Below Tulip

* Only lenses 30 intersections

4.6.3.2 Kriging

Over the defined grid for each lens, or fault block of a lens, estimates were computed for each block along with the relative kriging variance. These estimates were temporarily saved as sequential ASCII files (? K Lens) on the HP1000 computer.

4.6.4 Lens Termination Definition

Definition of the lens shape in long projection was achieved by editing block values outside a polygon according to the lens termination interpreted by a geologist. Those blocks outside the lens have had their estimates set to "-1.00" to act as a flag for subsequent processing. The resulting block estimate files are permanently saved as sequential ASCII files (? P Lens) on the HP1000 computer. The files at this stage represent the lens in the virgin state, before depletion by mining.

4.6.5 Ore Mined Status

To allow for depletion of resources through both development and stope production, records were made of the ore mined status as at 12th June. As was the practice in the 1985 assessment, each block for each lens was ascribed a percentage mined, varying from 0-100%, to the nearest 5%, as seen from long projection plots of up-dated stope boundaries and development advances. In the case of development mining only portion of a lens, the correct adjustment was made.

4.6.6 Tonneage Calculation and Totalling

Calculation of tonneage was made in units of 10m x 10m (or 40m x 40m as the case may be) blocks as defined by the original grid layouts. The totalizing program accepts up to 10 different % SnT cut-offs; then reads each block's estimated % SnT grade; decides whether it is above or below the specified cut-off and accumulates the tonneage whereby:

$$\text{Block tonneage} = \text{block area} \times \text{hor. width} \times \text{S.G.} \times \frac{100-\text{MOS}}{100}$$

(100 or 1600m^2) estimate

where MOS = Mined Out Status

4.6.6 Tonneage Calculation and Totalling (cont.)

As in the 1980 - 1985 assessments, S.G.'s as specified by Palmer (1973) were used :

Hall's and Henry's lenses	3.05
Khaki, B-South and Battery Lenses	3.08

4.6.7 Average Grade Calculation.

The totalizing programme whilst counting blocks exceeding the cut-off and accumulating tonneage, also accumulated tonneage x % SnT, % SnS and % Cu for average grade calculation.

$$\text{Mean Grade} = \frac{\sum_{i=1}^{n} (T_i . G_i)}{\sum_{i=1}^{n} T_i}$$

where n = No. of blocks cut-off

T = block tonneage

G = % SnT, % SnS, % Cu

$$\text{Mean horizontal width} = \frac{\sum_{i=1}^{n} HW_i}{n}$$

(N.B. No adjustment for mined out portions of blocks)

4.6.8 Resource Categories.

As in the 1985 assessment, classification into measured, indicated and inferred was done by subjective judgement according to sample density and known variability.

4.6.9 Resource Confidence.

Lognormal confidence intervals for % SnT have been calculated from the relative kriging variance as in the last assessment.

4.6.10 Grade - Tonneage Curve

A grade-tonneage curve has been calculated for all measured and indicated resources at Cleveland. (Figure 1)

This was constructed from tabulations for cut-offs of 0, 0.2, 0.35, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0 and 1.2 %SnT, for deposit in both the virgin and present in-situ state.

TOTAL GEOLOGICAL RESOURCE

Measured & Indicated Status

June, 1986

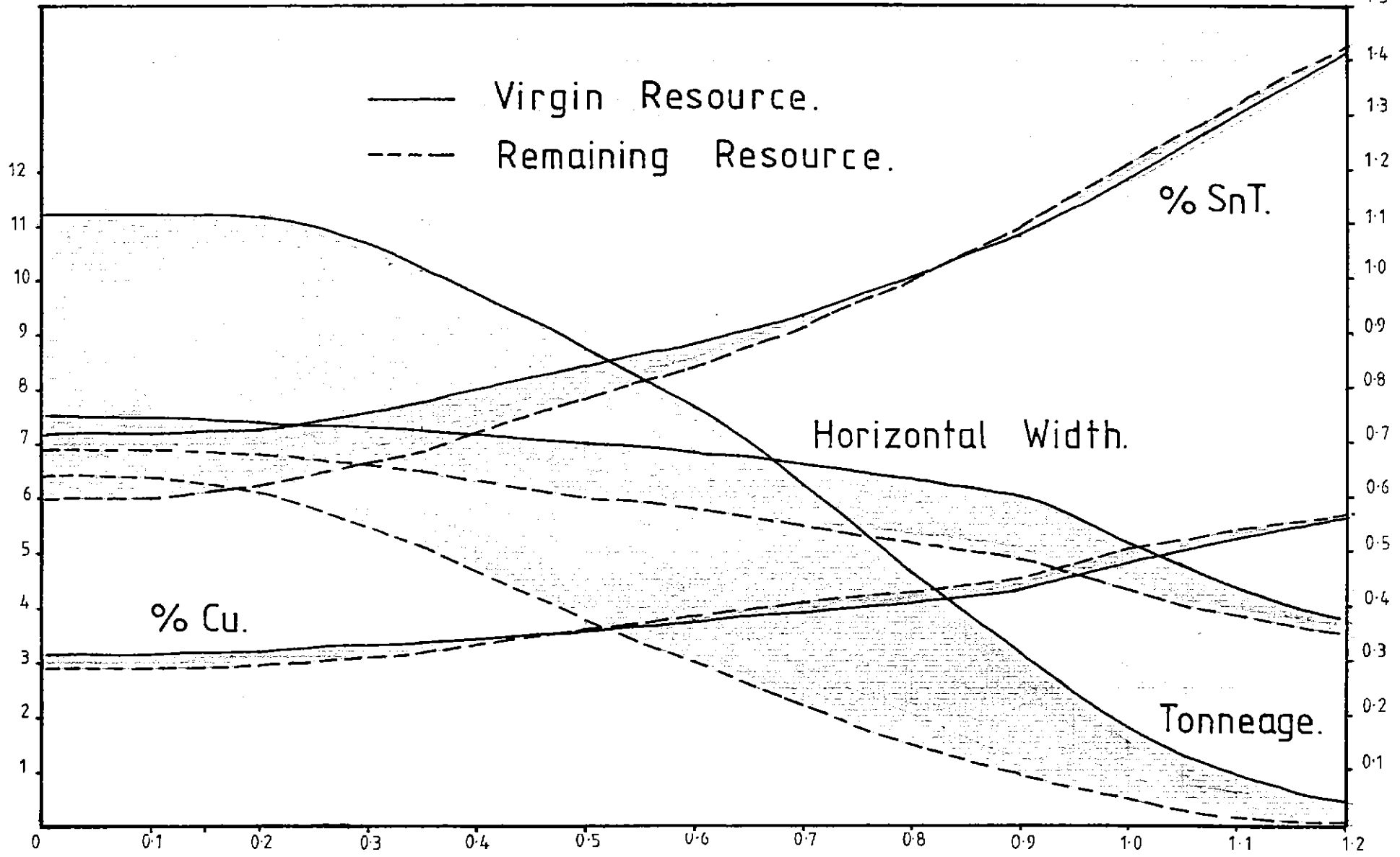

Fig 1

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TABLE 5. HORIZONTAL WIDTH VARIOGRAM PARAMETERS.

LENS	NUGGET EFFECT Co	CO-VARIANCE AT ZERO LAG C	SILL C+Co	RANGE a	ANISOTROPY PLUNGE ANGLE & DIRECTION	RATIO
HNY1	0.00	0.93	0.93	35	80	1.50
HNY2	0.00	1.37	1.37	28	0	1.87
HNY3	0.00	1.09	1.09	27	45	1.38
HN3A	0.00	1.32	1.32	15	0	1.00
HNY5	0.00	1.26	1.26	29	0	1.00
HNY6	0.00	0.61	0.61	36	0	1.00
HNYV	0.00	0.55	0.55	30	0	1.00
HNY	0.00	0.80	0.80	23	0	1.00
HNYW	0.13	0.89	1.02	30	0	1.00
HNYE	0.07	0.57	0.64	60	0	1.00
HAAW	0.13	0.10	0.23	60	0	1.00
HA1	0.09	0.62	0.71	38	0	1.00
HA2	0.00	0.23	0.23	26	0	1.00
HA3	0.00	0.24	0.24	80	0	1.00
HAW	0.00	1.58	1.58	68	40	1.31
HAE	0.00	1.06	1.06	40	0	1.00
HBAW	0.00	0.92	0.92	55	50	1.67
HBWR	0.02	0.29	0.31	135	50	1.83
HBRN	0.00	0.20	0.20	30	0	1.00
HBW	0.24	0.75	0.97	30	0	1.00
HBE	0.00	0.95	0.95	30	0	1.00
HBBT	0.06	0.22	0.28	165	40	1.27
HCAR	0.07	0.96	1.03	135	-85	1.60
HCRN+	0.00	0.56	0.56	30	0	1.00
HCW	0.00	0.54	0.54	55	0	1.00
HCE	0.00	0.34	0.34	38	0	1.00
HCBT	0.00	0.50	0.50	135	55	3.50
HCHW+	0.00	0.60	0.60	100	0	1.00
HDAR	0.13	0.57	0.70	60	60	1.67
HDRN	0.10	0.59	0.69	40	0	1.00
HDET	0.38	0.80	1.18	30	0	1.00
HDBT	0.00	0.75	0.75	100	0	1.00
HEAR+	0.22	1.94	2.16	65	0	1.00
HEET	0.00	0.91	0.91	25	0	1.00
KHKW	0.02	0.82	0.84	55	0	1.00
KHKE	0.09	0.64	0.73	120	40	1.85
LUCK+	0.24	0.44	0.68	30	0	1.00
BSTH	0.05	0.25	0.30	120	0	1.00
BATW	0.00	0.70	0.70	45	45	1.50
BATE	0.00	0.99	0.99	45	45	1.50
BAT	0.03	0.60	0.63	60	45	1.50
AVERAGE	0.05	0.73	0.79	55	16	1.46

+AVERAGE USED.

TABLE 6. % SnT VARIOGRAM PARAMETERS.

LENS	NUGGET EFFECT Co	CO-VARIANCE AT ZERO LAG C	SILL C+Co	RANGE a	ANISTROPY PLUNGE	RATIO
HNY1	0.10	1.21	1.31	24	0	1.00
HNY2	0.11	0.28	0.39	24	0	1.00
HNY3	0.19	0.42	0.63	20	0	1.00
HN3A*	0.11	0.21	0.32	23	0	1.00
HNY5	0.09	0.24	0.33	29	0	1.00
HNY6	0.06	0.20	0.26	25	0	1.00
HNYV	0.24	0.23	0.47	45	0	1.00
HNY	0.09	0.33	0.42	18	0	1.00
HNYW	0.13	0.29	0.42	80	0	1.00
HNYE	0.15	0.12	0.27	55	0	1.00
HAAW	0.05	0.14	0.19	50	0	1.00
HA1#	0.04	0.24	0.28	30	0	1.00
HA2#	0.12	0.62	0.74	36	0	1.00
HA3#	0.06	0.80	0.86	48	0	1.00
HAW	0.04	0.24	0.28	30	0	1.00
HAE	0.13	0.26	0.39	25	0	1.00
HBAW	0.04	0.32	0.36	42	0	1.00
HBWR	0.05	0.23	0.28	90	0	1.00
HBRN	0.05	0.17	0.22	20	0	1.00
HBW	0.23	0.67	0.90	52	0	1.00
HBE	0.05	0.19	0.24	20	0	1.00
HBBT	0.24	0.13	0.37	170	40	1.32
HCAR[x]	0.47	0.21	0.68	90	0	1.00
HCRN	0.47	0.49	0.96	30	0	1.00
HCW	0.10	0.19	0.29	42	0	1.00
HCE	0.08	0.13	0.21	45	0	1.00
HCBT	0.09	0.21	0.30	95	0	1.00
HCHW[+]	0.13	0.18	0.31	80	0	1.00
HDAR	0.22	0.12	0.34	50	60	1.82
HDRN[+]	0.30	0.28	0.58	30	0	1.00
HDET	0.06	0.27	0.33	22	0	1.00
HDBT[+]	0.23	0.19	0.42	60	0	1.00
HEAR[+]	0.39	0.34	0.73	55	0	1.00
HEET	0.18	1.23	1.41	25	0	1.00
KHKW[x]	0.06	0.25	0.31	55	0	1.00
KHKE	0.09	0.15	0.24	120	40	1.70
LUCK[+]	0.01	0.43	0.43	50	0	1.00
BSTH	0.15	0.17	0.32	45	-10	1.80
BATW	0.07	0.13	0.20	75	0	1.00
BATE	0.10	0.18	0.28	75	0	1.00
BAT	0.20	0.44	0.64	50	0	1.00
AVERAGE	0.14	0.32	0.46	50	33	1.66

* Proportioned to HNY3. # Combined [x] Accumulated with Horizontal Width

+ Average Used.

TABLE 7. % SnS VARIOGRAM PARAMETERS.

LENS	NUGGET EFFECT Co	CO-VARIANCE AT ZERO LAG C	SILL C+Co	RANGE a
HNY1	0.00	0.32	0.32	20
HNY2	0.00	0.71	0.71	20
HNY3	0.10	0.14	0.24	20
HN3A*	0.05	0.08	0.13	15
HNY5	0.00	0.62	0.62	60
HNY6	0.18	0.17	0.35	30
HNYV	0.31	0.40	0.71	20
HNY	0.30	0.45	0.75	45
HNYW	0.54	1.56	2.10	25
HNYE	1.10	1.73	2.83	18
HAAW+	0.05	0.68	0.73	50
HA1#	0.40	0.62	1.02	35
HA2#	0.29	0.37	0.66	35
HA3#	0.40	0.62	1.02	35
HAW	0.48	0.78	1.26	35
HAE	0.19	0.75	0.94	35
HBAW+	0.29	0.50	0.79	30
HBWR‡	0.20	0.27	0.47	90
HBRN	0.06	0.15	0.21	40
HBW	0.00	0.62	0.62	37
HBE	0.00	1.21	1.21	30
HBBT	0.37	0.42	0.79	105
HCAR×	0.17	0.62	0.79	100
HCRN	0.05	0.25	0.30	57
HCW	0.16	1.20	1.36	30
HCE	0.00	2.10	2.10	35
HCBT+	0.10	0.42	0.52	30
HCHW+	0.76	0.20	0.96	20
HDAR	0.15	0.32	0.47	54
HDRN+	0.25	0.21	0.46	40
HDET	0.22	1.62	1.84	55
HDBT+	2.35	0.67	3.02	40
HEAR	0.00	0.20	0.20	20
HEET	0.00	1.50	1.50	20
KHKW×	0.57	2.60	3.17	55
KHKE	0.16	0.29	0.45	180
LUCK+	0.16	0.30	0.46	50
BSTH	0.10	0.25	0.35	45
BATW	0.25	0.49	0.74	75
BATE	0.17	0.32	0.49	75
BAT	0.12	0.29	0.41	45
AVERAGE	0.27	0.66	0.93	45

* Proportioned to HNY3 + Average Used # Combined

‡SnT Range for HBWR used.

019

95 021

TABLE 8. % Cu VARIOGRAM PARAMETERS.

LENS	NUGGET EFFECT Co	CO-VARIANCE AT ZERO LAG C	SILL C+Co	RANGE a
HNY1	0.00	0.59	0.59	27
HNY2	0.00	0.53	0.53	27
HNY3*	0.04	0.58	0.62	42
HN3A	0.00	0.13	0.13	38
HNY5	0.07	0.19	0.26	24
HNY6	0.20	0.12	0.32	55
HNYV	0.19	0.29	0.48	55
HNY	0.41	0.47	0.88	15
HNYW	0.13	0.60	0.73	15
HNYE	0.17	1.22	1.39	55
HAAW	0.05	0.10	0.15	50
HA1#	0.00	0.69	0.69	40
HA2#	0.00	0.69	0.69	40
HA3#	0.00	0.69	0.69	40
HAW	0.00	1.34	1.34	45
HAE	0.17	2.24	2.41	23
HDAW	0.05	1.89	1.94	75
HBWR	0.07	0.35	0.42	140
HBRN	0.04	0.08	0.12	35
HBW	0.00	0.28	0.28	42
HBE	0.06	0.27	0.33	35
HBBT	0.37	0.65	1.02	60
HCAR^x	0.11	0.49	0.60	65
HCRN	0.05	0.28	0.33	48
HCW	0.09	0.30	0.39	29
HCE	0.03	0.21	0.24	27
HCBT^+	0.77	0.46	1.23	55
HCHW^+	0.21	0.12	0.33	55
HDAR	0.20	0.32	0.52	85
HDRN	0.22	0.38	0.60	45
HDET	0.42	0.58	1.00	40
HDBT	0.11	0.41	0.52	80
HEAR^+	0.25	0.27	0.52	55
HEET	0.00	0.65	0.65	25
KHKW^x	0.16	0.32	0.48	30
KHKE	0.08	1.15	1.23	165
LUCK^+	0.20	0.32	0.52	50
BSTH	0.17	0.26	0.43	75
BATW	0.13	0.26	0.39	75
BATE	0.09	0.21	0.30	75
BAT	0.06	0.15	0.21	55
AVERAGE	0.13	0.52	0.68	51

*Proportioned to HNY3 # Combined x Accumulated with Horizontal Width

5. RECONCILIATION

In the geological resource assessment, reconciliation has been carried out as the annual check to determine the accuracy of the estimation procedures and/or the amount of unplanned dilution mined. The loss of geological resources in the areas from which mining took place is compared with the nett ore mined.

Table 9. COMPARISON OF GEOLOGICAL RESOURCE GRADE AND MILL HEAD GRADE

Assessment Date	Geological Resource	Mill Head Grade	Equivalent* Dilution
June, 1970	1.02% SnT	0.87	17
June, 1971	1.02% SnT	0.82	24
June, 1972	1.00% Sn?	0.85	18
February, 1973	0.87% SnC	?	?
November, 1973	0.96% Sn?	0.81	19
November, 1974	0.82% SnC	0.78	6
October, 1975	0.92% SnC	0.78	18
September, 1976	0.97% SnC	0.79	23
September, 1977	0.91% SnC	0.68	34
September, 1978	0.79% SnC	0.58	36
February, 1979	1.06% SnC	0.53	100
October, 1980	0.76% SnC	0.49	55
September, 1981	0.73% SnC	0.54	35
June, 1982	0.73% SnT	0.55	33
May, 1983	0.85% SnT	0.60 #	42
		0.74 #	15
May, 1984	0.95% SnT	0.56 #	70
		0.68 ##	40
May, 1985	0.93% SnT	0.70 #	33
		0.72 ##	31
June, 1986	0.95	0.79 #	20
		0.87 ##	9

* Equivalent dilution is waste rock dilution expressed as a percentage of the mill haed grade available.

Before grade control as determined by grade control sampling.

Mill feed as sampled after crushing - stockpile effects not accounted for.

The equivalent dilution as shown by the discrepancy between mill head grade and geological resource grade has decreased since the 1985 assessment, and represents amongst the lowest dilution figures achieved ever at Cleveland mine.

022

TABLE 10

JUNE, 1986 RECONCILIATION

INCREASED IN GEO. RESOURCE THROUGH PRODN.

LENS	ORE HAULED (Wet)			WASTE			BROKEN RESOURCES IN STOPES		MILL RECONCILED ORE HAULAGE (Includes Broken)					
	Tonnes	% SnT	% Cu	Tonnes	% SnT	% Cu	1985	1986	Tonnes	% SnT	% Cu	Tonnes	% SnT	% Cu
Hall's	33748	0.94	0.44	6172	0.23	0.08	8000	7600	30020	0.99	0.48	38119	1.19	0.45
Henry's	58005	0.86	0.37	15151	0.21	0.09	7500	500	51598	0.92	0.42	39995	0.78	0.43
Khaki	9324	0.73	0.24	-	-	-	1500	Nil	8294	0.77	0.27	1500	0.65	0.24
B-South	35443	0.74	0.22	264	0.32	0.09	10300	Nil	31528	0.77	0.25	10300	0.72	0.24
TOTAL	136520	0.85	0.34	21587	0.22	0.09	27300	8100	121440	0.89	0.38	89914	0.94	0.41

ORE STOCKPILE

1985 - 27600t 1986 - 500t

LOW GRADE STOCKPILE MILLED

1985 - 0t 1986 - 0t

1986 TONNES MILLED

148540 Dry Tonnes 0.87% SnT , 0.38% Cu

Reconciliation Mine/Mill:

$$\frac{148540 + (500 - 27600)}{136520 + 0} \times \frac{100}{1} = 89\% \quad (-11\%)$$

Apparent Tonneage Discrepancy:

$$\frac{121440 + (8100 - 27300) - 89914}{89914} \times \frac{100}{1} = 137\% \quad (+37\%)$$

Apparent Grade Discrepancy:

$$\frac{0.85 - 0.94}{0.94} \times \frac{100}{1} = -10\%$$

95 024

5.1 LOCAL RECONCILIATION

Table 11 shows mill reconciled ore haulage (2.) compared with predicated 1985 Mineable Ore Reserve (M.O.R.) estimates (3.). The total figures are distorted by the proportionally larger amount of ore hauled in comparison to M.O.R. available for Khaki and B-South stopes. For Khaki stopes the amount of broken resources available could not be estimated properly because of poor visibility and limited access to previously broken ore. Broken ore trammed from the B-South was also difficult to estimate visually. The ore had been broken over 6 years ago and old records were not available to generate a more confident estimate.

The overall reconciliation suggested mining recoveries and dilution to be substantially better than had been anticipated. In light of the difficult nature of mining remnant resources (Crown and Rib Pillars) particularly where adverse ground conditions have persisted the overall result may be considered good.

TABLE 11

JUNE, 1986 LOCAL RECONCILIATION

1 SOURCE	2 ORE HAULAGE			3 M.O.R. MINED (Blocks & Broken Ore)			4 NET BROKEN ORE IN STOPE (End 1986)			5 % ORE Recovery (M.T.U.)	6 % TONNEAGE RECOVERY	7 % GRADE RECOVERY (SnT)
Henry's Pod 1 (4SHNY, 5DPTSN)	51593	0.92	0.42	32824	0.71	0.39	500	0.76	0.28	205	158	130
Hall's A, C.P. & R.P. (2HA, 2HAN, 4SHAR)	28309	1.00	0.49	34541	0.84	0.29	6200	0.61	0.19	98	82	119
Hall's B, R1S P. (4SHR)	1349	0.81	0.36	1002	0.48	0.21	800	0.81	0.36	227	135	169
Hall's D Lens (4SAR)	362	0.65	0.46	Nil (Not in Reserve)			600	0.66	0.46	-	-	-
Khaki East Lens (12KHKE, 14KHKE)	8294	0.77	0.27	1500	0.65	0.24		N I L		655	553	118
B-South (12BSTH)	31528	0.77	0.25	10300	0.72	0.24		N I L		327	306	107
TOTAL	121440	0.89	0.38	79967	0.76	0.32	8100	0.64	0.23	178	152	117
TOTAL (Exclud. B-Sth Khaki)	81618	0.95	0.44	68167	0.77	0.33				148	120	123

Ore haulage tonnes adjjsted to mill feed 11.05% down.

Ore haulage %SnT adjusted to mill feed 4.7% up.

Ore haulage % Cu adjusted to mill feed 11.6% up.

6. GEOLOGICAL RESOURCE TABLES:

Geological resources for Cleveland are presented as follows: details of individual block values are shown on long projections plots available from the geology office.

TABLE 12	Summary of all Sn/Cu Resources
TABLE 13	Henry's Lenses
TABLE 14	Hall's A and B Lenses
TABLE 15	Hall's C, D and E Lenses
TABLE 16	Khaki and Luck's Lenses
TABLE 17	B-South and Battery Lenses
TABLE 18	Foley Zone W/Sn/Mo

TABLE 12

SUMMARY Sn/Cu GEOLOGICAL RESOURCES

Total geological tin resources for a 0.35% SnT in-situ cut-off grade at 12th June, 1986 were 6.5 x 10^6 tonnes at 0.70% Snt, 0.29% Cu.

LENS	June, 1986 @ 0.35% Snt Cut-Off Tonnes	% SnT	% Cu	May, 1985 @ 0.35% SnT Cut-Off Tonnes	% SnT	% Cu
Henry's	454000	0.81	0.47	503600	0.79	0.45
Hall's	3392000	0.71	0.33	3402700	0.71	0.32
Khaki + Luck's	683000	0.70	0.22	734900	0.73	0.22
B-South + Battery	622000	0.57	0.22	640400	0.57	0.22
TOTAL	5151000	0.70	0.31	5281700	0.70	0.31
INFERRED						
Henry's	0	-	-	0	-	-
Hall's	1089000	0.69	0.19	1116800	0.69	0.20
Khaki + Luck's	40000	0.73	0.15	40000	0.73	0.15
B-South + Battery	187300	0.86	0.35	187300	0.86	0.35
TOTAL	1316300	0.72	0.21	1344100	0.72	0.22
GRAND TOTAL	6467000	0.70	0.29	6625800	0.70	0.22
SUB ECONOMIC	6600000	0.25	0.11	6600000	0.25	0.11

TABLE 13 027

95 029

HENRY'S LENSES JUNE, 1986

LENS	File Code	Measured Broken	Measured In-Situ	Ind.	Mea + Ind	Inf	Hor. W	%SnT	%Cu
Henry's Pods Above Nadir Fault									
Pod 1	HNY1			95700			9.0	0.82	0.41
		500						0.76	0.28
Pod 2	HNY2			16658			3.3	1.34	0.61
Pod 3	HNY3		31429				5.0	0.71	0.61
Pod 3A	HN3A			6018			5.5	1.02	0.68
Pod 5	HNY5			27790			5.8	0.80	0.41
			10313				2.3	0.87	0.63
Pod 8	HNY8		4900				4.4	0.95	0.91
Pod 10	HNYX		10400				4.5	0.60	0.48
Pod 11	HNYV		17966				5.1	0.79	0.60
Various Locations		1000						1.36	0.56
Henry's Lenses Below Nadir Fault									
Henry's South of Oa Fault	HNY	4000	19430				3.8	0.93	0.59
				23564			3.3	0.44	0.43
					46994		3.6	0.66	0.51
Henry's West	HNYW		37651				5.2	0.76	0.48
				53689			3.3	0.85	0.35
					91341		4.2	0.84	0.40
Henry's East	HNYE	38300						0.80	0.18
			48814				5.2	0.71	0.65
				5516			3.9	0.84	0.17
					92630		4.8	0.73	0.44
TOTALS:									
		43300						0.82	0.23
Measured			180903				4.8	0.76	0.50
Indicated				228935			6.1	0.84	0.41
Measured + Indicated					453638		5.5	0.81	0.47
Sub Economic				127100			4.6	0.19	0.18
Inferred									

HALL'S LENSES A & B

LENS	File Code	Measured Broken	Measured In Situ	Ind.	Mes + Ind	Inf	Hor. W	% SnT	%Cu
A-B Lens Above 12L									
A Lens Above W Fault	HAAW			91208			7.0	0.99	0.36
		8200						0.58	0.19
B Lens Above W Fault	HBAW		57131				1.9	1.12	0.46
				9220			1.1	0.88	1.50
					66401		1.8	1.09	0.55
B Lens to W Ratchet Faults	HBWR	8800						0.79	0.39
			263434				17.4	0.71	0.33
				29656			11.9	1.18	0.35
					311890		16.8	0.74	0.33
A Lens 12L to Nadir Fault									
A1 Lens Ratchet to Nadir Faults	HA1			2704			2.8	0.89	0.27
A2 Lens Ratchet to Nadir Faults	HA2			14416			7.9	0.71	0.19
A3 Ratchet to Nadir Faults	HA3			8411			3.8	0.73	0.15
A West Lens Below Tulip Fault	HAW			67325			4.0	0.93	0.36
A East Lens Below Tulip Fault	HAE		33772				7.4	0.65	0.28
				117943			3.4	0.77	0.17
					151715		4.0	0.75	0.19
B Lens 12L to Nadir Fault									
B Lens Ratchet to Nadir Fault	HBRN		47336				9.5	0.50	0.20
B Lens Nadir to Tulip Faults	HBET								
B West Lens Nadir to Tulip Faults	HBW		39616				6.3	0.86	0.24
B East Nadir to Tulip Fault	HBE		49189				7.5	0.79	0.60
		5000						0.74	0.55
B Lens Bewlo Tulip Fault	HBBT		306307				11.6	0.64	0.25
				536021			14.0	0.48	0.17
					942329		13.0	0.53	0.20
						108700	22.3	0.36	0.05
TOTALS:									
		22000						0.70	0.37
Measured			796835				12.0	0.71	0.31
Indicated				976904			11.0	0.63	0.22
Measured + Indicated					1795739		11.4	0.66	0.26
Sub Economic				711600			17.1	0.24	0.15
Inferred						108700	22.3	0.36	0.06
Sub Economic						3468600	20.9	0.22	0.09

TABLE 15 029

95 031

HAIL'S LENSES C, D, & E

LENS	File Code	Measured Broken	Measured In Situ	Ind.	Mea + Ind	Inf	Hor. W	% SnT	% Cu
C Lens Above Ratchet Fault	HCAR								
			125372				5.0	0.97	0.41
				151272			3.2	0.84	0.35
					281644		4.0	0.89	0.38
C Lens Ratchet to Nadir Faults	HCRN	5600						1.16	0.61
				56234			3.7	1.12	0.42
C Lens to Tulip Faults	HCET								
C West Lens Nadir to Tulip Faults	HCW		112070				5.6	0.98	0.68
C East Lens Nadir to Tulip Faults	HCE		72831				6.9	0.74	0.45
C Lens Below Tulip Fault	HCBT			553015			11.1	0.56	0.29
						890800	10.1	0.75	0.20
D Lens Above Ratchet Fault	HDAR	600	162611				3.9	0.83	0.52
				95173			2.4	0.81	0.49
					258384		3.3	0.86	0.51
						5148	1.7	0.86	0.62
D Lens Ratchet to Nadir Fault	HDRN	2200						0.93	0.46
				26357			2.3	0.80	0.46
D Lens En to Tulip Faults	HDET			64716			3.0	0.78	0.59
D Lens Below Tulip Fault	HDBT			110627			3.8	0.63	0.40
						84400	3.5	0.38	0.19
E Lens Above En/Nadir Fault									
E Lens Above Ratchet Fault	HEAR			18121			1.6	0.96	0.43
E LEns En to Tulip Faults	HEET			34743			2.0	0.82	0.69
TOTALS:									
		8400						1.08	0.56
Measured			467884				5.1	0.91	0.52
Indicated				1120256			7.0	0.69	0.37
Measured + Indicated					1596540		6.5	0.76	0.41
Sun Economic				173600			11.4	0.31	0.20
Inferred						950348	9.5	0.73	0.20
Sub Economic						1836400	17.1	0.29	0.11

TABLE 16

KHAKI AND LUCK'S LENSES

95 032

LENS	File Code	Measured Broken	Measured In Situ	Ind	Mea + Ind	Inf	Hor. W	% SnT	% Cu
Khkai Lenses Above 11L									
Khaki West Lens Below 11L									
Khaki East lens Below 11L									
Khaki West Lens	KHKW		103305				4.8	0.71	0.25
				67896			4.9	0.47	0.23
					171201		4.8	0.62	0.24
Khkai East lens	KHKE								
			324028				11.3	0.71	0.20
				136794			9.0	0.76	0.20
					462822		11.5	0.74	0.20
						40000	10.0	0.73	0.15
Luck's Lens	LUCK			49404			5.5	0.76	0.35
TOTALS:									
Measured			427333				9.7	0.71	0.21
Indicated				256094			7.2	0.68	0.23
Measured + Indicated					683427		8.8	0.70	0.22
Sub Economic				125100			6.5	0.29	0.20
Inferred						40000	10.0	0.73	0.15

TABLE 17

031

B-SOUTH & BATTERY LENSES

95 033

LENS	File Code	Measured Broken	Measured In Situ	Ind	Mea + Ind	Inf	Hor. W	% SnT	% Cu
B-South Lens Above 11L		1000	31800					0.48	0.25
B-South Lens Below 11L	BSTH								
			163651				10.0	0.62	0.26
				156094			8.7	0.58	0.25
					319745		9.4	0.60	0.24
						13300	6.8	1.70	0.42
Battery Lens Above 17L									
Battery West Lens Above 17L	BATW			175332			6.4	0.49	0.15
Battery East Lens Above 17L	BATE			93708			2.9	0.62	0.23
Battery Lens Below 17L	BAT					174000		0.80	0.35
TOTALS:									
		1000						0.48	0.25
Measured			195451					0.60	0.26
Indicated				425134				0.55	0.20
Measured + Indicated					621585			0.57	0.22
Sun Economic				138400			6.8	0.31	0.19
Inferred						187300		0.86	0.35

TABLE 18 FOLEY ZONE GEOLOGICAL RESOURCE

95 034

% Wo_3 Cut-Off	Indicated Tonnes	% Wo_3	% SnT	% Cu	% MoS_2	% Bi
0.20	3800000	0.28	0.05	0.03	0.02	0.02
0.30	1200000	0.35	0.05	0.04	0.02	0.02
0.40	140000	0.43	0.05	0.03	0.02	0.02

Based on 3 - D kriging of 10m. cubes down to 32 levels horizon (850 R.L.)

7. VARIATION FROM PREVIOUS ASSESSMENT

TABLE 19 GEOLOGICAL RESOURCE VARIATION ANALYSIS

	Tonnes	% SnT	M.T.U. Sn	% Cu	M.T.U. Cu
June, 1986 Resource	6467000	0.70	4526900	0.29	1875430
Dec. in Resource Through Production	90000	0.94	84600	0.41	24879
May, 1985 Resource	6625800	0.70	4638060	0.29	1921480
Nett Difference	- 68800	0.39	- 26560		- 21171

TABLE 20 SIGNIFICANT ACCOUNTED DIFFERENCES

	Tonnes	% SnT	M.T.U. Sn	% Cu	M.T.U. Cu
Re-intrep Lens Polygon Hall's B Rib Pill. 9 L	- 6381	0.43	2744	0.28	1787
Re-kriging All Lenses From Which No Mining Took Place	- 94665	0.66	62479	0.41	38813
Total Accounted Differences	- 101046	0.65	- 65223	0.40	- 40660
Unaccounted Differences	- 32246	1.20	38663	0.60	- 19429

95 036

4034 SYSTEM FLOWCHART

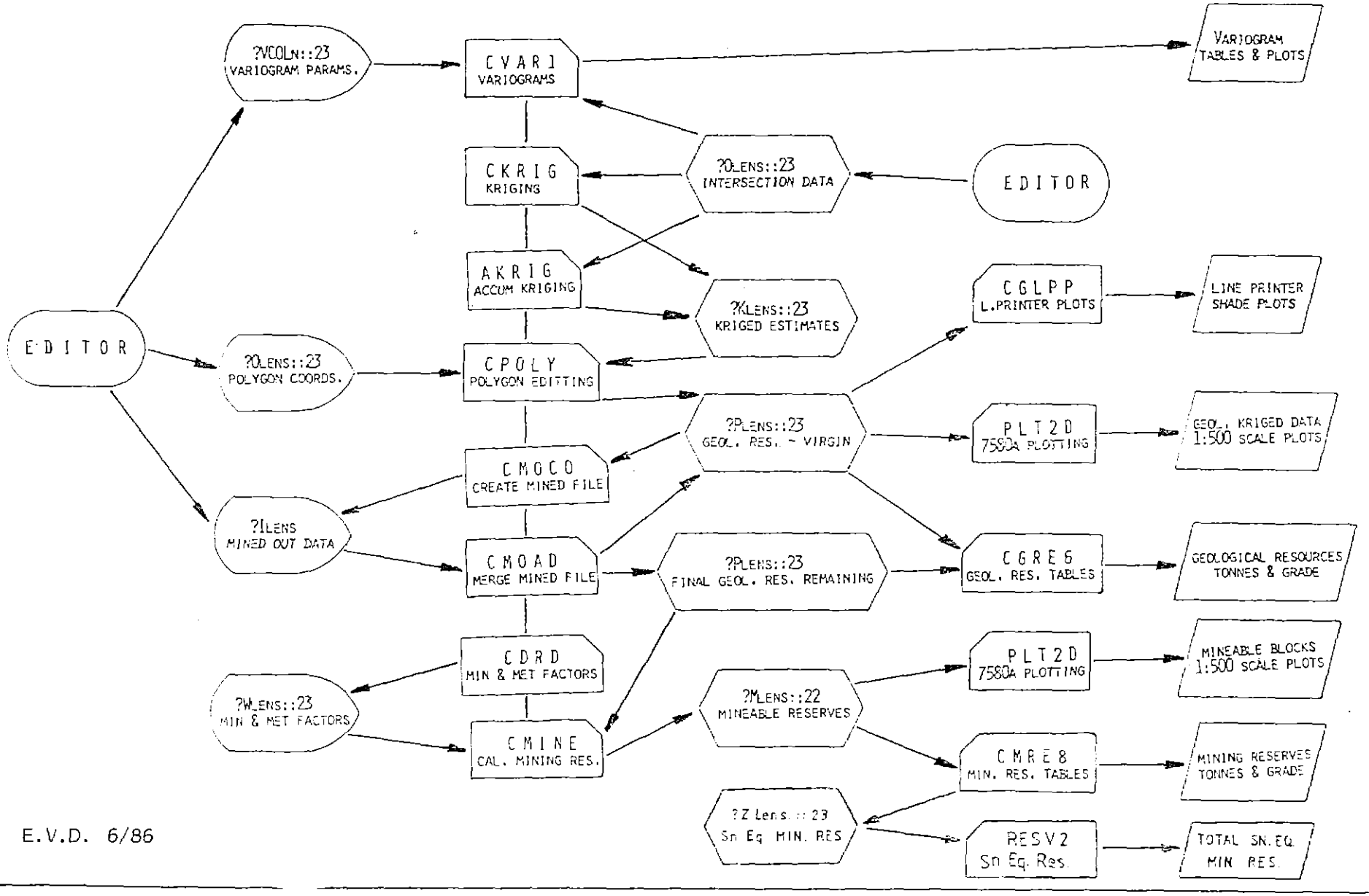
Each programme within the system is run on-line on demand. (See Figure 2.) Extreme care must be taken to ensure correct file name mnemonic has been used, as there are no checks within the programs.

5. PERMANENT STORAGE

A copy of all cartridge 23 files has been made to act as an archive for the May, 1984 assessment. This archive will be kept as is an a permanent basis on a magnetic type cartridge.

To allow space on cartridge 23 for other processing, all ore reserve files have been transferred to floppy disks, but can be loaded as required for regular updating. The following printouts can be used as an index for files stored on media apart from the permanent hard disk (cartridge 23).

CLEVELAND ORE RESERVES SYSTEM 1936



E.V.D. 6/86

65 037 35

036

APPENDIX I

LENS INTERSECTION DATA

037

95 039

Plist... File (?DHMY1) Date 3:34 PM (BOL, 7 JULY, 1986 Page001

```
   1   15    1   1o     5315.     1325.       10.       10.
  40   2000
     0.00       0.93        35.       80.       1.46
     0.10       0.21        24.        0.       1.00
     0.00       0.32        20.        0.       1.00
     0.00       0.59        27.        0.       1.00
 145   HENRY'S LENS POD 1              <8.041-4.1125>
```

DDHFACE	FROM	TO	WIDTH	%CNT	%SHS	%CU	INT.W%	NORTH	RL
0-5292	-1.00	-1.00	21.70	-1.00	-1.00	-1.00	-1.00	5292.	1471.
1-5296	-1.00	-1.00	11.20	-1.00	-1.00	-1.00	-1.00	5296.	1454.
2-5212	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5212.	1411.
2-5217	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5217.	1411.
2-5222	-1.00	-1.00	8.00	-1.00	-1.00	-1.00	-1.00	5222.	1411.
2-5227	-1.00	-1.00	20.40	-1.00	-1.00	-1.00	-1.00	5227.	1411.
2-5232	-1.00	-1.00	25.20	-1.00	-1.00	-1.00	-1.00	5232.	1411.
2-5237	-1.00	-1.00	26.10	-1.00	-1.00	-1.00	-1.00	5237.	1411.
2-5242	-1.00	-1.00	24.00	-1.00	-1.00	-1.00	-1.00	5242.	1411.
2-5247	-1.00	-1.00	25.50	-1.00	-1.00	-1.00	-1.00	5247.	1411.
2-5252	-1.00	-1.00	24.30	-1.00	-1.00	-1.00	-1.00	5252.	1411.
2-5257	-1.00	-1.00	12.30	-1.00	-1.00	-1.00	-1.00	5257.	1411.
2-5262	-1.00	-1.00	4.80	-1.00	-1.00	-1.00	-1.00	5262.	1411.
2-5267	-1.00	-1.00	6.40	-1.00	-1.00	-1.00	-1.00	5267.	1411.
2-5272	-1.00	-1.00	7.40	-1.00	-1.00	-1.00	-1.00	5272.	1411.
2-5277	-1.00	-1.00	11.30	-1.00	-1.00	-1.00		5277.	1411.
2-5282	-1.00	-1.00	8.00	-1.00	-1.00	-1.00		5282.	1411.
2-5287	-1.00	-1.00	5.60	-1.00	-1.00	-1.00		5287.	1411.
2-5292	-1.00	-1.00	4.80	-1.00	-1.00	-1.00	-1.00	5292.	1411.
2-5297	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5297.	1411.
2-5302	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5302.	1411.
3-5187	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5187.	1397.
3-5192	-1.00	-1.00	11.00	-1.00	-1.00	-1.00	-1.00	5192.	1397.
3-5197	-1.00	-1.00	14.30	-1.00	-1.00	-1.00	-1.00	5197.	1397.
3-5202	-1.00	-1.00	21.10	-1.00	-1.00	-1.00	-1.00	5202.	1397.
3-5207	-1.00	-1.00	21.30	-1.00	-1.00	-1.00	-1.00	5207.	1397.
3-5212	-1.00	-1.00	21.10	-1.00	-1.00	-1.00	-1.00	5212.	1397.
3-5217	-1.00	-1.00	21.40	-1.00	-1.00	-1.00	-1.00	5217.	1397.
3-5222	-1.00	-1.00	20.90	-1.00	-1.00	-1.00	-1.00	5222.	1397.
3-5227	-1.00	-1.00	19.90	-1.00	-1.00	-1.00	-1.00	5227.	1397.
3-5232	-1.00	-1.00	16.70	-1.00	-1.00	-1.00	-1.00	5232.	1397.
3-5237	-1.00	-1.00	15.00	-1.00	-1.00	-1.00	-1.00	5237.	1397.
3-5242	-1.00	-1.00	4.30	-1.00	-1.00	-1.00	-1.00	5242.	1397.
3-5247	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	-1.00	5247.	1397.
3-5252	-1.00	-1.00	4.30	-1.00	-1.00	-1.00	-1.00	5252.	1397.
3-5257	-1.00	-1.00	5.00	-1.00	-1.00	-1.00	-1.00	5257.	1397.
3-5262	-1.00	-1.00	3.30	-1.00	-1.00	-1.00	-1.00	5262.	1397.
3-5267	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5267.	1397.
3-5272	-1.00	-1.00	3.50	-1.00	-1.00	-1.00	-1.00	5272.	1397.
3-5277	-1.00	-1.00	5.00	-1.00	-1.00	-1.00	-1.00	5277.	1397.
3-5282	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	-1.00	5282.	1397.
3-5287	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5287.	1397.
4-5152	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5152.	1379.
4-5157	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	5157.	1379.
4-5162	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	-1.00	5162.	1379.
4-5167	-1.00	-1.00	3.50	-1.00	-1.00	-1.00	-1.00	5167.	1379.
4-5172	-1.00	-1.00	6.30	-1.00	-1.00	-1.00	-1.00	5172.	1379.
4-5177	-1.00	-1.00	19.20	-1.00	-1.00	-1.00	-1.00	5177.	1379.
4-5182	-1.00	-1.00	21.50	-1.00	-1.00	-1.00	-1.00	5182.	1379.
4-5187	-1.00	-1.00	20.80	-1.00	-1.00	-1.00	-1.00	5187.	1379.

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4-5192	-1.00	-1.00	20.10	-1.00	-1.00	-1.00	-1.00	5192.	1379.
4-5197	-1.00	-1.00	15.00	-1.00	-1.00	-1.00	-1.00	5197.	1379.
4-5202	-1.00	-1.00	5.50	-1.00	-1.00	-1.00	-1.00	5202.	1379.
4-5207	-1.00	-1.00	3.00	1.81	0.18	0.58		5207.	1379.
4-5212	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5212.	1379.
4SUBQA	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5258.	1397.
5-5152	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5152.	1361.
5-5157	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	5157.	1361.
5-5162	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	-1.00	5162.	1361.
5-5167	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	-1.00	5167.	1361.
5-5172	-1.00	-1.00	16.30	-1.00	-1.00	-1.00	-1.00	5172.	1361.
5-5177	-1.00	-1.00	22.40	-1.00	-1.00	-1.00	-1.00	5177.	1361.
5-5182	-1.00	-1.00	24.50	-1.00	-1.00	-1.00	-1.00	5182.	1361.
5-5187	-1.00	-1.00	21.80	-1.00	-1.00	-1.00	-1.00	5187.	1361.
5-5192	-1.00	-1.00	17.50	-1.00	-1.00	-1.00	-1.00	5192.	1361.
5-5197	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5197.	1361.
5-5202	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5202.	1361.
5-5207	-1.00	-1.00	0.80	-1.00	-1.00	-1.00		5207.	1361.
5-5212	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5212.	1361.
5-5217	-1.00	-1.00	2.40	-1.00	-1.00	-1.00		5217.	1361.
5-5222	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5222.	1361.
5-5227	-1.00	-1.00	2.60	-1.00	-1.00	-1.00		5227.	1361.
5-5232	-1.00	-1.00	2.90	-1.00	-1.00	-1.00		5232.	1361.
5-5237	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5237.	1361.
5Q	-1.00	-1.00	-1.00	0.50	0.07	0.14		5222.	1362.
5QA	-1.00	-1.00	-1.00	0.14	0.01	0.05		5236.	1362.
7-5147	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5147.	1344.
7-5152	-1.00	-1.00	2.30	-1.00	-1.00	-1.00	-1.00	5152.	1344.
7-5157	-1.00	-1.00	13.20	-1.00	-1.00	-1.00	-1.00	5157.	1344.
7-5162	-1.00	-1.00	9.80	-1.00	-1.00	-1.00	-1.00	5162.	1344.
7-5167	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5167.	1344.
7-5172	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5172.	1344.
7-5177	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5177.	1344.
7-5182	-1.00	-1.00	15.40	-1.00	-1.00	-1.00	-1.00	5182.	1344.
7-5187	-1.00	-1.00	16.50	-1.00	-1.00	-1.00	-1.00	5187.	1344.
7-5192	-1.00	-1.00	25.70	-1.00	-1.00	-1.00	-1.00	5192.	1344.
7-5197	-1.00	-1.00	5.30	-1.00	-1.00	-1.00	-1.00	5197.	1344.
7-5202	-1.00	-1.00	2.40	-1.00	-1.00	-1.00	-1.00	5202.	1344.
7-5207	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5207.	1344.
7-5212	-1.00	-1.00	3.30	-1.00	-1.00	-1.00	-1.00	5212.	1344.
7-5217	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5217.	1344.
8-5177	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5177.	1327.
8-5182	-1.00	-1.00	1.70	-1.00	-1.00	-1.00	-1.00	5182.	1327.
8-5187	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5187.	1327.
8-5192	-1.00	-1.00	5.30	-1.00	-1.00	-1.00	-1.00	5192.	1327.
8-5197	-1.00	-1.00	8.00	-1.00	-1.00	-1.00	-1.00	5197.	1327.
8-5202	-1.00	-1.00	4.70	-1.00	-1.00	-1.00	-1.00	5202.	1327.
8-5207	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5207.	1327.
C 14	32.00	54.30	16.60	0.80	-1.00	-1.00		5273.	1439.
C 36	75.20	76.10	0.60	-1.00	-1.00	-1.00		5239.	1394.
C 37	101.60	107.30	4.20	1.87	-1.00	-1.00		5238.	1349.
C 38	91.00	91.00	0.00	-1.00	-1.00	-1.00		5272.	1352.
C 49	23.80	28.10	4.30	0.75	-1.00	0.29		5237.	1399.
C 52	25.00	25.00	0.00	-1.00	-1.00	-1.00		5292.	1399.
C 56	15.00	15.00	0.00	-1.00	-1.00	-1.00		5276.	1400.
C 71	18.90	34.40	15.50	0.71	-1.00	0.27		5198.	1400.
C 113	55.47	77.11	21.00	1.10	-1.00	0.46	1.48	5240.	1426.
C 115	43.89	59.13	14.10	1.34	-1.00	0.41	39.70	5281.	1439.
C 118	37.40	61.40	24.00	1.08	-1.00	0.37		5236.	1414.
C 119	30.20	30.70	0.40	0.35	-1.00	0.20		5314.	1432.

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C 121	18.00	18.00	0.00	-1.00	-1.00	-1.00		5313.	1414.
C 122	46.60	74.30	27.80	0.72	-1.00	0.42		5251.	1415.
C 128	0.00	13.60	-1.00	0.80	-1.00	0.26		5222.	1408.
C 137	27.70	31.60	3.90	1.18	-1.00	0.71		5208.	1381.
C 147	28.50	29.20	0.70	0.51	0.10	0.52		5197.	1381.
C 181	35.00	35.00	0.00	-1.00	-1.00	-1.00		5240.	1382.
C 187	15.40	35.10	19.70	0.63	0.06	0.37		5171.	1361.
C 189	47.00	47.00	0.00	-1.00	-1.00	-1.00		5139.	1364.
C 219	0.00	7.90	-1.00	-1.00	-1.00	-1.00		5225.	1413.
C 241	30.00	30.00	0.00	-1.00	-1.00	-1.00		5288.	1347.
C 243	0.00	9.70	23.60	0.58	0.08	0.41		5180.	1362.
C 244	1.70	3.30	0.60	0.07	0.02	0.27		5199.	1361.
C 251	32.30	39.30	7.00	1.63	0.10	0.22		5160.	1345.
C 252	26.00	28.20	2.20	0.16	0.02	2.03		5223.	1346.
C 256	31.00	31.00	0.00	-1.00	-1.00	-1.00		5139.	1345.
C 270	27.00	27.00	0.00	-1.00	-1.00	-1.00		5221.	1327.
C 272	26.10	37.10	11.00	0.48	0.03	0.62		5159.	1327.
C 278	29.00	49.30	19.50	0.90	0.04	0.43		5199.	1351.
C 957	0.00	1.10	1.10	0.38	0.09	1.00		5219.	1381.
C1282	41.60	43.80	2.10	0.30	-1.00	0.14	-1.00	5163.	1363.
C1706	28.35	36.90	7.80	1.13	0.08	0.21	35.10	5294.	1439.
C1709	27.45	36.90	9.40	0.45	0.06	0.89	19.60	5294.	1448.
C1711	37.40	55.70	18.10	0.44	0.06	0.22	48.60	5293.	1459.
C1715	38.00	54.00	15.20	1.01	0.10	0.32	19.40	5293.	1469.
C1719	27.00	28.00	1.00	0.26	0.12	0.39		5311.	1451.
C1721	50.00	74.80	23.00	0.77	0.11	0.31	49.20	5254.	1430.
C1723	46.00	75.40	29.10	0.90	0.09	0.61	25.90	5262.	1443.
C1724	53.80	79.50	24.90	1.64	0.17	0.39	2.30	5243.	1434.
C1727	53.05	71.00	17.90	0.90	0.22	0.39	11.70	5259.	1457.
C1783	37.35	50.60	12.90	1.86	0.14	0.27	40.00	5281.	1441.
C1793	46.10	63.30	17.10	0.73	0.23	0.69	39.50	5279.	1462.
C1797	51.00	66.80	15.30	1.01	0.12	0.91	6.70	5278.	1466.
C1805	57.40	87.90	27.70	0.97	0.10	0.29	39.70	5224.	1432.
SURFS	-1.00	-1.00	22.00	-1.00	-1.00	-1.00	-1.00	5295.	1482.
SURFT	-1.00	-1.00	17.50	-1.00	-1.00	-1.00	-1.00	5318.	1479.

Flist - End of file

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Flist... File (DHNY2) Date 3:36 PM MON., 7 JUL, 1986 Page001

1 11 1 9 5325. 1335. 10. 10.

35 2000

0.00 1.37 28. 0. 1.37

0.11 0.23 24. 0. 1.00

0.00 0.71 20. 0. 1.00

0.00 0.53 27. 0. 1.00

82 HENRY'S LENS POD 2 (860414.1130)

DDHFACE	FROM	TO	WIDTH	%ENT	%ENS	%DU	INT.WX	NORTH	RL
2-5257	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5257.	1411.
2-5262	-1.00	-1.00	2.30	-1.00	-1.00	-1.00		5262.	1411.
2-5267	-1.00	-1.00	5.10	-1.00	-1.00	-1.00		5267.	1411.
2-5272	-1.00	-1.00	3.50	-1.00	-1.00	-1.00		5272.	1411.
2-5277	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5277.	1411.
2-5287	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5287.	1411.
2-5292	-1.00	-1.00	6.90	-1.00	-1.00	-1.00		5292.	1411.
2-5297	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5297.	1411.
2-5302	-1.00	-1.00	3.80	-1.00	-1.00	-1.00		5302.	1411.
2-5307	-1.00	-1.00	3.70	-1.00	-1.00	-1.00		5307.	1411.
2-5312	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5312.	1411.
2-5317	-1.00	-1.00	1.20	-1.00	-1.00	-1.00		5317.	1411.
2-5322	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5322.	1411.
3-5247	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5247.	1397.
3-5252	-1.00	-1.00	3.40	-1.00	-1.00	-1.00		5252.	1397.
3-5257	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5257.	1397.
3-5262	-1.00	-1.00	3.60	-1.00	-1.00	-1.00		5262.	1397.
3-5267	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5267.	1397.
3-5272	-1.00	-1.00	1.40	-1.00	-1.00	-1.00		5272.	1397.
3-5277	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5277.	1397.
3-5282	-1.00	-1.00	3.60	-1.00	-1.00	-1.00		5282.	1397.
3-5287	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5287.	1397.
3-5292	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5292.	1397.
3-5297	-1.00	-1.00	0.40	-1.00	-1.00	-1.00		5297.	1397.
3-5302	-1.00	-1.00	0.50	-1.00	-1.00	-1.00		5302.	1397.
3-5307	-1.00	-1.00	1.00	-1.00	-1.00	-1.00		5307.	1397.
3-5312	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5312.	1397.
4-5257	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5257.	1379.
4-5262	-1.00	-1.00	0.60	-1.00	-1.00	-1.00		5262.	1379.
4-5267	-1.00	-1.00	1.40	-1.00	-1.00	-1.00		5267.	1379.
4-5272	-1.00	-1.00	9.50	-1.00	-1.00	-1.00		5272.	1379.
4-5277	-1.00	-1.00	13.20	-1.00	-1.00	-1.00		5277.	1379.
4-5282	-1.00	-1.00	17.80	-1.00	-1.00	-1.00		5282.	1379.
4-5287	-1.00	-1.00	8.00	-1.00	-1.00	-1.00		5287.	1379.
4-5292	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5292.	1379.
4-5297	-1.00	-1.00	0.50	-1.00	-1.00	-1.00		5297.	1379.
4-5302	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5302.	1379.
4QB	-1.00	-1.00	-1.00	2.90	0.14	0.87		5263.	1381.
4R	-1.00	-1.00	-1.00	0.98	0.10	0.32		5277.	1381.
5-5237	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5237.	1361.
5-5242	-1.00	-1.00	0.70	-1.00	-1.00	-1.00		5242.	1361.
5-5247	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5247.	1361.
5-5252	-1.00	-1.00	8.30	-1.00	-1.00	-1.00		5252.	1361.
5-5257	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5257.	1361.
5-5262	-1.00	-1.00	0.60	-1.00	-1.00	-1.00		5262.	1361.
5-5267	-1.00	-1.00	3.70	-1.00	-1.00	-1.00		5267.	1361.
5-5272	-1.00	-1.00	9.10	-1.00	-1.00	-1.00		5272.	1361.
5-5277	-1.00	-1.00	3.60	-1.00	-1.00	-1.00		5277.	1361.
5-5282	-1.00	-1.00	0.60	-1.00	-1.00	-1.00		5282.	1361.
5-5287	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5287.	1361.

041

95 043

SGB	-1.00	-1.00	-1.00	1.93	0.14	1.9[illegible]	5258.	1362.
SR	-1.00	-1.00	-1.00	2.14	0.18	0.78	5277.	1362.
7-5237	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5237.	1344.
7-5242	-1.00	-1.00	5.60	-1.00	-1.00	-1.00	5242.	1344.
7-5247	-1.00	-1.00	9.40	-1.00	-1.00	-1.00	5247.	1344.
7-5252	-1.00	-1.00	10.90	-1.00	-1.00	-1.00	5252.	1344.
7-5257	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	5257.	1344.
7-5262	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	5262.	1344.
7-5267	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	5267.	1344.
7-5272	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5272.	1344.
C 37	101.80	107.30	4.20	1.87	-1.00	-1.00	5278.	1349.
C 38	90.50	94.20	2.80	1.40	-1.00	-1.00	5272.	1351.
C 43	85.00	85.00	0.00	-1.00	-1.00	-1.00	5310.	1372.
C 52	25.40	28.70	3.30	-1.00	-1.00	0.38	5292.	1399.
C 56	22.00	22.00	0.00	-1.00	-1.00	-1.00	5336.	1401.
C 115	71.20	72.10	0.90	0.64	-1.00	0.52	5270.	1423.
C 119	45.30	47.10	1.40	0.52	-1.00	0.43	5313.	1422.
C 121	21.60	23.80	2.20	1.80	-1.00	0.74	5313.	1414.
C 165	29.60	34.00	4.40	1.53	-1.00	0.93	5246.	1362.
C 181	41.00	41.00	0.00	-1.00	-1.00	-1.00	5240.	1382.
C 186	20.00	20.00	0.00	-1.00	-1.00	-1.00	5292.	1363.
C 218	5.10	11.50	6.40	2.45	0.40	0.44	5291.	1414.
C 222	10.00	10.00	0.00	-1.00	-1.00	-1.00	5282.	1414.
C 240	32.00	32.00	0.00	-1.00	-1.00	-1.00	5235.	1347.
C 241	30.60	37.20	6.60	1.26	0.10	0.64	5258.	1347.
C 246	24.00	24.00	0.00	-1.00	-1.00	-1.00	5276.	1347.
C1007 D	0.00	1.20	3.30	1.43	0.21	1.39	5240.	1347.
C1706	57.00	60.50	3.40	0.36	0.05	0.13	5293.	1428.
C1709	66.40	68.80	2.30	0.65	0.04	0.16	5292.	1444.
C1711	65.00	65.00	0.00	-1.00	-1.00	-1.00	5292.	1462.
C1719	54.60	56.30	1.70	0.14	0.02	0.13	5310.	1450.
C1783	64.90	65.50	0.50	0.71	0.04	0.27	5284.	1437.

Flist - End of file

042

95 044

Flist... File (JOHNY3) Date 3:37 PM MON., 7 JULY, 1986 Page001

1 13 1 17 5235. 1305. 10. 10.
30 2000
0.00 1.09 27. 45. 1.30
0.19 0.44 20. 0. 1.00
0.19 0.14 20. 0. 1.00
0.04 0.58 42. 0. 1.00
117 HENRY'S LENS POD 3 (3s0414.1130)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	ADD	INT.W%	NORTH	RL
2-5177	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5177.	1411.
2-5182	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5182.	1411.
2-5187	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5187.	1411.
2-5192	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5192.	1411.
2-5197	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	-1.00	5197.	1411.
2-5202	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	-1.00	5202.	1411.
2-5207	-1.00	-1.00	5.10	-1.00	-1.00	-1.00		5207.	1411.
2-5212	-1.00	-1.00	19.60	-1.00	-1.00	-1.00		5212.	1411.
2-5217	-1.00	-1.00	22.20	-1.00	-1.00	-1.00		5217.	1411.
2-5222	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5222.	1411.
3-5167	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5167.	1397.
3-5172	-1.00	-1.00	0.90	-1.00	-1.00	-1.00	-1.00	5172.	1397.
3-5177	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5177.	1397.
3-5182	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	-1.00	5182.	1397.
3-5187	-1.00	-1.00	3.20	-1.00	-1.00	-1.00	-1.00	5187.	1397.
3-5192	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5192.	1397.
3-5197	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5197.	1397.
3-5202	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5202.	1397.
3-5207	-1.00	-1.00	5.90	-1.00	-1.00	-1.00	-1.00	5207.	1397.
3-5212	-1.00	-1.00	6.20	-1.00	-1.00	-1.00		5212.	1397.
3-5217	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5217.	1397.
3-5222	-1.00	-1.00	4.40	-1.00	-1.00	-1.00		5222.	1397.
3-5227	-1.00	-1.00	3.10	-1.00	-1.00	-1.00		5227.	1397.
3-5232	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5232.	1397.
4-5142	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5142.	1379.
4-5147	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5147.	1379.
4-5152	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5152.	1379.
4-5157	-1.00	-1.00	7.30	-1.00	-1.00	-1.00	-1.00	5157.	1379.
4-5162	-1.00	-1.00	6.50	-1.00	-1.00	-1.00	-1.00	5162.	1379.
4-5167	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	-1.00	5167.	1379.
4-5172	-1.00	-1.00	7.90	-1.00	-1.00	-1.00		5172.	1379.
4-5177	-1.00	-1.00	3.30	-1.00	-1.00	-1.00		5177.	1379.
4-5182	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		5182.	1379.
4-5187	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5187.	1379.
4-5192	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5192.	1379.
4-5197	-1.00	-1.00	5.70	-1.00	-1.00	-1.00		5197.	1379.
4-5202	-1.00	-1.00	6.00	-1.00	-1.00	-1.00		5202.	1379.
4-5207	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		5207.	1379.
4-5212	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5212.	1379.
4N	-1.00	-1.00	-1.00	0.97	0.10	0.43		5159.	1380.
5-5097	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5097.	1361.
5-5102	-1.00	-1.00	8.80	-1.00	-1.00	-1.00		5102.	1361.
5-5107	-1.00	-1.00	10.00	-1.00	-1.00	-1.00	-1.00	5107.	1361.
5-5112	-1.00	-1.00	18.40	-1.00	-1.00	-1.00	-1.00	5112.	1361.
5-5117	-1.00	-1.00	22.30	-1.00	-1.00	-1.00	-1.00	5117.	1361.
5-5122	-1.00	-1.00	16.90	-1.00	-1.00	-1.00	-1.00	5122.	1361.
5-5127	-1.00	-1.00	13.60	-1.00	-1.00	-1.00	-1.00	5127.	1361.
5-5132	-1.00	-1.00	12.50	-1.00	-1.00	-1.00	-1.00	5132.	1361.
5-5137	-1.00	-1.00	12.70	-1.00	-1.00	-1.00	-1.00	5137.	1361.
5-5142	-1.00	-1.00	9.80	-1.00	-1.00	-1.00	-1.00	5142.	1361.

5-5147	-1.00	-1.00	10.70	-1.00	-1.00	-1.00	-1.00	5147.	1361.
5-5152	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	5152.	1361.
5-5157	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5157.	1361.
5-5162	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5162.	1361.
5-5167	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5167.	1361.
5-5172	-1.00	-1.00	2.50	-1.00	-1.00	-1.00		5172.	1361.
5-5177	-1.00	-1.00	3.00	-1.00	-1.00	-1.00		5177.	1361.
5-5182	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5182.	1361.
5-5187	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5187.	1361.
7-5082	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5082.	1344.
7-5087	-1.00	-1.00	10.50	-1.00	-1.00	-1.00	-1.00	5087.	1344.
7-5092	-1.00	-1.00	9.00	-1.00	-1.00	-1.00	-1.00	5092.	1344.
7-5097	-1.00	-1.00	10.90	-1.00	-1.00	-1.00	-1.00	5097.	1344.
7-5102	-1.00	-1.00	8.50	-1.00	-1.00	-1.00	-1.00	5102.	1344.
7-5107	-1.00	-1.00	5.80	-1.00	-1.00	-1.00	-1.00	5107.	1344.
7-5112	-1.00	-1.00	7.20	-1.00	-1.00	-1.00	-1.00	5112.	1344.
7-5117	-1.00	-1.00	5.70	-1.00	-1.00	-1.00	-1.00	5117.	1344.
7-5122	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5122.	1344.
7L	-1.00	-1.00	-1.00	0.71	0.04	0.62		5112.	1346.
8-5067	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5067.	1327.
8-5072	-1.00	-1.00	0.30	-1.00	-1.00	-1.00	-1.00	5072.	1327.
8-5077	-1.00	-1.00	3.80	-1.00	-1.00	-1.00	-1.00	5077.	1327.
8-5082	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	5082.	1327.
8-5087	-1.00	-1.00	11.00	-1.00	-1.00	-1.00	-1.00	5087.	1327.
8-5092	-1.00	-1.00	18.10	-1.00	-1.00	-1.00	-1.00	5092.	1327.
8-5097	-1.00	-1.00	23.00	-1.00	-1.00	-1.00	-1.00	5097.	1327.
8-5102	-1.00	-1.00	24.60	-1.00	-1.00	-1.00	-1.00	5102.	1327.
8-5107	-1.00	-1.00	9.80	-1.00	-1.00	-1.00	-1.00	5107.	1327.
8-5112	-1.00	-1.00	2.60	-1.00	-1.00	-1.00	-1.00	5112.	1327.
8-5117	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5117.	1327.
8KA	-1.00	-1.00	-1.00	1.05	0.05	0.52		5095.	1329.
8KNTH	-1.00	-1.00	-1.00	1.47	0.11	0.61		5078.	1329.
8LSTH	-1.00	-1.00	-1.00	0.99	0.05	0.56		5111.	1329.
9-5067	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5067.	1308.
9-5072	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5072.	1308.
9-5077	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	-1.00	5077.	1308.
9-5082	-1.00	-1.00	5.80	-1.00	-1.00	-1.00	-1.00	5082.	1308.
9-5087	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	-1.00	5087.	1308.
9-5092	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5092.	1308.
9-5097	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5097.	1308.
9KASTH	-1.00	-1.00	-1.00	1.29	0.07	1.13		5089.	1311.
9KNTH	-1.00	-1.00	-1.00	1.16	0.04	1.08		5078.	1311.
C 71	47.40	51.90	4.50	0.07	-1.00	0.17		5138.	1400.
C 107	51.50	52.00	0.50	0.31	-1.00	0.15		5181.	1413.
C 109	78.70	80.50	1.70	2.06	-1.00	0.29		5200.	1419.
C 127	15.20	16.60	1.40	0.68	-1.00	0.39		5180.	1400.
C 128	17.20	21.50	4.30	0.32	-1.00	0.20		5220.	1400.
C 147	36.10	45.00	8.90	0.67	-1.00	0.58		5157.	1381.
C 157	8.60	11.50	2.90	3.59	-1.00	1.13		5179.	1412.
C 189	49.90	64.20	14.20	0.51	0.01	0.82		5139.	1364.
C 190	53.20	62.00	8.60	0.49	0.06	0.76		5134.	1364.
C 209	3.70	9.70	6.00	0.35	0.07	0.31		5210.	1400.
C 216	11.80	11.80	0.00	-1.00	-1.00	-1.00		5221.	1413.
C 242	3.90	15.60	8.00	0.51	0.04	0.29		5162.	1362.
C 243	15.60	16.90	1.30	0.13	0.07	2.37		5180.	1362.
C 245	16.00	16.00	0.00	-1.00	-1.00	-1.00		5221.	1361.
C 257	6.00	6.00	0.00	-1.00	-1.00	-1.00		5240.	1413.
C 267	62.00	62.00	0.00	-1.00	-1.00	-1.00		5079.	1347.
C 316	54.20	65.90	11.50	1.03	0.07	0.64		5085.	1347.
C 317	42.90	58.10	13.20	1.62	0.09	0.64		5094.	1320.

C322	62.00	62.00	0.00	-1.00	-1.00	-1.00	5071.	1351.
C 335	41.20	43.10	1.80	2.48	0.06	0.97	5098.	1311.
C 390	3.00	3.00	0.00	-1.00	-1.00	-1.00	5067.	1311.
C 498	46.40	35.70	9.20	1.29	-1.00	0.49	5086.	1322.
C1245	0.00	11.60	-1.00	1.28	0.10	0.23	5097.	1325.
C12[illegible]	0.00	10.80	-1.00	0.27	0.0.	0.34	5098.	1337.
C1805	93.00	93.00	0.00	-1.00	-1.00	-1.00	5214.	1415.

First - End of file

Flist... File (DOHNDA) Date 3:39 PM MON., 7 JULY, 1986 Page001

1 7 1 5 5095. 1295. 10. 10.

36 2000

0.00 1.32 15. 0. 1.00

0.11 0.21 23. 0. 1.00

0.05 0.08 15. 0. 1.00

0.00 0.13 38. 0. 1.00

34 HENRY'S LENS POD 3H (86041-1131)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	MOD	INT.W%	NORTH	RL
7-5052	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5052.	1344.
7-5057	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5057.	1344.
7-5062	-1.00	-1.00	3.60	-1.00	-1.00	-1.00		5062.	1344.
7-5067	-1.00	-1.00	4.80	-1.00	-1.00	-1.00		5067.	1344.
7-5072	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5072.	1344.
7JK	-1.00	-1.00	-1.00	1.22	-1.00	0.66		5061.	1347.
8-5047	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5047.	1327.
8-5052	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5052.	1327.
8-5057	-1.00	-1.00	5.10	-1.00	-1.00	-1.00		5057.	1327.
8-5062	-1.00	-1.00	12.70	-1.00	-1.00	-1.00		5062.	1327.
8-5067	-1.00	-1.00	6.40	-1.00	-1.00	-1.00		5067.	1327.
8-5072	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5072.	1327.
8-5077	-1.00	-1.00	6.70	-1.00	-1.00	-1.00		5077.	1327.
8-5082	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		5082.	1327.
8-5087	-1.00	-1.00	2.30	-1.00	-1.00	-1.00		5087.	1327.
8-5092	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5092.	1327.
9-5047	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5047.	1308.
9-5052	-1.00	-1.00	10.70	-1.00	-1.00	-1.00		5052.	1308.
9-5057	-1.00	-1.00	14.00	-1.00	-1.00	-1.00		5057.	1308.
9-5062	-1.00	-1.00	12.80	-1.00	-1.00	-1.00		5062.	1308.
9-5067	-1.00	-1.00	11.30	-1.00	-1.00	-1.00		5067.	1308.
9-5072	-1.00	-1.00	5.00	-1.00	-1.00	-1.00		5072.	1308.
9-5077	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5077.	1308.
9JNTH	-1.00	-1.00	-1.00	1.02	0.16	0.62		5058.	1311.
C 267	68.00	68.00	0.00	-1.00	-1.00	-1.00		5078.	1347.
C 268	65.00	65.00	0.00	-1.00	-1.00	-1.00		5048.	1347.
C 322	37.50	42.10	4.60	1.36	0.09	0.59		5071.	1330.
C 340	38.00	40.80	2.50	0.94	0.10	0.52		5071.	1309.
C 342	72.00	72.00	0.00	-1.00	-1.00	-1.00		5049.	1331.
C 371	60.00	60.00	0.00	-1.00	-1.00	-1.00		5045.	1312.
C 390	6.50	16.50	9.60	0.99	0.09	0.78		5065.	1311.
C 391	4.00	4.00	0.00	-1.00	-1.00	-1.00		5083.	1310.
C 414	12.00	16.20	2.20	2.60	0.17	0.39		5067.	1347.
C 498	24.00	27.70	3.70	0.40	0.07	1.02		5084.	1325.

Flist - End of file

046

95 048

Flist... File (?DHNS) Date 3:40 PM MON., 7 JULY, 1986 Page001

1 12	1 9	5035.	1265.	10.	10.
60 1900					
.00	1.26	29.	0.	1.00	
0.09	0.24	29.	0.	1.00	
0.00	0.62	60.	0.	1.00	
0.07	0.19	24.	0.	1.00	

77 HENRY'S POD 5 LENS 860414.1321

DDHFACE	FROM	TO	WIDTH	%SNT	%DNS	%CU	INT.W%	NORTH	RL
7-5002	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5002.	1347.
7-5007	-1.00	-1.00	4.30	-1.00	-1.00	-1.00	-1.00	5007.	1347.
7-5012	-1.00	-1.00	24.00	-1.00	-1.00	-1.00	-1.00	5012.	1347.
7-5017	-1.00	-1.00	18.50	-1.00	-1.00	-1.00	-1.00	5017.	1347.
7-5022	-1.00	-1.00	17.00	-1.00	-1.00	-1.00	-1.00	5022.	1347.
7-5027	-1.00	-1.00	7.20	-1.00	-1.00	-1.00	-1.00	5027.	1347.
7-5032	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5032.	1347.
7-5037	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5037.	1347.
7H	-1.00	-1.00	-1.00	1.08	-1.00	0.46		5018.	1347.
8-4962	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4962.	1330.
8-4967	-1.00	-1.00	0.20	-1.00	-1.00	-1.00		4967.	1330.
8-4972	-1.00	-1.00	1.40	-1.00	-1.00	-1.00		4972.	1330.
8-4977	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		4977.	1330.
8-4982	-1.00	-1.00	4.50	-1.00	-1.00	-1.00		4982.	1330.
8-4987	-1.00	-1.00	0.80	-1.00	-1.00	-1.00		4987.	1330.
8-4992	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4992.	1330.
8-4997	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4997.	1330.
8-5002	-1.00	-1.00	4.90	-1.00	-1.00	-1.00	-1.00	5002.	1330.
8-5007	-1.00	-1.00	8.90	-1.00	-1.00	-1.00	-1.00	5007.	1330.
8-5012	-1.00	-1.00	25.80	-1.00	-1.00	-1.00	-1.00	5012.	1330.
8-5017	-1.00	-1.00	14.90	-1.00	-1.00	-1.00	-1.00	5017.	1330.
8-5022	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5022.	1330.
8-5027	-1.00	-1.00	0.30	-1.00	-1.00	-1.00		5027.	1330.
8GA	-1.00	-1.00	1.60	1.26	-1.00	0.32		4978.	1330.
8G-H	-1.00	-1.00	-1.00	1.14	-1.00	3.27		5009.	1330.
9-4947	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4947.	1311.
9-4952	-1.00	-1.00	1.80	-1.00	-1.00	-1.00		4952.	1311.
9-4957	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		4957.	1311.
9-4962	-1.00	-1.00	4.50	-1.00	-1.00	-1.00		4962.	1311.
9-4967	-1.00	-1.00	2.90	-1.00	-1.00	-1.00		4967.	1311.
9-4972	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		4972.	1311.
9-4977	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		4977.	1311.
9-4982	-1.00	-1.00	5.70	-1.00	-1.00	-1.00		4982.	1311.
9-4987	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		4987.	1311.
9-4992	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4992.	1311.
9-4997	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4997.	1311.
9-5002	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5002.	1311.
9-5007	-1.00	-1.00	15.00	-1.00	-1.00	-1.00	-1.00	5007.	1311.
9-5012	-1.00	-1.00	19.80	-1.00	-1.00	-1.00	-1.00	5012.	1311.
9-5017	-1.00	-1.00	18.80	-1.00	-1.00	-1.00	-1.00	5017.	1311.
9-5022	-1.00	-1.00	3.80	-1.00	-1.00	-1.00	-1.00	5022.	1311.
9-5027	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5027.	1311.
9GB	-1.00	-1.00	3.70	1.19	-1.00	0.29		4963.	1311.
9GA	-1.00	-1.00	4.70	1.36	-1.00	0.46		4981.	1311.
9G-H	-1.00	-1.00	-1.00	0.98	0.07	0.39		5009.	1311.
11-4947	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4947.	1285.
11-4952	-1.00	-1.00	0.50	-1.00	-1.00	-1.00		4952.	1285.
11-4957	-1.00	-1.00	4.00	-1.00	-1.00	-1.00		4957.	1284.
11-4962	-1.00	-1.00	2.60	-1.00	-1.00	-1.00		4962.	1284.
11-4967	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		4967.	1284.

11-4972	-1.00	-1.00	3.40	-1.00	-1.00	-1.00		4972.	1284.
11-4977	-1.00	-1.00	2.90	-1.00	-1.00	-1.00	-1.00	4977.	1283.
11-4982	-1.00	-1.00	8.00	-1.00	-1.00	-1.00	-1.00	4982.	1283.
11-4987	-1.00	-1.00	6.30	-1.00	-1.00	-1.00	-1.00	4987.	1283.
11-4992	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	4992.	1282.
11-4997	-1.00	-1.00	5.70	-1.00	-1.00	-1.00	-1.00	4997.	1282.
11-5002	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5002.	1282.
11-5007	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5007.	1282.
11-5012	-1.00	-1.00	10.50	-1.00	-1.00	-1.00	-1.00	5012.	1282.
11-5017	-1.00	-1.00	10.60	-1.00	-1.00	-1.00	-1.00	5017.	1282.
11-5022	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5022.	1282.
11GB	-1.00	-1.00	3.00	0.89	0.01	0.51		4963.	1284.
11GA	-1.00	-1.00	5.70	0.87	0.02	0.55		4983.	1283.
11G	-1.00	-1.00	4.00	1.05	0.03	0.36		5000.	1282.
11H	-1.00	-1.00	9.80	0.50	0.02	0.13		5009.	1282.
C 370	58.90	62.50	3.60	1.91	0.10	0.57		4980.	1332.
C 374	58.50	59.60	1.00	0.75	-1.00	0.54		5019.	1331.
C1221	28.50	36.20	7.60	0.26	0.04	0.20		5026.	1370.
C1223	13.60	29.30	12.90	0.70	0.00	0.42		5018.	1357.
C1251	1.40	9.50	-1.00	0.96	0.02	0.20		5012.	1312.
C1487	4.00	4.00	0.00	-1.00	-1.00	-1.00		4964.	1277.
C1488	6.50	12.30	5.80	0.88	0.04	0.58		4981.	1279.
C1644	7.50	10.00	1.30	0.20	0.01	0.72		4985.	1274.
C1646	8.50	11.10	2.00	0.18	0.00	0.18		5001.	1274.
C1647	17.40	20.20	2.10	0.10	0.01	0.40		4987.	1295.
C1844	21.30	25.40	3.40	2.10	0.04	1.10		5001.	1296.
C1901	18.70	35.60	6.10	1.00	0.03	0.39		4963.	1298.

Flist - End of file

Eliot... File (?DHNYG) Date 31st FM NOW.. 2 JULY, 1986 Page001

1 10 1 11 5215. 1245. 10. 10.
55 2000
0.30 0.61 36. 0. 1.00
0.06 0.20 25. 0. 1.00
0.08 0.27 30. 0. 1.00
0.20 0.12 55. 0. 1.00

110 HENRY LENS POD 6 (840523.1220)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
8-5152	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5152.	1327.
8-5157	-1.00	-1.00	0.60	-1.00	-1.00	-1.00	-1.00	5157.	1327.
8-5162	-1.00	-1.00	1.30	-1.00	-1.00	-1.00	-1.00	5162.	1327.
8-5167	-1.00	-1.00	1.90	-1.00	-1.00	-1.00	-1.00	5167.	1327.
8-5172	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5172.	1327.
8-5177	-1.00	-1.00	11.10	-1.00	-1.00	-1.00	-1.00	5177.	1327.
8-5182	-1.00	-1.00	15.80	-1.00	-1.00	-1.00	-1.00	5182.	1327.
8-5187	-1.00	-1.00	11.20	-1.00	-1.00	-1.00	-1.00	5187.	1327.
8-5192	-1.00	-1.00	4.90	-1.00	-1.00	-1.00	-1.00	5192.	1327.
8-5197	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5197.	1327.
8OSTH	-1.00	-1.00	6.20	1.09	0.07	0.96	25.00	5175.	1327.
9-5137	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5137.	1308.
9-5142	-1.00	-1.00	2.80	-1.00	-1.00	-1.00	-1.00	5142.	1308.
9-5147	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5147.	1308.
9-5152	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5152.	1308.
9-5157	-1.00	-1.00	5.70	-1.00	-1.00	-1.00	-1.00	5157.	1308.
9-5162	-1.00	-1.00	8.50	-1.00	-1.00	-1.00	-1.00	5162.	1308.
9-5167	-1.00	-1.00	10.70	-1.00	-1.00	-1.00	-1.00	5167.	1308.
9-5172	-1.00	-1.00	10.00	-1.00	-1.00	-1.00	-1.00	5172.	1308.
9-5177	-1.00	-1.00	11.90	-1.00	-1.00	-1.00	-1.00	5177.	1308.
9-5182	-1.00	-1.00	10.70	-1.00	-1.00	-1.00	-1.00	5182.	1308.
9-5187	-1.00	-1.00	6.20	-1.00	-1.00	-1.00	-1.00	5187.	1308.
9-5192	-1.00	-1.00	5.00	-1.00	-1.00	-1.00	-1.00	5192.	1308.
9-5197	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	-1.00	5197.	1308.
9-5202	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5202.	1308.
9-5207	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	-1.00	5207.	1308.
9-5212	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	5212.	1308.
9-5217	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5217.	1308.
9MNTH	-1.00	-1.00	3.40	0.92	0.03	0.76	0.00	5144.	1308.
9MSTH	-1.00	-1.00	1.20	1.15	0.04	0.86	0.00	5136.	1309.
9NNTH	-1.00	-1.00	9.80	1.38	0.10	0.77	17.40	5164.	1308.
9NSTH	-1.00	-1.00	4.20	1.18	0.05	0.68	21.40	5153.	1308.
9ONTH	-1.00	-1.00	7.50	0.86	0.00	0.67	17.30	5185.	1308.
9OSTH	-1.00	-1.00	9.80	1.08	0.08	0.71	22.50	5174.	1308.
9PNTH	-1.00	-1.00	4.00	1.33	0.10	0.94	0.00	5206.	1308.
9PSTH	-1.00	-1.00	5.90	1.01	0.11	1.25	40.70	5195.	1309.
10-5127	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5127.	1288.
10-5132	-1.00	-1.00	0.40	-1.00	-1.00	-1.00	-1.00	5132.	1286.
10-5137	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5137.	1285.
10-5142	-1.00	-1.00	5.80	-1.00	-1.00	-1.00	-1.00	5142.	1288.
10-5147	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	5147.	1288.
10-5152	-1.00	-1.00	5.90	-1.00	-1.00	-1.00	-1.00	5152.	1288.
10-5157	-1.00	-1.00	7.30	-1.00	-1.00	-1.00	-1.00	5157.	1288.
10-5162	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	5162.	1288.
10-5167	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	5167.	1288.
10-5172	-1.00	-1.00	8.70	-1.00	-1.00	-1.00	-1.00	5172.	1288.
10-5177	-1.00	-1.00	8.30	-1.00	-1.00	-1.00	-1.00	5177.	1288.
10-5182	-1.00	-1.00	6.80	-1.00	-1.00	-1.00	-1.00	5182.	1288.
10-5187	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	-1.00	5187.	1288.
10-5192	-1.00	-1.00	1.70	-1.00	-1.00	-1.00	-1.00	5192.	1288.

10-5197	-1.00	-1.00	1.10	-1.00	-1.00	-1.00	-1.00	5197.	1288.
10-5202	-1.00	-1.00	0.50	-1.00	-1.00	-1.00	-1.00	5202.	1288.
10-5207	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5207.	1288.
10MNTH	-1.00	-1.00	7.70	1.60	0.08	1.40	15.60	5144.	1288.
10MSTH	-1.00	-1.00	8.70	2.65	-1.00	0.74	0.00	5134.	1288.
10NNTH	-1.00	-1.00	6.90	1.98	-1.00	1.40	11.60	5164.	1288.
10NSTH	-1.00	-1.00	6.10	2.06	-1.00	1.63	26.20	5153.	1288.
10ONTH	-1.00	-1.00	3.60	0.73	-1.00	0.66	27.80	5185.	1288.
10OSTH	-1.00	-1.00	9.00	1.08	0.09	1.05	30.90	5174.	1288.
11-5102	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5102.	1272.
11-5107	-1.00	-1.00	0.50	-1.00	-1.00	-1.00	-1.00	5107.	1272.
11-5112	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5112.	1272.
11-5117	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	5117.	1272.
11-5122	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5122.	1272.
11-5127	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5127.	1272.
11-5132	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5132.	1272.
11-5137	-1.00	-1.00	2.30	-1.00	-1.00	-1.00	-1.00	5137.	1272.
11-5142	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5142.	1272.
11-5147	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	-1.00	5147.	1272.
11-5152	-1.00	-1.00	4.70	-1.00	-1.00	-1.00	-1.00	5152.	1272.
11-5157	-1.00	-1.00	6.30	-1.00	-1.00	-1.00	-1.00	5157.	1272.
11-5162	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	-1.00	5162.	1272.
11-5167	-1.00	-1.00	3.30	-1.00	-1.00	-1.00	-1.00	5167.	1272.
11-5172	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5172.	1272.
11-5177	-1.00	-1.00	0.70	-1.00	-1.00	-1.00	-1.00	5177.	1272.
11-5182	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5182.	1272.
11MNTH	-1.00	-1.00	5.90	0.66	-1.00	0.45	0.00	5144.	1272.
11MSTH	-1.00	-1.00	2.20	0.30	-1.00	0.69	0.00	5134.	1272.
11NNTH	-1.00	-1.00	5.30	0.85	-1.00	0.56	0.00	5164.	1272.
11NSTH	-1.00	-1.00	5.70	0.42	-1.00	0.35	17.50	5153.	1272.
11OSTH	-1.00	-1.00	2.20	1.19	0.03	0.39	0.00	5174.	1272.
12-5102	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5102.	1254.
12-5107	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5107.	1254.
12-5112	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5112.	1254.
12-5117	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5117.	1254.
12-5122	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5122.	1254.
C 273	34.19	49.23	15.00	1.12	0.05	0.38	24.80	5180.	1328.
C 308	3.91	6.58	2.70	0.53	0.03	0.68	29.60	5197.	1329.
C 329	30.23	31.85	1.60	0.95	0.04	1.25	0.40	5139.	1308.
C 418	15.41	19.61	4.40	0.92	-1.00	0.43	26.00	5169.	1290.
C 419	12.85	20.17	7.40	2.04	-1.00	1.15	28.10	5153.	1290.
C 470	23.42	24.49	1.10	0.22	-1.00	0.94	0.00	5197.	1290.
C 480	28.50	28.50	0.00	-1.00	-1.00	-1.00	-1.00	5181.	1270.
C 486	22.91	29.87	6.10	1.04	0.09	0.27	14.20	5150.	1277.
C 509	118.00	118.00	0.00	-1.00	-1.00	-1.00	-1.00	5118.	1245.
C 781	25.85	38.25	12.10	1.50	0.11	0.78	15.40	5180.	1717.
C 784	20.01	30.69	10.40	1.02	0.10	0.57	19.30	5178.	1304.
C 787	21.32	28.46	6.10	1.68	0.19	0.63	0.00	5180.	1296.
C 788	23.23	28.97	5.40	1.10	0.11	0.46	7.50	5200.	1319.
C 795	49.00	49.00	0.00	-1.00	-1.00	-1.00	-1.00	5159.	1255.
C 801	37.00	39.02	2.00	1.24	0.15	1.03	0.00	5171.	1272.
C1252	54.68	57.74	2.90	0.15	0.01	0.07	47.40	5119.	1269.
C1795	14.60	17.70	2.90	0.74	0.02	0.92	12.90	5161.	1320.
C1798	23.30	32.50	8.80	0.60	0.03	0.28	0.00	5139.	1281.
C1799	20.70	30.40	9.10	1.29	0.06	0.34	15.50	5148.	1280.
C1801	26.80	35.90	8.50	1.79	0.09	0.54	6.20	5170.	1281.
C1802	19.20	22.90	3.30	0.43	0.02	0.35	0.00	5149.	1299.
C1806	24.00	31.20	6.70	2.32	0.08	0.72	18.10	5170.	1300.
C1808	12.40	21.00	7.90	1.66	0.06	0.69	32.60	5160.	1301.
C1813	14.60	22.00	6.90	0.30	0.02	0.16	10.90	5139.	1283.

050

95 052

Flist... File (2DHNN9) Date 3:42 PM MON., 7 JULY, 1986 Page001

1	4	1	7	5155.	1295.	10.	10.		
100	2000								
0.00		0.45		30.	0.	1.00			
0.24		0.19		45.	0.	1.00			
0.31		0.09		20.	0.	1.00			
0.19		0.12		55.	0.	1.00			

19 HENRY LENS POD 8 (840222.0761)

DDHFACE	FROM	TO	WIDTH	%ENT	%SMS	%CU	INT.W%	NORTH	RL
8-5117	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5177.	1327.
8-5122	-1.00	-1.00	0.90	-1.00	-1.00	-1.00	-1.00	5122.	1327.
8-5127	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5127.	1327.
8-5132	-1.00	-1.00	6.90	-1.00	-1.00	-1.00	-1.00	5132.	1327.
8-5137	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5137.	1327.
8-5142	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	5142.	1327.
8-5147	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	5147.	1327.
8-5152	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5152.	1327.
9-5092	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5092.	1308.
9-5097	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	-1.00	5097.	1308.
9-5102	-1.00	-1.00	5.00	-1.00	-1.00	-1.00	-1.00	5102.	1308.
9-5107	-1.00	-1.00	8.00	-1.00	-1.00	-1.00	-1.00	5107.	1308.
9-5112	-1.00	-1.00	6.50	-1.00	-1.00	-1.00	-1.00	5112.	1308.
9-5117	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	-1.00	5117.	1308.
9-5122	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	-1.00	5122.	1308.
9-5127	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5127.	1308.
C 193	37.90	44.50	5.70	0.89	0.00	1.00		5117.	1323.
C 329	25.70	28.90	2.80	1.06	0.00	0.67		5139.	1331.
C 343	46.90	49.90	3.00	0.72	0.00	1.92		5119.	1311.

Flist - End of file

051

95 053

Flist... File (JOHNYX) Date 5:45 PM MON., 7 JULY, 1986 Page001

BLOCK SPECS
SAMPLE SEARCH
HOR.WIDTH VAR
%SNT VAR
%SNS VAR
%CU VAR

17 HENRY LENS PCD 10 <940222.1115.

DOHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
10-5057	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5057.	1284.
10-5062	-1.00	-1.00	2.80	-1.00	-1.00	-1.00	-1.00	5062.	1284.
10-5067	-1.00	-1.00	6.40	-1.00	-1.00	-1.00	-1.00	5067.	1285.
10-5072	-1.00	-1.00	3.80	-1.00	-1.00	-1.00	-1.00	5072.	1285.
10-5077	-1.00	-1.00	0.90	-1.00	-1.00	-1.00	-1.00	5077.	1285.
10-5082	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	-1.00	5082.	1285.
10-5087	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5087.	1286.
10-5092	-1.00	-1.00	5.70	-1.00	-1.00	-1.00	-1.00	5092.	1286.
10-5097	-1.00	-1.00	6.70	-1.00	-1.00	-1.00	-1.00	5097.	1287.
10-5102	-1.00	-1.00	5.60	-1.00	-1.00	-1.00	-1.00	5102.	1288.
10-5107	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	-1.00	5107.	1288.
10-5112	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	-1.00	5112.	1288.
10-5117	-1.00	-1.00	1.00	-1.00	-1.00	-1.00	-1.00	5117.	1288.
10-5122	-1.00	-1.00	0.50	-1.00	-1.00	-1.00	-1.00	5122.	1288.
10-5127	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5127.	1288.
C 455	19.30	25.20	5.30	0.29	-1.00	0.25		5095.	1300.
C 458	25.70	32.50	6.00	0.92	-1.00	0.75		5119.	1296.

Flist - End of file

052

95 054

Flist... File (JOHNYV) Date 3:40 PM MON., 7 JULY, 1986 Page001

1	7	1	7	5275.	1225.	10.	10.
100	2000						
0.00		0.55		30.	0.	1.00	
0.24		0.23		45.	0.	1.00	
0.31		0.40		20.	0.	1.00	
0.19		0.29		55.	0.	1.00	

28 HENRY'S POD 11 LENS (866414.1132)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
10-5217	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5217.	1288.
10-5222	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5222.	1288.
10-5227	-1.00	-1.00	5.40	-1.00	-1.00	-1.00	-1.00	5227.	1288.
10-5232	-1.00	-1.00	10.20	-1.00	-1.00	-1.00	-1.00	5232.	1288.
10-5237	-1.00	-1.00	6.90	-1.00	-1.00	-1.00	-1.00	5237.	1288.
10-5242	-1.00	-1.00	3.70	-1.00	-1.00	-1.00	-1.00	5242.	1288.
10-5247	-1.00	-1.00	5.50	-1.00	-1.00	-1.00	-1.00	5247.	1288.
10-5252	-1.00	-1.00	3.50	-1.00	-1.00	-1.00	-1.00	5252.	1288.
10-5257	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5257.	1288.
10-5262	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5262.	1288.
11-5217	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5217.	1272.
11-5222	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5222.	1272.
11-5227	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	-1.00	5227.	1272.
11-5232	-1.00	-1.00	6.60	-1.00	-1.00	-1.00	-1.00	5232.	1272.
11-5237	-1.00	-1.00	9.50	-1.00	-1.00	-1.00	-1.00	5237.	1272.
11-5242	-1.00	-1.00	8.70	-1.00	-1.00	-1.00	-1.00	5242.	1272.
11-5247	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	5247.	1272.
11-5252	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	-1.00	5252.	1272.
11-5257	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5257.	1272.
C 88	128.40	145.70	13.80	1.44	-1.00	1.14	-1.00	5236.	1281.
C 469	12.00	12.80	0.80	-1.00	-1.00	-1.00	-1.00	5221.	1291.
C 546	30.60	38.90	6.50	0.68	-1.00	0.36	-1.00	5252.	1273.
C 553	38.30	41.40	3.10	0.62	-1.00	0.48	-1.00	5230.	1273.
C 630	32.50	40.90	8.40	0.97	0.09	0.35	-1.00	5240.	1272.
C 674	22.06	25.80	3.20	0.58	0.09	0.37	-1.00	5258.	1273.
C 889	33.60	41.40	7.80	1.01	0.18	0.68	-1.00	5221.	1255.
C1025	34.20	39.60	5.20	0.35	0.08	0.55	-1.00	5219.	1242.

Flist - End of file

053

95 055

Plot... File <2DHW > Date 3:43 PM MON., 7 JULY, 1986 Page001

1	20	1	21	5265.	965.	10.	10.
60	2000						
0.00	0.30	23.	0.	1.00			
0.09	0.33	18.	0.	1.00			
0.30	0.45	45.	0.	1.00			
0.41	0.47	15.	0.	1.00			

109 HENRY'S LENS BELOW TULIP <860414.1132>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	--	NORTH	RL
16SUBN	-1.00	-1.00	1.90	0.95	-1.00	0.34	-1.00	-1.00	5158.	1153.
17N	-1.00	-1.00	4.30	0.95	-1.00	0.50	-1.00	-1.00	5165.	1146.
17O	-1.00	-1.00	4.40	1.46	-1.00	0.35	-1.00	-1.00	5179.	1145.
17P	-1.00	-1.00	3.80	1.65	-1.00	0.44	-1.00	-1.00	5200.	1144.
17Q	-1.00	-1.00	1.60	1.58	-1.00	0.57	-1.00	-1.00	5221.	1145.
17QA	-1.00	-1.00	3.40	1.25	-1.00	0.57	-1.00	-1.00	5240.	1145.
18L	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5130.	1117.
18M	-1.00	-1.00	4.10	1.57	0.06	0.41	-1.00	-1.00	5142.	1118.
18N	-1.00	-1.00	6.70	1.44	0.05	0.52	-1.00	-1.00	5158.	1118.
18O	-1.00	-1.00	3.40	0.46	0.04	0.44	-1.00	-1.00	5179.	1119.
18P	-1.00	-1.00	5.20	0.99	0.01	0.49	-1.00	-1.00	5200.	1119.
18Q	-1.00	-1.00	2.10	1.01	0.06	0.91	-1.00	-1.00	5221.	1120.
19N	-1.00	-1.00	5.00	2.22	0.01	0.23			5144.	1103.
19N	-1.00	-1.00	4.20	0.84	0.04	0.91			5158.	1103.
19P	-1.00	-1.00	4.70	1.23	0.04	2.17			5200.	1099.
19Q	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5224.	1095.
20L	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5117.	1086.
20N	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5158.	1086.
21OP	-1.00	-1.00	1.80	2.03	-1.00	0.81	-1.00	-1.00	5191.	1083.
22KA	-1.00	-1.00	4.00	0.29	-1.00	0.23	-1.00	-1.00	5101.	1049.
22M	-1.00	-1.00	1.70	0.15	-1.00	0.05	-1.00	-1.00	5139.	1049.
22O	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5176.	1050.
22P	-1.00	-1.00	2.50	0.24	-1.00	0.32	-1.00	-1.00	5201.	1050.
22Q	-1.00	-1.00	1.80	0.48	-1.00	0.31	-1.00	-1.00	5221.	1050.
23O	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00	5186.	1022.
23P	-1.00	-1.00	4.30	0.59	-1.00	0.17	-1.00	-1.00	5205.	1022.
23Q	-1.00	-1.00	4.70	0.48	-1.00	0.36	-1.00	-1.00	5220.	1022.
24N	-1.00	-1.00	7.80	0.20	-1.00	0.11	-1.00	-1.00	5142.	1009.
C 936	499.70	518.20	12.90	0.14	0.05	0.06	27.00	-1.00	5133.	1031.
C1008	704.70	705.80	0.80	0.29	0.01	0.09	44.00	-1.00	5152.	868.
C1186	52.60	61.00	6.30	0.48	0.03	0.21	7.50	-1.00	5198.	1158.
C1204	80.50	80.50	0.00	-1.00	-1.00	-1.00			5182.	1113.
C1206	80.10	83.90	3.30	0.23	0.02	0.14	32.80	-1.00	5214.	1118.
C1259	112.00	112.00	0.00	-1.00	-1.00	-1.00			5080.	1080.
C1262	73.00	75.50	2.30	1.42	-1.00	0.49	-1.00	-1.00	5217.	1136.
C1267	90.70	92.20	0.80	1.05	0.03	0.37	0.00	-1.00	5207.	1098.
C1271	66.30	71.50	5.00	0.68	-1.00	0.12	50.70	-1.00	5185.	1138.
C1274	72.70	82.00	7.50	0.26	0.05	0.23	16.00	-1.00	5195.	1118.
C1280	134.00	134.20	0.10	0.08	0.05	0.01	0.00	-1.00	5064.	1054.
C1287	38.00	38.00	0.00	-1.00	-1.00	-1.00			5132.	1139.
C1291	33.00	33.00	0.00	-1.00	-1.00	-1.00			5134.	1134.
C1294	34.00	34.00	0.00	-1.00	-1.00	-1.00			5141.	1132.
C1298	37.00	37.00	0.00	-1.00	-1.00	-1.00			5131.	1127.
C1302	43.00	43.00	0.00	-1.00	-1.00	-1.00			5131.	1118.
C1303	39.90	59.20	13.60	1.40	0.06	0.14	23.00	-1.00	5140.	1113.
C1343	103.90	106.80	2.90	0.12	0.03	0.23	20.00	-1.00	5202.	1049.
C1348	96.00	96.00	0.00	-1.00	-1.00	-1.00			5219.	1059.
C1352	48.50	54.10	4.60	0.29	0.02	0.11	48.20	-1.00	5122.	1060.
C1355	82.20	88.80	4.70	0.51	0.03	1.06	15.00	-1.00	5190.	1097.
C1393	129.70	139.90	7.30	0.37	0.02	0.33	42.30	-1.00	5227.	1010.

C1408	12.60	20.50	7.90	0.99	0.06	0.41	9.70	-1.00	5158.	1119.
C1441	46.00	46.00	0.00	-1.00	-1.00	-1.00			5173.	1082.
C1448	48.00	48.00	0.00	-1.00	-1.00	-1.00			5176.	1107.
C1453	35.40	40.40	4.80	0.78	0.04	0.45	25.00	-1.00	5194.	1112.
C1455	27.30	29.40	1.30	0.22	0.07	1.58	29.50	-1.00	5147.	1145.
C1457	35.30	38.40	3.00	0.89	0.00	0.47	0.00	-1.00	5194.	1088.
C1461	48.90	49.30	0.30	0.09	0.00	2.09	0.00	-1.00	5189.	1066.
C1484	31.60	38.20	5.90	0.16	0.02	0.21	25.80	-1.00	5197.	1023.
C1490	1.80	4.70	2.90	0.67	0.00	0.41	20.70	-1.00	5139.	1087.
C1504	113.40	117.80	3.30	0.09	0.02	0.17	8.70	-1.00	5193.	966.
C1506	26.70	27.60	0.70	0.56	0.01	0.24			5240.	1140.
C1518	144.00	144.00	0.00	-1.00	-1.00	-1.00			5189.	937.
C1529	27.40	29.60	1.60	0.96	-1.00	0.37	13.60	-1.00	5157.	1139.
C1532	11.60	17.60	5.20	0.98	-1.00	0.58	16.00	-1.00	5158.	1109.
C1625	58.40	65.10	5.80	0.12	0.00	0.16	14.90	-1.00	5156.	981.
C1630	102.90	106.80	2.90	0.03	0.00	0.11	50.00	-1.00	5158.	964.
C1651	12.00	12.00	0.00	-1.00	-1.00	-1.00			5222.	1156.
C1652	7.00	10.00	2.50	0.22	0.05	0.26	31.70	-1.00	5223.	1140.
C1653	11.50	20.30	5.20	0.97	0.13	1.30	9.10	-1.00	5223.	1130.
C1654	15.70	17.30	1.30	0.90	0.04	0.17	0.00	-1.00	5207.	1157.
C1655	11.40	16.00	4.10	1.76	0.13	0.68	10.90	-1.00	5210.	1138.
C1656	15.80	22.30	4.20	1.71	0.13	0.65	23.10	-1.00	5210.	1129.
C1657	7.70	14.00	5.60	1.35	0.19	0.39	28.60	-1.00	5200.	1138.
C1658	8.30	21.20	8.10	0.95	0.07	0.41	0.00	-1.00	5201.	1132.
C1660	14.00	18.10	3.10	1.27	0.05	0.22	6.10	-1.00	5188.	1140.
C1661	16.50	19.80	2.60	1.35	0.04	0.21	0.00	-1.00	5189.	1133.
C1662	21.60	30.60	7.70	0.39	0.02	0.14	58.30	-1.00	5179.	1159.
C1663	12.40	17.50	4.80	1.43	0.02	0.34	9.80	-1.00	5180.	1139.
C1666	15.00	17.10	2.00	0.99	0.00	0.27	0.00	-1.00	5167.	1138.
C1667	13.10	23.70	7.30	1.02	0.04	0.31	9.40	-1.00	5167.	1131.
C1668	16.50	18.40	1.90	0.57	0.02	0.20	26.30	-1.00	5197.	1146.
C1670	15.00	15.00	0.00	-1.00	-1.00	-1.00			5149.	1137.
C1671	19.90	25.00	3.90	0.85	0.04	0.18	24.60	-1.00	5149.	1126.
C1672	22.00	22.00	0.00	-1.00	-1.00	-1.00			5226.	1113.
C1674	21.40	22.30	0.90	0.46	0.03	0.20	0.00	-1.00	5214.	1113.
C1675	24.80	30.30	4.50	1.49	0.08	0.64	0.00	-1.00	5215.	1103.
C1677	19.20	27.90	8.40	1.28	0.04	1.81	3.50	-1.00	5199.	1113.
C1678	25.60	33.90	8.70	1.33	0.01	0.53	8.70	-1.00	5200.	1104.
C1679	35.40	38.40	3.50	0.56	0.00	0.70	46.00	-1.00	5200.	1095.
C1680	23.90	28.80	4.20	1.25	0.01	0.77	6.10	-1.00	5188.	1105.
C1681	19.00	22.70	3.50	0.25	0.05	0.36	40.50	-1.00	5169.	1112.
C1682	16.70	18.20	1.20	0.30	0.02	0.08	26.70	-1.00	5168.	1108.
C1683	20.10	22.20	1.40	0.34	0.00	0.17	53.30	-1.00	5168.	1102.
C1684	16.60	24.80	7.20	1.17	0.16	0.54	29.60	-1.00	5158.	1130.
C1685	10.20	21.40	7.40	0.37	0.02	0.37	10.70	-1.00	5156.	1196.
C1686	18.20	25.10	4.60	0.72	0.03	2.14	13.00	-1.00	5156.	1101.
C1687	3.20	12.80	8.60	1.41	0.05	0.40	15.60	-1.00	5146.	1114.
C1688	3.20	18.10	9.20	1.05	0.02	0.23	34.20	-1.00	5146.	1109.
C1689	3.30	22.50	7.70	1.56	0.03	0.38	8.30	-1.00	5148.	1106.
C1690	3.50	29.10	9.40	0.75	0.01	1.07	30.10	-1.00	5139.	1101.
C1691	9.60	30.10	9.20	0.86	0.04	0.42			5139.	1108.
C1692	3.30	6.40	2.70	0.90	0.01	1.54			5139.	1092.
C1696	11.00	11.00	0.00	-1.00	-1.00	-1.00			5128.	1098.
C1697	12.00	12.00	0.00	-1.00	-1.00	-1.00			5130.	1096.
C1704	17.60	18.70	0.80	0.53	0.04	1.56	0.00	-1.00	5178.	1131.
C1707	36.40	39.90	2.30	1.17	0.03	1.12	0.00	-1.00	5210.	1091.
C1966	84.10	84.60	0.40	0.59	0.17	5.66			5290.	1148.
C1975	85.00	85.00	0.00	-1.00	-1.00	-1.00			5290.	1136.
C1976	27.90	36.00	0.10	0.83	0.19	3.34			5248.	1145.

055

95 057

Flist... File (?DHNYW) Date 5:49 PM MON., 7 JULY, 1986 Page001

1 18 1 11 5335. 965. 10. 10.
105 2000
0.13 0.89 27. 0. 1.00
0.28 0.42 5. 0. 1.00
0.54 1.56 25. 0. 1.00
0.13 0.60 15. 0. 1.00
93 HENRY'S WEST BELOW TULIP (860414.1133)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
18QAQB	-1.00	-1.00	0.60	0.73	0.02	1.02	-1.00	5245.	1120.
18QB	-1.00	-1.00	1.20	0.41	0.02	0.63	-1.00	5258.	1120.
18QA	-1.00	-1.00	0.50	0.36	0.04	0.28	-1.00	5236.	1120.
18R	-1.00	-1.00	3.80	0.52	0.02	0.66	-1.00	5275.	1120.
18S	-1.00	-1.00	2.20	0.19	0.07	0.84	-1.00	5286.	1120.
19R	-1.00	-1.00	6.70	0.51	-1.00	1.31	-1.00	5277.	1096.
19S	-1.00	-1.00	5.30	0.94	-1.00	0.65	-1.00	5294.	1096.
19T	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5304.	1096.
21QA	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5240.	1075.
21QB	-1.00	-1.00	16.80	0.57	-1.00	0.28	-1.00	5258.	1074.
21R	-1.00	-1.00	6.00	0.51	-1.00	0.46	-1.00	5275.	1074.
21S	-1.00	-1.00	2.00	0.45	-1.00	0.48	-1.00	5291.	1074.
22QA	-1.00	-1.00	10.70	1.23	-1.00	0.30	-1.00	5240.	1050.
22QB	-1.00	-1.00	8.00	1.09	-1.00	0.20	-1.00	5258.	1050.
22R	-1.00	-1.00	8.50	1.11	-1.00	0.50	-1.00	5277.	1050.
22S	-1.00	-1.00	3.20	0.45	-1.00	0.41	-1.00	5292.	1050.
22T	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5310.	1050.
22U	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5336.	1050.
23QA	-1.00	-1.00	4.80	0.91	-1.00	0.12	-1.00	5240.	1023.
23QB	-1.00	-1.00	4.40	1.15	-1.00	0.20	-1.00	5258.	1023.
23R	-1.00	-1.00	1.80	1.13	-1.00	0.26	-1.00	5278.	1023.
C 254	269.39	270.00	0.40	0.19	0.01	0.47		5241.	1080.
C 659	562.00	562.00	0.00	-1.00	-1.00	-1.00		5307.	994.
C 768	453.62	454.69	0.80	2.85	0.17	0.31	0.00	5325.	1135.
C 881	591.25	595.94	3.70	1.25	0.05	0.15	26.70	5253.	1030.
C1283	73.10	77.30	4.10	0.24	-1.00	0.22	47.90	5294.	1110.
C1286	68.20	74.30	5.90	0.50	0.06	0.24	31.60	5292.	1083.
C1292	85.70	93.20	6.20	0.47	0.07	0.20	29.00	5292.	1049.
C1299	62.60	69.50	6.90	0.73	0.03	0.35	7.00	5282.	1102.
C1305	67.50	71.63	4.00	0.70	0.02	0.98	0.00	5273.	1112.
C1306	69.10	77.90	7.50	0.55	0.07	0.53	26.80	5271.	1072.
C1312	77.50	89.10	9.70	1.32	0.08	0.16	16.90	5271.	1054.
C1331	67.50	76.00	8.10	0.97	0.02	0.85	7.10	5272.	1079.
C1393	142.30	159.10	11.90	0.65	0.02	0.19	19.60	5227.	999.
C1395	146.00	146.00	0.00	-1.00	-1.00	-1.00		5236.	1019.
C1396	34.00	34.00	0.00	-1.00	-1.00	-1.00		5234.	1097.
C1397	43.00	43.00	0.00	-1.00	-1.00	-1.00		5238.	1073.
C1401	35.90	38.70	2.60	0.90	0.04	0.42	16.30	5258.	1115.
C1402	31.10	52.80	16.30	1.02	0.03	0.30	15.60	5239.	1075.
C1405	160.50	162.50	1.20	0.81	0.04	0.27		5328.	983.
C1415	70.00	70.00	0.00	-1.00	-1.00	-1.00		5337.	1099.
C1420	79.00	79.00	0.00	-1.00	-1.00	-1.00		5341.	1131.
C1425	73.00	73.00	0.00	-1.00	-1.00	-1.00		5340.	1077.
C1430	82.00	82.00	0.00	-1.00	-1.00	-1.00		5338.	1054.
C1440	86.00	86.00	0.00	-1.00	-1.00	-1.00		5357.	1077.
C1445	109.00	109.00	0.00	-1.00	-1.00	-1.00		5358.	1045.
C1486	83.00	83.00	0.00	-1.00	-1.00	-1.00		5360.	1104.
C1489	42.30	44.60	2.30	0.20	0.00	1.28	34.80	5312.	1122.
C1492	46.40	51.40	4.60	0.75	0.04	0.76	0.00	5309.	1095.
C1493	87.00	87.00	0.00	-1.00	-1.00	-1.00		5352.	1129.

C1520	103.60	111.00	5.00	1.06	0.01	0.28	12.20		5287.	1021.
C1525	137.20	144.10	4.00	0.97	0.09	0.39	0.00		5280.	986.
C1578	1.90	14.20	12.70	0.39	0.00	0.24	44.50		5257.	1097.
C1616	38.10	48.00	4.50	0.09	0.00	0.12	31.20		5243.	999.
C1617	69.00	69.00	0.00	-1.00	-1.00	-1.00			5243.	964.
C1620	131.00	131.00	0.00	-1.00	-1.00	-1.00			5391.	1013.
C1694	4.40	15.30	9.80	0.48	0.00	0.54			5279.	1092.
C1698	33.10	33.60	0.40	0.36	0.01	0.70			5240.	1085.
C1699	34.50	41.60	7.10	0.71	0.00	1.30			5285.	1110.
C1700	36.30	37.80	1.40	0.83	0.01	0.03			5258.	1106.
C1720	37.20	42.30	5.10	0.55	0.00	0.66			5264.	1114.
C1722	42.00	50.50	8.00	0.88	0.00	0.59			5266.	1104.
C1729	30.00	30.00	0.00	-1.00	-1.00	-1.00			5237.	1106.
C1726	37.40	43.90	6.20	0.49	0.00	1.79			5276.	1108.
C1728	27.00	27.00	0.00	-1.00	-1.00	-1.00			5238.	1112.
C1731	15.30	21.90	5.90	0.51	0.00	0.59	-1.00		5285.	1066.
C1732	0.70	1.30	0.60	0.63	0.00	0.24			5293.	1073.
C1733	17.50	23.40	4.30	1.36	0.32	2.31	-1.00		5284.	1060.
C1737	20.90	23.20	2.10	1.33	0.40	1.20	0.00		5286.	1082.
C1738	19.00	28.20	8.00	1.20	0.11	0.59	6.70		5276.	1062.
C1739	0.80	1.70	0.70	0.18	0.01	0.37			5284.	1077.
C1745	16.60	24.90	8.00	0.26	0.00	0.14	62.70		5277.	1068.
C1745	24.50	26.50	2.10	1.01	0.10	0.88	18.20		5277.	1083.
C1748	9.40	27.00	13.90	0.75	0.00	0.33	12.50		5298.	1062.
C1752	0.00	7.10	11.90	0.75	0.06	0.35			5267.	1072.
C1753	7.00	33.50	21.00	1.45	0.10	0.48	9.10		5249.	1062.
C1758	6.30	20.80	13.60	1.06	0.01	0.13	35.90		5248.	1070.
C1756	4.50	16.20	11.10	0.71	0.01	5.09	44.40		5248.	1079.
C1757	7.00	27.70	16.50	0.67	0.01	0.20			5239.	1064.
C1759	5.20	21.50	19.20	0.84	0.02	0.15			5239.	1070.
C1769	13.00	25.60	10.80	0.59	0.06	0.40			5267.	1064.
C1772	15.30	25.00	10.60	1.28	0.06	0.37	0.00		5267.	1066.
C1776	37.10	37.70	0.60	0.69	0.01	0.46			5234.	1088.
C1777	12.00	12.00	0.00	-1.00	-1.00	-1.00			5249.	1091.
C1780	0.00	11.80	10.50	0.58	0.06	0.47			5267.	1093.
C1782	0.00	18.40	11.50	0.46	0.00	0.33	40.20		5267.	1088.
C1787	27.30	35.90	8.40	0.41	0.00	0.12			5256.	1098.
C1789	40.00	40.00	0.00	-1.00	-1.00	-1.00			5248.	1105.
C1791	28.20	41.40	11.80	0.66	0.00	0.14			5255.	1080.
C1979	19.10	26.90	6.30	0.25	0.04	0.03			5260.	1009.
C1997	28.90	30.40	1.00	0.28	0.01	0.23			5279.	1002.
C1999	23.20	25.30	1.80	2.74	0.12	0.49			5274.	1011.
C2007	38.30	40.20	1.20	0.29	0.02	0.24			5253.	992.

First - End of File

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95 059

Elist... File (JOHNYE) Date 31st JUL, 1996 Page001

1	17	1	9	5315.	995.	10.	10.
60	2000						
0.07		0.57		60.	0.	1.00	
0.15		0.12		55.	0.	1.00	
1.10		1.73		18.	0.	1.00	
0.17		1.22		55.	0.	1.00	

108 HENRY'S EAST BELOW TULIP <860414.1135>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNE	%CU	INT.W%	NORTH	RL
170B	-1.00	-1.00	4.80	0.62	-1.00	0.39	-1.00	5238.	1146.
170BR	-1.00	-1.00	6.10	0.65	-1.00	0.42	-1.00	5272.	1145.
180A	-1.00	-1.00	7.10	0.84	0.07	0.56	-1.00	5242.	1120.
180B	-1.00	-1.00	2.00	0.21	0.02	0.42	-1.00	5259.	1120.
18R	-1.00	-1.00	-1.00	0.25	0.07	1.93	-1.00	5279.	1120.
190A	-1.00	-1.00	6.90	0.65	0.02	0.20	-1.00	5240.	1097.
190B	-1.00	-1.00	9.30	0.47	0.03	0.50	-1.00	5258.	1097.
19R	-1.00	-1.00	5.60	1.01	0.02	0.62	-1.00	5276.	1097.
19S	-1.00	-1.00	5.90	0.54	0.02	1.27	-1.00	5292.	1097.
19ST	-1.00	-1.00	3.40	0.39	0.03	1.34	-1.00	5306.	1097.
210A	-1.00	-1.00	-1.00	0.34	-1.00	0.19	-1.00	5240.	1074.
210B	-1.00	-1.00	9.50	0.56	-1.00	0.16	-1.00	5258.	1074.
21R	-1.00	-1.00	-1.00	0.50	-1.00	0.16	-1.00	5276.	1074.
220A	-1.00	-1.00	9.50	0.66	-1.00	0.11	-1.00	5241.	1050.
220B	-1.00	-1.00	-1.00	0.09	-1.00	0.06	-1.00	5250.	1050.
22R	-1.00	-1.00	-1.00	1.34	-1.00	0.27	-1.00	5277.	1051.
230A0B	-1.00	-1.00	5.30	1.73	-1.00	0.20	5.70	5253.	1023.
230BR	-1.00	-1.00	3.80	1.76	-1.00	0.20	9.50	5264.	1023.
23THR	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5280.	1024.
C 254	290.00	299.30	4.60	1.74	0.20	0.49	0.00	5241.	1060.
C 381	558.40	574.70	11.80	0.92	0.05	0.04	27.00	5254.	1046.
C1283	81.10	85.50	4.30	0.21	-1.00	0.56	10.80	5293.	1111.
C1286	85.60	88.40	2.70	0.09	0.01	0.53	44.60	5292.	1079.
C1292	105.00	105.00	0.00	-1.00	-1.00	-1.00		5292.	1042.
C1299	74.60	80.60	6.00	0.30	0.03	0.50	24.60	5281.	1103.
C1305	73.10	78.10	4.80	2.11	0.03	0.44	0.00	5273.	1113.
C1306	94.70	102.90	7.50	1.05	0.03	0.12	25.00	5271.	1063.
C1312	105.80	111.20	4.60	1.14	0.05	0.19	30.30	5269.	1040.
C1331	89.60	96.60	6.60	0.50	0.02	0.19	-1.00	5271.	1073.
C1395	158.00	158.00	0.00	-1.00	-1.00	-1.00		5386.	1012.
C1396	20.00	28.00	8.00	0.85	0.02	0.11	30.60	5239.	1097.
C1397	18.80	34.70	15.70	0.76	0.03	0.12	27.00	5239.	1081.
C1401	26.00	33.00	6.30	0.66	0.03	1.48	4.70	5258.	1112.
C1402	21.50	29.10	5.60	0.69	0.02	0.16	9.20	5258.	1081.
C1415	90.00	90.00	0.00	-1.00	-1.00	-1.00		5337.	1098.
C1420	93.00	93.00	0.00	-1.00	-1.00	-1.00		5341.	1135.
C1425	90.00	90.00	0.00	-1.00	-1.00	-1.00		5341.	1072.
C1430	108.00	108.00	0.00	-1.00	-1.00	-1.00		5339.	1040.
C1440	120.00	120.00	0.00	-1.00	-1.00	-1.00		5357.	1071.
C1445	125.00	125.00	0.00	-1.00	-1.00	-1.00		5356.	1037.
C1486	100.00	100.00	0.00	-1.00	-1.00	-1.00		5359.	1104.
C1489	37.80	38.70	0.90	0.28	0.03	0.76		5313.	1122.
C1491	34.60	38.90	3.10	0.56	-1.00	0.43	20.90	5276.	1142.
C1492	43.00	43.00	0.00	-1.00	-1.00	-1.00		5310.	1098.
C1493	112.00	112.00	0.00	-1.00	-1.00	-1.00		5355.	1137.
C1506	26.70	27.60	0.70	0.59	0.01	0.24	-1.00	5239.	1140.
C1508	24.70	32.00	4.30	0.41	0.05	0.46	24.55	5258.	1139.
C1520	131.00	131.00	0.00	-1.00	-1.00	-1.00		5286.	1085.
C1535	16.50	27.40	10.70	0.54	-1.00	0.08	10.10	5261.	1046.
C1538	18.20	29.70	10.70	0.60	0.09	0.14	29.60	5263.	1058.

C1542	16.80	28.90	11.10	0.93	0.01	0.08	21.40		5261.	1043.
C1546	16.50	24.20	7.60	0.72	0.02	0.13	26.00		5279.	1053.
C1550	16.30	22.80	6.20	0.70	0.00	0.13	46.20		5278.	1043.
C1553	11.00	11.20	0.20	0.00	0.01	0.07	0.00		5291.	1050.
C1556	12.00	12.40	0.40	0.21	0.02	1.04	0.00		5291.	1046.
C1564	5.00	5.00	0.00	-1.00	-1.00	-1.00			5305.	1052.
C1574	19.40	23.00	2.40	0.70	0.00	0.17	50.70		5277.	1036.
C1582	6.30	6.50	0.10	0.22	0.01	0.71	0.00		5305.	1056.
C1585	24.60	26.80	1.90	0.46	0.00	0.07	36.40		5239.	1011.
C1616	56.00	56.00	0.00	-1.00	-1.00	-1.00			5248.	994.
C1617	92.00	92.00	0.00	-1.00	-1.00	-1.00			5248.	945.
C1620	145.00	145.00	0.00	-1.00	-1.00	-1.00			5349.	1004.
C1639	16.10	21.80	4.70	0.43	0.05	0.12	55.30		5256.	1012.
C1673	32.00	34.10	1.70	0.40	0.06	1.31			5228.	1102.
C1693	14.60	26.40	9.30	1.11	0.01	0.15			5244.	1078.
C1695	16.50	26.90	8.30	0.62	0.09	0.10			5267.	1083.
C1698	15.00	23.00	7.30	0.68	0.00	0.12			5244.	1090.
C1699	28.10	33.20	4.90	0.79	0.01	1.88			5285.	1112.
C1700	23.70	30.40	6.50	0.50	0.00	0.36			5258.	1106.
C1720	34.60	35.60	1.00	0.26	0.01	3.44			5264.	1115.
C1722	35.30	40.60	5.00	1.13	0.03	0.96			5266.	1107.
C1725	21.10	25.40	3.80	0.69	0.00	1.04			5237.	1109.
C1726	30.90	37.40	6.20	0.61	0.00	1.30			5276.	1110.
C1728	16.50	24.70	7.90	0.59	0.00	0.93			5238.	1114.
C1732	14.00	14.00	0.00	-1.00	-1.00	-1.00			5293.	1067.
C1734	25.20	26.10	0.60	0.44	0.05	0.34	0.00		5293.	1054.
C1735	14.70	20.60	4.00	0.30	0.01	2.07	23.70		5292.	1090.
C1736	17.40	24.70	4.60	0.48	0.01	0.37	43.80		5285.	1093.
C1739	16.00	19.50	3.00	0.39	0.00	0.47	14.50		5284.	1086.
C1742	14.60	15.20	0.60	0.92	0.01	0.35	0.00		5284.	1075.
C1744	17.90	24.30	6.40	0.80	0.02	0.95	0.00		5265.	1066.
C1746	18.50	24.70	4.40	0.93	0.03	0.33	0.00		5284.	1062.
C1747	18.60	26.70	5.10	0.31	0.00	0.23	35.80		5278.	1094.
C1750	0.00	9.00	10.10	1.58	0.00	0.22	11.10		5235.	1075.
C1751	19.30	23.40	3.60	0.53	0.02	0.83	0.00		5273.	1037.
C1752	28.80	39.30	8.70	1.25	0.02	0.16	0.00		5267.	1064.
C1758	15.60	26.80	9.80	0.58	0.00	0.13	7.70		5277.	1067.
C1759	0.00	5.20	12.80	1.12	0.00	0.22			5239.	1072.
C1760	17.20	28.00	9.30	0.90	0.04	0.13	15.70		5276.	1062.
C1761	14.30	26.90	9.60	0.78	0.02	0.13	27.80		5257.	1060.
C1762	10.80	26.50	12.10	0.49	0.01	0.07	15.30		5250.	1061.
C1763	16.00	25.00	5.80	0.78	0.00	0.22	17.80		5267.	1092.
C1764	3.40	23.30	18.00	1.80	0.01	0.20	13.60		5257.	1068.
C1765	7.40	18.80	10.30	1.13	0.00	0.20	20.20		5251.	1068.
C1766	7.80	14.60	-1.00	0.92	0.00	0.14	27.90		5250.	1072.
C1767	9.40	22.50	11.90	1.02	0.00	0.19			5241.	1067.
C1768	29.00	36.30	6.80	0.82	0.00	0.18			5231.	1034.
C1771	31.30	32.60	1.30	0.59	0.00	0.38			5232.	1089.
C1776	20.20	26.50	6.00	0.77	0.00	0.16			5236.	1091.
C1778	4.40	14.10	8.70	0.81	0.00	0.11			5232.	1071.
C1781	6.30	17.60	8.30	0.97	0.00	0.11			5231.	1066.
C1787	18.40	25.30	6.80	0.93	0.00	0.26			5256.	1092.
C1789	30.60	38.60	7.40	0.76	0.00	1.00			5248.	1107.
C1791	19.00	27.50	7.60	0.45	0.01	0.06			5256.	1086.
C1979	37.50	40.70	2.60	0.69	0.00	0.05			5261.	1000.
C1997	40.00	40.00	0.00	-1.00	-1.00	-1.00			5274.	995.
C1999	34.00	38.70	4.20	0.38	0.00	0.18			5274.	1006.
C2007	16.00	24.30	5.10	0.86	0.05	0.34			5255.	1007.

Flist - End of File

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95 061

Flist... File (ODHPAW ... Date Fri 3 Th NOV., 7 JULY, 1986 Page001

1	13	1	26	5255.	1345.	10.	10.
60	900					
0.13		0.10		60.	1.	1.00	
0.05		0.14		50.	0.	1.00	
0.50		0.60		90.	0.	1.00	
0.05		0.10		50.	0.	1.00	

57 HALL'S A LENS ABOVE W FAULT (260414.1134)

ODHFACE	FROM	TO	WIDTH	%ENT	%ENS	%CU	INT.W%	NORTH	RL
1A	-1.00	-1.00	4.30	1.14	0.08	0.17		5072.	1446.
1KA	-1.00	-1.00	5.20	1.14	0.10	0.28		5095.	1447.
1L	-1.00	-1.00	4.90	0.89	0.06	0.42		5118.	1448.
1O	-1.00	-1.00	5.40	1.16	-1.00	0.29		5180.	1450.
1PO	-1.00	-1.00	2.10	0.46	-1.00	0.35		5210.	1450.
1QQA	-1.00	-1.00	5.10	1.90	-1.00	0.69		5230.	1450.
2H	-1.00	-1.00	6.90	-1.00	-1.00	-1.00		5018.	1412.
2I	-1.00	-1.00	5.10	-1.00	-1.00	-1.00		5033.	1412.
2J	-1.00	-1.00	3.10	-1.00	-1.00	-1.00		5049.	1412.
2KKA	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5084.	1412.
2L	-1.00	-1.00	4.20	-1.00	-1.00	-1.00		5118.	1412.
2M	-1.00	-1.00	4.20	-1.00	-1.00	-1.00		5139.	1412.
2NN	-1.00	-1.00	9.10	-1.00	-1.00	-1.00		5148.	1412.
2O	-1.00	-1.00	5.00	-1.00	-1.00	-1.00		5180.	1412.
2P	-1.00	-1.00	3.30	-1.00	-1.00	-1.00		5200.	1412.
2Q	-1.00	-1.00	13.40	-1.00	-1.00	-1.00		5222.	1411.
3I	-1.00	-1.00	2.40	-1.00	-1.00	-1.00		5033.	1400.
3L	-1.00	-1.00	3.70	-1.00	-1.00	-1.00		5118.	1398.
4M	-1.00	-1.00	8.10	-1.00	-1.00	-1.00		5139.	1380.
4N	-1.00	-1.00	12.10	-1.00	-1.00	-1.00		5156.	1380.
4O	-1.00	-1.00	7.80	-1.00	-1.00	-1.00		5180.	1380.
5M	-1.00	-1.00	5.30	-1.00	-1.00	-1.00		5139.	1361.
5N	-1.00	-1.00	15.30	-1.00	-1.00	-1.00		5158.	1361.
C 10	23.50	32.30	6.50	1.20	-1.00	-1.00		5179.	1420.
C 36	4.90	10.40	3.90	0.67	-1.00	0.18		5239.	1442.
C 48 D	0.00	3.70	6.80	-1.00	-1.00	-1.00		5220.	1398.
C 50 D	0.00	3.40	5.40	-1.00	-1.00	-1.00		5178.	1399.
C 51 D	0.00	7.90	9.40	-1.00	-1.00	0.33		5137.	1400.
C 54 D	0.00	8.80	10.60	0.70	-1.00	-1.00		5092.	1400.
C 57 D	0.00	6.60	8.90	0.63	-1.00	0.12		5050.	1400.
C 83	3.60	14.20	10.60	1.11	-1.00	0.37		5153.	1399.
C 84 D	0.00	9.60	10.20	1.06	-1.00	0.47		5196.	1399.
C 86 D	0.00	7.00	9.30	0.98	-1.00	0.33		5071.	1400.
C 87 D	0.00	3.50	6.90	0.92	-1.00	0.71		5019.	1401.
C 93 D	0.00	5.60	7.80	0.56	-1.00	0.29		5000.	1401.
C 104	34.90	38.60	3.70	1.47	-1.00	0.74		5072.	1439.
C 109	5.30	11.90	6.20	0.58	-1.00	0.19		5200.	1443.
C 113	0.80	8.40	7.20	0.68	-1.00	0.23		5239.	1446.
C 125	90.50	96.10	5.60	0.71	-1.00	0.20		5108.	1436.
C 175	5.20	13.60	8.40	1.79	0.15	1.07		5139.	1349.
C 269	22.50	29.70	7.20	0.42	0.05	0.10		5000.	1417.
C 488	18.70	25.40	6.70	0.51	0.07	0.40		5050.	1437.
C 497	18.10	24.60	6.40	0.64	-1.00	0.31		5050.	1441.
C 513	18.90	29.00	9.80	1.00	-1.00	0.29		5047.	1430.
C1282	5.90	19.40	12.40	1.62	-1.00	0.46		5158.	1375.
C1910	62.30	69.00	6.70	0.59	0.04	0.23		5140.	1434.
C1914	68.40	74.50	6.10	1.02	0.06	0.25		5119.	1435.
C1919	64.80	72.40	7.20	1.42	0.10	0.32		5118.	1455.
C1923	71.50	76.40	4.90	0.71	0.06	0.31		5100.	1436.
C1929	70.40	74.20	5.50	0.98	0.10	0.26		5097.	1453.

060

[illegible]	40.40	45.90	5.20	1.31	0.07	0.29	5033.	1434.
C1950	45.40	56.90	10.60	1.27	0.05	0.26	5045.	1442.
C1955	57.90	60.70	2.60	1.36	0.08	0.31	5066.	1431.
C2006	34.80	35.00	0.20	2.32	0.40	3.37	5052.	1439.
C2016	34.80	38.30	3.60	0.72	0.09	0.20	5078.	1454.
C2017	45.80	49.00	2.90	1.79	0.08	0.46	5104.	1460.
C2019	89.10	105.60	14.80	1.09	0.16	0.27	5179.	1441.

Flist - End of file

061

Flist... File /2DH3AW ; Date 3:49 PM MON., 7 JULY, 1986 Page001

1 16 1 23 5225. 1295. 10. 10.
90 500
0.00 0.92 35. 50. 1.67
0.04 0.32 42. 0. 1.00
0.29 0.50 30. 0. 1.00
0.05 1.89 25. 0. 1.00

157 HALL'S B LENS ABOVE W FAULT NORTH OF G (8:0414.1137)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
2-5037	-1.00	-1.00	0.80	0.73	0.02	1.31		5037.	1408.
2-5042	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5042.	1408.
2-5057	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5057.	1409.
2-5067	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5067.	1409.
2-5072	-1.00	-1.00	0.70	-1.00	-1.00	-1.00		5072.	1409.
2K	-1.00	-1.00	-1.00	1.22	0.07	0.54		5072.	1408.
2-5077	-1.00	-1.00	0.70	-1.00	-1.00	-1.00		5077.	1409.
2-5082	-1.00	-1.00	1.70	-1.00	-1.00	-1.00		5082.	1409.
2-5087	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5087.	1410.
2-5092	-1.00	-1.00	1.60	-1.00	-1.00	-1.00		5092.	1410.
2KA	-1.00	-1.00	-1.00	0.61	0.02	0.19		5095.	1410.
2-5097	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5097.	1410.
2-5102	-1.00	-1.00	1.30	-1.00	-1.00	-1.00		5102.	1410.
2-5107	-1.00	-1.00	0.60	-1.00	-1.00	-1.00		5107.	1411.
2-5112	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5112.	1411.
2-5117	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5117.	1411.
2L	-1.00	-1.00	-1.00	0.83	0.05	0.15		5118.	1411.
2-5122	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5122.	1411.
2-5127	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5127.	1411.
2-5132	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5132.	1411.
2-5137	-1.00	-1.00	0.40	-1.00	-1.00	-1.00		5137.	1411.
2M	-1.00	-1.00	-1.00	1.49	0.03	0.34		5139.	1411.
2-5142	-1.00	-1.00	0.60	-1.00	-1.00	-1.00		5142.	1411.
2-5147	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5147.	1411.
2N	-1.00	-1.00	1.70	-1.00	-1.00	-1.00		5152.	1411.
3K	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5070.	1400.
3L	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5115.	1400.
4-5015	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5015.	1380.
4-5025	-1.00	-1.00	2.30	-1.00	-1.00	-1.00		5025.	1380.
4-5035	-1.00	-1.00	4.30	-1.00	-1.00	-1.00		5035.	1380.
4-5045	-1.00	-1.00	8.30	-1.00	-1.00	-1.00		5045.	1380.
4-5055	-1.00	-1.00	9.20	-1.00	-1.00	-1.00		5045.	1381.
4-5065	-1.00	-1.00	2.90	-1.00	-1.00	-1.00		5065.	1381.
4-5075	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5075.	1381.
4-5085	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5085.	1380.
4-5095	-1.00	-1.00	3.90	-1.00	-1.00	-1.00		5095.	1380.
4-5105	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5105.	1380.
4-5115	-1.00	-1.00	3.30	-1.00	-1.00	-1.00		5115.	1380.
4-5125	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5125.	1380.
4-5135	-1.00	-1.00	1.80	-1.00	-1.00	-1.00		5135.	1380.
4-5145	-1.00	-1.00	1.60	-1.00	-1.00	-1.00		5145.	1380.
4-5155	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5155.	1380.
4-5165	-1.00	-1.00	2.10	-1.00	-1.00	-1.00		5165.	1380.
4-5175	-1.00	-1.00	2.00	-1.00	-1.00	-1.00		5175.	1380.
4-5185	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		5185.	1380.
4-5195	-1.00	-1.00	1.40	-1.00	-1.00	-1.00		5195.	1380.
4-5205	-1.00	-1.00	1.10	-1.00	-1.00	-1.00		5205.	1380.
4-5215	-1.00	-1.00	1.00	-1.00	-1.00	-1.00		5215.	1380.
4-5225	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5225.	1380.
5-4995	-1.00	-1.00	4.00	-1.00	-1.00	-1.00		4995.	1362.

5-5005	-1.00	-1.00	6.90	-1.00	-1.00	-1.00	5005.	1362.
5-5015	-1.00	-1.00	5.50	-1.00	-1.00	-1.00	5015.	1362.
5-5025	-1.00	-1.00	6.60	-1.00	-1.00	-1.00	5025.	1362.
5-5035	-1.00	-1.00	8.10	-1.00	-1.00	-1.00	5035.	1361.
5-5045	-1.00	-1.00	6.10	-1.00	-1.00	-1.00	5045.	1362.
5-5055	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	5055.	1362.
5-5065	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5065.	1362.
5-5075	-1.00	-1.00	2.90	-1.00	-1.00	-1.00	5075.	1361.
5-5085	-1.00	-1.00	5.10	-1.00	-1.00	-1.00	5085.	1361.
5-5095	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	5095.	1361.
5-5105	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	5105.	1361.
5-5115	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	5115.	1361.
5-5125	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	5125.	1361.
5-5135	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	5135.	1361.
5-5145	-1.00	-1.00	2.40	-1.00	-1.00	-1.00	5145.	1361.
5-5155	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	5155.	1361.
5-5165	-1.00	-1.00	2.40	-1.00	-1.00	-1.00	5165.	1361.
5-5175	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	5175.	1361.
5-5185	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5185.	1361.
5-5195	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5195.	1361.
7-4995	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	4995.	1346.
7-5005	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	5005.	1346.
7-5015	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	5015.	1345.
7-5025	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	5025.	1345.
7-5035	-1.00	-1.00	1.90	-1.00	-1.00	-1.00	5035.	1345.
7-5045	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	5045.	1345.
7-5055	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	5055.	1345.
7-5065	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	5065.	1345.
7-5075	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	5075.	1346.
7-5085	-1.00	-1.00	0.40	-1.00	-1.00	-1.00	5085.	1345.
7-5095	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5095.	1345.
7-5115	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5115.	1345.
7-5125	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	5125.	1345.
7-5135	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	5135.	1345.
7-5145	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	5145.	1345.
7-5155	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	5155.	1345.
7-5165	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5165.	1345.
8-4995	-1.00	-1.00	3.30	-1.00	-1.00	-1.00	4995.	1329.
8-5005	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	5005.	1328.
8-5015	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	5015.	1328.
8-5025	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	5025.	1328.
8-5035	-1.00	-1.00	2.90	-1.00	-1.00	-1.00	5035.	1328.
8-5045	-1.00	-1.00	1.40	-1.00	-1.00	-1.00	5045.	1328.
8-5055	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	5055.	1328.
8-5065	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5065.	1328.
8-5105	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5105.	1327.
8-5115	-1.00	-1.00	1.70	-1.00	-1.00	-1.00	5115.	1327.
8-5125	-1.00	-1.00	3.20	-1.00	-1.00	-1.00	5125.	1327.
8-5135	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	5135.	1326.
8-5145	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5145.	1326.
9-4995	-1.00	-1.00	0.50	-1.00	-1.00	-1.00	4995.	1311.
9-5005	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	5005.	1311.
9-5015	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5015.	1311.
9-5025	-1.00	-1.00	0.80	-1.00	-1.00	-1.00	5025.	1311.
10-4995	-1.00	-1.00	0.20	-1.00	-1.00	-1.00	4995.	1292.
10-5005	-1.00	-1.00	0.20	-1.00	-1.00	-1.00	5005.	1292.
10-5015	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5015.	1292.
C 54	16.20	16.00	1.80	-1.00	-1.00	-1.00	5092.	1400.
C 57	18.80	22.30	3.50	-1.00	-1.00	-1.00	5050.	1400.
C 62	6.10	7.20	1.10	1.45	-1.00	0.42	5198.	1399.

063

C 64	4.30	5.80	1.50	1.05	-1.00	0.32	5156.	1399.
C 87	30.30	30.90	0.60	-1.00	-1.00	-1.00	5019.	1401.
C 92	26.00	26.70	0.70	2.84	-1.00	1.24	5035.	1400.
C 93	18.00	18.00	0.00	-1.00	-1.00	-1.00	5001.	1401.
C 104	26.00	26.00	0.00	-1.00	-1.00	-1.00	5072.	1440.
C 105	7.90	10.30	2.40	0.17	-1.00	0.27	5118.	1413.
C 110	14.00	14.00	0.00	-1.00	-1.00	-1.00	5224.	1413.
C 111	9.70	11.20	1.50	0.42	-1.00	0.20	5181.	1413.
C 125	43.00	43.00	0.00	-1.00	-1.00	-1.00	5108.	1438.
C 131	7.40	16.90	9.50	1.19	0.08	0.33	5048.	1381.
C 149	20.00	20.00	0.00	-1.00	-1.00	-1.00	5010.	1381.
C 153	15.60	19.90	4.30	2.09	0.12	0.79	5180.	1361.
C 158	1.00	2.20	1.20	1.15	0.00	0.55	5097.	1361.
C 161	9.00	9.00	0.00	-1.00	-1.00	-1.00	5064.	1362.
C 182	33.00	33.00	0.00	-1.00	-1.00	-1.00	5071.	1316.
C 183	11.00	13.80	2.80	-1.00	-1.00	-1.00	5071.	1337.
C 194	6.00	6.00	0.00	-1.00	-1.00	-1.00	5094.	1345.
C 217	4.80	7.90	3.10	1.98	0.12	0.51	5054.	1345.
C 221	10.10	10.90	0.80	0.79	0.10	0.38	5034.	1346.
C 224	15.90	17.30	1.40	0.82	0.06	0.64	5018.	1345.
C 227	8.10	10.60	2.50	-1.00	-1.00	-1.00	5072.	1346.
C 228	8.00	8.00	0.00	-1.00	-1.00	-1.00	5072.	1328.
C 234	4.50	6.10	1.60	0.25	0.00	0.20	5048.	1327.
C 236	8.60	14.40	5.80	0.99	0.08	0.27	5018.	1362.
C 239	8.50	16.00	7.50	1.59	0.21	0.29	5033.	1362.
C 253	5.00	5.00	0.00	-1.00	-1.00	-1.00	5095.	1343.
C 259	3.30	6.90	3.60	1.94	0.16	0.44	5033.	1327.
C 260	25.20	30.10	2.60	0.97	0.16	0.73	5003.	1321.
C 261	36.30	38.90	0.80	0.79	0.04	0.53	5003.	1309.
C 297	17.50	20.10	2.60	1.83	0.18	0.44	4999.	1346.
C 334	0.00	3.10	-1.00	1.39	0.68	0.41	5033.	1312.
C 344	8.10	8.40	0.30	0.26	0.03	0.20	5115.	1310.
C 377	8.00	8.00	0.00	-1.00	-1.00	-1.00	5030.	1310.
C 496	17.90	19.10	1.20	0.27	0.02	0.15	5071.	1310.
C 562	2.60	3.50	0.90	1.03	0.07	0.59	5014.	1310.
C 607	14.60	14.80	0.20	0.59	-1.00	0.55	5095.	1311.
C 715	57.80	59.40	1.60	0.89	0.07	0.28	5131.	1320.
C 975	44.10	45.30	1.10	0.26	0.04	0.61	5103.	1423.
C1910	52.10	52.90	0.40	0.39	0.01	0.25	5140.	1435.
C1914	58.20	59.90	1.70	0.46	0.01	0.07	5119.	1434.
C1919	60.10	61.90	1.70	0.65	0.00	0.18	5118.	1452.
C1923	64.80	65.00	0.20	1.38	0.02	0.21	5099.	1435.
C1929	66.90	67.80	0.90	1.37	0.03	0.09	5098.	1455.
C1937	17.00	17.00	0.00	-1.00	-1.00	-1.00	5033.	1425.
C2017	42.50	43.00	0.50	1.80	0.02	0.91	5104.	1458.
C2019	79.20	79.80	0.60	0.89	0.22	4.42	5179.	1433.
LADIT	-1.00	-1.00	1.30	-1.00	-1.00	-1.00	5198.	1427.

Flist - End of File

Flist... File /20H8W8 : Date 3:51 PM MON. 7 JULY, 1986 Page001

1	26	1	36	5.05.	1195.	10.	10.
150	900					
0.02		0.29		136.	50.	1.83	
0.05		0.23		90.	0.	1.00	
0.20		0.27		90.	0.	1.00	
0.07		0.35		140.	0.	1.00	

107 HALL'S 8 LENS 4 - RATCHET FAULTS <860414.1137>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
2QA	-1.00	-1.00	8.40	-1.00	-1.00	-1.00		5240.	1413.
2QB	-1.00	-1.00	10.10	-1.00	-1.00	-1.00		5258.	1413.
2R	-1.00	-1.00	19.30	-1.00	-1.00	-1.00		5277.	1412.
2S	-1.00	-1.00	14.20	-1.00	-1.00	-1.00		5292.	1413.
2T	-1.00	-1.00	15.50	-1.00	-1.00	-1.00		5310.	1412.
2U	-1.00	-1.00	15.50	-1.00	-1.00	-1.00		5336.	1412.
3QA	-1.00	-1.00	7.20	-1.00	-1.00	-1.00		5238.	1398.
3QB	-1.00	-1.00	15.40	-1.00	-1.00	-1.00		5256.	1398.
3T	-1.00	-1.00	12.70	-1.00	-1.00	-1.00		5310.	1399.
3U	-1.00	-1.00	6.60	-1.00	-1.00	-1.00		5336.	1400.
4Q	-1.00	-1.00	13.40	-1.00	-1.00	-1.00		5222.	1380.
4QA	-1.00	-1.00	15.40	-1.00	-1.00	-1.00		5240.	1380.
4R	-1.00	-1.00	18.60	-1.00	-1.00	-1.00		5277.	1380.
4S	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5292.	1380.
4T	-1.00	-1.00	6.60	-1.00	-1.00	-1.00		5310.	1380.
4U	-1.00	-1.00	6.70	-1.00	-1.00	-1.00		5336.	1380.
5Q	-1.00	-1.00	17.20	-1.00	-1.00	-1.00		5222.	1361.
5QA	-1.00	-1.00	28.70	-1.00	-1.00	-1.00		5240.	1361.
5QB	-1.00	-1.00	13.30	-1.00	-1.00	-1.00		5258.	1361.
5R	-1.00	-1.00	8.20	-1.00	-1.00	-1.00		5277.	1362.
5S	-1.00	-1.00	3.90	-1.00	-1.00	-1.00		5292.	1362.
5T	-1.00	-1.00	5.60	-1.00	-1.00	-1.00		5310.	1362.
5U	-1.00	-1.00	2.50	-1.00	-1.00	-1.00		5329.	1362.
7Q	-1.00	-1.00	7.10	-1.00	-1.00	-1.00		5180.	1345.
7P	-1.00	-1.00	9.70	-1.00	-1.00	-1.00		5200.	1344.
7Q	-1.00	-1.00	14.60	-1.00	-1.00	-1.00		5222.	1345.
7QA	-1.00	-1.00	21.50	-1.00	-1.00	-1.00		5240.	1345.
7QB	-1.00	-1.00	12.20	-1.00	-1.00	-1.00		5258.	1346.
7R	-1.00	-1.00	12.70	-1.00	-1.00	-1.00		5277.	1346.
7S	-1.00	-1.00	8.80	-1.00	-1.00	-1.00		5292.	1346.
7ST	-1.00	-1.00	1.40	-1.00	-1.00	-1.00		5303.	1346.
7T	-1.00	-1.00	7.20	-1.00	-1.00	-1.00		5310.	1347.
7U	-1.00	-1.00	5.70	-1.00	-1.00	-1.00		5336.	1347.
7VA	-1.00	-1.00	5.80	-1.00	-1.00	-1.00		5384.	1347.
8N	-1.00	-1.00	15.60	-1.00	-1.00	-1.00		5158.	1327.
8O	-1.00	-1.00	16.70	-1.00	-1.00	-1.00		5180.	1327.
8P	-1.00	-1.00	19.00	-1.00	-1.00	-1.00		5200.	1327.
8Q	-1.00	-1.00	17.50	-1.00	-1.00	-1.00		5222.	1326.
8QA	-1.00	-1.00	14.80	-1.00	-1.00	-1.00		5240.	1326.
8QB	-1.00	-1.00	13.40	-1.00	-1.00	-1.00		5258.	1327.
8R	-1.00	-1.00	14.10	-1.00	-1.00	-1.00		5277.	1327.
8S	-1.00	-1.00	14.30	-1.00	-1.00	-1.00		5292.	1326.
8T	-1.00	-1.00	13.90	-1.00	-1.00	-1.00		5310.	1328.
8U	-1.00	-1.00	17.60	-1.00	-1.00	-1.00		5336.	1329.
8V	-1.00	-1.00	6.40	-1.00	-1.00	-1.00		5361.	1327.
8VA	-1.00	-1.00	7.60	-1.00	-1.00	-1.00		5384.	1330.
9M	-1.00	-1.00	24.30	-1.00	-1.00	-1.00		5139.	1309.
9N	-1.00	-1.00	25.80	-1.00	-1.00	-1.00		5158.	1309.
9O	-1.00	-1.00	20.10	-1.00	-1.00	-1.00		5180.	1309.
9P	-1.00	-1.00	21.30	-1.00	-1.00	-1.00		5200.	1309.

9Q	-1.00	-1.00	18.30	-1.00	-1.00	-1.00	5222.	1309.
9QA	-1.00	-1.00	19.30	-1.00	-1.00	-1.00	5240.	1310.
9QB	-1.00	-1.00	17.80	-1.00	-1.00	-1.00	5258.	1310.
9R	-1.00	-1.00	18.50	-1.00	-1.00	-1.00	5277.	1311.
9S	-1.00	-1.00	12.80	-1.00	-1.00	-1.00	5292.	1310.
9T	-1.00	-1.00	21.90	-1.00	-1.00	-1.00	5310.	1311.
9U	-1.00	-1.00	15.00	-1.00	-1.00	-1.00	5336.	1311.
9V	-1.00	-1.00	4.20	-1.00	-1.00	-1.00	5361.	1311.
11J INT	-1.00	-1.00	14.00	-1.00	-1.00	-1.00	5049.	1270.
11M	-1.00	-1.00	20.80	-1.00	-1.00	-1.00	5139.	1271.
13JK	-1.00	-1.00	38.00	-1.00	-1.00	-1.00	5060.	1236.
C 17	18.30	32.30	8.90	1.02	-1.00	-1.00	5292.	1435.
C 37	54.90	70.70	12.10	1.23	-1.00	0.57	5238.	1376.
C 38	55.00	75.60	15.80	0.67	-1.00	0.27	5272.	1369.
C 42	72.90	76.50	2.50	1.33	-1.00	-1.00	5311.	1340.
C 43	53.30	61.00	7.50	1.16	-1.00	0.55	5310.	1379.
C 53	0.00	9.00	10.00	0.65	-1.00	-1.00	5291.	1398.
C 55	0.00	5.90	-1.00	1.36	-1.00	-1.00	5336.	1400.
C 61	156.30	183.20	-1.00	0.16	-1.00	0.16	5075.	1241.
C 80	3.60	22.40	18.80	0.70	-1.00	0.22	5274.	1399.
C 81	0.00	15.90	-1.00	0.60	-1.00	0.24	5309.	1399.
C 112	0.00	11.00	-1.00	0.57	-1.00	0.25	5276.	1413.
C 146	0.00	9.70	19.10	1.10	0.17	0.64	5259.	1381.
C 180	25.30	64.00	32.20	0.79	0.07	0.27	5159.	1319.
C 443	7.80	17.10	-1.00	0.66	-1.00	-1.00	5291.	1302.
C 446	49.60	76.60	-1.00	0.45	-1.00	0.22	5138.	1273.
C 473	79.80	98.10	-1.00	0.09	-1.00	0.16	5065.	1215.
C 482 D	0.00	2.60	23.00	0.42	0.04	0.40	5118.	1290.
C 499	4.40	12.90	-1.00	0.35	-1.00	0.91	5301.	1292.
C 509	51.20	70.10	18.40	0.77	-1.00	0.34	5118.	1257.
C 522	4.00	15.90	-1.00	0.85	-1.00	0.36	5310.	1292.
C 574	0.00	11.50	27.00	0.48	0.04	0.47	5094.	1290.
C 590	0.00	13.70	-1.00	0.13	0.06	0.26	5139.	1271.
C 619	15.00	27.80	11.60	0.93	-1.00	0.19	5240.	1301.
C 651	22.80	36.90	13.20	1.02	0.05	1.06	5222.	1302.
C 656	14.60	27.60	11.30	0.59	0.04	0.28	5258.	1302.
C 663	25.30	46.90	21.00	0.59	0.06	0.30	5310.	1301.
C 666	13.80	21.30	-1.00	0.81	0.05	0.22	5277.	1302.
C 669	26.80	36.20	-1.00	0.81	-1.00	0.67	5310.	1287.
C 689	32.50	48.80	-1.00	0.92	0.06	0.20	5103.	1231.
C 778	27.10	33.70	-1.00	0.21	0.04	0.26	5118.	1299.
C 785	19.10	36.30	20.00	0.17	0.04	0.30	5140.	1300.
C 791	18.80	35.20	22.00	1.03	0.07	0.29	5180.	1301.
C 826	72.90	97.20	47.00	0.12	0.02	0.14	5070.	1226.
C 849	0.00	30.20	-1.00	0.43	0.02	0.13	5074.	1236.
C 850 D	0.00	12.50	-1.00	0.93	0.03	0.18	5118.	1237.
C 854 D	0.00	11.40	46.70	0.87	0.03	0.18	5104.	1237.
C 865	0.00	24.70	-1.00	0.13	0.03	0.10	5049.	1236.
C 921	93.90	103.10	-1.00	0.07	0.05	0.09	5093.	1187.
C 964	9.20	21.20	-1.00	0.84	0.07	0.35	5279.	1434.
C1013	0.00	8.00	34.00	0.94	0.07	0.15	5140.	1251.
C1021	0.00	8.10	-1.00	0.92	0.03	0.19	5139.	1243.
C1252	6.20	16.20	-1.00	0.29	0.01	0.23	5117.	1285.
C1254	0.00	16.70	-1.00	0.56	0.02	0.15	5119.	1259.
C1256	0.00	13.30	-1.00	0.23	0.01	0.15	5119.	1254.
C1257	0.00	14.60	-1.00	0.41	0.03	0.14	5118.	1248.
C1263	0.00	18.10	-1.00	0.45	0.02	0.12	5094.	1249.

Flist - End of File

Flist... File (7DHA1) Date 3:52 PM MON., 7 JULY, 1986 Page001

1	5	1	9	5195.	1205.	10.	10.	
40	500							
0.09		0.62		38.	0.	1.00		
0.04		0.24		30.	0.	1.00		
0.40		0.62		35.	0.	1.00		
0.00		0.69		40.	0.	1.00		

34 HALL'S AI LENS RATCHET-MAOIR SOUTH OF CULSHAW <860414.1134>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
13-5132	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5132.	1237.
13-5137	-1.00	-1.00	4.70	-1.00	-1.00	-1.00		5137.	1237.
13-5142	-1.00	-1.00	5.30	-1.00	-1.00	-1.00		5142.	1237.
13-5147	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5147.	1237.
13-5152	-1.00	-1.00	0.20	-1.00	-1.00	-1.00		5152.	1237.
13-5157	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5157.	1237.
13-5162	-1.00	-1.00	7.30	-1.00	-1.00	-1.00		5162.	1237.
13-5167	-1.00	-1.00	8.10	-1.00	-1.00	-1.00		5167.	1237.
13-5172	-1.00	-1.00	5.00	-1.00	-1.00	-1.00		5172.	1237.
13-5177	-1.00	-1.00	4.30	-1.00	-1.00	-1.00		5177.	1237.
13-5182	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5182.	1237.
13M	-1.00	-1.00	5.80	1.42	0.07	0.32		5140.	1237.
13N	-1.00	-1.00	7.90	0.68	0.08	0.24		5158.	1237.
13O	-1.00	-1.00	4.90	1.06	0.10	0.26		5174.	1237.
14-5127	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5127.	1219.
14-5132	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5132.	1219.
14-5137	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		5137.	1219.
14-5142	-1.00	-1.00	2.80	-1.00	-1.00	-1.00		5142.	1219.
14-5147	-1.00	-1.00	2.70	-1.00	-1.00	-1.00		5147.	1219.
14-5152	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5152.	1219.
14M-N	-1.00	-1.00	2.20	0.33	0.02	0.16		5149.	1219.
C 169	126.40	134.30	5.50	1.18	0.03	0.41		5159.	1238.
C 489	73.00	73.00	0.00	-1.00	-1.00	-1.00		5118.	1214.
C 689	53.00	53.00	0.00	-1.00	-1.00	-1.00		5100.	1225.
C 811	115.00	115.00	0.00	-1.00	-1.00	-1.00		5179.	1223.
C 822	113.00	113.00	0.00	-1.00	-1.00	-1.00		5149.	1215.
C1030	10.10	12.40	2.30	0.29	0.07	0.07		5139.	1218.
C1037	15.00	15.00	0.00	-1.00	-1.00	-1.00		5172.	1219.
C1084	13.00	18.50	5.20	0.91	0.05	0.24		5178.	1232.
C1085	9.50	16.00	5.70	1.19	0.02	0.36		5158.	1231.
C1105	14.00	14.00	0.00	-1.00	-1.00	-1.00		5140.	1208.
C1198	6.90	9.50	2.20	0.58	0.04	0.26		5115.	1232.
C1199	10.10	10.40	0.20	0.41	0.01	0.47		5115.	1228.
C1200	7.90	13.80	4.30	1.55	0.07	0.35		5134.	1229.

Flist - End of file

Flist... File \20H42 2 Date 3:53 PM 1986.. 2 JULY, 1986 Page001

1	8	1	15	5215.	1165.	10.	10.
40	1000					
	0.00		0.25	26.	0.	1.00	
	0.12		0.62	36.	0.	1.00	
	0.29		0.37	35.	0.	1.00	
	0.00		0.69	40.	0.	1.00	

104 HALL'S A2 LENS RATCHET-NADIR SOUTH OF CULSHAW (860414.1134)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
13-5142	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5142.	1238.
13-5147	-1.00	-1.00	0.50	-1.00	-1.00	-1.00		5147.	1238.
13-5152	-1.00	-1.00	5.60	-1.00	-1.00	-1.00		5152.	1238.
13-5157	-1.00	-1.00	10.60	-1.00	-1.00	-1.00		5157.	1238.
13-5162	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5162.	1238.
13-5167	-1.00	-1.00	5.30	-1.00	-1.00	-1.00		5167.	1238.
13-5172	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5172.	1238.
13N	-1.00	-1.00	11.50	0.73	0.06	0.12		5158.	1238.
14-5062	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5062.	1217.
14-5067	-1.00	-1.00	1.10	-1.00	-1.00	-1.00		5067.	1217.
14-5072	-1.00	-1.00	3.70	-1.00	-1.00	-1.00		5072.	1217.
14-5077	-1.00	-1.00	3.70	-1.00	-1.00	-1.00		5077.	1217.
14-5082	-1.00	-1.00	2.40	-1.00	-1.00	-1.00		5082.	1217.
14-5087	-1.00	-1.00	3.90	-1.00	-1.00	-1.00		5087.	1217.
14-5092	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		5092.	1217.
14-5097	-1.00	-1.00	5.00	-1.00	-1.00	-1.00		5097.	1217.
14-5102	-1.00	-1.00	4.30	-1.00	-1.00	-1.00		5102.	1217.
14-5107	-1.00	-1.00	4.70	-1.00	-1.00	-1.00		5107.	1217.
14-5112	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5112.	1217.
14-5117	-1.00	-1.00	7.50	-1.00	-1.00	-1.00		5117.	1217.
14-5122	-1.00	-1.00	7.50	-1.00	-1.00	-1.00		5122.	1218.
14-5127	-1.00	-1.00	7.70	-1.00	-1.00	-1.00		5127.	1218.
14-5132	-1.00	-1.00	7.10	-1.00	-1.00	-1.00		5132.	1218.
14-5137	-1.00	-1.00	8.90	-1.00	-1.00	-1.00		5137.	1218.
14-5142	-1.00	-1.00	8.30	-1.00	-1.00	-1.00		5142.	1218.
14-5147	-1.00	-1.00	8.70	-1.00	-1.00	-1.00		5147.	1219.
14-5152	-1.00	-1.00	9.20	-1.00	-1.00	-1.00		5152.	1219.
14-5157	-1.00	-1.00	9.50	-1.00	-1.00	-1.00		5157.	1219.
14-5162	-1.00	-1.00	10.00	-1.00	-1.00	-1.00		5162.	1219.
14-5167	-1.00	-1.00	9.50	-1.00	-1.00	-1.00		5167.	1219.
14-5172	-1.00	-1.00	9.90	-1.00	-1.00	-1.00		5172.	1219.
14-5177	-1.00	-1.00	11.00	-1.00	-1.00	-1.00		5177.	1219.
14-5182	-1.00	-1.00	12.00	-1.00	-1.00	-1.00		5182.	1219.
14-5187	-1.00	-1.00	8.60	-1.00	-1.00	-1.00		5187.	1219.
14-5192	-1.00	-1.00	9.30	-1.00	-1.00	-1.00		5192.	1219.
14-5197	-1.00	-1.00	8.00	-1.00	-1.00	-1.00		5197.	1219.
14L	-1.00	-1.00	6.60	0.55	0.03	0.15		5118.	1218.
14O	-1.00	-1.00	11.10	0.53	0.02	0.13		5180.	1219.
15-5072	-1.00	-1.00	6.80	-1.00	-1.00	-1.00		5072.	1196.
15-5077	-1.00	-1.00	6.50	-1.00	-1.00	-1.00		5077.	1196.
15-5082	-1.00	-1.00	6.30	-1.00	-1.00	-1.00		5082.	1196.
15-5087	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5087.	1197.
15-5092	-1.00	-1.00	6.20	-1.00	-1.00	-1.00		5092.	1197.
15-5097	-1.00	-1.00	6.50	-1.00	-1.00	-1.00		5097.	1197.
15-5102	-1.00	-1.00	6.70	-1.00	-1.00	-1.00		5102.	1197.
15-5107	-1.00	-1.00	6.90	-1.00	-1.00	-1.00		5107.	1197.
15-5112	-1.00	-1.00	7.40	-1.00	-1.00	-1.00		5112.	1197.
15-5117	-1.00	-1.00	7.90	-1.00	-1.00	-1.00		5117.	1197.
15-5122	-1.00	-1.00	8.10	-1.00	-1.00	-1.00		5122.	1197.
15-5127	-1.00	-1.00	7.80	-1.00	-1.00	-1.00		5127.	1197.

15-5132	-1.00	-1.00	7.40	-1.00	-1.00	-1.00	5132.	1197.
15-5137	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	5137.	1197.
15-5142	-1.00	-1.00	7.50	-1.00	-1.00	-1.00	5142.	1197.
15-5147	-1.00	-1.00	7.20	-1.00	-1.00	-1.00	5147.	1197.
15-5152	-1.00	-1.00	9.90	-1.00	-1.00	-1.00	5152.	1197.
15-5157	-1.00	-1.00	10.40	-1.00	-1.00	-1.00	5157.	1198.
15-5162	-1.00	-1.00	9.30	-1.00	-1.00	-1.00	5162.	1198.
15-5167	-1.00	-1.00	11.50	-1.00	-1.00	-1.00	5167.	1198.
15-5172	-1.00	-1.00	12.10	-1.00	-1.00	-1.00	5172.	1198.
15-5177	-1.00	-1.00	15.70	-1.00	-1.00	-1.00	5177.	1198.
15-5182	-1.00	-1.00	15.70	-1.00	-1.00	-1.00	5182.	1198.
15-5187	-1.00	-1.00	14.10	-1.00	-1.00	-1.00	5187.	1198.
15-5192	-1.00	-1.00	16.70	-1.00	-1.00	-1.00	5192.	1199.
15-5197	-1.00	-1.00	8.90	-1.00	-1.00	-1.00	5197.	1199.
15-5202	-1.00	-1.00	7.80	-1.00	-1.00	-1.00	5202.	1199.
15-5207	-1.00	-1.00	6.10	-1.00	-1.00	-1.00	5207.	1199.
15-5212	-1.00	-1.00	4.20	-1.00	-1.00	-1.00	5212.	1199.
15-5217	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	5217.	1199.
15K	-1.00	-1.00	6.00	0.14	0.03	0.23	5063.	1196.
16-5072	-1.00	-1.00	8.60	-1.00	-1.00	-1.00	5072.	1184.
16-5077	-1.00	-1.00	10.30	-1.00	-1.00	-1.00	5077.	1183.
16-5082	-1.00	-1.00	10.60	-1.00	-1.00	-1.00	5082.	1182.
16-5087	-1.00	-1.00	10.80	-1.00	-1.00	-1.00	5087.	1181.
16-5092	-1.00	-1.00	10.90	-1.00	-1.00	-1.00	5092.	1179.
16-5097	-1.00	-1.00	10.30	-1.00	-1.00	-1.00	5097.	1178.
16-5102	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	5102.	1177.
16-5107	-1.00	-1.00	3.50	-1.00	-1.00	-1.00	5107.	1176.
16-5112	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5112.	1175.
16K	-1.00	-1.00	6.00	0.19	0.02	0.13	5071.	1184.
C 169	140.70	153.20	8.60	1.03	0.02	0.55	5158.	1226.
C 489	61.30	67.40	-1.00	0.64	0.03	0.12	5118.	1221.
C 811	98.80	108.70	9.50	0.71	0.02	0.09	5178.	1226.
C 822	99.10	109.20	9.50	0.60	0.06	0.14	5151.	1218.
C 912	1.20	12.80	11.60	1.01	0.08	0.24	5159.	1238.
C 926	119.60	137.04	10.50	0.69	0.01	0.14	5087.	1183.
C1030	0.40	8.00	7.60	1.75	0.04	0.27	5139.	1218.
C1037 D	0.00	7.90	8.40	0.68	0.03	0.20	5171.	1218.
C1086	0.80	13.70	11.80	0.91	0.10	0.21	5158.	1234.
C1087	8.00	5.50	-1.00	1.42	0.13	0.43	5137.	1221.
C1104	6.40	21.80	13.80	0.28	0.02	0.15	5179.	1211.
C1105	0.50	10.30	7.00	1.26	0.09	0.26	5140.	1213.
C1106	7.80	16.00	6.20	0.57	0.05	0.26	5158.	1209.
C1119	2.80	19.00	16.20	0.44	0.04	0.26	5193.	1198.
C1126	9.40	19.60	10.20	0.30	0.02	0.06	5158.	1198.
C1169 D	0.00	7.00	11.50	0.33	0.02	0.08	5180.	1218.
C1362	5.00	9.30	4.20	0.34	0.06	0.35	5098.	1217.
C1364	2.20	10.00	7.80	0.08	0.00	0.06	5110.	1213.
C1407	10.40	17.00	5.80	0.05	0.02	0.15	5156.	1190.
C1414	17.90	23.10	5.70	0.09	0.01	0.07	5139.	1192.
C1418	10.20	19.90	8.50	0.09	0.02	0.16	5094.	1189.
C1422	7.90	14.30	6.00	0.66	0.01	0.14	5094.	1204.
C1442	14.70	22.20	7.40	0.20	0.02	0.11	5120.	1202.
C1444	15.10	25.30	9.20	0.15	0.03	0.13	5119.	1188.
C1481 D	0.00	10.60	15.90	0.16	0.02	0.16	5181.	1198.

Flist - End of file

Flist... File (20HA3) Date 3:54 PM MON., 7 JULY, 1986 Page001

1	8	1	12	5135.	1155.	10.	10.	
80	1000							
	0.00		0.24	80.	0.	1.00		
	0.06		0.80	48.	0.	1.00		
	0.40		0.62	35.	0.	1.00		
	0.04		0.24	30.	0.	1.00		

84 HALL'S A3 LENS RATCHET-NADIR SOUTH OF CULSHAW <860414.1135>

DOHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
14-5102	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5102.	1217.
14-5107	-1.00	-1.00	3.60	-1.00	-1.00	-1.00		5107.	1217.
14-5112	-1.00	-1.00	6.30	-1.00	-1.00	-1.00		5112.	1217.
14-5117	-1.00	-1.00	4.80	-1.00	-1.00	-1.00		5117.	1217.
14-5122	-1.00	-1.00	4.10	-1.00	-1.00	-1.00		5122.	1217.
14-5127	-1.00	-1.00	6.00	-1.00	-1.00	-1.00		5127.	1218.
14-5132	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5132.	1218.
14-5137	-1.00	-1.00	5.30	-1.00	-1.00	-1.00		5137.	1218.
14-5142	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5142.	1218.
14-5147	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5147.	1219.
14-5152	-1.00	-1.00	4.50	-1.00	-1.00	-1.00		5152.	1219.
14-5157	-1.00	-1.00	3.80	-1.00	-1.00	-1.00		5157.	1219.
14-5162	-1.00	-1.00	3.40	-1.00	-1.00	-1.00		5162.	1219.
14-5167	-1.00	-1.00	3.00	-1.00	-1.00	-1.00		5167.	1219.
14-5172	-1.00	-1.00	1.90	-1.00	-1.00	-1.00		5172.	1219.
14-5177	-1.00	-1.00	1.70	-1.00	-1.00	-1.00		5177.	1219.
14-5182	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5182.	1219.
14L	-1.00	-1.00	5.40	0.71	0.06	0.24		5118.	1217.
14M	-1.00	-1.00	5.60	1.20	0.06	0.38		5139.	1218.
14N	-1.00	-1.00	4.00	1.46	0.06	0.33		5158.	1219.
15-5072	-1.00	-1.00	9.20	-1.00	-1.00	-1.00		5072.	1196.
15-5077	-1.00	-1.00	9.00	-1.00	-1.00	-1.00		5077.	1196.
15-5082	-1.00	-1.00	9.20	-1.00	-1.00	-1.00		5082.	1196.
15-5087	-1.00	-1.00	9.40	-1.00	-1.00	-1.00		5087.	1197.
15-5092	-1.00	-1.00	9.00	-1.00	-1.00	-1.00		5092.	1197.
15-5097	-1.00	-1.00	8.10	-1.00	-1.00	-1.00		5097.	1197.
15-5102	-1.00	-1.00	7.30	-1.00	-1.00	-1.00		5102.	1197.
15-5107	-1.00	-1.00	6.70	-1.00	-1.00	-1.00		5107.	1197.
15-5112	-1.00	-1.00	6.60	-1.00	-1.00	-1.00		5112.	1197.
15-5117	-1.00	-1.00	6.00	-1.00	-1.00	-1.00		5117.	1197.
15-5122	-1.00	-1.00	6.30	-1.00	-1.00	-1.00		5122.	1197.
15-5127	-1.00	-1.00	7.30	-1.00	-1.00	-1.00		5127.	1197.
15-5132	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5132.	1197.
15-5137	-1.00	-1.00	8.10	-1.00	-1.00	-1.00		5137.	1197.
15-5142	-1.00	-1.00	7.50	-1.00	-1.00	-1.00		5142.	1197.
15-5147	-1.00	-1.00	8.00	-1.00	-1.00	-1.00		5147.	1197.
15-5152	-1.00	-1.00	6.70	-1.00	-1.00	-1.00		5152.	1197.
15-5157	-1.00	-1.00	6.40	-1.00	-1.00	-1.00		5157.	1197.
15-5162	-1.00	-1.00	3.10	-1.00	-1.00	-1.00		5162.	1197.
15-5167	-1.00	-1.00	2.20	-1.00	-1.00	-1.00		5167.	1197.
15-5172	-1.00	-1.00	1.70	-1.00	-1.00	-1.00		5172.	1197.
15-5177	-1.00	-1.00	1.50	-1.00	-1.00	-1.00		5177.	1197.
15-5182	-1.00	-1.00	0.80	-1.00	-1.00	-1.00		5182.	1197.
15-5187	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5187.	1197.
15K	-1.00	-1.00	8.90	0.21	0.02	0.16		5075.	1196.
15L-M	-1.00	-1.00	7.90	0.21	0.03	0.12		5129.	1197.
16-5072	-1.00	-1.00	10.20	-1.00	-1.00	-1.00		5072.	1181.
16-5077	-1.00	-1.00	10.30	-1.00	-1.00	-1.00		5077.	1180.
16-5082	-1.00	-1.00	11.10	-1.00	-1.00	-1.00		5082.	1179.
16-5087	-1.00	-1.00	12.00	-1.00	-1.00	-1.00		5087.	1179.

16-5092	-1.00	-1.00	10.60	-1.00	-1.00	-1.00	5092.	1178.
16-5097	-1.00	-1.00	9.60	-1.00	-1.00	-1.00	5097.	1177.
16-5102	-1.00	-1.00	8.50	-1.00	-1.00	-1.00	5102.	1177.
16-5107	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	5107.	1176.
16-5112	-1.00	-1.00	6.30	-1.00	-1.00	-1.00	5112.	1175.
16-5117	-1.00	-1.00	7.70	-1.00	-1.00	-1.00	5117.	1174.
16-5122	-1.00	-1.00	8.30	-1.00	-1.00	-1.00	5122.	1174.
16-5127	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	5127.	1174.
16-5132	-1.00	-1.00	6.90	-1.00	-1.00	-1.00	5132.	1174.
16-5137	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	5137.	1174.
16-5142	-1.00	-1.00	1.10	-1.00	-1.00	-1.00	5142.	1174.
16-5147	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5147.	1174.
16K	-1.00	-1.00	10.00	0.10	0.02	0.15	5073.	1180.
C 70	178.90	204.00	10.60	-1.00	-1.00	-1.00	5075.	1180.
C 169	155.30	159.60	3.00	1.35	0.29	0.43	5158.	1218.
C 822	93.20	96.80	3.20	2.35	0.13	0.29	5153.	1221.
C 926	94.40	109.70	9.00	0.21	0.01	0.20	5092.	1204.
C1031 D	0.00	0.60	5.60	1.34	0.07	0.27	5139.	1219.
C1086	15.50	19.00	3.20	0.37	0.05	0.10	5158.	1230.
C1087	6.60	11.30	-1.00	1.37	0.14	0.29	5137.	1225.
C1098	10.90	14.30	-1.00	1.05	0.06	0.12	5181.	1211.
C1126	0.80	7.00	6.20	0.50	0.00	0.03	5158.	1198.
C1188	0.00	4.50	5.60	1.77	0.08	0.26	5158.	1216.
C1205	18.90	21.20	-1.00	2.30	0.06	0.11	5181.	1191.
C1207	22.00	22.00	0.00	-1.00	-1.00	-1.00	5184.	1199.
C1367	2.40	7.80	4.90	0.29	0.00	0.13	5118.	1215.
C1407	0.70	7.30	6.20	0.25	0.02	0.10	5157.	1194.
C1412 D	4.70	9.50	7.80	0.69	0.02	0.14	5139.	1198.
C1414	6.90	16.80	6.90	0.09	0.00	0.03	5139.	1189.
C1416	0.00	5.00	-1.00	0.54	0.03	0.13	5165.	1196.
C1418	0.00	4.30	-1.00	0.17	0.01	0.16	5095.	1196.
C1422 D	0.00	3.40	5.90	0.16	0.01	0.16	5095.	1199.
C1442	3.10	10.30	7.00	0.28	0.02	0.19	5119.	1199.
C1444	2.30	10.60	7.50	0.06	0.02	0.10	5119.	1194.

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071

95 073

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1 11 1 11 5275. 1005. 10. 10.

68 2000

0.00 1.56 68. 40. 1.31

0.03 0.27 40. 0. 1.00

0.15 0.76 35. 0. 1.00

0.00 1.20 45. 0. 1.00

67 HALL'S A WEST LENS (860414.1136)

ODHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
19Q	-1.00	-1.00	6.60	0.60	0.02	0.26	-1.00	5222.	1096.
19QA	-1.00	-1.00	6.80	0.97	0.02	0.19	-1.00	5240.	1095.
19QB	-1.00	-1.00	3.00	0.95	0.03	1.57	-1.00	5258.	1096.
19R	-1.00	-1.00	9.00	-1.00	-1.00	-1.00	-1.00	5275.	1096.
21Q	-1.00	-1.00	7.50	0.60	0.00	0.04	-1.00	5218.	1078.
22O	-1.00	-1.00	2.80	1.20	0.04	0.27	-1.00	5182.	1051.
22P	-1.00	-1.00	2.50	0.77	-1.00	0.20	-1.00	5200.	1051.
22Q	-1.00	-1.00	3.30	1.25	-1.00	0.16	-1.00	5222.	1051.
22QA	-1.00	-1.00	2.50	1.17	-1.00	0.15	-1.00	5236.	1051.
23NO	-1.00	-1.00	2.40	0.28	-1.00	0.67	-1.00	5171.	1022.
23O	-1.00	-1.00	2.30	0.94	-1.00	0.18	-1.00	5180.	1022.
24O	-1.00	-1.00	4.00	0.39	-1.00	0.18	-1.00	5175.	1011.
C 254	376.00	376.00	0.00	-1.00	-1.00	-1.00	-1.00	5242.	991.
C 845	583.84	587.22	2.40	0.13	0.01	0.03		5175.	1017.
C 881	531.00	531.00	0.00	-1.00	-1.00	-1.00		5250.	1070.
C1206	116.08	124.36	7.70	0.80	0.02	2.02	14.20	5221.	1101.
C1267	146.23	151.50	4.30	1.34	0.03	0.09	2.80	5215.	1063.
C1274	114.90	118.18	3.00	1.01	0.04	0.94	37.50	5195.	1105.
C1294	83.00	83.00	0.00	-1.00	-1.00	-1.00	-1.00	5151.	1109.
C1299	110.00	110.00	0.00	-1.00	-1.00	-1.00		5282.	1104.
C1305	99.79	102.57	2.80	0.48	0.02	0.72	0.00	5272.	1118.
C1306	130.00	130.00	0.00	-1.00	-1.00	-1.00	-1.00	5270.	1052.
C1312	145.00	145.00	0.00	-1.00	-1.00	-1.00	-1.00	5265.	1017.
C1331	125.00	125.00	0.00	-1.00	-1.00	-1.00	-1.00	5268.	1066.
C1343	171.20	174.00	2.50	1.05	0.03	0.41	31.10	5196.	1017.
C1348	162.80	164.35	1.50	0.91	0.03	0.16	0.00	5213.	1030.
C1355	150.80	155.00	3.10	0.92	0.03	0.52	0.00	5184.	1053.
C1357	126.00	126.00	0.00	-1.00	-1.00	-1.00	-1.00	5158.	1015.
C1459	41.00	41.00	0.00	-1.00	-1.00	-1.00	-1.00	5157.	1062.
C1467	31.00	31.00	0.00	-1.00	-1.00	-1.00	-1.00	5157.	1077.
C1471	51.00	51.00	0.00	-1.00	-1.00	-1.00	-1.00	5157.	1088.
C1480	32.00	32.00	0.00	-1.00	-1.00	-1.00	-1.00	5272.	1088.
C1500	0.00	13.30	10.40	0.36	0.01	0.10	28.90	5223.	1091.
C1520	165.00	165.00	0.00	-1.00	-1.00	-1.00	-1.00	5285.	980.
C1525	190.00	190.00	0.00	-1.00	-1.00	-1.00	-1.00	5276.	945.
C1530	32.00	32.00	0.00	-1.00	-1.00	-1.00	-1.00	5153.	1073.
C1533	29.70	36.70	6.20	0.73	0.02	0.15	15.70	5241.	1068.
C1534	27.60	31.10	3.40	0.79	0.02	0.12	24.30	5236.	1053.
C1535	53.00	53.00	0.00	-1.00	-1.00	-1.00	-1.00	5265.	1041.
C1537	31.00	31.00	0.00	-1.00	-1.00	-1.00		5243.	1034.
C1538	57.00	57.00	0.00	-1.00	-1.00	-1.00	-1.00	5264.	1068.
C1542	60.00	60.00	0.00	-1.00	-1.00	-1.00	-1.00	5262.	1031.
C1543	35.00	35.00	0.00	-1.00	-1.00	-1.00	-1.00	5241.	1039.
C1546	51.00	51.00	0.00	-1.00	-1.00	-1.00	-1.00	5282.	1058.
C1550	50.00	50.00	0.00	-1.00	-1.00	-1.00	-1.00	5277.	1035.
C1558	20.00	20.00	0.00	-1.00	-1.00	-1.00	-1.00	5304.	1039.
C1559	44.60	47.70	3.00	0.88	0.00	0.25	0.00	5203.	1043.
C1563	41.90	46.60	4.60	1.56	0.00	0.17	-1.00	5203.	1056.
C1565	43.00	49.00	5.40	1.71	0.00	0.24	8.90	5201.	1072.
C1568	51.70	55.60	3.90	2.87	0.00	0.12	4.90	5225.	1063.

C1572	54.00	56.60	2.50	0.94	0.00	0.15	23.10	5223.	1042.
C1574	53.00	53.00	0.00	-1.00	-1.00	-1.00	-1.00	5278.	1018.
C1576	63.40	64.50	1.00	1.59	0.00	0.20	0.00	5225.	1027.
C1583	67.00	67.00	0.00	-1.00	-1.00	-1.00	-1.00	5198.	978.
C1585	56.00	56.00	0.00	-1.00	-1.00	-1.00	-1.00	5239.	998.
C1639	53.00	53.00	0.00	-1.00	-1.00	-1.00		5265.	993.
C1699	2.00	2.00	0.00	-1.00	-1.00	-1.00	-1.00	5284.	1120.
C1720	7.20	12.30	5.00	0.60	0.00	0.96		5265.	1119.
C1722	8.70	12.80	3.90	0.72	0.00	0.85		5267.	1116.
C1726	8.00	8.00	0.00	-1.00	-1.00	-1.00		5276.	1118.
C1904	4.10	4.80	0.60	0.60	0.00	0.58		5268.	1096.
C1909	1.30	3.30	2.00	0.42	0.00	0.17		5267.	1101.
C1913	4.60	5.70	1.00	0.31	0.01	0.52		5268.	1095.
C1935 D	0.00	3.80	12.40	0.73	0.01	0.17		5250.	1096.
C2009	2.90	11.70	8.10	0.77	0.00	0.05		5211.	1076.
C2011	42.70	47.10	4.10	0.78	0.09	0.13		5246.	1067.
C2012	26.50	32.70	5.90	0.88	0.00	0.12		5189.	1072.

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1 13 1 14 5305. 975. 10. 10.

60 2000

0.00 1.06 40. 0. 1.00

0.13 0.26 25. 0. 1.00

0.19 0.75 35. 0. 1.00

0.17 2.24 25. 0. 1.00

85 HALL'S A EAST LENS (860414.1136)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
19O	-1.00	-1.00	6.00	0.35	0.01	0.46	-1.00	5179.	1096.
19P	-1.00	-1.00	13.00	-1.00	-1.00	-1.00	-1.00	5200.	1096.
19Q	-1.00	-1.00	3.50	0.76	0.02	0.36	-1.00	5221.	1096.
19QA	-1.00	-1.00	-1.00	1.19	-1.00	0.19		5244.	1096.
19R	-1.00	-1.00	0.50	-1.00	-1.00	-1.00	-1.00	5277.	1099.
20O	-1.00	-1.00	6.20	0.79	-1.00	0.07	-1.00	5176.	1087.
20P	-1.00	-1.00	7.20	0.98	-1.00	0.10	-1.00	5200.	1086.
21Q	-1.00	-1.00	5.80	0.71	0.00	0.07	-1.00	5219.	1076.
22ND	-1.00	-1.00	2.80	0.25	-1.00	0.19	-1.00	5176.	1027.
22O	-1.00	-1.00	8.20	0.49	0.03	0.10	-1.00	5177.	1051.
22R	-1.00	-1.00	2.20	0.79	-1.00	0.24	-1.00	5281.	1052.
23O	-1.00	-1.00	3.00	0.94	-1.00	0.19	-1.00	5185.	1026.
23P	-1.00	-1.00	2.10	0.91	0.00	0.17	-1.00	5196.	1026.
24O	-1.00	-1.00	1.40	0.94	-1.00	0.45	-1.00	5175.	1011.
24OBR	-1.00	-1.00	2.40	1.14	-1.00	0.21	-1.00	5276.	1013.
24S	-1.00	-1.00	2.50	0.47	-1.00	0.19	-1.00	5288.	1013.
C 254	389.00	389.00	0.00	-1.00	-1.00	-1.00		5242.	980.
C 659	511.00	511.00	0.00	-1.00	-1.00	-1.00		5309.	1036.
C 845	579.20	580.15	0.70	1.33	0.02	0.16		5176.	1021.
C 881	519.20	523.80	3.20	0.28	0.02	0.55		5250.	1077.
C1204	132.38	140.06	6.70	0.53	0.01	0.04	37.50	5173.	1086.
C1206	128.40	132.33	3.50	0.99	0.03	0.38	27.70	5222.	1097.
C1267	156.50	160.92	3.60	0.29	0.03	0.05	46.80	5215.	1057.
C1274	114.90	124.18	8.50	0.60	0.03	0.50	49.70	5195.	1103.
C1286	130.94	133.06	2.00	0.52	0.02	0.20	-1.00	5292.	1070.
C1292	144.73	150.70	5.00	2.00	0.03	0.05	6.20	5292.	1018.
C1294	91.00	91.00	0.00	-1.00	-1.00	-1.00		5153.	1105.
C1299	117.00	117.00	0.00	-1.00	-1.00	-1.00		5282.	1104.
C1312	148.72	152.20	3.00	0.25	0.02	0.03	42.70	5264.	1015.
C1331	128.30	129.10	0.80	1.22	0.02	0.09	0.00	5268.	1065.
C1343	178.45	181.30	2.50	0.57	0.02	0.15	79.00	5195.	1014.
C1348	168.05	172.55	4.10	0.43	0.01	0.10	45.60	5212.	1028.
C1355	156.40	169.80	10.00	1.31	0.03	0.14	25.40	5182.	1047.
C1357	134.00	134.00	0.00	-1.00	-1.00	-1.00		5161.	1011.
C1398	7.35	9.32	2.00	0.36	0.03	2.13	0.00	5242.	1096.
C1404	8.30	11.71	3.30	2.44	0.03	0.22	36.40	5259.	1103.
C1452 D	0.00	0.96	4.70	0.38	0.02	0.62		5181.	1097.
C1459	49.00	49.00	0.00	-1.00	-1.00	-1.00		5157.	1057.
C1464 D	0.00	21.10	19.90	0.47	0.00	0.15		5201.	1086.
C1467	39.00	39.00	0.00	-1.00	-1.00	-1.00		5156.	1075.
C1471	34.00	34.00	0.00	-1.00	-1.00	-1.00		5158.	1088.
C1476 D	0.00	8.50	13.30	0.42	0.00	0.59		5201.	1096.
C1477	10.00	13.90	3.80	0.51	0.01	0.27	18.00	5258.	1094.
C1480	37.20	39.20	1.90	0.79	0.01	2.26	0.00	5271.	1087.
C1500	16.20	26.20	7.80	0.49	0.01	0.05	42.00	5222.	1082.
C1520	178.00	178.00	0.00	-1.00	-1.00	-1.00		5285.	971.
C1530	41.00	41.00	0.00	-1.00	-1.00	-1.00		5152.	1070.
C1533	38.40	42.80	3.90	0.63	0.02	0.05	31.80	5242.	1072.
C1534	35.70	36.20	0.50	2.38	0.03	0.19	0.00	5235.	1053.
C1535	63.00	65.70	2.60	0.79	-1.00	0.04	33.30	5266.	1040.

C1537	41.10	44.90	3.30	0.98	0.00	0.11	90.00	5244.	1026.
C1538	60.00	60.90	0.80	0.55	0.00	0.13	0.00	5264.	1069.
C1542	64.30	65.60	1.20	0.81	0.03	0.04	0.00	5262.	1029.
C1543	37.00	39.60	2.50	0.32	-1.00	0.11	-1.00	5241.	1038.
C1546	56.80	57.90	1.10	0.85	0.04	0.13	0.00	5282.	1058.
C1550	57.50	61.90	4.20	0.81	0.02	0.08	19.30	5276.	1032.
C1553	48.90	53.50	4.60	0.75	0.02	0.44	15.20	5290.	1046.
C1556	52.20	55.70	3.20	0.77	0.03	0.13	0.00	5290.	1031.
C1558	45.90	46.10	0.20	0.07	0.00	0.01		5303.	1026.
C1559	50.60	61.50	10.80	0.72	0.00	0.07	43.10	5204.	1041.
C1563	51.80	60.00	8.10	0.44	0.00	0.07	8.50	5204.	1057.
C1564	38.00	38.00	0.00	-1.00	-1.00	-1.00		5303.	1057.
C1565	53.25	64.30	10.00	0.96	0.00	0.06	21.50	5201.	1078.
C1566	46.00	46.00	0.00	-1.00	-1.00	-1.00		5305.	1039.
C1568	60.40	65.00	4.50	1.03	0.00	0.11	21.70	5225.	1065.
C1572	60.00	64.30	4.30	0.36	0.00	0.08	60.50	5223.	1041.
C1574	60.80	65.65	3.90	0.88	0.03	0.08	13.70	5278.	1012.
C1576	67.60	71.50	3.80	0.28	0.00	0.04	64.10	5225.	1025.
C1582	46.00	46.00	0.00	-1.00	-1.00	-1.00		5304.	1079.
C1583	74.00	74.00	0.00	-1.00	-1.00	-1.00		5197.	974.
C1585	61.90	63.65	1.60	0.12	0.01	0.04	44.40	5238.	995.
C1624	1.30	7.30	5.40	0.28	0.00	0.70		5225.	1099.
C1639	64.50	66.30	1.50	0.74	0.01	0.12		5265.	986.
C1904	10.40	12.60	2.10	1.28	0.03	0.68		5267.	1095.
C1909	8.60	9.30	0.60	1.69	0.00	0.46		5266.	1105.
C1913	12.20	16.50	3.70	0.80	0.02	1.09		5269.	1091.
C1935	11.60	18.10	5.70	0.54	0.00	0.10		5252.	1089.
C1971	1.80	13.80	9.90	1.28	0.00	0.17		5190.	1045.
C1979	91.90	93.80	1.50	0.27	0.00	0.10		5263.	969.
C2002	21.70	23.90	1.70	1.55	0.00	0.16		5261.	1008.
C2008	45.50	45.50	0.00	-1.00	-1.00	-1.00		5285.	1088.
C2009	13.00	25.60	11.70	1.33	0.00	0.08		5212.	1071.
C2011	38.20	39.10	0.80	1.87	0.00	0.07		5247.	1065.
C2012	34.30	38.60	4.10	0.40	0.00	0.03		5190.	1070.
C2013	41.30	51.00	9.20	1.09	0.00	0.12		5181.	1069.

Flist - End of file

075

95 077

Flist... File (DHBRN) Date 3:50 PM MON., 7 JULY, 1986 Page001

```
    1    9    1   11     5175.      1145.       10.       10.
   40   2000
      0.00       0.20       30.         0.       1.00
      0.05       0.17       20.         0.       1.00
      0.06       0.15       40.         0.       1.00
      0.00       0.12       35.         0.       1.00
   99   HALL'S B LENS RATCHET-NADIR SOUTH OF CULSHAW  (860414.1137)
```

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
14-5112	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5112.	1218.
14-5117	-1.00	-1.00	3.40	-1.00	-1.00	-1.00		5117.	1218.
14-5122	-1.00	-1.00	6.10	-1.00	-1.00	-1.00		5122.	1218.
14-5127	-1.00	-1.00	7.00	-1.00	-1.00	-1.00		5127.	1218.
14-5132	-1.00	-1.00	6.90	-1.00	-1.00	-1.00		5132.	1218.
14-5137	-1.00	-1.00	6.90	-1.00	-1.00	-1.00		5137.	1218.
14-5142	-1.00	-1.00	7.40	-1.00	-1.00	-1.00		5142.	1218.
14-5147	-1.00	-1.00	7.70	-1.00	-1.00	-1.00		5147.	1218.
14-5152	-1.00	-1.00	8.30	-1.00	-1.00	-1.00		5152.	1218.
14-5157	-1.00	-1.00	9.30	-1.00	-1.00	-1.00		5157.	1218.
14-5162	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5162.	1218.
14-5167	-1.00	-1.00	8.40	-1.00	-1.00	-1.00		5167.	1218.
14-5172	-1.00	-1.00	2.50	-1.00	-1.00	-1.00		5172.	1218.
14-5177	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5177.	1218.
15-5072	-1.00	-1.00	9.00	-1.00	-1.00	-1.00		5072.	1197.
15-5077	-1.00	-1.00	11.00	-1.00	-1.00	-1.00		5077.	1197.
15-5082	-1.00	-1.00	11.20	-1.00	-1.00	-1.00		5082.	1197.
15-5087	-1.00	-1.00	10.40	-1.00	-1.00	-1.00		5087.	1197.
15-5092	-1.00	-1.00	9.60	-1.00	-1.00	-1.00		5092.	1197.
15-5097	-1.00	-1.00	9.70	-1.00	-1.00	-1.00		5097.	1197.
15-5102	-1.00	-1.00	10.00	-1.00	-1.00	-1.00		5102.	1197.
15-5107	-1.00	-1.00	10.40	-1.00	-1.00	-1.00		5107.	1197.
15-5112	-1.00	-1.00	11.00	-1.00	-1.00	-1.00		5112.	1197.
15-5117	-1.00	-1.00	11.70	-1.00	-1.00	-1.00		5117.	1197.
15-5122	-1.00	-1.00	12.40	-1.00	-1.00	-1.00		5122.	1197.
15-5127	-1.00	-1.00	12.60	-1.00	-1.00	-1.00		5127.	1197.
15-5132	-1.00	-1.00	12.90	-1.00	-1.00	-1.00		5132.	1197.
15-5137	-1.00	-1.00	14.20	-1.00	-1.00	-1.00		5137.	1197.
15-5142	-1.00	-1.00	15.90	-1.00	-1.00	-1.00		5142.	1197.
15-5147	-1.00	-1.00	17.10	-1.00	-1.00	-1.00		5147.	1197.
15-5152	-1.00	-1.00	17.40	-1.00	-1.00	-1.00		5152.	1197.
15-5157	-1.00	-1.00	16.70	-1.00	-1.00	-1.00		5157.	1197.
15-5162	-1.00	-1.00	14.90	-1.00	-1.00	-1.00		5162.	1197.
15-5167	-1.00	-1.00	13.00	-1.00	-1.00	-1.00		5167.	1197.
15-5172	-1.00	-1.00	9.50	-1.00	-1.00	-1.00		5172.	1197.
15-5177	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5177.	1197.
16-5072	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5072.	1180.
16-5077	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5077.	1180.
16-5082	-1.00	-1.00	10.90	-1.00	-1.00	-1.00		5082.	1179.
16-5087	-1.00	-1.00	10.40	-1.00	-1.00	-1.00		5087.	1178.
16-5092	-1.00	-1.00	10.20	-1.00	-1.00	-1.00		5092.	1177.
16-5097	-1.00	-1.00	11.90	-1.00	-1.00	-1.00		5097.	1176.
16-5102	-1.00	-1.00	12.50	-1.00	-1.00	-1.00		5102.	1176.
16-5107	-1.00	-1.00	12.40	-1.00	-1.00	-1.00		5107.	1175.
16-5112	-1.00	-1.00	13.10	-1.00	-1.00	-1.00		5112.	1175.
16-5117	-1.00	-1.00	12.80	-1.00	-1.00	-1.00		5117.	1175.
16-5122	-1.00	-1.00	11.70	-1.00	-1.00	-1.00		5122.	1175.
16-5127	-1.00	-1.00	12.40	-1.00	-1.00	-1.00		5127.	1175.
16-5132	-1.00	-1.00	12.90	-1.00	-1.00	-1.00		5132.	1175.
16-5137	-1.00	-1.00	18.90	-1.00	-1.00	-1.00		5137.	1175.

16-5142	-1.00	-1.00	16.60	-1.00	-1.00	-1.00	5142.	1175.
16-5147	-1.00	-1.00	14.60	-1.00	-1.00	-1.00	5147.	1175.
16-5152	-1.00	-1.00	11.70	-1.00	-1.00	-1.00	5152.	1175.
16-5157	-1.00	-1.00	11.00	-1.00	-1.00	-1.00	5157.	1175.
16-5162	-1.00	-1.00	11.20	-1.00	-1.00	-1.00	5162.	1175.
16-5167	-1.00	-1.00	7.50	-1.00	-1.00	-1.00	5167.	1175.
16-5172	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	5172.	1175.
16-5177	-1.00	-1.00	3.90	-1.00	-1.00	-1.00	5177.	1175.
16-5182	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	5182.	1175.
16-5187	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5187.	1175.
16KA	-1.00	-1.00	11.30	0.57	0.04	0.19	5095.	1177.
16L	-1.00	-1.00	12.20	0.44	0.02	0.16	5118.	1175.
16S-5072	-1.00	-1.00	8.80	-1.00	-1.00	-1.00	5072.	1160.
16S-5077	-1.00	-1.00	9.80	-1.00	-1.00	-1.00	5077.	1160.
16S-5082	-1.00	-1.00	10.90	-1.00	-1.00	-1.00	5082.	1160.
16S-5087	-1.00	-1.00	11.20	-1.00	-1.00	-1.00	5087.	1160.
16S-5092	-1.00	-1.00	10.50	-1.00	-1.00	-1.00	5092.	1160.
16S-5097	-1.00	-1.00	8.60	-1.00	-1.00	-1.00	5097.	1160.
16S-5102	-1.00	-1.00	7.30	-1.00	-1.00	-1.00	5102.	1160.
16S-5107	-1.00	-1.00	5.20	-1.00	-1.00	-1.00	5107.	1161.
16S-5112	-1.00	-1.00	4.90	-1.00	-1.00	-1.00	5112.	1161.
16S-5117	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	5117.	1162.
16S-5122	-1.00	-1.00	3.80	-1.00	-1.00	-1.00	5122.	1162.
16S-5127	-1.00	-1.00	6.40	-1.00	-1.00	-1.00	5127.	1163.
16S-5132	-1.00	-1.00	9.30	-1.00	-1.00	-1.00	5132.	1164.
16S-5137	-1.00	-1.00	9.20	-1.00	-1.00	-1.00	5137.	1164.
16S-5142	-1.00	-1.00	9.00	-1.00	-1.00	-1.00	5142.	1164.
16S-5147	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	5147.	1165.
16S-5152	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	5152.	1165.
16S-5157	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	5157.	1165.
16SUBKA	-1.00	-1.00	9.60	0.14	-1.00	0.12	5095.	1160.
C 169	166.10	193.30	18.80	0.96	0.06	0.16	5158.	1203.
C 566	113.90	129.60	9.00	0.63	-1.00	0.13	5142.	1180.
C 822	83.50	89.50	5.30	0.93	0.07	0.30	5155.	1224.
C 931	66.30	87.70	11.70	0.53	0.05	0.09	5141.	1190.
C1031	3.90	10.60	6.70	1.26	0.02	0.21	5139.	1218.
C1086	20.60	24.70	3.80	0.70	0.06	0.36	5159.	1228.
C1154 D	0.00	4.00	17.50	0.56	0.04	0.15	5158.	1198.
C1182 D	0.00	3.70	12.10	0.53	0.03	0.13	5158.	1175.
C1184 D	0.00	5.50	17.50	0.42	0.03	0.24	5139.	1175.
C1188	8.50	23.50	14.00	0.57	0.03	0.20	5159.	1211.
C1366	2.70	22.90	17.60	0.71	0.05	0.22	5141.	1211.
C1367	8.90	18.70	8.90	0.58	0.01	0.13	5118.	1211.
C1409 D	0.00	4.40	15.60	1.09	0.04	0.18	5139.	1198.
C1416	7.30	25.80	16.60	0.57	0.04	0.13	5161.	1192.
C1423 D	0.00	6.60	8.00	0.26	0.02	0.17	5095.	1199.
C1424	0.00	13.80	12.20	0.35	0.02	0.21	5095.	1193.
C1436 D	0.00	4.40	11.60	0.51	0.02	0.26	5118.	1198.
C1439 D	0.00	11.10	14.00	0.51	0.03	0.24	5118.	1192.

Flist - End of file

Flist... File (DHBW) Date 3:59 PM MON., 7 JULY, 1986 Page001

1 4 1 18 5255. 1125. 10. 10.
35 2000
0.24 0.75 30. 0. 1.00
0.23 0.67 52. 0. 1.00
0.00 0.62 37. 0. 1.00
0.00 0.28 43. 0. 1.00
29 HALL'S B WEST LENS EN-TULIP (860414.1138)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
C1262	93.00	93.40	-1.00	1.47	-1.00	0.81		5223.	1131.
C1271	91.40	101.60	9.80	0.64	-1.00	0.14		5181.	1133.
C1391	19.00	24.20	4.70	0.61	0.04	0.19		5201.	1127.
C1413	18.00	24.00	3.50	0.62	0.06	0.20		5201.	1138.
C1417	20.30	23.10	1.70	2.64	0.19	0.59		5218.	1139.
C1455	59.00	59.00	0.00	-1.00	-1.00	-1.00		5161.	1140.
C1540 D	0.00	13.20	17.10	0.58	0.03	0.15		5182.	1144.
C1541	4.20	4.90	0.70	1.19	0.03	0.18		5158.	1144.
C1549	0.00	5.30	5.30	1.01	0.02	0.34		5140.	1144.
C1552	0.00	4.20	-1.00	0.37	0.04	0.30		5118.	1143.
C1613	17.50	27.40	8.50	0.31	0.01	0.06		5094.	1144.
C1815	0.50	1.50	1.00	0.25	0.02	0.57		5149.	1144.
C1817	0.00	13.70	-1.00	0.40	0.03	0.11		5182.	1139.
C1819 D	0.00	12.40	17.80	0.46	0.06	0.20		5190.	1145.
C1821	0.00	16.00	-1.00	0.53	0.05	0.17		5190.	1139.
C1825	0.00	1.60	1.60	0.22	0.02	0.43		5129.	1143.
C1829	3.40	10.30	6.90	0.75	0.01	0.13		5169.	1144.
C1831	4.40	12.60	7.00	0.77	0.03	0.24		5169.	1138.
C1834 D	0.00	13.20	19.50	0.80	0.10	0.25		5198.	1145.
C1920 D	0.00	1.00	7.10	0.80	0.10	0.27		5222.	1145.
C1924 D	0.00	3.10	7.90	0.65	0.04	0.23		5210.	1144.
C1938	0.00	14.40	-1.00	0.90	0.09	0.39		5197.	1140.
C1940 D	0.00	9.50	9.70	0.67	0.08	0.27		5197.	1149.
C1944	0.00	22.40	-1.00	1.15	0.10	0.39		5192.	1130.
C1947	3.20	9.00	-1.00	0.17	0.00	0.12		5169.	1150.
C1948	7.10	10.20	1.80	2.79	0.06	0.30		5168.	1136.
C1958	13.90	14.80	0.70	3.84	0.06	0.48		5232.	1131.
C1969	5.00	5.00	0.00	-1.00	-1.00	-1.00		5243.	1146.
C1970	6.50	6.50	0.00	-1.00	-1.00	-1.00		5244.	1151.

Flist - End of file

Flist... File (20HBE) Date 4:00 PM MON., 7 JULY, 1986 Page001

1 6 1 11 5305. 1115. 10. 10.

50 2000

0.00 0.95 30. 0. 1.00

0.05 0.19 20. 0. 1.00

0.00 1.21 30. 0. 1.00

0.06 0.27 35. 0. 1.00

50 HALL'S B EAST LENS EN-TULIP (860414.1138)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.4%	NORTH	RL
17R	-1.00	-1.00	-1.00	0.33	-1.00	0.29		5273.	1144.
18P	-1.00	-1.00	6.50	1.33	0.02	0.69		5200.	1119.
18QA	-1.00	-1.00	3.00	0.90	0.02	0.67		5236.	1120.
C1262	96.80	104.20	6.80	1.00	-1.00	0.38		5225.	1130.
C1346	25.80	27.00	1.20	0.54	0.03	1.75		5201.	1117.
C1350	18.20	26.10	7.80	1.55	-1.00	0.36		5218.	1120.
C1351	30.90	33.00	2.10	1.29	0.03	0.72		5242.	1121.
C1354	28.60	29.00	0.40	0.64	0.01	0.66		5258.	1121.
C1391	27.30	28.00	0.60	2.16	0.04	0.37		5201.	1130.
C1392	26.70	29.60	2.90	0.20	0.01	0.28		5241.	1113.
C1394	20.80	25.60	4.40	0.82	0.01	0.89		5241.	1128.
C1399	17.20	37.70	17.10	0.99	0.11	0.78		5280.	1165.
C1403	21.40	23.70	-1.00	0.72	0.01	0.26		5293.	1173.
C1413	33.50	37.10	2.10	0.38	0.08	0.31		5202.	1150.
C1417	31.60	38.90	4.50	0.28	0.02	0.22		5216.	1149.
C1438	22.20	39.40	15.10	0.84	0.01	0.38		5257.	1143.
C1491	7.00	7.00	0.00	-1.00	-1.00	-1.00		5277.	1126.
C1720	7.00	7.00	0.00	-1.00	-1.00	-1.00		5265.	1119.
C1789	4.60	7.20	-1.00	1.12	0.01	0.47		5248.	1117.
C1848 D	0.00	3.70	10.40	0.72	0.03	0.65		5210.	1119.
C1850	4.40	4.40	0.00	-1.00	-1.00	-1.00		5200.	1116.
C1868	0.00	5.80	-1.00	0.13	0.01	0.25		5258.	1118.
C1871	0.00	5.40	-1.00	1.11	0.01	0.69		5258.	1125.
C1908	0.00	9.60	-1.00	1.09	0.01	0.60		5248.	1145.
C1911 D	0.00	10.50	18.30	0.98	0.01	0.42		5248.	1141.
C1912	1.20	7.90	6.70	0.91	0.01	0.83		5241.	1145.
C1915	1.90	6.40	4.50	0.79	0.03	0.38		5231.	1145.
C1917	5.10	13.50	7.30	1.16	0.10	0.65		5231.	1139.
C1918	0.80	10.80	7.40	0.67	0.05	0.47		5231.	1150.
C1920	8.60	16.10	7.50	0.56	0.04	0.38		5221.	1145.
C1921	7.30	17.20	8.90	0.95	0.12	0.52		5222.	1380.
C1922	7.70	11.20	-1.00	0.60	0.08	0.51		5211.	1153.
C1924	8.70	14.80	6.10	0.59	0.06	0.28		5210.	1145.
C1925	10.00	18.20	7.40	0.66	0.05	0.42		5211.	1138.
C1928	9.10	19.30	7.50	0.82	0.08	0.46		5212.	1134.
C1932	0.00	9.90	-1.00	0.94	0.01	0.71		5249.	1147.
C1934	1.40	9.90	5.20	0.35	0.01	0.57		5240.	1151.
C1936	6.40	12.80	4.30	0.98	0.00	1.12		5242.	1136.
C1954	10.90	11.30	0.30	0.59	0.01	0.48		5268.	1129.
C1956	8.80	9.30	0.40	0.47	0.00	1.56		5267.	1124.
C1957	2.90	36.00	27.20	0.84	0.00	0.71		5263.	1157.
C1958	6.50	12.40	4.50	1.40	0.00	1.28		5232.	1128.
C1959	2.80	15.40	9.40	0.59	0.03	0.65		5265.	1151.
C1960	3.10	4.90	1.60	1.04	0.01	1.20		5200.	1122.
C1962	3.40	9.30	3.70	0.61	0.02	0.71		5266.	1149.
C1963	5.20	10.20	4.90	0.96	0.00	0.46		5278.	1143.
C1965	8.80	14.00	4.20	0.72	0.00	1.00		5277.	1137.
C1966	112.30	114.70	2.00	0.43	0.08	0.32		5289.	1164.
C1967	9.00	9.00	0.00	-1.00	-1.00	-1.00		5269.	1139.
C1976	5.50	11.80	4.30	1.06	0.00	0.49		5248.	1128.

Flist... File (2DHBBT) Date 4:01 PM MON., 7 JULY, 1986 Page001

1	14	1	40	5395.		965.	10.	10.	
210	2000								
	0.06		0.22	165.		40.	1.27		
	0.24		0.13	170.		40.	1.32		
	0.37		0.42	105.		0.	1.00		
	0.37		0.65	60.		0.	1.00		

162 HALL'S B LENS BELOW TULIP FAULT (86/04/14.1139)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
20HI	-1.00	-1.00	1.70	0.51	-1.00	0.36	-1.00	5029.	1088.
20IJ	-1.00	-1.00	2.80	1.15	-1.00	0.55	-1.00	5037.	1088.
20J	-1.00	-1.00	5.30	1.37	-1.00	0.59	-1.00	5049.	1088.
20K	-1.00	-1.00	6.99	1.02	-1.00	0.39	-1.00	5072.	1088.
20KA	-1.00	-1.00	-1.00	1.14	-1.00	0.39	-1.00	5089.	1087.
20MN	-1.00	-1.00	1.20	0.43	-1.00	0.30	-1.00	5147.	1088.
20N	-1.00	-1.00	4.10	0.65	-1.00	1.15	-1.00	5160.	1088.
20NO	-1.00	-1.00	4.40	1.26	-1.00	1.88	-1.00	5174.	1088.
20O	-1.00	-1.00	10.40	0.67	-1.00	0.94	-1.00	5176.	1087.
21O	-1.00	-1.00	17.10	0.45	0.00	0.94	46.00	5222.	1075.
21R	-1.00	-1.00	6.40	0.63	0.01	0.65		5277.	1076.
21-5286	-1.00	-1.00	3.30	0.84	0.00	1.50		5286.	1077.
22J	-1.00	-1.00	6.30	0.33	-1.00	0.33	-1.00	5049.	1052.
22K	-1.00	-1.00	8.50	0.46	-1.00	0.61	-1.00	5072.	1051.
22KA	-1.00	-1.00	8.80	0.98	-1.00	0.74	-1.00	5095.	1051.
22L	-1.00	-1.00	7.50	0.89	-1.00	0.74	-1.00	5118.	1051.
22M	-1.00	-1.00	7.60	0.87	-1.00	0.27	-1.00	5139.	1051.
22N	-1.00	-1.00	17.30	0.57	-1.00	0.39	-1.00	5158.	1051.
22O	-1.00	-1.00	17.10	0.49	-1.00	0.14	-1.00	5180.	1051.
22P	-1.00	-1.00	-1.00	0.29	-1.00	0.20	-1.00	5203.	1051.
22Q	-1.00	-1.00	-1.00	0.38	-1.00	0.15	-1.00	5222.	1051.
22QA	-1.00	-1.00	-1.00	0.74	-1.00	0.15	-1.00	5240.	1051.
22QB	-1.00	-1.00	-1.00	0.61	-1.00	0.12	-1.00	5258.	1051.
22R	-1.00	-1.00	6.70	0.90	-1.00	0.10	-1.00	5277.	1052.
22S	-1.00	-1.00	4.30	0.86	-1.00	0.15	-1.00	5292.	1051.
22ST	-1.00	-1.00	-1.00	0.52	-1.00	0.91	-1.00	5306.	1052.
22TA	-1.00	-1.00	15.90	0.55	-1.00	0.54	-1.00	5321.	1052.
22U	-1.00	-1.00	15.70	0.93	-1.00	0.31	-1.00	5335.	1052.
22VU	-1.00	-1.00	5.10	0.70	-1.00	0.31	-1.00	5355.	1052.
23O	-1.00	-1.00	16.90	0.24	-1.00	0.12	-1.00	5178.	1023.
24O	-1.00	-1.00	17.30	0.24	-1.00	0.96	-1.00	5180.	1011.
24P	-1.00	-1.00	-1.00	0.12	-1.00	0.06	-1.00	5194.	1011.
24R	-1.00	-1.00	20.90	0.47	-1.00	0.07	-1.00	5277.	1013.
C 254	402.20	441.70	24.59	0.27	0.03	0.07	14.10	5242.	955.
C 580	439.20	444.40	-1.00	0.43	-1.00	0.85		5142.	1072.
C 587	393.60	408.40	3.10	0.83	-1.00	0.55	15.60	5053.	1072.
C 659	479.10	495.80	14.00	0.67	0.06	0.57	30.20	5311.	1056.
C 800	646.80	680.00	21.60	0.29	0.03	0.02	16.20	5227.	902.
C 845	554.60	580.20	18.00	0.43	0.01	0.09	25.60	5179.	1016.
C 856	541.70	546.10	4.10	0.39	0.04	0.22	33.40	5151.	1075.
C 881	502.90	511.70	-1.00	0.36	0.03	0.56	17.60	5248.	1091.
C 969	687.90	697.20	28.30	0.21	0.03	0.20	9.50	5116.	847.
C1008	570.30	599.50	19.90	0.07	0.02	0.09	37.70	5137.	953.
C1204	143.30	159.50	14.10	0.63	0.02	0.07	32.20	5174.	1079.
C1253	152.40	157.50	4.70	1.31	-1.00	0.43	23.50	5058.	1085.
C1259	188.10	198.10	9.00	0.85	-1.00	0.50	30.20	5087.	1043
C1267	169.10	187.30	15.30	0.53	0.03	0.07	40.00	5216.	1047.
C1280	196.60	213.10	14.50	0.41	0.03	0.16	19.20	5058.	1015.
C1286	138.30	145.10	6.70	2.53	0.03	0.14	20.00	5288.	1067.
C1292	159.60	172.90	11.10	0.76	0.04	0.05	15.00	5293.	1008.

C1303	124.80	151.80	19.10	0.68	0.02	0.07	45.30	5150.	1052.
C1306	145.50	158.00	11.70	0.57	0.04	0.10	20.00	5269.	1045.
C1307	84.80	95.10	7.30	2.04	0.06	0.57	15.80	5037.	1072.
C1312	156.10	184.00	24.00	0.53	0.04	0.08	27.40	5263.	1009.
C1313	98.00	111.10	10.00	0.31	0.02	0.15	6.10	5037.	1052.
C1319	141.50	183.60	20.70	0.11	0.02	0.19	17.90	5115.	978.
C1326	94.60	109.60	10.50	1.17	0.02	0.45	0.00	5116.	1047.
C1331	134.90	152.80	17.60	0.51	0.04	0.10	13.90	5267.	1062.
C1341	112.70	139.40	16.80	0.46	0.03	0.28	16.80	5099.	1016.
C1343	188.50	211.60	20.60	0.24	0.02	0.04	18.10	5192.	1005.
C1345	83.70	93.00	6.70	0.81	0.03	0.46	16.20	5100.	1067.
C1348	180.10	197.80	16.20	0.27	0.03	0.11	5.10	5209.	1019.
C1352	130.10	141.10	10.40	1.87	0.03	0.22	16.40	5134.	1024.
C1355	177.60	199.30	21.20	0.27	0.02	0.08	20.80	5180.	1034.
C1357	142.90	155.40	11.00	0.44	0.03	0.30	0.00	5167.	1004.
C1395	254.00	254.00	0.00	-1.00	-1.00	-1.00		5385.	973.
C1400	290.80	270.40	11.20	0.22	0.01	0.05	41.70	5315.	879.
C1405	206.20	226.70	14.70	0.15	0.03	0.07	28.30	5321.	945.
C1421	57.40	76.20	17.00	0.64	0.02	0.40	27.20	5098.	1019.
C1425	151.90	171.00	15.10	0.93	0.03	0.33	27.20	5341.	1051.
C1429	57.90	67.70	9.70	1.06	0.01	0.99	46.20	5095.	1040.
C1430	179.00	179.00	0.00	-1.00	-1.00	-1.00		5339.	998.
C1437	54.10	60.60	6.40	0.46	0.03	0.47	30.50	5098.	1065.
C1440	175.00	187.30	12.00	0.58	0.02	0.31	13.00	5356.	1059.
C1443	49.80	53.30	3.30	1.09	0.03	0.33	16.10	5116.	1068.
C1445	211.00	211.00	0.00	-1.00	-1.00	-1.00	-1.00	5353.	1002.
C1447	10.10	11.80	1.20	1.05	0.07	0.92	8.50	5117.	1077.
C1450	95.30	115.70	15.40	0.28	0.01	0.27	34.10	5127.	1009.
C1459	54.90	77.50	18.90	0.71	0.00	0.20	22.60	5156.	1047.
C1464	25.50	43.00	13.00	0.95	0.00	0.08	12.00	5202.	1071.
C1465	195.00	195.00	0.00	-1.00	-1.00	-1.00	-1.00	5391.	1056.
C1467	45.80	64.40	17.80	0.90	0.00	0.50	29.60	5156.	1070.
C1471	44.60	51.00	6.40	0.26	0.00	0.20	25.80	5163.	1088.
C1473	52.30	53.00	-1.00	1.20	0.00	0.57	-1.00	5138.	1080.
C1479	59.70	64.40	-1.00	0.69	0.00	0.58	-1.00	5139.	1065.
C1480	42.60	55.60	12.70	1.00	0.00	0.89	40.00	5269.	1085.
C1483	70.60	76.70	5.40	0.73	0.00	0.18	28.90	5140.	1047.
C1500	29.70	51.70	17.60	0.71	0.01	0.04	42.70	5221.	1069.
C1504	178.90	205.60	22.30	0.19	0.02	0.06	31.50	5165.	921.
C1518	200.40	227.80	22.50	0.13	0.01	0.08	11.30	5185.	895.
C1520	193.80	219.50	18.50	0.25	0.03	0.06	7.40	5284.	950.
C1525	217.50	262.70	28.90	0.25	0.03	0.10	25.70	5275.	907.
C1526	270.70	303.00	22.00	0.16	0.02	0.08	23.20	5177.	803.
C1530	50.00	68.50	15.70	0.65	0.00	0.23	44.10	5152.	1062.
C1533	45.20	62.60	15.50	0.76	0.02	0.38	37.40	5244.	1078.
C1534	44.60	61.20	16.40	0.38	0.03	0.09	40.40	5233.	1055.
C1535	70.50	89.60	18.80	0.38	0.00	0.09	16.20	5266.	1038.
C1537	50.70	76.00	22.70	0.36	0.02	0.11	14.20	5246.	1019.
C1538	66.50	78.30	11.20	0.45	0.00	0.12	16.10	5272.	1073.
C1542	73.60	95.00	20.30	0.35	0.02	0.10	29.40	5265.	1024.
C1543	48.00	65.10	14.60	0.23	-1.00	0.10	24.50	5243.	1033.
C1545	210.50	247.40	25.10	0.18	0.04	0.06	5.40	5219.	860.
C1546	63.40	71.80	8.30	0.56	0.03	0.13	25.00	5283.	1059.
C1550	68.00	82.10	13.60	0.64	0.02	0.11	20.60	5277.	1028.
C1553	59.60	67.40	7.90	0.43	0.01	0.07	51.30	5290.	1045.
C1556	59.90	74.90	14.90	0.58	0.03	0.11	18.70	5295.	1026.
C1558	54.20	65.50	9.70	0.87	0.02	0.16	13.30	5303.	1019.
C1559	64.00	81.50	17.40	0.51	0.00	0.14	20.60	5205.	1039.
C1563	63.10	78.30	15.20	0.53	0.00	0.14	13.20	5205.	1059.
C1564	46.60	54.80	5.10	0.58	-1.00	0.33	2.40	5302.	1059.

C1566	54.20	60.30	5.80	0.44	-1.00	0.44	21.30	5305.	1036.
C1568	68.90	82.50	13.10	0.50	0.00	0.06	31.60	5226.	1069.
C1569	4.80	11.50	6.80	1.02	0.03	0.30	30.90	5072.	1087.
C1571	9.30	22.00	6.80	0.57	0.02	0.58	24.40	5072.	1071.
C1572	70.10	85.70	15.60	0.58	0.01	0.11	29.50	5222.	1040.
C1573	39.00	49.70	3.80	0.12	0.02	0.25	21.50	5014.	1047.
C1574	75.00	89.60	11.90	0.71	0.03	0.07	17.10	5278.	1002.
C1575	358.10	377.50	9.20	0.32	0.01	0.05	10.10	5227.	702.
C1576	73.20	95.30	21.40	0.31	0.01	0.08	20.30	5224.	1022.
C1580	236.80	288.40	31.30	0.30	0.00	0.08	12.20	5251.	803.
C1583	79.30	105.60	21.20	0.47	0.00	0.09	40.90	5195.	963.
C1584	51.40	63.50	11.60	0.68	0.00	0.42	35.50	5335.	1069.
C1585	72.00	98.90	24.90	0.28	0.02	0.06	18.40	5238.	986.
C1586 D	0.00	2.80	8.90	0.26	-1.00	0.25	11.20	5041.	1013.
C1588 D	0.00	5.80	10.20	0.44	-1.00	0.24	5.40	5049.	1013.
C1590 D	0.00	7.80	12.20	0.25	-1.00	0.26	10.70	5061.	1013.
C1591 D	0.00	4.70	14.10	0.36	-1.00	0.27	49.70	5071.	1013.
C1592 D	0.00	12.00	18.00	0.56	-1.00	0.27	3.30	5083.	1013.
C1593 D	0.00	0.50	15.20	0.68	-1.00	0.22	20.40	5095.	1013.
C1596 D	0.00	4.70	14.90	0.48	-1.00	0.33	12.80	5106.	1013.
C1598 D	0.00	5.30	15.80	0.44	-1.00	0 28	21.50	5118.	1013.
C1599 D	0.00	11.60	16.30	0.28	-1.00	0.19	39.00	5129.	1013.
C1600 D	0.00	5.60	18.50	0.34	-1.00	0.18	34.60	5139.	1012.
C1601 D	0.00	4.70	10.60	0.53	-1.00	0.15	3.80	5158.	1012.
C1605 D	0.00	12.80	15.10	0.45	-1.00	0.22	27.80	5169.	1012.
C1607	51.70	64.00	12.20	0.72	0.01	0.41	21.00	5335.	1036.
C1609	54.70	68.30	12.10	0.55	0.02	0.59	6.60	5339.	1020.
C1614	80.00	80.00	0.00	-1.00	-1.00	-1.00	-1.00	5361.	1023.
C1619	58.30	69.70	10.40	0.33	0.00	0.33	32.30	5354.	1074.
C1620	213.00	213.00	0.00	-1.00	-1.00	-1.00	-1.00	5342.	963.
C1621	65.10	79.50	11.00	0.47	0.02	0.14	39.60	5319.	1001.
C1622	55.50	65.70	9.40	1.01	0.00	0.29	9.80	5322.	1025.
C1625	141.50	162.10	17.80	0.12	0.00	0.06	43.70	5151.	934.
C1630	169.50	201.80	24.00	0.09	0.00	0.12	45.80	5145.	875.
C1635	50.00	57.00	6.10	0.34	0.01	0.32	19.30	5322.	1077.
C1639	78.70	92.20	11.20	0.73	0.02	0.15	3.70	5263.	974.
C1650	346.30	359.30	5.80	0.23	0.01	0.04		5328.	781.
C1913	19.40	36.80	15.10	0.51	0.00	0.21		5269.	1084.
C1935	22.40	40.60	16.20	0.81	0.01	0.23		5254.	1082.
C1971	15.50	46.70	25.90	0.33	0.00	0.08		5190.	1032.
C1973	16.40	31.40	13.70	0.94	0.02	0.35		5322.	1063.
C1978	25.50	35.60	8.40	0.36	0.02	0.38		5322.	1036.
C1979	103.30	116.70	11.00	0.23	0.01	0.03		5264.	959.
C1981	20.70	32.40	13.80	0.97	0.01	0.25		5310.	1070.
C1983	17.50	30.20	9.10	1.04	0.00	0.21		5303.	1071.
C1985	15.20	21.90	6.20	0.86	0.00	0.61		5303.	1045.
C2002	29.50	54.60	21.60	0.27	0.02	0.04		5262.	997.
C2008	22.30	28.70	4.40	0.68	0.00	0.23		5285.	1073.
C2009	29.00	44.90	14.70	0.89	0.00	0.10		5213.	1065.
C2011	12.10	30.90	16.70	0.78	0.01	0.09		5249.	1059.
C2012	42.50	61.30	17.80	0.39	0.00	0.06		5190.	1065.
C2013	53.40	71.50	17.10	1.02	0.00	0.09		5181.	1064.

Flist - End of File

Flist... File (?DHCAR) Date 4:03 PM MON., 7 JULY, 1986 Page001

1 21 1 42 5415. 1235. 10. 10.
186 1000
0.07 0.96 135. -85. 1.00
0.47 0.21 90. 0. 1.00
0.17 0.62 100. 0. 1.00
0.11 0.49 65. 0. 1.00
167 HALL'S C LENS ABOVE RATCHET FAULT (8o9414.1139)

DDHFACE	FROM	TO	WIDTH	%SMT	%SNS	%DU	INT.0%	NORTH	RL
3VA	-1.00	-1.00	8.20	-1.00	-1.00	-1.00	-1.00	5384.	1399.
5U	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	-1.00	5336.	1363.
5V	-1.00	-1.00	12.60	-1.00	-1.00	-1.00	-1.00	5361.	1363.
5VA	-1.00	-1.00	11.60	-1.00	-1.00	-1.00	-1.00	5384.	1363.
7T	-1.00	-1.00	1.70	-1.00	-1.00	-1.00	-1.00	5310.	1346.
7U	-1.00	-1.00	3.00	-1.00	-1.00	-1.00	-1.00	5336.	1347.
7V	-1.00	-1.00	13.30	-1.00	-1.00	-1.00	-1.00	5361.	1347.
7VA	-1.00	-1.00	7.90	-1.00	-1.00	-1.00	-1.00	5384.	1347.
8N	-1.00	-1.00	0.30	-1.00	-1.00	-1.00	-1.00	5158.	1327.
8S	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5292.	1329.
8T	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	-1.00	5311.	1329.
8U	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5336.	1329.
9ND	-1.00	-1.00	0.10	-1.00	-1.00	-1.00	-1.00	5167.	1310.
9Q	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5222.	1310.
9QA	-1.00	-1.00	5.60	-1.00	-1.00	-1.00	-1.00	5240.	1310.
9QB	-1.00	-1.00	2.80	-1.00	-1.00	-1.00	-1.00	5258.	1311.
9R	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5277.	1312.
9S	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	-1.00	5292.	1312.
9T	-1.00	-1.00	2.60	-1.00	-1.00	-1.00	-1.00	5310.	1313.
9VA	-1.00	-1.00	7.50	-1.00	-1.00	-1.00	-1.00	5384.	1312.
9W	-1.00	-1.00	15.00	-1.00	-1.00	-1.00	-1.00	5407.	1312.
10-R#2	-1.00	-1.00	-1.00	2.34	-1.00	0.42	-1.00	5038.	1305.
10-R#3N	-1.00	-1.00	-1.00	3.64	-1.00	1.50	-1.00	5084.	1308.
10-R#3S	-1.00	-1.00	-1.00	1.45	-1.00	1.02	-1.00	5076.	1302.
10I	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	-1.00	5032.	1292.
10J	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5049.	1293.
10K	-1.00	-1.00	1.60	-1.00	-1.00	-1.00	-1.00	5072.	1293.
10KA	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5095.	1293.
10O	-1.00	-1.00	4.30	-1.00	-1.00	-1.00	-1.00	5180.	1290.
10P	-1.00	-1.00	7.80	-1.00	-1.00	-1.00	-1.00	5200.	1290.
10Q	-1.00	-1.00	7.60	-1.00	-1.00	-1.00	-1.00	5222.	1291.
10QA	-1.00	-1.00	10.20	-1.00	-1.00	-1.00	-1.00	5240.	1291.
10QB	-1.00	-1.00	7.20	-1.00	-1.00	-1.00	-1.00	5258.	1291.
10R	-1.00	-1.00	8.00	-1.00	-1.00	-1.00	-1.00	5277.	1291.
10S	-1.00	-1.00	8.80	-1.00	-1.00	-1.00	-1.00	5292.	1292.
10T	-1.00	-1.00	5.80	-1.00	-1.00	-1.00	-1.00	5310.	1292.
11O	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	-1.00	5180.	1270.
11P	-1.00	-1.00	10.20	-1.00	-1.00	-1.00	-1.00	5200.	1271.
11Q	-1.00	-1.00	9.60	-1.00	-1.00	-1.00	-1.00	5222.	1271.
11QA	-1.00	-1.00	7.80	-1.00	-1.00	-1.00	-1.00	5240.	1271.
11QB	-1.00	-1.00	7.40	-1.00	-1.00	-1.00	-1.00	5258.	1271.
11R	-1.00	-1.00	9.50	-1.00	-1.00	-1.00	-1.00	5277.	1271.
11S	-1.00	-1.00	9.90	-1.00	-1.00	-1.00	-1.00	5292.	1272.
11T	-1.00	-1.00	5.80	-1.00	-1.00	-1.00	-1.00	5310.	1272.
C 38	27.60	27.90	0.30	0.65	-1.00	-1.00	-1.00	5272.	1393.
C 42	61.00	64.60	2.90	0.89	-1.00	0.25	-1.00	5311.	1349.
C 43	40.70	43.40	2.60	0.68	-1.00	0.38	-1.00	5310.	1383.
C 55	18.10	20.40	2.30	-1.00	-1.00	-1.00	-1.00	5336.	1400.
C 67	5.60	9.70	4.10	0.35	-1.00	0.28	-1.00	5276.	1399.
C 76	3.70	5.70	2.00	0.99	-1.00	0.15	-1.00	5310.	1399.

C 79	113.00	113.00	0.00	-1.00	-1.00	-1.00	-1.00	5076.	1308.
C 85	131.30	137.60	4.60	-1.00	-1.00	0.22	-1.00	5018.	1249.
C 94	0.00	16.10	6.20	0.46	-1.00	0.18	-1.00	5358.	1400.
C 112	18.90	20.70	1.80	1.59	-1.00	0.70	-1.00	5276.	1413.
C 116	6.40	13.50	7.10	0.55	-1.00	0.33	-1.00	5342.	1413.
C 120	5.40	8.60	3.20	0.80	-1.00	0.32	-1.00	5333.	1413.
C 142	18.80	20.40	1.60	0.51	0.02	0.20	-1.00	5277.	1381.
C 155	8.00	8.80	0.80	1.15	0.00	0.34	-1.00	5310.	1382.
C 166	16.00	16.00	0.00	-1.00	-1.00	-1.00	-1.00	5139.	1345.
C 168	10.80	11.10	0.30	-1.00	0.15	1.64	-1.00	5277.	1362.
C 173	21.00	21.00	0.00	-1.00	-1.00	-1.00	-1.00	5118.	1346.
C 180	69.60	72.20	2.20	0.32	0.07	0.37	-1.00	5160.	1305.
C 182	78.20	79.20	0.60	0.26	0.02	0.13	-1.00	5071.	1329.
C 183	58.40	60.10	1.40	1.49	-1.00	0.66	-1.00	5071.	1310.
C 189	16.20	16.90	0.90	-1.00	-1.00	-1.00	-1.00	5292.	1363.
C 194	21.00	21.00	0.00	-1.00	-1.00	-1.00	-1.00	5095.	1346.
C 195	7.70	8.00	0.30	1.17	0.08	0.50	-1.00	5277.	1347.
C 197	4.80	14.30	8.30	0.59	0.06	0.34	-1.00	5310.	1341.
C 199	14.80	21.80	4.30	1.45	0.15	0.42	-1.00	5310.	1331.
C 200	38.40	48.30	4.40	0.78	0.03	0.56	-1.00	5310.	1306.
C 202	8.40	10.90	2.50	0.96	0.01	0.51	-1.00	5310.	1363.
C 204	27.80	27.80	0.00	-1.00	-1.00	-1.00	-1.00	5221.	1345.
C 206	20.00	20.00	0.00	-1.00	-1.00	-1.00	-1.00	5258.	1345.
C 211	12.50	13.10	0.60	0.31	0.00	1.44	-1.00	5221.	1331.
C 212	6.20	8.70	2.50	0.58	0.04	0.56	-1.00	5184.	1326.
C 215	19.50	19.50	0.00	-1.00	-1.00	-1.00	-1.00	5240.	1331.
C 224	44.00	44.00	0.00	-1.00	-1.00	-1.00	-1.00	5018.	1347.
C 228	23.50	23.50	0.00	-1.00	-1.00	-1.00	-1.00	5072.	1329.
C 230	9.80	10.70	0.90	0.76	0.09	0.39	-1.00	5292.	1347.
C 232	26.70	27.80	1.10	1.48	0.01	0.34	-1.00	5124.	1327.
C 234	40.00	40.00	0.00	-1.00	-1.00	-1.00	-1.00	5048.	1328.
C 239	12.50	12.50	0.00	-1.00	-1.00	-1.00	-1.00	5033.	1362.
C 253	37.60	38.50	0.90	0.91	0.01	0.72	-1.00	5095.	1331.
C 258	28.30	35.60	4.70	0.81	0.09	1.03	-1.00	5241.	1301.
C 259	21.30	21.30	0.00	-1.00	-1.00	-1.00	-1.00	5033.	1327.
C 262	33.40	34.60	1.20	3.71	0.22	0.67	-1.00	5093.	1328.
C 279	21.40	21.40	0.00	-1.00	-1.00	-1.00	-1.00	5199.	1346.
C 280	21.50	21.60	0.10	-1.00	-1.00	-1.00	-1.00	5180.	1345.
C 289	17.10	19.00	1.90	0.66	0.03	0.28	-1.00	5336.	1330.
C 290	5.50	7.80	2.30	4.13	0.37	0.48	-1.00	5310.	1329.
C 291	11.00	12.40	1.40	0.42	0.05	0.49	-1.00	5297.	1327.
C 292	17.60	18.20	0.60	0.87	0.04	0.32	-1.00	5277.	1327.
C 294	13.40	13.40	0.00	-1.00	-1.00	-1.00	-1.00	5258.	1327.
C 296	4.10	7.20	3.10	2.47	0.11	0.48	-1.00	5323.	1347.
C 304	4.60	4.80	0.20	0.28	0.06	0.26	-1.00	5348.	1327.
C 325	26.60	29.20	2.60	1.04	0.04	0.53	-1.00	5033.	1330.
C 327	33.00	33.80	0.80	-1.00	-1.00	-1.00	-1.00	4999.	1330.
C 337	10.30	12.30	2.00	0.33	0.04	0.51	-1.00	5274.	1311.
C 344	23.20	25.40	2.20	1.78	0.16	0.51	-1.00	5116.	1310.
C 350	4.10	6.60	2.50	1.60	0.14	0.45	-1.00	5384.	1331.
C 351	25.20	26.00	0.80	0.65	0.14	0.35	-1.00	5199.	1310.
C 353	14.50	16.10	1.60	0.79	-1.00	0.30	-1.00	5139.	1310.
C 359	19.20	19.20	0.00	-1.00	-1.00	-1.00	-1.00	5184.	1310.
C 361	3.00	6.50	3.50	4.16	0.15	0.95	-1.00	5323.	1311.
C 362	5.80	8.60	2.80	0.42	0.09	0.38	-1.00	5336.	1311.
C 364	8.50	13.10	4.60	0.71	0.13	0.84	-1.00	5351.	1312.
C 373	62.20	68.60	6.00	1.21	0.11	0.39	-1.00	5181.	1287.
C 375	56.30	65.20	8.00	1.43	-1.00	0.49	-1.00	5219.	1281.
C 377	39.90	41.00	1.10	-1.00	-1.00	-1.00	-1.00	5030.	1312.
C 378	16.60	19.80	3.20	0.72	0.12	0.44	-1.00	5363.	1313.

C 387	5.90	10.20	4.20	0.55	-1.00	0.37	-1.00	5369.	1312.
C 408	12.30	18.40	5.60	0.75	0.05	0.19	-1.00	5389.	1313.
C 439	8.50	10.30	1.80	0.18	0.03	0.11	-1.00	5145.	1389.
C 460	18.10	30.90	9.70	0.64	0.02	0.64	-1.00	5276.	1293.
C 465	8.50	23.80	7.70	0.61	-1.00	0.25	-1.00	5400.	1313.
C 474	98.20	111.20	12.60	1.00	-1.00	0.44	-1.00	5236.	1273.
C 475	25.10	26.90	1.80	0.65	0.05	0.41	-1.00	5072.	1291.
C 490	128.90	140.40	10.30	1.98	-1.00	0.91	-1.00	5289.	1270.
C 496	35.40	36.10	0.70	0.04	0.02	3.15	-1.00	5071.	1311.
C 519	20.00	22.00	2.00	1.39	0.04	0.82	-1.00	5118.	1291.
C 521	28.60	32.70	4.10	1.94	0.10	0.50	-1.00	5031.	1291.
C 523	9.80	23.40	12.80	0.19	-1.00	0.22	-1.00	5378.	1292.
C 535	3.10	10.80	7.60	1.29	-1.00	0.16	-1.00	5424.	1312.
C 537	0.00	24.00	17.80	0.23	-1.00	0.19	-1.00	5434.	1312.
C 539	2.90	6.00	3.10	0.48	-1.00	0.27	-1.00	5406.	1312.
C 548	5.30	8.80	2.60	2.32	-1.00	0.63	-1.00	5340.	1290.
C 552	5.60	6.90	1.30	1.75	-1.00	0.30	-1.00	5333.	1290.
C 555	3.00	4.30	1.30	0.90	0.25	0.38	-1.00	5328.	1290.
C 556	11.40	18.30	6.90	0.35	-1.00	0.28	-1.00	5361.	1292.
C 562	35.00	35.00	0.00	-1.00	-1.00	-1.00	-1.00	5012.	1310.
C 564	15.10	17.30	2.20	0.25	-1.00	0.14	-1.00	5349.	1292.
C 607	28.80	31.60	2.70	0.34	0.03	0.34	-1.00	5095.	1311.
C 614	25.10	27.70	2.50	0.33	0.01	0.26	-1.00	5023.	1292.
C 616	3.50	4.60	1.10	1.99	0.08	0.50	-1.00	5128.	1289.
C 617	2.80	4.00	1.20	1.68	-1.00	1.01	-1.00	5130.	1289.
C 618	34.30	36.20	1.80	0.73	0.04	0.80	-1.00	5049.	1292.
C 625	10.40	11.40	1.00	0.25	0.03	0.31	-1.00	5095.	1290.
C 632	14.00	14.40	0.40	0.14	-1.00	0.08	-1.00	5095.	1282.
C 663	17.80	21.90	4.00	0.26	0.05	0.32	-1.00	5310.	1297.
C 669	16.80	24.90	8.10	0.70	0.15	0.41	-1.00	5310.	1289.
C 673	17.10	24.00	6.60	1.70	0.04	0.59	-1.00	5292.	1287.
C 718	5.10	11.70	3.60	1.32	0.23	0.34	-1.00	5180.	1281.
C 730	18.50	29.30	10.80	1.25	0.19	0.34	-1.00	5200.	1280.
C 733	20.30	28.50	7.60	1.12	0.06	0.91	-1.00	5277.	1282.
C 791	43.00	43.00	0.00	-1.00	-1.00	-1.00	-1.00	5179.	1307.
C 796	19.20	27.90	7.80	1.06	0.11	0.35	-1.00	5310.	1282.
C 813	2.30	3.90	1.60	0.80	0.09	1.02	-1.00	5259.	1255.
C 839	18.10	20.90	2.80	1.17	0.07	0.40	-1.00	5310.	1265.
C 899	6.80	22.20	14.40	0.54	0.05	0.24	-1.00	5200.	1266.
C1523	22.60	48.40	3.50	0.12	-1.00	0.24	-1.00	5031.	1265.
C1531	20.00	20.00	0.00	-1.00	-1.00	-1.00	-1.00	5014.	1292.
C1581	20.60	25.10	4.10	0.40	0.00	0.32	-1.00	5034.	1280.
FACE# 1	-1.00	-1.00	1.50	1.70	-1.00	0.80		5075.	1312.
FACE# 2	-1.00	-1.00	2.10	0.55	-1.00	0.60		5080.	1313.
FACE# 3	-1.00	-1.00	2.80	1.00	-1.00	0.58		5087.	1313.
FACE# 4	-1.00	-1.00	2.60	0.11	-1.00	0.30		5094.	1312.
FACE# 5	-1.00	-1.00	4.00	1.27	-1.00	0.50		5101.	1312.
FACE# 6	-1.00	-1.00	1.00	0.12	-1.00	0.56		5124.	1317.
FACE# 7	-1.00	-1.00	0.90	2.86	-1.00	0.79		5119.	1317.
FACE# 8	-1.00	-1.00	0.90	3.25	-1.00	0.58		5111.	1314.
FACE# 9	-1.00	-1.00	2.90	1.43	-1.00	0.79		5099.	1316.
FACE#10	-1.00	-1.00	1.90	2.55	-1.00	0.60		5093.	1320.
FACE#11	-1.00	-1.00	3.20	-1.00	-1.00	-1.00		5091.	1322.
FACE#12	-1.00	-1.00	0.20	-1.00	-1.00	-1.00		5085.	1323.
FACE#13	-1.00	-1.00	2.30	-1.00	-1.00	-1.00		5070.	1319.
FACE#14	-1.00	-1.00	1.30	1.05	-1.00	0.31		5069.	1320.

Flist - End of file

Flist... File (?DHCRN) Date 4:06 PM MON., 7 JULY, 1986 Page001

1 10 1 18 5305. 1155. 10. 10.

55 1001

0.00 0.56 30. 0. 1.00

0.47 0.49 30. 0. 1.00

0.05 0.25 57. 0. 1.00

0.05 0.28 48. 0. 1.00

65 HALL'S C LENS RATCHET-NADIR (860414.1140)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
13Q	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	-1.00	5222.	1239.
13QA	-1.00	-1.00	1.30	-1.00	-1.00	-1.00	-1.00	5240.	1239.
14P	-1.00	-1.00	4.20	-1.00	-1.00	-1.00	-1.00	5200.	1219.
14Q	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	-1.00	5222.	1219.
14QA	-1.00	-1.00	1.50	-1.00	-1.00	-1.00	-1.00	5240.	1219.
14QB	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5258.	1220.
14R	-1.00	-1.00	2.70	-1.00	-1.00	-1.00	-1.00	5277.	1220.
14S	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	-1.00	5292.	1220.
15NO	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5170.	1198.
15O	-1.00	-1.00	2.40	-1.00	-1.00	-1.00	-1.00	5180.	1198.
15P	-1.00	-1.00	5.70	-1.00	-1.00	-1.00	-1.00	5200.	1197.
15Q	-1.00	-1.00	5.10	-1.00	-1.00	-1.00	-1.00	5222.	1198.
15QA	-1.00	-1.00	7.40	-1.00	-1.00	-1.00	-1.00	5240.	1198.
15QB	-1.00	-1.00	11.60	-1.00	-1.00	-1.00	-1.00	5258.	1199.
15R	-1.00	-1.00	5.99	-1.00	-1.00	-1.00	-1.00	5277.	1200.
16M	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5140.	1175.
16N	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5157.	1175.
16O	-1.00	-1.00	3.20	-1.00	-1.00	-1.00	-1.00	5179.	1176.
16P	-1.00	-1.00	7.70	-1.00	-1.00	-1.00	-1.00	5200.	1177.
16Q	-1.00	-1.00	10.10	-1.00	-1.00	-1.00	-1.00	5222.	1179.
16QA	-1.00	-1.00	8.30	-1.00	-1.00	-1.00	-1.00	5240.	1181.
C 169	214.60	218.30	2.70	0.36	0.03	0.24	-1.00	5158.	1177.
C 449	90.00	94.00	3.30	0.86	0.14	0.45	-1.00	5240.	1242.
C 500	86.70	94.40	5.90	0.84	0.06	0.32	-1.00	5200.	1232.
C 589	119.00	131.30	4.80	0.97	-1.00	0.21	-1.00	5198.	1179.
C 645	125.10	130.10	1.70	0.36	0.11	0.83	-1.00	5240.	1178.
C 732	107.70	112.60	2.70	0.67	0.12	0.39	-1.00	5291.	1203.
C 805	108.40	123.20	8.00	0.72	0.10	0.55	-1.00	5257.	1200.
C 809	106.30	111.90	3.00	0.59	0.16	0.60	-1.00	5237.	1205.
C 811	80.80	81.80	1.00	5.75	0.08	0.78	-1.00	5176.	1233.
C 817	102.10	105.40	1.70	1.28	0.13	1.16	-1.00	5218.	1208.
C 822	78.20	79.80	1.50	1.42	0.12	0.58	-1.00	5156.	1227.
C 927	86.10	87.70	1.20	0.22	0.05	0.06	-1.00	5180.	1195.
C 931	66.20	67.90	0.90	0.84	0.07	0.13	-1.00	5141.	1198.
C 946	25.10	28.20	3.10	1.57	0.14	0.30	-1.00	5221.	1239.
C 968	7.20	12.50	5.30	0.29	0.02	0.31	-1.00	5201.	1239.
C1031	8.80	10.60	1.80	4.48	0.06	0.43	-1.00	5139.	1218.
C1038	30.80	34.90	3.80	1.47	0.09	0.37	-1.00	5200.	1226.
C1040	29.30	32.50	3.00	0.80	0.08	0.47	-1.00	5222.	1227.
C1044	32.90	37.10	4.00	0.51	0.01	0.50	-1.00	5240.	1228.
C105B	32.60	36.20	3.40	1.74	0.12	1.01	-1.00	5254.	1230.
C1074	9.70	16.80	7.10	0.96	0.14	0.55	-1.00	5251.	1221.
C1076	3.10	6.80	3.70	0.95	0.09	0.54	-1.00	5292.	1221.
C1083	27.40	28.60	1.10	0.53	0.02	0.30	-1.00	5180.	1228.
C1086	32.70	34.70	1.90	0.37	0.06	0.27	-1.00	5159.	1224.
C1153	9.10	12.30	3.20	0.31	0.02	0.13	-1.00	5180.	1199.
C1156	7.00	12.40	5.40	0.82	0.09	0.27	-1.00	5200.	1199.
C1168	8.10	12.20	4.00	1.25	0.08	0.38	-1.00	5222.	1200.
C1177	18.70	23.40	3.40	0.25	-1.00	0.31	-1.00	5197.	1215.
C1183	18.00	18.50	0.50	3.70	0.06	0.26	-1.00	5158.	1175.

C1184	12.80	14.60	1.80	1.82	0.08	0.19	-1.00	5139.	1176.
C1185	14.10	17.60	3.50	0.76	0.05	0.30	-1.00	5180.	1176.
C1187	34.40	37.50	2.70	1.58	0.07	0.28	-1.00	5180.	1180.
C1189	38.40	38.80	0.40	0.37	0.02	0.19	-1.00	5180.	1210.
C1208	20.00	33.10	11.60	1.34	0.13	0.49	-1.00	5259.	1207.
C1209	9.30	21.60	10.80	1.88	0.17	0.60	-1.00	5275.	1212.
C1224	7.10	8.60	1.10	1.01	0.09	0.82	-1.00	5222.	1207.
C1229	10.70	22.20	10.40	0.75	0.06	0.44	-1.00	5200.	1191.
C1232	9.70	13.40	3.60	0.16	0.04	0.17	-1.00	5181.	1195.
C1236	16.70	23.80	6.10	0.70	0.04	0.38	-1.00	5158.	1163.
C1237	5.70	13.80	6.30	1.31	0.10	0.52	-1.00	5224.	1190.
C1238	15.30	16.90	1.40	-1.00	-1.00	-1.00	-1.00	5182.	1167.
C1409	3.30	4.40	1.10	0.26	0.04	0.33	-1.00	5140.	1198.
C1410	8.50	11.70	2.80	0.66	0.02	0.13	-1.00	5140.	1192.
C1416	40.60	40.60	0.00	-1.00	-1.00	-1.00	-1.00	5154.	1184.

Flist - End of File

Flist... File (?DHCW) Date 4:07 PM MON., 7 JULY, 1986 Page001

1 0 1 23 5375. 1085. 10. 10.
55 2000
0.00 0.54 55. 0. 1.00
0.10 0.19 42. 0. 1.00
0.16 1.20 30. 0. 1.00
0.09 0.30 29. 0. 1.00
81 HALL'S C WEST LENS EN-TULIP (860414.1140)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
17QB	-1.00	-1.00	3.70	1.33	-1.00	1.01		5261.	1144.
17QBR	-1.00	-1.00	2.00	0.95	-1.00	0.57		5269.	1144.
18Q	-1.00	-1.00	1.20	1.05	0.02	1.21		5227.	1120.
18QA	-1.00	-1.00	3.10	1.04	0.03	0.76		5240.	1120.
18QB	-1.00	-1.00	6.30	0.98	0.04	0.53		5258.	1120.
18R	-1.00	-1.00	12.10	0.92	0.03	0.39		5277.	1121.
18S	-1.00	-1.00	-1.00	1.12	0.02	0.54		5292.	1121.
18T	-1.00	-1.00	10.00	1.12	0.02	0.55		5310.	1121.
18TA	-1.00	-1.00	7.20	1.09	0.02	0.91		5323.	1122.
18U	-1.00	-1.00	3.00	0.96	0.02	0.53		5336.	1122.
18V	-1.00	-1.00	0.90	0.16	0.03	1.02		5349.	1122.
19QB	-1.00	-1.00	7.20	0.77	-1.00	1.19		5258.	1097.
19R	-1.00	-1.00	-1.00	1.18	-1.00	2.63		5273.	1099.
19S	-1.00	-1.00	-1.00	1.78	-1.00	0.73		5293.	1100.
19T	-1.00	-1.00	-1.00	2.42	-1.00	0.85		5310.	1101.
19TA	-1.00	-1.00	-1.00	0.69	-1.00	1.25		5323.	1101.
19U	-1.00	-1.00	2.90	0.59	-1.00	0.63		5336.	1101.
C1262	110.90	113.50	2.40	1.47	-1.00	0.53		5228.	1127.
C1271	110.00	110.00	0.00	-1.00	-1.00	-1.00		5178.	1130.
C1283	112.10	122.30	10.10	0.72	-1.00	0.24		5293.	1116.
C1305	110.00	120.20	10.00	1.05	0.03	0.54		5271.	1120.
C1346	30.50	33.00	2.50	0.85	0.11	1.06		5201.	1117.
C1347	72.00	80.30	7.00	0.64	0.08	0.28		5313.	1143.
C1350	34.90	35.80	0.90	1.61	-1.00	0.28		5216.	1120.
C1351	30.90	33.00	2.10	1.29	0.03	0.72		5242.	1121.
C1354	34.30	39.20	4.90	1.52	0.02	0.31		5258.	1122.
C1358	29.60	41.00	11.40	0.95	0.02	0.57		5280.	1124.
C1389 D	0.00	10.00	12.80	1.13	0.02	1.07		5290.	1121.
C1391	30.60	30.70	0.10	0.92	0.02	0.16		5201.	1131.
C1392	34.00	38.10	4.00	0.99	0.01	0.66		5242.	1111.
C1394	33.10	34.60	1.40	1.59	0.01	1.30		5241.	1132.
C1398	14.90	18.70	3.80	1.40	0.02	0.72		5242.	1096.
C1404	12.40	17.60	4.90	0.57	0.02	0.24		5259.	1105.
C1406	15.90	19.20	3.30	0.40	0.03	0.34		5180.	1119.
C1411	18.40	19.00	0.60	1.02	0.06	1.20		5158.	1119.
C1420	136.30	143.90	7.20	0.25	0.05	0.49		5343.	1151.
C1477	19.90	28.00	7.90	0.86	0.01	0.90		5258.	1091.
C1493	157.30	161.20	3.80	0.18	0.04	0.25		5351.	1151.
C1527	37.80	48.20	8.90	0.15	0.00	0.29		5301.	1140.
C1564	68.50	73.90	5.30	0.45	-1.00	0.39		5300.	1061.
C1705	15.80	29.40	6.80	0.22	0.04	0.21		5337.	1145.
C1708	12.70	19.60	5.40	0.24	0.06	0.23		5338.	1134.
C1710	11.50	21.10	4.90	0.45	0.08	0.21		5322.	1139.
C1712	8.80	15.60	4.60	0.66	0.03	0.28		5323.	1133.
C1717	0.00	9.70	-1.00	0.79	0.00	0.70		5311.	1129.
C1784	0.00	13.80	-1.00	0.96	0.00	0.67		5286.	1130.
C1788	0.00	16.70	-1.00	1.17	0.00	0.65		5286.	1128.
C1817	18.00	18.00	0.00	-1.00	-1.00	-1.00		5183.	1133.
C1839	0.00	3.10	-1.00	1.19	0.01	1.18		5267.	1119.
C1848	10.80	14.30	3.20	2.15	0.05	0.32		5210.	1114.

C1850	6.80	14.40	6.50	1.07	0.05	1.97	5201.	1114.
C1851	17.00	29.40	11.30	1.05	0.00	0.46	5190.	1109.
C1853	17.40	19.70	2.30	0.89	0.06	0.64	5190.	1119.
C1855	17.80	26.00	7.40	0.55	0.00	0.64	5181.	1108.
C1856	13.60	16.70	3.10	1.02	0.06	0.26	5169.	1119.
C1862	9.50	15.50	5.20	2.68	0.00	0.83	5337.	1115.
C1868	13.20	22.90	9.00	0.61	0.00	0.63	5258.	1113.
C1870	5.00	12.00	6.10	1.27	0.01	0.77	5249.	1115.
C1871	9.00	15.30	3.90	1.31	0.02	0.54	5257.	1133.
C1882	5.80	10.20	3.80	1.51	0.00	0.64	5231.	1115.
C1886	0.00	3.20	-1.00	1.33	0.00	0.56	5277.	1120.
C1889	0.00	7.60	-1.00	0.76	0.00	0.57	5284.	1119.
C1890	17.20	31.20	12.60	0.55	0.00	0.30	5300.	1112.
C1891	14.30	24.70	9.70	0.79	0.00	0.46	5291.	1109.
C1893	0.00	6.40	-1.00	0.71	0.01	0.85	5284.	1121.
C1897	0.00	9.10	-1.00	0.79	0.00	0.72	5285.	1124.
C1899	0.00	15.00	-1.00	0.89	0.00	0.94	5284.	1131.
C1908	15.30	17.20	1.90	1.08	0.15	1.09	5248.	1145.
C1909	10.50	15.90	-1.00	2.72	0.00	0.97	5266.	1107.
C1911	14.10	17.80	3.20	0.74	0.02	0.79	5248.	1135.
C1912	15.50	16.50	1.00	0.63	0.10	0.34	5242.	1145.
C1915	16.10	16.20	0.10	0.21	0.05	0.44	5231.	1145.
C1917	17.50	21.40	3.40	0.36	0.02	0.30	5231.	1134.
C1921	20.60	21.10	0.40	0.40	0.05	0.69	5221.	1134.
C1925	20.20	20.80	0.60	0.87	0.09	0.33	5211.	1136.
C1928	25.50	26.90	1.00	0.58	0.01	0.86	5213.	1126.
C1952	10.10	17.00	4.60	1.96	0.00	2.00	5231.	1109.
C1960	7.40	7.40	0.00	-1.00	-1.00	-1.00	5200.	1123.
C1963	13.70	18.80	5.90	1.08	0.15	0.47	5278.	1141.
C1965	14.50	23.80	7.50	0.87	0.00	0.69	5278.	1132.
C1967	13.30	25.20	10.20	0.95	0.00	0.62	5269.	1134.

Flist - End of file

Flist... File (DDHCE) Date 4:08 PM MON., 7 JULY, 1986 Page001

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    1    9    1   11      5375.      1065.       18.       10.
   45  2000
     0.00       0.34        36.        0.       1.00
     0.08       0.13        45.        0.       1.00
     0.00       2.10        36.        0.       1.00
     0.03       0.21        97.        0.       1.00
   45  HALL'S C EAST LENS EN-TULIP    (860414.1140)
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DDHFACE	FROM	TO	WIDTH	%GMT	%SNS	%CU	INT.W%	NORTH	RL
18ST	-1.00	-1.00	5.90	1.32	0.04	1.40		5305.	1121.
18TA	-1.00	-1.00	5.50	1.09	0.08	1.04		5321.	1121.
18U	-1.00	-1.00	10.30	0.49	0.10	0.32		5336.	1121.
18UV	-1.00	-1.00	4.00	0.11	0.02	0.16		5353.	1121.
19R	-1.00	-1.00	3.70	0.78	-1.00	0.52		5281.	1101.
C 200	309.20	321.00	8.40	0.61	0.03	0.35		5311.	1091.
C1283	127.20	128.00	0.80	0.96	-1.00	0.44		5293.	1117.
C1286	166.30	169.20	2.80	0.63	0.02	0.89		5292.	1062.
C1299	130.60	133.60	3.00	0.42	0.01	0.27		5283.	1104.
C1305	125.00	125.00	0.00	-1.00	-1.00	-1.00		5270.	1122.
C1378	7.50	17.50	10.00	0.60	0.13	0.60		5336.	1122.
C1380	12.40	20.20	5.30	0.17	0.05	0.13		5336.	1136.
C1384	6.60	12.70	6.10	0.87	0.02	0.41		5323.	1122.
C1389	15.00	15.00	0.00	-1.00	-1.00	-1.00		5287.	1121.
C1415	142.00	156.00	13.90	0.31	0.01	0.24		5337.	1094.
C1420	146.90	149.40	2.40	0.55	0.03	0.49		5343.	1155.
C1468	47.00	56.80	9.70	0.30	0.01	0.39		5296.	1087.
C1493	167.20	173.90	6.40	0.12	0.03	0.23		5350.	1154.
C1546	88.70	93.80	5.00	0.67	0.01	0.84		5285.	1062.
C1582	56.50	60.90	3.60	0.96	0.01	0.36		5304.	1086.
C1635	57.50	68.10	9.50	0.86	0.00	0.36		5322.	1081.
C1714	8.60	14.00	2.40	0.59	0.04	0.24		5323.	1135.
C1716	8.30	12.30	3.60	0.38	0.07	0.20		5324.	1129.
C1866	7.40	16.30	8.10	0.96	0.01	0.45		5298.	1115.
C1874	5.00	13.60	8.60	0.81	0.01	0.69		5336.	1102.
C1875	3.60	13.50	9.40	0.69	0.02	0.71		5336.	1105.
C1876	1.70	10.40	8.70	1.13	0.02	0.32		5322.	1101.
C1878	1.10	11.30	9.10	1.01	0.01	0.35		5322.	1105.
C1879	2.00	10.20	8.10	1.22	0.00	0.23		5310.	1102.
C1880	1.70	11.20	8.20	0.98	0.00	0.20		5310.	1105.
C1883	5.00	17.50	5.20	0.52	-1.00	0.38		5309.	1115.
C1885	2.30	8.60	6.30	1.03	0.00	0.41		5301.	1101.
C1886	8.40	9.70	1.20	1.53	0.00	0.59		5277.	1117.
C1887	1.10	10.20	7.70	1.04	0.00	0.56		5292.	1105.
C1889	12.80	13.70	0.80	0.30	0.01	0.77		5284.	1116.
C1890	5.80	13.40	6.90	0.96	0.00	0.45		5300.	1106.
C1891	0.80	8.80	8.20	0.76	0.00	0.43		5291.	1103.
C1892	2.50	13.70	10.10	1.03	0.01	0.23		5310.	1097.
C1893	10.00	10.00	0.00	-1.00	-1.00	-1.00		5284.	1121.
C1896	2.10	11.40	8.70	0.76	0.00	0.48		5301.	1098.
C1898	2.10	13.00	9.30	1.47	0.00	0.39		5301.	1096.
C1909	19.00	19.00	0.00	-1.00	-1.00	-1.00		5266.	1111.
C1939	2.90	18.30	10.00	0.95	0.00	0.38		5301.	1092.
C1943	10.20	19.50	8.40	0.44	0.00	0.48		5284.	1093.
C1949	10.90	20.50	7.60	0.95	0.00	0.95		5285.	1090.

Flist - End of file

Flist... File (?DHCBT) Date 4:08 PM MON., 7 JULY, 1986 Page001

1 13 1 29 9385. 965. 10. 10.
150 2000
0.00 0.50 136. 55. 3.50
0.09 0.21 95. 0. 1.00
0.10 0.42 30. 0. 1.00
0.77 0.46 55. 0. 1.00

86 HALL'S C LENS BELOW TULIP FAULT (860414.1141)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
22QA	-1.00	-1.00	1.20	0.87	-1.00	0.36	-1.00	5245.	1052.
22QB	-1.00	-1.00	1.90	0.69	-1.00	1.43	-1.00	5258.	1052.
22R	-1.00	-1.00	3.30	0.46	-1.00	2.33	-1.00	5277.	1052.
22S	-1.00	-1.00	5.80	0.57	-1.00	0.73	-1.00	5292.	1052.
22T	-1.00	-1.00	-1.00	0.70	-1.00	0.44	-1.00	5310.	1052.
23P	-1.00	-1.00	3.90	0.70	-1.00	0.47	-1.00	5200.	1029.
23Q	-1.00	-1.00	5.00	0.85	-1.00	0.40	-1.00	5222.	1029.
23QA	-1.00	-1.00	4.80	0.87	-1.00	0.28	-1.00	5240.	1030.
23QB	-1.00	-1.00	-1.00	0.70	-1.00	0.33	-1.00	5258.	1031.
24QBR	-1.00	-1.00	-1.00	0.54	-1.00	0.07	-1.00	5264.	1013.
24R	-1.00	-1.00	11.70	0.42	-1.00	0.15	-1.00	5277.	1013.
24S	-1.00	-1.00	16.00	0.81	-1.00	0.19	-1.00	5292.	1013.
24T	-1.00	-1.00	20.80	0.85	-1.00	0.42	-1.00	5310.	1013.
24U	-1.00	-1.00	15.50	0.87	-1.00	0.67	-1.00	5336.	1013.
C 254	460.63	487.68	18.20	0.46	0.04	0.10	13.10	5242.	915.
C 800	588.16	610.84	13.00	0.31	0.06	0.08	17.00	5227.	955.
C 953	625.00	625.00	0.00	-1.00	-1.00	-1.00	-1.00	5114.	883.
C 969	623.00	623.00	0.00	-1.00	-1.00	-1.00	-1.00	5115.	888.
C1008	545.90	555.40	6.20	0.42	0.04	0.09	-1.00	5133.	978.
C1267	207.15	211.40	3.70	1.29	0.04	0.06	20.20	5218.	1030.
C1286	153.03	159.78	6.60	0.84	0.03	0.20	-1.00	5292.	1064.
C1292	186.28	209.49	20.40	0.49	0.04	0.09	48.50	5294.	991.
C1306	170.15	177.00	6.50	0.64	0.05	0.67	0.00	5268.	1037.
C1312	192.65	215.81	20.30	0.21	0.02	0.08	25.90	5258.	988.
C1319	211.60	213.90	1.20	0.86	0.03	0.07	0.00	5113.	932.
C1326	129.65	130.65	0.80	0.51	0.01	0.13	0.00	5114.	1028.
C1331	159.90	163.30	3.30	1.04	0.05	0.15	0.00	5265.	1059.
C1343	239.05	246.00	6.20	0.45	0.02	0.11	17.30	5181.	987.
C1348	225.10	232.00	6.40	1.25	0.03	0.18	0.00	5205.	1006.
C1352	161.10	164.70	3.40	0.17	-1.00	0.03	66.70	5149.	1014.
C1355	236.40	239.75	2.70	0.18	0.02	0.15	0.00	5174.	999.
C1357	184.50	192.60	7.00	0.53	0.02	0.18	0.00	5180.	987.
C1400	274.85	329.55	32.10	0.30	0.04	0.07	15.30	5314.	844.
C1405	227.25	269.35	36.20	0.21	0.03	0.09	13.80	5316.	923.
C1421	88.00	88.00	0.00	-1.00	-1.00	-1.00	-1.00	5097.	1012.
C1425	172.60	187.60	14.50	0.67	0.04	0.31	2.70	5341.	1046.
C1430	193.70	220.30	22.20	0.61	0.03	0.29	34.60	5339.	984.
C1440	189.10	204.50	15.10	0.35	0.03	0.32	8.40	5356.	1055.
C1445	209.90	232.97	20.30	0.19	0.02	0.22	54.00	5351.	991.
C1450	129.87	141.16	8.60	0.38	0.02	0.14	19.10	5130.	991.
C1465	221.00	223.00	2.00	0.18	0.00	0.23		5389.	1053.
C1504	218.00	234.60	14.60	0.53	0.02	0.25	4.80	5184.	906.
C1518	236.20	253.90	14.90	0.53	0.02	0.31	3.40	5170.	877.
C1520	233.50	267.20	24.40	0.46	0.01	0.08	14.00	5283.	918.
C1525	270.20	301.70	21.00	0.82	0.01	0.11	24.80	5270.	872.
C1526	307.90	318.90	7.40	0.55	0.03	0.11	2.70	5156.	784.
C1535	96.50	104.10	7.50	0.76	-1.00	0.70	0.00	5270.	1035.
C1537	90.40	99.90	8.70	0.35	0.00	0.13	22.10	5244.	1005.
C1542	106.30	113.70	7.10	0.38	0.02	0.12	9.50	5264.	1016.
C1543	81.00	84.20	3.20	0.87	-1.00	0.12	0.00	5240.	1027.

C1545	257.00	282.40	18.00	0.82	0.02	0.23	16.90	5220.	834.
C1546	79.90	86.80	6.80	1.05	0.01	0.54	0.00	5284.	1061.
C1550	94.20	109.50	14.90	0.77	0.02	0.24	21.20	5276.	1022.
C1553	78.80	83.00	4.20	1.16	0.03	0.36	0.00	5291.	1043.
C1556	89.20	105.20	15.00	1.14	0.02	0.21	12.50	5288.	1016.
C1558	77.60	98.00	17.90	0.61	0.02	0.23	13.70	5299.	1005.
C1559	96.50	98.50	2.00	0.82	0.00	0.05	60.00	5204.	1037.
C1566	74.00	83.70	9.40	0.49	-1.00	0.39	18.60	5305.	1030.
C1574	108.30	135.60	22.90	0.29	0.02	0.12	37.90	5279.	979.
C1575	385.00	413.00	14.80	0.27	0.03	0.03	55.50	5227.	675.
C1576	112.10	118.30	6.00	0.48	0.01	0.08	24.20	5223.	1013.
C1580	230.70	309.00	11.10	0.48	0.02	0.11	7.70	5250.	801.
C1583	123.70	140.35	13.90	0.83	0.00	0.07	36.70	5192.	941.
C1584	64.70	77.80	12.60	1.05	0.01	0.41	6.10	5335.	1073.
C1585	108.20	125.40	16.80	0.34	0.02	0.08	7.00	5238.	974.
C1607	72.00	86.00	13.50	0.56	0.02	0.46	11.80	5334.	1031.
C1609	75.80	103.10	24.30	0.58	0.02	0.43	20.20	5340.	1007.
C1614	89.40	101.25	10.90	0.06	0.00	0.14	65.40	5365.	1017.
C1619	70.00	85.00	13.70	0.31	0.00	0.52	13.30	5357.	1078.
C1620	227.00	275.90	42.10	0.22	0.00	0.11	40.90	5337.	943.
C1621	83.40	112.40	22.80	0.38	0.01	0.13	90.00	5316.	982.
C1622	77.50	100.50	21.00	0.93	0.02	0.42	26.10	5321.	1013.
C1625	175.30	188.00	11.10	1.29	0.02	0.28	11.00	5149.	920.
C1630	219.20	233.30	10.40	0.61	0.00	0.22	10.60	5143.	853.
C1639	109.30	134.00	21.70	0.14	0.01	0.05	34.40	5266.	957.
C1650	367.40	393.60	13.20	0.34	0.03	0.05		5325.	756.
C1926	8.20	16.70	7.40	0.74	0.01	0.98		5323.	1061.
C1930	13.30	26.00	11.70	0.87	0.02	0.51		5310.	1044.
C1971	57.10	69.70	10.50	0.61	0.00	0.30		5190.	1014.
C1973	0.00	9.20	-1.00	1.11	0.02	0.46		5323.	1056.
C1978 D	0.00	9.80	14.50	1.08	0.03	0.59		5323.	1049.
C1979	133.90	156.40	18.60	0.38	0.02	0.06		5266.	939.
C1981	0.00	9.70	-1.00	1.03	0.01	0.60		5310.	1057.
C1985 D	0.00	1.00	9.50	0.67	0.00	0.45		5303.	1051.
C1990 D	0.00	0.40	4.40	0.84	0.00	0.53		5285.	1052.
C2002	76.40	102.30	19.60	0.16	0.01	0.06		5267.	965.

Flist - End of file

092

95 094

Flist... File (?DHDHR) Date 4:10 PM MON., 7 JULY, 1986 Page001

1 20 1 39 5405. 1225. 10. 10.

100 1000

0.15 0.57 60. 60. 1.67

0.22 0.12 59. 60. 1.82

0.15 0.32 54. 0. 1.00

0.20 0.32 85. 0. 1.00

202 HALL'S D LENS ABOVE RATCHET <860414.1142>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
4N	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5164.	1379.
4O	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5180.	1380.
4P	-1.00	-1.00	4.20	-1.00	-1.00	-1.00	-1.00	5200.	1380.
4Q	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5222.	1380.
4QA	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5240.	1380.
5I	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	-1.00	5033.	1361.
5J	-1.00	-1.00	10.40	-1.00	-1.00	-1.00	-1.00	5049.	1361.
5K	-1.00	-1.00	12.10	-1.00	-1.00	-1.00	-1.00	5072.	1361.
5KA	-1.00	-1.00	8.30	-1.00	-1.00	-1.00	-1.00	5095.	1360.
5L	-1.00	-1.00	6.00	-1.00	-1.00	-1.00	-1.00	5118.	1360.
5M	-1.00	-1.00	5.20	-1.00	-1.00	-1.00	-1.00	5139.	1360.
5N	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	-1.00	5158.	1359.
5O	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5180.	1360.
5P	-1.00	-1.00	9.40	-1.00	-1.00	-1.00	-1.00	5200.	1360.
5Q	-1.00	-1.00	7.60	-1.00	-1.00	-1.00	-1.00	5222.	1360.
5QA	-1.00	-1.00	2.60	-1.00	-1.00	-1.00	-1.00	5240.	1360.
5QB	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	-1.00	5258.	1360.
7O	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5229.	1346.
8KA	-1.00	-1.00	2.30	-1.00	-1.00	-1.00	-1.00	5095.	1328.
8L	-1.00	-1.00	2.10	-1.00	-1.00	-1.00	-1.00	5118.	1327.
8M	-1.00	-1.00	2.50	-1.00	-1.00	-1.00	-1.00	5139.	1327.
8N	-1.00	-1.00	1.90	-1.00	-1.00	-1.00	-1.00	5158.	1327.
8U	-1.00	-1.00	2.00	-1.00	-1.00	-1.00	-1.00	5336.	1329.
8VA	-1.00	-1.00	4.20	-1.00	-1.00	-1.00	-1.00	5384.	1330.
9SUBP	-1.00	-1.00	3.20	1.82	0.02	0.94		5200.	1319.
9O	-1.00	-1.00	0.90	1.60	0.00	1.21		5180.	1309.
9P	-1.00	-1.00	3.20	1.44	0.03	0.55		5200.	1309.
9-5216	-1.00	-1.00	3.10	1.67	0.08	0.66		5216.	1309.
9QA	-1.00	-1.00	5.30	-1.00	-1.00	-1.00	-1.00	5240.	1310.
9QB	-1.00	-1.00	4.80	-1.00	-1.00	-1.00	-1.00	5258.	1310.
9R	-1.00	-1.00	3.10	-1.00	-1.00	-1.00	-1.00	5277.	1310.
9U	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	-1.00	5336.	1312.
9V	-1.00	-1.00	5.20	-1.00	-1.00	-1.00	-1.00	5361.	1312.
9VA	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	5384.	1312.
10S	-1.00	-1.00	5.30	-1.00	-1.00	-1.00	-1.00	5292.	1292.
10T	-1.00	-1.00	3.90	-1.00	-1.00	-1.00	-1.00	5310.	1292.
10U	-1.00	-1.00	3.40	-1.00	-1.00	-1.00	-1.00	5336.	1293.
10V	-1.00	-1.00	4.10	-1.00	-1.00	-1.00	-1.00	5361.	1293.
11N	-1.00	-1.00	1.20	-1.00	-1.00	-1.00	-1.00	5158.	1270.
11O	-1.00	-1.00	4.80	-1.00	-1.00	-1.00	-1.00	5180.	1271.
11P	-1.00	-1.00	7.60	-1.00	-1.00	-1.00	-1.00	5200.	1271.
11Q	-1.00	-1.00	9.10	-1.00	-1.00	-1.00	-1.00	5222.	1271.
11QA	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5240.	1271.
11QB	-1.00	-1.00	7.10	-1.00	-1.00	-1.00	-1.00	5258.	1271.
11R	-1.00	-1.00	11.90	-1.00	-1.00	-1.00	-1.00	5277.	1271.
11S	-1.00	-1.00	11.50	-1.00	-1.00	-1.00	-1.00	5292.	1271.
11T	-1.00	-1.00	6.20	-1.00	-1.00	-1.00	-1.00	5310.	1271.
12O	-1.00	-1.00	2.90	-1.00	-1.00	-1.00	-1.00	5180.	1254.
12P	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5200.	1254.
12Q	-1.00	-1.00	5.10	-1.00	-1.00	-1.00	-1.00	5222.	1254.

12QA	-1.00	-1.00	4.50	-1.00	-1.00	-1.00	-1.00	5240.	1254.
12QB	-1.00	-1.00	8.10	-1.00	-1.00	-1.00	-1.00	5258.	1254.
12R	-1.00	-1.00	9.20	-1.00	-1.00	-1.00	-1.00	5277.	1255.
12S	-1.00	-1.00	11.80	-1.00	-1.00	-1.00	-1.00	5292.	1255.
12T	-1.00	-1.00	9.70	-1.00	-1.00	-1.00	-1.00	5310.	1255.
13QB	-1.00	-1.00	6.60	-1.00	-1.00	-1.00	-1.00	5258.	1239.
13R	-1.00	-1.00	9.50	-1.00	-1.00	-1.00	-1.00	5276.	1240.
13S	-1.00	-1.00	7.70	-1.00	-1.00	-1.00	-1.00	5292.	1239.
C 34	14.30	19.40	2.20	0.87	-1.00	0.31	-1.00	5362.	1393.
C 35	63.40	63.40	0.00	-1.00	-1.00	-1.00	-1.00	5158.	1375.
C 37	13.00	13.00	0.00	-1.00	-1.00	-1.00	-1.00	5238.	1408.
C 38	1.20	2.10	0.70	0.69	-1.00	-1.00	-1.00	5272.	1410.
C 39	30.50	34.60	1.70	1.60	-1.00	-1.00	-1.00	5240.	1387.
C 41	109.30	110.30	0.60	0.12	-1.00	-1.00	-1.00	5157.	1273.
C 44	0.00	4.30	3.10	0.33	-1.00	0.10	-1.00	5409.	1392.
C 62	34.90	40.80	5.90	0.51	-1.00	0.51	-1.00	5198.	1399.
C 64	22.60	22.60	0.00	-1.00	-1.00	-1.00	-1.00	5156.	1399.
C 65	3.80	5.40	1.60	0.96	-1.00	0.55	-1.00	5115.	1399.
C 66	14.50	14.50	0.00	-1.00	-1.00	-1.00	-1.00	5069.	1400.
C 67	21.90	25.50	3.60	0.19	-1.00	0.25	-1.00	5276.	1399.
C 72	29.60	34.10	4.50	0.53	-1.00	0.24	-1.00	5383.	1400.
C 79	97.00	101.70	3.40	1.01	-1.00	0.40	-1.00	5076.	1317.
C 85	122.10	122.10	0.00	-1.00	-1.00	-1.00	-1.00	5018.	1257.
C 88	76.30	78.70	1.90	1.07	0.00	0.44	-1.00	5237.	1318.
C 90	91.80	105.50	6.70	0.32	-1.00	0.23	-1.00	5237.	1280.
C 96	62.60	65.50	1.50	0.78	-1.00	0.22	-1.00	5359.	1332.
C 125	19.00	19.00	0.00	-1.00	-1.00	-1.00	-1.00	5108.	1440.
C 129	33.20	38.20	5.00	0.94	0.10	1.19	-1.00	5199.	1381.
C 130	22.60	30.60	8.00	1.91	0.15	1.19	-1.00	5181.	1380.
C 142	35.30	36.40	1.10	0.85	0.04	1.06	-1.00	5277.	1382.
C 152	8.80	11.80	3.00	2.04	0.11	1.13	-1.00	5180.	1361.
C 154	7.60	16.50	9.00	0.44	0.05	0.56	-1.00	5191.	1360.
C 155	36.00	36.00	0.00	-1.00	-1.00	-1.00	-1.00	5310.	1383.
C 158	21.00	28.10	7.10	0.53	0.01	0.44	-1.00	5097.	1362.
C 159	21.20	26.60	5.40	0.51	0.02	0.37	-1.00	5118.	1362.
C 160	18.70	23.40	4.70	1.28	0.06	0.64	-1.00	5121.	1362.
C 164	24.70	25.70	1.00	2.20	0.10	1.85	-1.00	5240.	1363.
C 168	27.60	27.70	0.10	-1.00	-1.00	-1.00	-1.00	5277.	1363.
C 170	0.00	11.30	8.60	1.72	0.22	1.01	-1.00	5205.	1360.
C 173	28.70	33.10	3.80	0.19	0.01	0.10	-1.00	5118.	1346.
C 180	88.30	89.80	1.50	0.45	0.13	1.06	-1.00	5160.	1295.
C 183	58.40	60.10	1.40	2.54	0.12	3.17	-1.00	5071.	1310.
C 185	32.40	35.10	2.70	1.30	0.06	0.86	-1.00	5292.	1363.
C 191	3.40	5.10	-1.00	1.15	0.11	0.80	-1.00	5106.	1362.
C 192	3.60	9.70	6.00	1.22	0.04	0.39	-1.00	5072.	1362.
C 193	2.30	6.50	5.00	0.29	0.03	0.15	-1.00	5048.	1363.
C 194	37.20	37.20	0.00	-1.00	-1.00	-1.00	-1.00	5095.	1346.
C 195	14.20	18.30	4.10	1.76	0.09	0.69	-1.00	5277.	1347.
C 196	24.20	25.30	1.10	0.03	0.00	0.36	-1.00	5240.	1346.
C 199	55.40	66.10	7.30	0.42	0.05	0.27	-1.00	5310.	1299.
C 206	24.00	25.80	1.80	0.10	0.06	1.06	-1.00	5258.	1345.
C 211	24.00	25.10	1.10	1.78	0.10	0.61	-1.00	5221.	1331.
C 212	22.80	24.30	1.50	0.67	0.00	0.40	-1.00	5184.	1327.
C 215	27.80	29.40	1.60	1.48	0.00	0.46	-1.00	5240.	1331.
C 217	42.80	45.00	2.20	0.76	0.08	0.69	-1.00	5055.	1347.
C 224	49.80	51.90	2.10	1.31	0.07	0.24	-1.00	5018.	1347.
C 228	43.40	43.40	0.00	-1.00	-1.00	-1.00	-1.00	5072.	1330.
C 229	20.40	20.40	0.00	-1.00	-1.00	-1.00	-1.00	5335.	1363.
C 230	17.40	19.00	1.50	1.44	0.04	0.64	-1.00	5292.	1347.
C 233	21.10	22.30	1.20	1.07	0.24	1.07	-1.00	5345.	1347.

C 234	46.00	46.60	0.60	0.27	0.00	0.50	-1.00	5048.	1328.
C 253	47.20	49.40	2.00	1.01	0.05	0.32	-1.00	5094.	1328.
C 255	30.90	31.80	0.60	-1.00	-1.00	-1.00	-1.00	5128.	1361.
C 258	84.10	91.00	4.40	1.09	0.17	0.43	-1.00	5241.	1259.
C 259	47.00	49.40	2.30	1.26	0.01	0.75	-1.00	5033.	1328.
C 262	42.40	44.90	2.50	0.63	0.16	0.59	-1.00	5093.	1328.
C 286	27.40	29.10	1.70	0.81	0.06	0.38	-1.00	5361.	1347.
C 290	14.30	14.30	0.00	-1.00	-1.00	-1.00	-1.00	5310.	1329.
C 291	17.10	19.20	2.10	1.10	0.06	0.77	-1.00	5297.	1327.
C 292	22.30	25.20	2.90	0.21	0.05	0.15	-1.00	5277.	1328.
C 293	24.40	28.20	3.80	0.51	0.05	0.18	-1.00	5392.	1364.
C 294	19.90	22.00	2.10	1.00	0.05	0.99	-1.00	5258.	1327.
C 295	22.70	28.50	5.80	0.47	0.06	0.28	-1.00	5384.	1348.
C 296	19.90	21.90	2.00	0.87	0.10	0.43	-1.00	5323.	1348.
C 298	31.10	31.90	0.80	-1.00	-1.00	-1.00	-1.00	5072.	1346.
C 304	20.60	25.40	2.80	0.65	0.14	0.78	-1.00	5348.	1328.
C 325	39.30	39.30	0.00	-1.00	-1.00	-1.00	-1.00	5033.	1330.
C 327	35.70	35.70	0.00	-1.00	-1.00	-1.00	-1.00	4999.	1330.
C 337	31.70	33.00	1.30	0.63	0.03	0.82	-1.00	5277.	1311.
C 344	37.80	38.20	0.40	0.28	0.03	0.12	-1.00	5116.	1311.
C 350	28.60	31.50	2.90	1.22	0.05	0.36	-1.00	5384.	1331.
C 362	25.00	29.70	4.70	0.90	0.12	0.99	-1.00	5337.	1312.
C 364	31.80	36.70	4.90	0.73	0.13	0.30	-1.00	5351.	1313.
C 373	88.30	92.80	4.20	1.37	-1.00	0.49	-1.00	5181.	1278.
C 375	81.10	91.40	9.20	-1.00	-1.00	-1.00	-1.00	5219.	1270.
C 377	53.80	53.80	0.00	-1.00	-1.00	-1.00	-1.00	5030.	1312.
C 395	16.20	18.10	1.90	1.38	0.09	0.40	-1.00	5279.	1312.
C 396	12.70	17.80	5.10	3.17	0.10	0.57	-1.00	5259.	1312.
C 399	14.90	16.50	1.60	1.06	0.14	0.91	-1.00	5221.	1310.
C 420	22.60	24.30	1.50	0.86	0.02	0.43	-1.00	5202.	1310.
C 421	11.80	18.40	5.60	1.14	0.15	0.66	-1.00	5238.	1310.
C 433	15.70	16.30	0.60	0.63	0.03	0.84	-1.00	5181.	1309.
C 439	23.90	23.90	0.00	-1.00	-1.00	-1.00	-1.00	5145.	1290.
C 444	24.40	26.80	2.00	0.97	0.10	0.59	-1.00	5256.	1296.
C 447	25.60	30.70	5.80	0.44	-1.00	0.44	-1.00	5231.	1289.
C 449	85.00	85.00	0.00	-1.00	-1.00	-1.00	-1.00	5240.	1246.
C 461	34.70	46.80	10.70	0.54	-1.00	0.23	-1.00	5361.	1292.
C 463	34.40	44.80	8.80	0.65	0.05	0.27	-1.00	5337.	1290.
C 474	79.20	85.40	6.10	0.66	-1.00	0.84	-1.00	5236.	1278.
C 475	40.00	40.50	0.50	0.78	0.07	0.25	-1.00	5072.	1291.
C 490	93.50	108.30	13.20	0.59	-1.00	0.51	-1.00	5276.	1277.
C 496	45.20	46.90	1.70	1.27	0.11	0.52	-1.00	5071.	1311.
C 510	17.00	21.80	4.80	-1.00	-1.00	-1.00	-1.00	5211.	1310.
C 512	19.40	21.10	1.70	0.61	0.06	0.41	-1.00	5257.	1329.
C 519	26.60	29.30	2.60	1.19	0.03	1.01	-1.00	5118.	1291.
C 521	41.60	44.20	2.60	0.96	0.07	0.31	-1.00	5030.	1291.
C 561	5.30	7.90	2.60	1.70	-1.00	0.18	-1.00	5128.	1271.
C 562	39.50	42.60	3.10	1.66	0.06	1.03	-1.00	5012.	1310.
C 586	29.70	29.70	0.00	-1.00	-1.00	-1.00	-1.00	5258.	1292.
C 591	17.90	26.30	8.40	0.41	0.07	0.21	-1.00	5240.	1292.
C 595	14.80	24.40	9.30	0.44	0.02	0.51	-1.00	5240.	1302.
C 602	21.00	22.60	1.40	0.67	0.04	0.30	-1.00	5258.	1301.
C 607	40.10	40.10	0.00	-1.00	-1.00	-1.00	-1.00	5095.	1311.
C 614	48.00	48.00	0.00	-1.00	-1.00	-1.00	-1.00	5019.	1292.
C 618	49.00	49.00	0.00	-1.00	-1.00	-1.00	-1.00	5049.	1292.
C 625	30.40	30.80	0.40	0.21	0.03	0.31	-1.00	5095.	1291.
C 632	30.70	31.50	0.70	0.03	0.00	0.54	-1.00	5095.	1274.
C 641	22.10	26.30	4.10	0.35	0.09	0.28	-1.00	5292.	1286.
C 644	22.90	27.10	4.00	0.41	0.05	0.60	-1.00	5199.	1282.
C 653	21.20	23.90	2.70	0.63	0.20	0.63	-1.00	5222.	1292.

C 657	25.00	30.70	5.10	0.97	0.13	0.19	-1.00	5258.	1284.
C 660	80.20	88.20	6.60	0.79	0.06	0.32	-1.00	5218.	1247.
C 664	87.20	92.80	5.00	0.74	0.12	0.61	-1.00	5257.	1254.
C 665	19.10	23.00	3.40	0.35	0.06	0.21	-1.00	5277.	1302.
C 671	93.50	105.50	10.40	0.92	0.10	0.62	-1.00	5293.	1247.
C 677	4.80	6.90	1.70	0.19	0.04	0.13	-1.00	5122.	1271.
C 678	32.00	38.00	5.90	0.30	0.04	0.38	-1.00	5333.	1284.
C 697	25.90	30.90	4.80	0.96	0.24	0.51	-1.00	5358.	1380.
C 698	52.00	52.00	0.00	-1.00	-1.00	-1.00	-1.00	5360.	1355.
C 704	27.00	37.60	8.10	0.50	0.17	0.31	-1.00	5380.	1380.
C 705	17.50	18.20	0.70	0.65	0.12	0.36	-1.00	5336.	1384.
C 725	10.70	13.50	2.80	1.59	0.09	0.32	-1.00	5177.	1254.
C 740	12.30	26.10	13.30	1.05	0.12	0.34	-1.00	5222.	1278.
C 747	14.70	26.00	9.60	0.59	0.09	0.38	-1.00	5240.	1282.
C 755	93.20	100.60	5.70	0.42	0.08	0.31	-1.00	5276.	1234.
C 833	22.60	28.50	5.30	0.58	0.04	0.43	-1.00	5310.	1282.
C 890	20.80	27.40	6.40	0.91	0.05	0.31	-1.00	5310.	1266.
C 891	14.40	28.30	13.50	0.76	0.11	0.26	-1.00	5293.	1266.
C 893	16.70	29.20	12.10	0.60	0.15	0.29	-1.00	5277.	1265.
C 896	21.80	33.00	11.00	0.80	0.17	0.34	-1.00	5258.	1265.
C 897	11.50	24.20	12.10	0.91	0.13	0.36	-1.00	5222.	1265.
C 898	15.50	20.80	5.00	1.41	0.12	0.47	-1.00	5180.	1264.
C 901	11.10	21.40	10.10	0.44	0.07	0.35	-1.00	5222.	1266.
C 952	27.50	38.30	10.70	0.75	0.16	0.33	-1.00	5256.	1239.
C 955	21.30	32.10	10.60	0.89	0.05	0.16	-1.00	5277.	1240.
C 958	6.50	8.50	2.00	0.83	0.15	0.90	-1.00	5158.	1254.
C 966	28.30	34.10	5.60	0.97	0.04	0.67	-1.00	5241.	1247.
C 970	29.00	33.30	4.20	0.91	0.13	0.45	-1.00	5257.	1246.
C1018	25.70	27.90	2.10	2.27	0.12	0.45	-1.00	5178.	1249.
C1019	20.50	24.00	3.50	1.02	0.10	0.84	-1.00	5200.	1243.
C1523	61.90	63.20	1.30	0.07	-1.00	1.67	-1.00	5030.	1245.
C1581	46.50	46.80	0.30	0.92	0.00	0.45	-1.00	5033.	1269.

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95 098

Flist... File (?DHDET) Date 4:12 PM MON.. 7 JULY, 1986 Page001

1 13 1 17 5345. 1015. 10. 10.

55 2000

0.38 0.80 30. 0. 1.00

0.06 0.27 22. 0. 1.00

0.22 1.62 55. 0. 1.00

0.42 0.58 40. 0. 1.00

80 HALL'S D LENS EN-TULIP (860414.1143)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
18T	-1.00	-1.00	2.90	2.70	0.04	1.10		5306.	1121.
18TA	-1.00	-1.00	2.60	0.21	-1.00	0.14		5321.	1122.
19QB	-1.00	-1.00	4.70	1.10	-1.00	0.60		5258.	1096.
19R	-1.00	-1.00	7.10	1.43	-1.00	0.87		5277.	1096.
19S	-1.00	-1.00	2.30	0.79	-1.00	0.61		5289.	1096.
20Q	-1.00	-1.00	1.90	0.70	-1.00	0.54		5181.	1087.
21R	-1.00	-1.00	5.60	0.46	0.00	0.22		5277.	1077.
22Q	-1.00	-1.00	3.40	0.94	-1.00	0.11		5224.	1052.
C 200	359.90	362.30	1.70	0.73	0.03	0.76		5311.	1060.
C 659	448.50	449.00	0.20	0.10	0.04	2.76		5312.	1088.
C 861	490.70	495.70	3.30	0.85	0.06	0.45		5257.	1097.
C1206	149.80	152.80	2.70	0.30	0.01	0.23		5226.	1088.
C1267	223.20	225.20	1.80	1.05	0.02	0.30		5219.	1023.
C1274	136.50	138.90	2.20	2.33	0.08	0.31		5196.	1096.
C1283	133.30	138.10	4.80	0.58	-1.00	0.43		5293.	1119.
C1299	137.70	146.75	9.10	0.62	0.02	0.42		5283.	1104.
C1305	128.40	130.50	2.10	0.45	0.03	0.11		5270.	1123.
C1351	40.95	41.60	0.60	0.74	0.02	0.14		5242.	1122.
C1354	49.00	49.00	0.00	-1.00	-1.00	-1.00		5258.	1122.
C1358	47.00	47.00	0.00	-1.00	-1.00	-1.00		5280.	1125.
C1378	22.95	24.70	1.80	0.52	0.09	0.46		5336.	1121.
C1379	35.00	35.00	0.00	-1.00	-1.00	-1.00		5366.	1121.
C1384	14.95	19.50	4.60	0.74	0.02	0.56		5323.	1123.
C1389	19.00	21.50	2.40	0.43	0.03	1.07		5286.	1121.
C1392	46.90	49.70	2.70	0.72	0.01	0.29		5242.	1108.
C1394	38.00	38.00	0.00	-1.00	-1.00	-1.00		5241.	1134.
C1398	22.80	25.10	2.30	0.46	0.02	1.71		5242.	1096.
C1404	27.90	31.10	3.00	0.89	0.02	0.43		5261.	1109.
C1415	168.40	169.70	1.30	0.06	0.02	0.04		5337.	1092.
C1468	68.90	72.30	3.40	0.68	0.02	1.32		5296.	1084.
C1477	34.10	39.20	4.00	0.48	0.03	2.53		5259.	1089.
C1480	59.70	66.00	6.10	0.26	0.00	0.31		5268.	1083.
C1500	57.40	63.80	5.20	0.45	0.00	0.10		5221.	1059.
C1534	66.40	69.90	3.50	0.98	0.02	0.08		5231.	1056.
C1538	88.30	92.60	4.10	0.41	0.01	0.86		5267.	1078.
C1546	98.00	98.00	0.00	-1.00	-1.00	-1.00		5285.	1063.
C1564	80.00	80.00	0.00	-1.00	-1.00	-1.00		5299.	1061.
C1565	74.20	75.60	1.30	0.68	0.01	0.89		5201.	1085.
C1568	83.00	84.50	1.40	1.27	0.00	0.16		5227.	1071.
C1572	103.60	105.20	1.60	1.21	0.00	0.62		5221.	1038.
C1582	75.60	76.90	1.20	0.61	0.00	0.18		5304.	1097.
C1584	85.00	85.00	0.00	-1.00	-1.00	-1.00		5335.	1076.
C1624	11.00	11.00	0.00	-1.00	-1.00	-1.00		5225.	1102.
C1635	77.00	77.00	0.00	-1.00	-1.00	-1.00		5221.	1087.
C1716	15.70	16.20	0.40	0.25	0.03	0.89		5324.	1132.
C1784	22.00	22.00	0.00	-1.00	-1.00	-1.00		5291.	1143.
C1788	22.30	22.60	0.20	1.19	0.03	0.19		5294.	1137.
C1839	16.00	23.90	7.10	0.76	0.00	0.45		5270.	1112.
C1841	14.20	19.60	5.00	0.91	0.00	0.30		5258.	1113.
C1843	14.30	16.50	1.90	0.38	0.00	0.15		5250.	1112.

95 099

C1845	10.00	10.00	0.00	-1.00	-1.00	-1.00	5232.	1114.
C1846	10.00	10.00	0.00	-1.00	-1.00	-1.00	5222.	1113.
C1850	22.50	23.10	0.60	0.52	0.01	1.87	5201.	1108.
C1851	31.30	32.90	1.50	1.61	0.00	0.44	5190.	1105.
C1857	7.00	7.00	0.00	-1.00	-1.00	-1.00	5250.	1120.
C1859	11.00	14.60	3.60	0.47	0.00	0.32	5267.	1121.
C1866	18.00	24.20	5.60	0.61	0.00	0.37	5297.	1111.
C1870	26.40	31.20	4.10	0.63	0.00	0.11	5247.	1105.
C1874	26.00	26.00	0.00	-1.00	-1.00	-1.00	5337.	1103.
C1875	25.00	25.00	0.00	-1.00	-1.00	-1.00	5336.	1110.
C1876	16.00	16.00	0.00	-1.00	-1.00	-1.00	5321.	1102.
C1878	16.00	16.00	0.00	-1.00	-1.00	-1.00	5321.	1109.
C1879	22.20	22.40	0.20	1.70	0.00	0.21	5309.	1102.
C1880	17.00	17.00	0.00	-1.00	-1.00	-1.00	5310.	1111.
C1882	30.50	31.10	0.50	1.34	0.00	0.65	5231.	1104.
C1883	22.50	24.70	0.90	0.67	-1.00	0.34	5309.	1127.
C1886	19.80	26.90	6.70	0.86	0.00	0.40	5276.	1112.
C1887	12.00	15.30	2.70	0.70	0.00	0.65	5292.	1110.
C1889	20.00	29.00	8.60	1.04	0.00	0.40	5284.	1113.
C1892	33.00	33.00	0.00	-1.00	-1.00	-1.00	5309.	1086.
C1893	19.50	21.90	2.40	0.30	0.02	1.11	5283.	1121.
C1896	23.80	26.90	2.10	0.92	0.01	0.59	5300.	1091.
C1897	15.00	15.00	0.00	-1.00	-1.00	-1.00	5283.	1130.
C1898	29.50	30.90	1.20	0.51	0.00	0.24	5300.	1084.
C1904	33.80	41.30	7.20	0.38	0.01	0.90	5267.	1088.
C1911	29.10	29.50	0.30	0.13	0.01	0.05	5248.	1128.
C1913	50.30	59.20	7.70	0.88	0.00	0.27	5270.	1071.
C1943	25.20	32.00	6.10	0.53	0.00	0.66	5284.	1088.
C1949	34.80	50.80	12.80	0.76	0.00	0.42	5286.	1074.
C1990	7.00	7.00	0.00	-1.00	-1.00	-1.00	5285.	1052.

Flist - End of file

Flist... File (?DHORN) Date 4:13 PM MON., 7 JULY, 1986 Page001

1	7	1	12	5275.	1155.	10.	10.
45	1000						
0.10		0.59	40.	0.	1.00		
0.30		0.28	30.	0.	1.00		
0.25		0.21	40.	0.	1.00		
0.22		0.38	45.	0.	1.00		

27 HALL'S D LENS RATCHET-NAD1R (860414.1142)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
15D	-1.00	-1.00	1.70	-1.00	-1.00	-1.00	-1.00	5180.	1197.
16ND	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5173.	1176.
16DP	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	5187.	1177.
16P	-1.00	-1.00	0.90	-1.00	-1.00	-1.00	-1.00	5200.	1178.
16D	-1.00	-1.00	3.20	-1.00	-1.00	-1.00	-1.00	5222.	1179.
16DA	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	5240.	1180.
C 608	115.30	115.80	0.20	0.81	0.08	0.09	-1.00	5285.	1192.
C 805	98.50	103.30	2.50	0.57	0.08	0.29	-1.00	5258.	1212.
C 817	97.80	97.80	0.00	-1.00	-1.00	-1.00	-1.00	5219.	1213.
C1040	39.30	44.00	4.40	1.24	0.15	0.59	-1.00	5222.	1223.
C1070	7.70	9.80	2.10	1.92	0.04	0.26	-1.00	5240.	1220.
C1071	5.10	6.00	0.90	1.40	0.05	0.62	-1.00	5224.	1226.
C1074	20.00	23.80	3.80	0.52	0.03	0.42	-1.00	5252.	1221.
C1153	15.60	18.70	3.10	1.47	9.03	1.46	-1.00	5180.	1200.
C1168	18.10	18.50	0.40	0.76	0.03	0.18	-1.00	5222.	1200.
C1185	26.30	26.80	0.50	0.52	0.03	0.09	-1.00	5181.	1177.
C1193	5.60	8.90	3.30	0.32	0.02	0.67	-1.00	5258.	1201.
C1194	10.50	10.50	0.00	-1.00	-1.00	-1.00	-1.00	5277.	1208.
C1213	13.30	15.50	2.10	0.15	0.01	0.05	-1.00	5278.	1194.
C1217	17.90	21.00	3.00	2.04	0.12	0.52	-1.00	5219.	1180.
C1224	18.20	19.50	0.90	0.42	0.03	0.23	-1.00	5221.	1214.
C1228	22.90	27.80	4.40	0.58	0.05	0.35	-1.00	5203.	1168.
C1230	4.10	6.30	2.00	0.23	0.04	0.48	-1.00	5240.	1184.
C1231	6.90	11.40	4.50	0.58	0.07	0.63	-1.00	5254.	1182.
C1232	9.70	13.40	3.60	0.16	0.04	0.17	-1.00	5181.	1195.
C1233	16.90	17.30	0.40	0.08	0.04	0.71	-1.00	5200.	1179.
C1237	17.70	19.60	1.50	1.32	0.12	0.44	-1.00	5226.	1195.

Flist - End of file

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95 101

Flist... File <?DHDBT > Date 4:13 PM MON., 7 JULY, 1986 Page001

1 10 1 15 5365. 965. 10. 10.
100 1000
0.00 0.75 180. 0. 1.00
0.23 0.19 60. 0. 1.00
2.35 0.67 40. 0. 1.00
0.11 0.41 80. 0. 1.00
39 HALL'S D LENS BELOW TULIP <860414.1143>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
24R	-1.00	-1.00	3.80	0.92	-1.00	0.45	-1.00	5277.	1013.
24S	-1.00	-1.00	3.80	0.96	-1.00	0.36		5292.	1013.
24T	-1.00	-1.00	1.50	0.85	-1.00	0.50		5308.	1013.
C 254	540.00	540.00	0.00	-1.00	-1.00	-1.00	-1.00	5242.	868.
C 800	560.09	562.10	1.10	0.35	0.06	0.11	0.00	5227.	986.
C1312	240.00	243.40	3.00	0.52	0.02	0.08	0.00	5253.	971.
C1400	424.10	429.70	3.30	0.32	0.01	0.10	0.00	5309.	747.
C1405	304.50	318.40	10.20	0.31	0.02	0.07	5.80	5308.	880.
C1425	204.00	207.80	3.70	0.34	0.02	0.78	0.00	5342.	1040.
C1430	267.00	268.40	1.20	0.25	0.02	0.20	0.00	5335.	951.
C1440	232.40	237.20	4.60	0.33	0.01	0.40	13.50	5355.	1048.
C1445	274.47	275.30	0.70	0.31	0.01	0.79	0.00	5344.	968.
C1504	270.00	270.00	0.00	-1.00	-1.00	-1.00	-1.00	5182.	887.
C1518	290.00	290.00	0.00	-1.00	-1.00	-1.00	-1.00	5167.	855.
C1520	308.10	317.00	6.60	0.23	0.00	0.14	0.00	5283.	875.
C1525	342.40	342.60	0.20	-1.00	-1.00	-1.00	0.00	5263.	831.
C1537	113.30	119.60	6.00	0.48	0.00	0.14	0.00	5244.	997.
C1542	127.10	132.70	5.40	0.79	0.00	0.38	17.90	5264.	1010.
C1548	374.00	375.50	1.10	-1.00	-1.00	-1.00	0.00	5223.	762.
C1550	118.20	124.60	6.30	0.55	0.00	0.61	17.20	5277.	1018.
C1553	102.80	104.50	-1.00	0.52	0.00	0.48	11.80	5293.	1041.
C1556	117.00	117.00	0.00	-1.00	-1.00	-1.00	-1.00	5288.	1009.
C1558	125.20	132.40	6.40	0.47	0.00	0.26	2.80	5294.	987.
C1566	96.10	104.20	7.90	0.79	-1.00	0.70	3.70	5306.	1026.
C1574	153.80	153.80	0.00	-1.00	-1.00	-1.00	-1.00	5280.	962.
C1575	527.60	549.90	11.80	0.36	0.00	0.02	0.00	5224.	559.
C1576	130.00	130.00	0.00	-1.00	-1.00	-1.00	-1.00	5222.	1010.
C1580	429.90	436.00	4.10	0.40	0.00	0.10	0.00	5278.	701.
C1583	165.00	165.00	0.00	-1.00	-1.00	-1.00	-1.00	5189.	924.
C1585	147.25	149.25	1.90	0.38	0.00	0.20	0.00	5239.	963.
C1607	111.80	115.10	3.10	1.43	0.00	0.29	15.20	5331.	1022.
C1609	135.50	139.00	3.20	0.47	0.00	0.42	0.00	5340.	986.
C1614	119.00	120.85	1.70	0.14	0.00	0.09	0.00	5371.	1011.
C1620	301.00	304.60	3.20	0.40	0.00	0.31	50.00	5331.	920.
C1622	123.90	129.00	4.70	0.69	0.00	0.50	20.60	5320.	999.
C1639	164.80	168.30	3.00	0.24	0.00	0.18	0.00	5267.	937.
C1650	534.90	544.30	5.50	0.25	0.02	0.05	-1.00	5308.	624.
C1930	44.30	52.90	8.00	1.34	0.01	0.69	-1.00	5311.	1034.
C1987	27.50	35.70	6.50	0.56	0.00	0.52	-1.00	5302.	1031.

Flist - End of file

Flist... File :?DHEAR ; Date 4:14 PM MON.. 7 JULY, 1986 Page001

1 12 1 11 5315. 1165. 10. 10.
65 1000
0.22 1.96 65. 0. 1.00
0.39 0.34 55. 0. 1.00
0.00 0.21 20. 0. 1.00
0.25 0.27 55. 0. 1.00
40 HALL'S E LENS ABOVE RATCHET <860414.1144>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
11Q	-1.00	-1.00	2.50	-1.00	-1.00	-1.00		5222.	1271.
11QA	-1.00	-1.00	1.20	-1.00	-1.00	-1.00		5240.	1271.
C 199	82.30	82.30	0.00	-1.00	-1.00	-1.00		5310.	1284.
C 542	5.90	9.10	3.20	1.86	-1.00	0.47		5218.	1271.
C 571	5.30	7.50	1.90	0.87	0.06	1.02		5233.	1271.
C 606	6.60	8.00	1.40	3.49	-1.00	0.76		5241.	1271.
C 609	6.90	6.90	0.00	-1.00	-1.00	-1.00		5258.	1272.
C 613	5.00	5.00	0.00	-1.00	-1.00	-1.00		5277.	1272.
C 636	4.10	6.50	2.40	1.11	-1.00	0.77		5224.	1271.
C 641	32.70	32.70	0.00	-1.00	-1.00	-1.00		5292.	1284.
C 645	97.50	100.70	1.10	0.91	0.07	0.55		5240.	1205.
C 660	65.90	68.20	2.20	0.44	0.05	0.18		5229.	1257.
C 664	81.80	81.80	0.00	-1.00	-1.00	-1.00		5258.	1257.
C 671	84.10	84.40	0.20	1.35	0.08	0.14		5239.	1255.
C 732	103.00	103.00	0.00	-1.00	-1.00	-1.00		5291.	1210.
C 740	29.00	29.00	0.00	-1.00	-1.00	-1.00		5222.	1282.
C 754	6.20	7.90	1.70	0.35	0.10	0.32		5310.	1272.
C 755	84.80	85.40	0.50	0.27	0.05	0.21		5276.	1241.
C 817	97.80	97.80	0.00	-1.00	-1.00	-1.00		5219.	1213.
C 823	10.70	11.20	0.50	1.67	0.10	0.62		5291.	1255.
C 824	7.70	7.90	0.20	0.21	0.10	0.14		5277.	1255.
C 825	12.10	12.80	0.70	0.27	0.05	0.59		5259.	1255.
C 827	13.50	15.20	1.70	0.08	0.03	0.23		5222.	1255.
C 828	9.60	9.60	0.00	-1.00	-1.00	-1.00		5201.	1255.
C 830	6.50	13.60	7.10	0.63	0.10	0.39		5240.	1255.
C 909	93.60	96.90	2.50	1.38	0.02	0.58		5312.	1234.
C 946	41.20	48.70	7.50	1.53	0.06	0.32		5219.	1240.
C 952	43.80	44.80	1.00	0.54	0.06	1.55		5255.	1239.
C 955	38.00	38.20	0.20	0.07	0.02	0.05		5279.	1240.
C 966	44.90	44.90	0.00	-1.00	-1.00	-1.00		5241.	1250.
C 968	18.40	18.40	0.00	-1.00	-1.00	-1.00		5203.	1239.
C 984	5.80	8.60	2.80	0.41	0.09	0.13		5249.	1255.
C 985	10.10	16.60	6.50	1.69	0.08	0.21		5231.	1255.
C1075	16.00	16.00	0.00	-1.00	-1.00	-1.00		5276.	1221.
C1169	30.50	31.10	0.60	0.63	0.04	0.27		5239.	1202.
C1214	28.50	30.50	1.90	0.89	0.05	0.57		5258.	1189.
C1217	35.00	35.00	0.00	-1.00	-1.00	-1.00		5217.	1181.
C1218	18.90	18.90	0.00	-1.00	-1.00	-1.00		5243.	1216.
C1230	15.00	15.60	0.60	1.19	0.14	0.53		5240.	1188.
C1231	20.00	21.20	1.20	0.13	0.08	0.65		5255.	1182.

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Flist... File (DDHEET) Date 4:15 PM MON., 7 JULY, 1986 Page001

1 11 1 16 5375. 1015. 10. 10.
50 2000
0.00 0.91 25. 0. 1.00
0.18 1.23 25. 0. 1.00
0.00 1.50 20. 0. 1.00
0.00 0.65 25. 0. 1.00
28 HALL'S E LENS EN-TULIP <860414.1144>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
2208	-1.00	-1.00	2.50	0.51	-1.00	1.58		5256.	1052.
C 208	321.70	324.00	1.70	0.57	0.04	1.02		5311.	1052.
C 659	442.00	442.00	0.00	-1.00	-1.00	-1.00		5312.	1094.
C1331	164.75	168.00	3.20	0.84	0.03	0.71		5264.	1058.
C1378	29.40	31.50	2.10	0.40	0.07	0.37		5336.	1121.
C1379	42.00	42.00	0.00	-1.00	-1.00	-1.00		5369.	1122.
C1415	168.10	169.70	1.60	0.06	0.02	0.04		5337.	1092.
C1477	41.00	41.00	0.00	-1.00	-1.00	-1.00		5259.	1088.
C1480	66.40	68.00	1.60	0.28	0.01	0.06		5267.	1082.
C1500	77.70	78.90	1.00	-1.00	-1.00	-1.00		5220.	1048.
C1543	94.00	96.40	2.30	0.78	-1.00	0.48		5240.	1025.
C1572	109.00	109.00	0.00	-1.00	-1.00	-1.00		5221.	1038.
C1582	83.00	83.00	0.00	-1.00	-1.00	-1.00		5304.	1101.
C1584	89.40	92.50	3.00	3.45	0.01	1.42		5335.	1078.
C1619	93.65	97.00	3.10	0.26	0.01	0.63		5360.	1084.
C1635	84.70	85.00	0.30	0.27	0.00	0.35		5321.	1090.
C1874	31.60	32.80	1.20	0.49	0.00	0.48		5337.	1103.
C1875	28.00	32.70	4.50	0.35	0.05	0.28		5336.	1111.
C1876	26.00	28.00	2.00	2.67	0.08	1.57		5320.	1102.
C1878	22.50	24.90	2.10	0.75	0.00	0.77		5321.	1113.
C1879	26.00	27.60	1.60	0.53	0.00	0.18		5309.	1103.
C1880	25.00	25.00	0.00	-1.00	-1.00	-1.00		5310.	1115.
C1892	38.40	41.30	2.60	0.10	0.00	0.05		5309.	1083.
C1896	31.00	31.00	0.00	-1.00	-1.00	-1.00		5300.	1087.
C1898	38.00	38.00	0.00	-1.00	-1.00	-1.00		5300.	1080.
C1913	66.00	66.00	0.00	-1.00	-1.00	-1.00		5267.	1068.
C1926	29.40	34.10	4.00	0.12	0.02	0.32		5323.	1072.
C1935	53.60	59.30	5.00	1.32	0.00	0.71		5257.	1071.

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Flist... File <?DKHKW > Date 4:16 PM MON., 7 JULY, 1986 Page001

1 22 1 26 4975. 1195. 10. 10.

55 2000

0.02 0.82 55. 0. 1.00

0.06 0.25 55. 0. 1.00

0.57 2.60 55. 0. 1.00

0.16 0.32 30. 0. 1.00

128 KHAKI WEST LENS <860416.1237>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
4GF	-1.00	-1.00	1.20	0.95	0.04	0.15	-1.00	4890.	1386.
4GG	-1.00	-1.00	5.90	0.60	0.04	0.09	-1.00	4872.	1387.
4GH	-1.00	-1.00	5.70	0.55	0.05	0.12	-1.00	4852.	1388.
4GI	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4832.	1388.
5GF	-1.00	-1.00	5.10	1.70	-1.00	0.94	-1.00	4890.	1369.
5GG	-1.00	-1.00	2.90	1.36	0.05	0.53	-1.00	4872.	1370.
5GH	-1.00	-1.00	4.20	1.22	0.08	0.27	-1.00	4852.	1370.
5GI	-1.00	-1.00	8.20	0.62	0.04	0.17	-1.00	4832.	1370.
5GJ	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4812.	1370.
7GG	-1.00	-1.00	13.80	1.00	-1.00	0.29	-1.00	4872.	1348.
7GH	-1.00	-1.00	9.20	0.88	-1.00	0.29	-1.00	4852.	1348.
7GI	-1.00	-1.00	4.70	-1.00	-1.00	-1.00	-1.00	4832.	1349.
7GJ	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4812.	1349.
8GG	-1.00	-1.00	17.70	0.90	-1.00	0.14	-1.00	4872.	1331.
8GH	-1.00	-1.00	10.70	1.01	-1.00	0.15	-1.00	4852.	1331.
8GI	-1.00	-1.00	4.70	0.99	0.07	0.27	-1.00	4832.	1332.
8GJ	-1.00	-1.00	5.20	1.18	0.06	0.26	-1.00	4812.	1332.
8GK	-1.00	-1.00	6.70	1.11	0.05	0.19	-1.00	4792.	1332.
8GL	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4772.	1332.
9GG	-1.00	-1.00	14.60	0.95	-1.00	0.17	-1.00	4872.	1313.
9GH	-1.00	-1.00	1.80	-1.00	-1.00	-1.00	-1.00	4852.	1313.
9GI	-1.00	-1.00	1.20	1.15	0.08	0.29	-1.00	4832.	1314.
9GJ	-1.00	-1.00	5.40	1.20	0.06	0.24	-1.00	4812.	1314.
9GK	-1.00	-1.00	5.10	0.89	0.03	0.15	-1.00	4792.	1314.
9GL	-1.00	-1.00	5.70	1.34	0.07	0.23	-1.00	4772.	1314.
9GM	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4752.	1314.
10GG	-1.00	-1.00	17.00	0.76	0.06	0.26	-1.00	4872.	1293.
10GH	-1.00	-1.00	4.90	0.77	0.06	0.16	-1.00	4852.	1293.
10GK	-1.00	-1.00	5.00	1.90	0.06	0.44	-1.00	4792.	1294.
10GL	-1.00	-1.00	3.90	1.87	0.09	0.53	-1.00	4772.	1294.
10GM	-1.00	-1.00	5.60	0.80	0.05	0.15	-1.00	4752.	1294.
10GN	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4732.	1294.
11A	-1.00	-1.00	2.30	0.96	0.07	0.19	-1.00	4832.	1276.
11AB	-1.00	-1.00	2.90	1.13	0.04	0.16	-1.00	4802.	1277.
11AD	-1.00	-1.00	2.70	1.07	0.06	0.11	-1.00	4773.	1277.
11B	-1.00	-1.00	3.10	0.31	0.04	0.21	-1.00	4846.	1276.
11C	-1.00	-1.00	7.20	0.77	0.04	0.14	-1.00	4856.	1275.
11D	-1.00	-1.00	14.20	1.15	0.04	0.24	-1.00	4884.	1274.
11E	-1.00	-1.00	16.00	0.92	0.02	0.15	-1.00	4903.	1273.
13AE	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	-1.00	4742.	1232.
13AEAD	-1.00	-1.00	4.70	1.23	-1.00	0.26	-1.00	4758.	1232.
13AF	-1.00	-1.00	3.80	1.10	-1.00	0.33	-1.00	4715.	1232.
13AFAE	-1.00	-1.00	4.10	1.18	-1.00	0.47	-1.00	4729.	1232.
13SAEAD	-1.00	-1.00	3.00	1.86	-1.00	0.39	-1.00	4758.	1223.
13SUBAD	-1.00	-1.00	1.30	0.19	-1.00	0.42	-1.00	4773.	1225.
14AB	-1.00	-1.00	3.40	1.25	0.12	0.78	-1.00	4804.	1212.
14AD	-1.00	-1.00	4.00	1.02	0.08	0.44	-1.00	4774.	1212.
14AE	-1.00	-1.00	5.80	0.72	0.05	0.16	-1.00	4744.	1211.
14AF	-1.00	-1.00	2.80	0.77	0.06	0.21	-1.00	4717.	1211.
14AG	-1.00	-1.00	3.10	0.68	0.09	0.36	-1.00	4689.	1210.

14STHR	-1.00	-1.00	-1.00	0.91	-1.00	0.44	-1.00	4700.	1234.
C 349	130.00	130.00	0.00	-1.00	-1.00	-1.00	-1.00	4660.	1264.
C 400	251.50	254.40	2.90	0.10	0.08	0.03	0.00	4870.	1188.
C 401	184.10	189.40	5.30	0.85	0.03	0.26	-1.00	4770.	1210.
C 402	176.30	176.30	0.00	-1.00	-1.00	-1.00	-1.00	4649.	1225.
C 403	175.50	178.10	2.10	0.48	0.04	0.72	-1.00	4832.	1263.
C 404	190.70	195.90	5.20	-1.00	-1.00	-1.00	-1.00	4837.	1220.
C 405	199.90	204.30	2.40	0.28	0.04	0.28	-1.00	4845.	1192.
C 506	103.40	106.50	3.00	0.70	0.02	0.34	-1.00	4814.	1298.
C 540	187.20	195.50	5.90	0.32	0.02	0.30	26.30	4828.	1209.
C 594	73.40	83.70	7.50	1.33	0.11	0.17	-1.00	4871.	1345.
C 647	12.20	15.60	3.40	0.62	0.07	0.08	-1.00	4921.	1403.
C 717	30.80	33.60	2.50	0.30	0.05	0.43	-1.00	4926.	1417.
C 739	13.70	15.30	1.60	1.18	0.09	0.31	-1.00	4889.	1387.
C 758	0.00	6.80	3.70	0.69	0.06	0.14	-1.00	4832.	1345.
C 760	0.00	8.80	-1.00	0.91	0.04	0.30	-1.00	4852.	1344.
C 762	1.00	15.30	10.90	0.92	0.04	0.16	-1.00	4872.	1343.
C 772	25.90	31.80	5.90	0.78	0.05	0.12	-1.00	4889.	1404.
C 786	18.60	23.20	4.60	0.93	0.05	0.10	-1.00	4908.	1403.
C 789	18.50	23.90	5.40	0.69	0.04	0.05	-1.00	4871.	1403.
C 790	20.50	26.80	5.90	0.11	0.03	0.05	-1.00	4855.	1403.
C 869	10.00	14.00	4.00	1.25	0.09	0.28	-1.00	4851.	1370.
C 870	19.90	21.60	1.50	0.25	0.02	0.95	-1.00	4890.	1375.
C 872	11.60	12.70	1.10	1.37	0.03	0.16	-1.00	4889.	1371.
C 873	16.60	23.60	7.00	0.43	0.04	0.10	-1.00	4872.	1388.
C 876	4.50	20.40	15.90	0.99	0.07	0.16	-1.00	4871.	1294.
C 882	18.90	21.90	3.00	1.59	0.06	0.38	-1.00	4851.	1293.
C 883	16.60	27.00	9.60	1.28	0.07	0.44	-1.00	4864.	1388.
C 904	87.20	88.10	0.90	2.03	0.08	0.23	-1.00	4832.	1301.
C 908	78.30	82.80	4.40	0.80	0.02	0.13	-1.00	4835.	1282.
C 910	66.70	77.90	11.00	1.20	0.04	0.20	-1.00	4867.	1280.
C 925	3.60	9.30	5.70	1.32	0.03	0.20	-1.00	4811.	1314.
C 935	8.60	9.60	1.00	1.70	0.24	0.74	-1.00	4889.	1382.
C 940	18.30	22.70	4.00	0.32	0.04	0.11	-1.00	4872.	1397.
C 941	13.80	16.90	2.80	0.79	0.04	0.29	-1.00	4871.	1380.
C 947	12.10	15.40	2.40	0.78	0.03	0.21	-1.00	4890.	1358.
C1009	5.90	8.20	1.30	1.37	0.03	0.23	-1.00	4832.	1325.
C1010	8.60	15.30	3.80	1.43	0.04	0.18	-1.00	4852.	1321.
C1015	4.20	13.00	8.50	1.80	0.03	0.11	-1.00	4874.	1329.
C1022	89.40	91.10	2.20	0.36	0.05	0.14	0.00	4803.	1245.
C1028	101.10	101.70	0.50	1.28	0.02	0.13	0.00	4780.	1260.
C1029	52.90	63.30	8.10	0.36	0.02	0.10	33.60	4889.	1254.
C1035	75.90	75.90	0.00	-1.00	-1.00	-1.00	-1.00	4918.	1242.
C1047	6.30	10.60	2.70	0.98	0.03	0.17	-1.00	4848.	1306.
C1055	0.00	17.10	15.40	0.54	0.04	0.15	-1.00	4873.	1307.
C1062	9.10	10.10	1.90	0.17	0.02	0.06	-1.00	4809.	1295.
C1107	113.10	114.00	0.70	3.60	0.38	0.15	0.00	4749.	1252.
C1130	87.80	92.40	4.20	0.39	0.02	0.07	15.70	4714.	1203.
C1288	27.20	46.10	18.30	0.40	0.02	0.14	9.10	4910.	1264.
C1289	30.90	35.70	4.20	0.22	0.02	0.09	0.00	4910.	1257.
C1320	84.70	84.70	0.00	-1.00	-1.00	-1.00	-1.00	4776.	1253.
C1324	108.00	111.00	2.60	0.62	0.05	0.52	0.00	4779.	1216.
C1369	12.30	20.50	6.70	0.53	0.03	0.35	31.70	4872.	1263.
C1370	0.00	15.10	12.30	0.67	0.03	0.32	12.00	4891.	1267.
C1509	0.00	4.40	-1.00	0.33	0.02	0.09	-1.00	4727.	1208.
C1511	47.40	47.40	0.00	-1.00	-1.00	-1.00	-1.00	4761.	1238.
C1514	0.00	8.80	-1.00	1.25	0.05	0.53	-1.00	4786.	1207.
C1517	0.00	9.20	-1.00	0.41	0.03	0.06	-1.00	4692.	1206.
C1521	35.00	42.20	4.60	0.57	0.06	0.14	27.30	4726.	1238.
C1557	91.30	92.50	1.10	1.02	1.06	0.23	0.00	4736.	1254.

C1561	23.50	31.00	3.60	0.59	0.02	0.43	14.80	4834.	1211.
C1623	78.50	86.80	6.60	0.23	0.00	0.22	44.60	4828.	1235.
C1628	65.90	82.30	13.20	0.29	0.00	0.27	23.49	4849.	1221.
C1641	21.80	26.60	3.90	0.70	0.03	0.33	23.49	4761.	1198.
C1643	20.30	20.30	0.00	-1.00	-1.00	-1.00	-1.00	4740.	1197.
FACE# 1	-1.00	-1.00	0.70	0.84	-1.00	0.32	-1.00	4770.	1235.
FACE# 2	-1.00	-1.00	2.20	0.74	-1.00	0.32	-1.00	4768.	1237.
FACE# 3	-1.00	-1.00	1.50	1.28	-1.00	0.12	-1.00	4752.	1239.
FACE# 4	-1.00	-1.00	3.60	0.92	-1.00	0.09	-1.00	4742.	1239.
FACE# 5	-1.00	-1.00	5.10	0.87	-1.00	0.10	-1.00	4734.	1236.
FACE# 6	-1.00	-1.00	1.20	0.47	0.04	0.10	-1.00	4724.	1254.
FACE# 7	-1.00	-1.00	-1.00	1.41	0.05	0.17	-1.00	4731.	1253.
FACE# 8	-1.00	-1.00	1.70	1.80	0.11	0.39	-1.00	4734.	1252.
FACE# 9	-1.00	-1.00	1.10	0.66	0.01	0.04	-1.00	4742.	1248.
FACE#10	-1.00	-1.00	0.80	1.26	0.09	0.30	-1.00	4747.	1246.
FACE#11	-1.00	-1.00	0.50	1.56	0.03	0.13	-1.00	4750.	1245.
FACE#12	-1.00	-1.00	0.50	1.19	0.04	0.18	-1.00	4732.	1256.
FACE#13	-1.00	-1.00	0.90	1.23	0.10	0.37	-1.00	4735.	1257.

Flist - End of file

Flist... File (?DKHKE) Date 4:18 PM MON., 7 JULY, 1986 Page001

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    1   29    1   32     5069.      1185.       10.       10.
  100  1000
     0.09      0.64       120.        40.      1.85
     0.09      0.15       120.        40.      1.70
     0.16      0.29       180.         0.      1.00
     0.08      1.15       165.         0.      1.00
  267  KHAKI EAST LENS          (860416.1048)
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DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
2I	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5033.	1423.
2H	-1.00	-1.00	6.30	-1.00	-1.00	-1.00		5018.	1423.
2G	-1.00	-1.00	33.40	-1.00	-1.00	-1.00		5000.	1423.
2GA	-1.00	-1.00	29.50	-1.00	-1.00	-1.00		4982.	1423.
2GB	-1.00	-1.00	31.60	-1.00	-1.00	-1.00		4963.	1423.
2GC	-1.00	-1.00	26.60	-1.00	-1.00	-1.00		4945.	1423.
3H	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5018.	1403.
3G	-1.00	-1.00	18.00	-1.00	-1.00	-1.00		5000.	1403.
3GA	-1.00	-1.00	22.90	-1.00	-1.00	-1.00		4982.	1403.
3GB	-1.00	-1.00	26.50	-1.00	-1.00	-1.00		4963.	1403.
3GC	-1.00	-1.00	29.20	-1.00	-1.00	-1.00		4945.	1403.
3GD	-1.00	-1.00	33.00	-1.00	-1.00	-1.00		4927.	1403.
3GE	-1.00	-1.00	17.50	-1.00	-1.00	-1.00		4909.	1402.
3GF	-1.00	-1.00	12.40	-1.00	-1.00	-1.00		4890.	1402.
3GG	-1.00	-1.00	7.30	-1.00	-1.00	-1.00		4872.	1402.
3GH	-1.00	-1.00	9.00	-1.00	-1.00	-1.00		4852.	1402.
4H	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5018.	1386.
4G	-1.00	-1.00	5.70	-1.00	-1.00	-1.00		5000.	1386.
4GA	-1.00	-1.00	18.40	-1.00	-1.00	-1.00		4982.	1386.
4GB	-1.00	-1.00	15.90	-1.00	-1.00	-1.00		4963.	1386.
4GC	-1.00	-1.00	22.50	-1.00	-1.00	-1.00		4945.	1386.
4GD	-1.00	-1.00	29.00	-1.00	-1.00	-1.00		4927.	1386.
4GE	-1.00	-1.00	34.90	-1.00	-1.00	-1.00		4909.	1386.
4GF	-1.00	-1.00	16.50	-1.00	-1.00	-1.00		4890.	1386.
4GG	-1.00	-1.00	11.50	-1.00	-1.00	-1.00		4872.	1387.
4GH	-1.00	-1.00	14.30	-1.00	-1.00	-1.00		4852.	1387.
4GI	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4832.	1387.
5GB	-1.00	-1.00	18.60	-1.00	-1.00	-1.00		4963.	1367.
5GC	-1.00	-1.00	25.30	-1.00	-1.00	-1.00		4945.	1368.
5GD	-1.00	-1.00	27.50	-1.00	-1.00	-1.00		4927.	1368.
5GE	-1.00	-1.00	27.00	-1.00	-1.00	-1.00		4909.	1369.
5GF	-1.00	-1.00	13.20	-1.00	-1.00	-1.00		4890.	1368.
5GG	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		4872.	1369.
5GH	-1.00	-1.00	8.60	-1.00	-1.00	-1.00		4852.	1369.
5GI	-1.00	-1.00	7.20	-1.00	-1.00	-1.00		4832.	1369.
5GJ	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4812.	1369.
7G	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5000.	1347.
7GA	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		4982.	1347.
7GB	-1.00	-1.00	6.50	-1.00	-1.00	-1.00		4963.	1348.
7GC	-1.00	-1.00	17.90	-1.00	-1.00	-1.00		4945.	1348.
7GD	-1.00	-1.00	23.90	-1.00	-1.00	-1.00		4927.	1348.
7GE	-1.00	-1.00	23.10	-1.00	-1.00	-1.00		4909.	1348.
7GF	-1.00	-1.00	21.50	-1.00	-1.00	-1.00		4890.	1348.
7GG	-1.00	-1.00	11.50	-1.00	-1.00	-1.00		4872.	1349.
7GH	-1.00	-1.00	6.60	-1.00	-1.00	-1.00		4852.	1348.
7GI	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		4832.	1349.
7GJ	-1.00	-1.00	9.00	-1.00	-1.00	-1.00		4812.	1349.
8GA	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4982.	1330.
8GB	-1.00	-1.00	4.80	-1.00	-1.00	-1.00		4963.	1330.
8GC	-1.00	-1.00	10.10	-1.00	-1.00	-1.00		4945.	1330.

9GD	-1.00	-1.00	24.70	-1.00	-1.00	-1.00	4927.	1331.
8GE	-1.00	-1.00	37.20	-1.00	-1.00	-1.00	4909.	1331.
8GF	-1.00	-1.00	28.70	-1.00	-1.00	-1.00	4890.	1331.
8GG	-1.00	-1.00	6.70	-1.00	-1.00	-1.00	4872.	1332.
8GH	-1.00	-1.00	4.70	-1.00	-1.00	-1.00	4852.	1332.
8GI	-1.00	-1.00	5.10	-1.00	-1.00	-1.00	4832.	1332.
8GJ	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4812.	1332.
9GB	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4963.	1311.
9GC	-1.00	-1.00	4.00	-1.00	-1.00	-1.00	4945.	1311.
9GD	-1.00	-1.00	25.90	-1.00	-1.00	-1.00	4927.	1313.
9GE	-1.00	-1.00	34.50	-1.00	-1.00	-1.00	4909.	1313.
9GF	-1.00	-1.00	28.60	-1.00	-1.00	-1.00	4890.	1314.
9GG	-1.00	-1.00	12.70	-1.00	-1.00	-1.00	4872.	1313.
9GH	-1.00	-1.00	12.10	-1.00	-1.00	-1.00	4852.	1314.
9GI	-1.00	-1.00	11.40	-1.00	-1.00	-1.00	4832.	1314.
9GJ	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	4812.	1314.
9GL	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4772.	1314.
10GB	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4963.	1293.
10GD	-1.00	-1.00	26.70	-1.00	-1.00	-1.00	4927.	1293.
10GE	-1.00	-1.00	33.30	-1.00	-1.00	-1.00	4909.	1293.
10GF	-1.00	-1.00	26.40	-1.00	-1.00	-1.00	4928.	1293.
10GG	-1.00	-1.00	9.70	-1.00	-1.00	-1.00	4872.	1293.
10GH	-1.00	-1.00	12.30	-1.00	-1.00	-1.00	4851.	1293.
10GI	-1.00	-1.00	15.20	-1.00	-1.00	-1.00	4832.	1293.
10GJ	-1.00	-1.00	14.50	-1.00	-1.00	-1.00	4812.	1294.
10GK	-1.00	-1.00	5.30	-1.00	-1.00	-1.00	4792.	1294.
10GL	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4772.	1294.
11-4940	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4940.	1273.
11-4930	-1.00	-1.00	7.00	-1.00	-1.00	-1.00	4930.	1273.
11-4920	-1.00	-1.00	11.10	-1.00	-1.00	-1.00	4920.	1273.
11-4910	-1.00	-1.00	12.00	0.25	0.02	0.15	4910.	1273.
11-4900	-1.00	-1.00	11.10	-1.00	-1.00	-1.00	4900.	1274.
11-4890	-1.00	-1.00	11.40	0.31	0.01	0.12	4890.	1274.
11-4880	-1.00	-1.00	12.30	-1.00	-1.00	-1.00	4880.	1274.
11-4870	-1.00	-1.00	16.30	-1.00	-1.00	-1.00	4870.	1274.
11-4860	-1.00	-1.00	22.30	0.25	0.01	0.16	4860.	1274.
11-4850	-1.00	-1.00	23.30	0.51	0.03	0.15	4850.	1275.
11-4840	-1.00	-1.00	22.10	0.88	0.03	0.09	4840.	1276.
11-4830	-1.00	-1.00	18.20	-1.00	-1.00	-1.00	4830.	1276.
11-4820	-1.00	-1.00	21.40	-1.00	-1.00	-1.00	4820.	1276.
11-4810	-1.00	-1.00	22.60	0.79	0.03	0.07	4810.	1277.
11-4800	-1.00	-1.00	18.50	-1.00	-1.00	-1.00	4800.	1277.
11-4790	-1.00	-1.00	11.90	0.94	0.03	0.07	4790.	1277.
11-4780	-1.00	-1.00	3.60	-1.00	-1.00	-1.00	4780.	1277.
11-4770	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4770.	1277.
12-4860	-1.00	-1.00	2.90	-1.00	-1.00	-1.00	4860.	1265.
12-4850	-1.00	-1.00	4.60	-1.00	-1.00	-1.00	4850.	1265.
12-4840	-1.00	-1.00	6.60	-1.00	-1.00	-1.00	4840.	1265.
12-4830	-1.00	-1.00	7.90	-1.00	-1.00	-1.00	4830.	1265.
12-4820	-1.00	-1.00	10.40	-1.00	-1.00	-1.00	4820.	1265.
12-4810	-1.00	-1.00	9.00	0.75	-1.00	0.19	4810.	1265.
12-4780	-1.00	-1.00	5.20	-1.00	-1.00	-1.00	4780.	1265.
12-4770	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4770.	1265.
14-4800	-1.00	-1.00	4.40	-1.00	-1.00	-1.00	4800.	1210.
14-4790	-1.00	-1.00	2.60	0.23	0.02	0.37	4790.	1210.
14-4780	-1.00	-1.00	5.00	0.77	0.07	0.27	4780.	1210.
14-4770	-1.00	-1.00	5.60	-1.00	-1.00	-1.00	4770.	1210.
14-4760	-1.00	-1.00	4.10	0.99	0.11	0.23	4760.	1210.
14-4750	-1.00	-1.00	2.20	-1.00	-1.00	-1.00	4750.	1210.
14-4740	-1.00	-1.00	1.70	1.41	0.08	0.47	4740.	1210.

14-4730	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	4730.	1210.
C 331	59.10	72.10	12.70	1.23	-1.00	0.37	4853.	1383.
C 400	233.00	237.30	3.76	0.12	0.07	0.04	4870.	1198.
C 401	135.60	141.40	3.50	1.89	-1.00	0.22	4782.	1246.
C 403	162.80	168.10	4.20	0.24	0.02	0.29	4835.	1269.
C 406	198.30	203.40	2.30	0.32	0.04	1.47	4783.	1177.
C 488	63.00	63.00	0.00	-1.00	-1.00	-1.00	5048.	1439.
C 497	80.00	80.00	0.00	-1.00	-1.00	-1.00	5047.	1452.
C 506	89.10	98.60	9.30	0.44	0.03	0.25	4816.	1300.
C 524	24.10	50.60	17.30	0.38	0.05	0.25	4905.	1293.
C 532	48.30	76.70	28.30	0.62	-1.00	0.15	4981.	1435.
C 558	46.40	74.50	26.30	0.62	0.05	0.10	5001.	1435.
C 594	60.60	72.90	9.60	1.08	0.05	0.15	4871.	1353.
C 670	0.00	17.70	-1.00	1.03	0.11	0.25	4999.	1416.
C 675	0.00	15.90	-1.00	0.67	0.08	0.15	4999.	1418.
C 676	0.00	18.30	-1.00	0.85	0.07	0.13	4981.	1418.
C 679	0.00	22.80	-1.00	0.60	0.05	0.12	4962.	1416.
C 680	0.00	19.40	-1.00	0.92	0.07	0.11	4963.	1416.
C 682	0.00	23.00	-1.00	1.04	0.11	0.19	4981.	1416.
C 685	0.00	26.50	-1.00	1.14	0.06	0.21	4908.	1393.
C 688	0.00	30.70	28.80	0.64	0.05	0.17	4926.	1397.
C 693	0.00	12.50	-1.00	0.56	0.07	0.11	4926.	1403.
C 699	0.00	15.70	-1.00	0.77	0.10	0.22	4962.	1397.
C 700	0.00	9.50	-1.00	0.92	0.08	0.13	4980.	1399.
C 702	0.00	8.80	-1.00	1.12	0.15	0.47	4981.	1400.
C 703	0.00	15.10	-1.00	1.55	0.12	0.37	4963.	1397.
C 706	0.00	12.10	-1.00	0.96	0.09	0.17	4944.	1399.
C 707	0.00	11.80	-1.00	0.84	0.08	0.09	4926.	1400.
C 711	0.00	17.70	-1.00	1.09	0.07	0.20	4944.	1398.
C 712	0.00	18.00	-1.00	0.73	0.08	0.13	4926.	1408.
C 716	0.00	13.00	-1.00	0.75	0.11	0.39	4926.	1387.
C 717	0.00	15.10	-1.00	0.53	0.08	0.19	4926.	1407.
C 719	0.00	8.10	-1.00	1.08	0.10	0.23	4963.	1386.
C 734	0.00	16.10	-1.00	1.04	0.10	0.23	4944.	1368.
C 736	0.00	13.10	-1.00	0.98	0.06	0.37	4908.	1399.
C 737	10.60	13.90	3.30	0.67	0.04	0.10	4998.	1369.
C 741	0.00	5.90	-1.00	0.74	0.07	0.13	4889.	1400.
C 742	0.00	12.60	-1.00	0.72	0.06	0.20	4889.	1398.
C 743	10.10	20.40	9.60	0.78	0.05	0.20	4871.	1394.
C 746	0.00	15.10	-1.00	0.81	0.07	0.15	4908.	1411.
C 749	0.00	15.60	-1.00	0.93	0.04	0.13	4908.	1412.
C 756	0.00	17.30	-1.00	1.15	0.05	0.20	4908.	1387.
C 757	0.00	4.80	-1.00	0.81	0.05	0.35	4832.	1346.
C 765	0.00	19.00	-1.00	0.59	0.04	0.10	4889.	1342.
C 766	0.00	15.80	-1.00	0.63	0.05	0.13	4907.	1343.
C 767	0.00	8.60	-1.00	0.44	0.06	0.14	4926.	1344.
C 769	0.00	12.50	-1.00	0.99	0.06	0.21	4944.	1341.
C 770	0.00	36.20	-1.00	1.10	0.05	0.29	4926.	1342.
C 775	0.00	26.40	-1.00	0.77	0.03	0.16	4922.	1343.
C 776	0.00	21.90	-1.00	0.75	0.01	0.04	4889.	1343.
C 777	14.50	24.80	9.70	1.22	0.05	0.20	4871.	1341.
C 798	0.00	23.50	-1.00	0.56	0.03	0.09	4908.	1314.
C 852	0.00	14.60	-1.00	0.90	0.17	0.38	4981.	1382.
C 853	0.00	11.10	-1.00	1.45	0.10	0.37	4963.	1381.
C 855	0.00	16.20	-1.00	0.74	0.06	0.18	4944.	1380.
C 857	0.00	12.00	-1.00	0.79	0.04	0.20	4963.	1382.
C 858	0.00	17.00	-1.00	1.17	0.05	0.29	4944.	1381.
C 861	0.00	16.70	-1.00	1.02	0.05	0.27	4908.	1380.
C 862	0.00	23.90	-1.00	1.09	0.07	0.39	4926.	1379.
C 863	0.00	11.00	-1.00	1.06	0.06	0.25	4890.	1381.

C 864	0.00	18.00	-1.00	1.18	0.08	0.42			4925.	1379.
C 867	0.00	21.00	-1.00	0.91	0.04	0.15			4909.	1380.
C 870	0.00	11.30	-1.00	1.01	0.05	0.36			4890.	1383.
C 882	1.00	14.40	13.40	0.64	0.05	0.10			4851.	1293.
C 904	67.00	84.90	17.90	0.72	0.06	0.19			4832.	1300.
C 905	53.00	78.10	24.80	0.65	0.04	0.27			4907.	1280.
C 906	0.00	13.50	-1.00	0.34	0.02	0.11			4927.	1293.
C 908	57.00	72.70	15.50	0.47	0.04	0.18			4834.	1284.
C 910	52.90	65.50	12.40	0.60	0.02	0.17			4868.	1282.
C 914	52.90	74.00	28.90	0.62	0.04	0.27			4893.	1281.
C 933	0.00	6.80	-1.00	1.13	0.07	0.26			4944.	1365.
C 937	0.00	10.70	-1.00	1.14	0.09	0.45			4955.	1364.
C 938	0.00	14.70	-1.00	0.92	0.04	0.15			4926.	1363.
C 943	0.00	13.30	-1.00	1.02	0.05	0.17			4909.	1363.
C 949	0.00	16.30	-1.00	0.77	0.05	0.22			4944.	1364.
C 950	15.40	23.70	8.90	0.72	0.03	0.36			4873.	1380.
C 951	10.90	23.60	11.20	1.70	0.03	0.28			4851.	1361.
C 954	13.10	26.20	11.80	1.07	0.03	0.36			4870.	1360.
C 956	5.30	30.20	22.60	0.93	0.02	0.13			4890.	1361.
C 960	0.00	24.70	-1.00	1.05	0.03	0.20			4909.	1363.
C 963	0.00	20.30	-1.00	0.94	0.06	0.21			4926.	1363.
C 965	0.00	16.70	-1.00	1.03	0.08	0.35			4963.	1363.
C1011	0.00	26.40	-1.00	0.73	0.05	0.16			4890.	1324.
C1012	5.90	12.90	6.50	0.67	0.05	0.11			4832.	1327.
C1014	6.70	16.20	9.00	0.99	0.03	0.18			4852.	1327.
C1015	22.00	35.10	13.60	0.81	0.04	0.21			4872.	1324.
C1022	69.00	77.80	7.00	0.57	0.04	0.40			4808.	1253.
C1028	75.00	81.40	6.20	0.48	0.02	0.13	50.90		4787.	1267.
C1029	49.20	50.80	1.20	0.76	0.03	0.21			4889.	1259.
C1035	53.50	66.10	9.50	0.14	0.01	0.15	42.90		4917.	1253.
C1045	0.00	11.00	-1.00	1.27	0.02	0.24			4838.	1311.
C1046	6.20	20.20	13.40	0.92	0.02	0.20			4856.	1309.
C1051	0.00	23.80	-1.00	0.73	0.05	0.15			4891.	1309.
C1052	4.70	6.20	1.50	1.21	0.02	0.20			4791.	1315.
C1054	0.00	22.70	-1.00	0.97	0.06	0.25			4889.	1307.
C1056	0.00	15.70	-1.00	0.32	0.02	0.16			4870.	1308.
C1059	5.40	6.90	2.40	1.90	0.02	0.51			4812.	1321.
C1060	0.00	4.40	-1.00	0.69	0.03	0.19			4983.	1368.
C1065	0.00	19.20	-1.00	0.53	0.02	0.09			4888.	1326.
C1066	0.00	24.40	-1.00	0.60	0.05	0.24			4909.	1326.
C1067	0.00	26.90	-1.00	0.54	0.05	0.13			4905.	1318.
C1068	0.00	24.10	-1.00	0.52	0.07	0.22			4927.	1326.
C1069	0.00	6.30	-1.00	0.73	0.08	0.27			4927.	1328.
C1072	0.00	29.70	-1.00	0.73	0.05	0.16			4909.	1307.
C1089	0.00	10.40	-1.00	2.18	0.15	0.67			4944.	1309.
C1090	0.00	9.80	-1.00	1.31	0.09	0.30			4944.	1307.
C1091	0.00	20.10	-1.00	0.44	0.02	0.10			4927.	1308.
C1092	0.00	15.20	-1.00	0.57	0.03	0.11			4929.	1309.
C1093	0.00	27.70	-1.00	0.62	0.03	0.16			4904.	1309.
C1107	87.20	87.50	0.29	1.24	0.05	0.03			4761.	1261.
C1130	85.00	85.00	0.00	-1.00	-1.00	-1.00			4716.	1203.
C1284	19.60	49.90	29.30	0.50	0.03	0.15			4912.	1279.
C1288	13.20	25.80	12.20	0.19	0.01	0.09	10.90		4910.	1268.
C1289	12.20	27.80	13.70	0.22	0.02	0.20	9.90		4910.	1263.
C1301	26.70	28.20	1.30	1.87	0.07	0.20			4770.	1267.
C1308	20.00	20.30	0.30	0.12	0.01	0.22			4771.	1272.
C1316	20.50	27.50	6.40	0.54	0.05	0.12	61.10		4780.	1268.
C1320	67.50	76.50	8.50	0.18	0.01	0.10			4779.	1257.
C1324	66.70	81.90	12.90	1.08	0.03	0.25	11.80		4784.	1234.
C1511	28.10	28.50	0.30	0.66	-1.00	0.27			4752.	1227.

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C1516	20.50	28.20	6.20	0.35	-1.00	0.05	26.00	4810.	1223.
C1548	55.50	55.50	0.00	-1.00	-1.00	-1.00		4720.	1244.
C1557	52.50	52.50	0.00	-1.00	-1.00	-1.00		4734.	1236.
C1623	53.50	69.60	12.60	0.15	0.00	0.09	18.90	4837.	1244.
C1628	46.50	59.80	10.50	0.32	0.00	0.06	61.70	4857.	1231.
C1629	28.50	28.90	0.20	0.21	0.03	2.81	0.00	4726.	1190.
C1632	26.80	36.20	7.40	0.60	0.00	0.19	55.30	4786.	1194.
C1807	32.00	35.40	3.20	1.10	0.04	0.17	0.00	4758.	1220.
C1810	40.70	46.00	3.10	0.60	0.01	1.23	0.00	4774.	1239.
C1812	31.10	39.80	7.60	1.00	0.02	0.25	0.00	4772.	1225.
C1814	48.30	48.30	0.00	-1.00	-1.00	-1.00		4770.	1252.
C1818	38.50	50.70	6.70	1.07	0.02	0.24	12.30	4784.	1251.
C1820	25.60	33.60	7.00	0.34	0.01	0.26	5.00	4783.	1224.
C1823	22.70	26.50	3.10	0.24	0.02	0.24		4797.	1225.
C1827	27.40	36.00	5.10	0.81	0.04	0.65	4.70	4798.	1239.
C1830	35.00	59.70	9.60	0.76	0.02	0.23	15.00	4796.	1259.
C1835	31.30	34.30	2.60	0.66	0.00	0.09	3.30	4772.	1201.
C1836	27.00	28.60	1.30	1.30	0.00	0.17	0.00	4756.	1201.
C1868	58.00	71.00	12.70	0.86	0.09	0.24		5020.	1436.
C1902	67.20	78.40	11.10	1.68	0.07	0.22		5017.	1456.
C1961	43.60	72.40	28.10	0.73	0.03	0.10		5003.	1435.
C1968	50.20	72.30	21.60	0.63	0.07	0.12		5010.	1430.
C1984	65.70	67.50	1.60	0.87	0.00	0.45		5036.	1411.
C1989	76.50	76.50	0.00	-1.00	-1.00	-1.00		5042.	1432.
C1991 D	0.00	4.00	10.00	1.20	0.07	0.16		4788.	1265.
C1992	0.00	5.90	-1.00	0.90	0.04	0.13		4789.	1262.
C1993 D	0.00	10.30	14.20	0.60	0.02	0.36		4798.	1265.
C1994	0.00	17.40	-1.00	0.43	0.00	0.32		4799.	1258.
C1995	92.00	92.00	0.00	-1.00	-1.00	-1.00		5039.	1449.
C1996 D	0.00	10.40	11.10	0.93	0.00	0.15		4806.	1265.
C1998	0.00	21.50	-1.00	0.62	0.01	0.22		4807.	1257.
C2001 D	0.00	6.90	13.10	0.41	-1.00	0.08		4840.	1266.
C2004	86.60	100.30	13.30	1.73	0.07	0.13		5036.	1466.
C2018	23.30	23.30	0.00	-1.00	-1.00	-1.00		4877.	1424.
C2022	25.10	34.40	8.60	0.57	0.00	0.08		4878.	1412.
C2023	32.50	32.50	0.00	-1.00	-1.00	-1.00		4861.	1418.
C2024	30.80	36.20	5.30	0.19	0.02	0.08		4898.	1421.

Flist - End of file

Flist... File <?DLUCK > Date 4:21 PM MON., 7 JULY, 1986 Page001

1 7 1 8 5045. 1395. 10. 10.

45 1011

0.24 0.44 30. 0. 1.00

0.00 0.43 43. 0. 1.00

0.16 0.30 50. 0. 1.00

0.20 0.32 50. 0. 1.00

67 LUCK'S LODE <860414.1145>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
60-5010	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5010.	1460.
60-5015	-1.00	-1.00	2.40	-1.00	-1.00	-1.00		5015.	1460.
60-5020	-1.00	-1.00	4.00	-1.00	-1.00	-1.00		5020.	1460.
60-5025	-1.00	-1.00	5.10	-1.00	-1.00	-1.00		5025.	1460.
60-5030	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5030.	1460.
60-5035	-1.00	-1.00	4.50	-1.00	-1.00	-1.00		5035.	1460.
60-5040	-1.00	-1.00	1.10	-1.00	-1.00	-1.00		5040.	1460.
60-5045	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5045.	1460.
40-4970	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4970.	1440.
40-4975	-1.00	-1.00	0.40	-1.00	-1.00	-1.00		4975.	1440.
40-4980	-1.00	-1.00	1.00	-1.00	-1.00	-1.00		4980.	1440.
40-4985	-1.00	-1.00	1.00	-1.00	-1.00	-1.00		4985.	1440.
40-4990	-1.00	-1.00	1.00	-1.00	-1.00	-1.00		4990.	1440.
40-4995	-1.00	-1.00	1.20	-1.00	-1.00	-1.00		4995.	1440.
40-5000	-1.00	-1.00	2.90	-1.00	-1.00	-1.00		5000.	1440.
40-5005	-1.00	-1.00	4.90	-1.00	-1.00	-1.00		5005.	1440.
40-5010	-1.00	-1.00	5.40	-1.00	-1.00	-1.00		5010.	1440.
40-5015	-1.00	-1.00	5.20	-1.00	-1.00	-1.00		5015.	1440.
40-5020	-1.00	-1.00	5.80	-1.00	-1.00	-1.00		5020.	1440.
40-5025	-1.00	-1.00	5.50	-1.00	-1.00	-1.00		5025.	1440.
40-5030	-1.00	-1.00	5.00	-1.00	-1.00	-1.00		5030.	1440.
40-5035	-1.00	-1.00	2.60	-1.00	-1.00	-1.00		5035.	1440.
40-5040	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5040.	1440.
20-4990	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4990.	1420.
20-4995	-1.00	-1.00	3.50	-1.00	-1.00	-1.00		4995.	1420.
20-5000	-1.00	-1.00	5.20	-1.00	-1.00	-1.00		5000.	1420.
20-5005	-1.00	-1.00	7.20	-1.00	-1.00	-1.00		5005.	1420.
20-5010	-1.00	-1.00	10.00	-1.00	-1.00	-1.00		5010.	1420.
20-5015	-1.00	-1.00	12.40	-1.00	-1.00	-1.00		5015.	1420.
20-5020	-1.00	-1.00	14.90	-1.00	-1.00	-1.00		5020.	1420.
20-5025	-1.00	-1.00	10.80	-1.00	-1.00	-1.00		5025.	1420.
20-5030	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5030.	1420.
00-4990	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		4990.	1400.
00-4995	-1.00	-1.00	2.50	-1.00	-1.00	-1.00		4995.	1400.
00-5000	-1.00	-1.00	4.80	-1.00	-1.00	-1.00		5000.	1400.
00-5005	-1.00	-1.00	7.50	-1.00	-1.00	-1.00		5005.	1400.
00-5010	-1.00	-1.00	10.00	-1.00	-1.00	-1.00		5010.	1400.
00-5015	-1.00	-1.00	10.80	-1.00	-1.00	-1.00		5015.	1400.
00-5020	-1.00	-1.00	10.40	-1.00	-1.00	-1.00		5020.	1400.
00-5025	-1.00	-1.00	0.00	-1.00	-1.00	-1.00		5025.	1400.
C 91	32.20	41.80	9.60	0.47	-1.00	0.46		5019.	1401.
C 126	37.00	53.60	15.90	0.79	-1.00	0.21		5020.	1430.
C 269	97.20	102.50	5.30	0.98	0.01	0.34		4999.	1424.
C 275	70.00	70.00	0.00	-1.00	-1.00	-1.00		4986.	1415.
C 318	43.10	52.00	8.80	0.94	0.06	0.23		5021.	1452.
C 532	9.40	10.00	0.60	-1.00	-1.00	-1.00		4980.	1441.
C 558	11.00	12.00	1.00	0.32	0.04	0.24		4984.	1440.
C 821	41.10	53.60	5.30	0.63	0.09	0.15		5018.	1422.
C1888	40.70	47.90	7.20	0.78	0.07	0.16		5018.	1438.
C1895	40.20	54.40	11.10	0.69	0.05	0.18		5017.	1415.

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C1902	50.10	55.60	5.40	0.91	0.14	0.68	5017.	1453.
C1942	18.20	22.70	4.50	0.29	0.00	0.04	4991.	1438.
C1961	20.50	23.30	2.80	0.51	0.03	0.21	5001.	1440.
C1968	37.50	43.50	5.80	0.77	0.20	0.51	5010.	1434.
C1972	37.00	48.20	9.80	0.37	0.06	0.14	5010.	1423.
C1974	34.50	42.40	7.90	0.99	0.09	0.27	5030.	1445.
C1977	35.60	43.70	7.70	0.52	0.12	0.17	5031.	1431.
C1980	36.80	37.70	0.80	0.39	0.07	0.93	5030.	1424.
C1982	54.20	60.20	5.90	0.11	0.02	0.28	5028.	1456.
C1984	36.00	36.50	0.40	0.71	0.10	0.89	5033.	1426.
C1986	49.30	49.40	0.10	-1.00	-1.00	-1.00	5032.	1410.
C1989	28.00	32.90	4.80	0.32	0.06	0.11	5035.	1441.
C1995	38.00	47.60	9.50	0.80	0.17	0.27	5034.	1447.
C2004	58.60	72.40	13.40	0.98	0.08	0.30	5034.	1460.
C2010	42.50	55.80	8.90	0.78	0.03	0.24	5010.	1409.
C2014	47.70	56.90	5.30	2.47	0.08	0.56	5011.	1401.
C2015	60.80	60.80	0.90	-1.00	-1.00	-1.00	5010.	1387.

Flist - End of file

Flist... File (?DBSTH) Date 4:21 PM MON., 7 JULY, 1986 Page001

1 15 1 24 4929. 1125. 10. 10.
45 2000
0.05 0.25 120. 0. 1.00
0.15 0.17 45. -10. 1.80
0.10 0.25 45. 0. 1.00
0.17 0.26 75. 0. 1.00
97 8-SOUTH LENS BELOW 11 <860414.1146>

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
11A	-1.00	-1.00	16.20	-1.00	-1.00	-1.00	-1.00	4860.	1274.
11C	-1.00	-1.00	10.20	0.29	0.02	0.15	-1.00	4897.	1273.
11D	-1.00	-1.00	5.40	0.43	0.03	0.13	-1.00	4920.	1272.
13AG	-1.00	-1.00	12.80	0.25	0.02	0.14	-1.00	4714.	1232.
15AD-S	-1.00	-1.00	7.60	0.58	-1.00	0.90	-1.00	4806.	1192.
15AD-N	-1.00	-1.00	2.80	0.74	-1.00	0.61	-1.00	4814.	1192.
15ADAE	-1.00	-1.00	-1.00	1.36	-1.00	0.58	-1.00	4795.	1192.
15AE	-1.00	-1.00	-1.00	1.01	-1.00	0.38	-1.00	4780.	1192.
15AEAF	-1.00	-1.00	-1.00	0.50	-1.00	0.15	-1.00	4765.	1192.
15AF	-1.00	-1.00	-1.00	0.39	-1.00	0.07	-1.00	4750.	1192.
15AFAG	-1.00	-1.00	-1.00	0.54	-1.00	0.11	-1.00	4735.	1192.
15AG	-1.00	-1.00	-1.00	1.11	-1.00	0.30	-1.00	4720.	1192.
15AGAH	-1.00	-1.00	-1.00	0.58	-1.00	0.13	-1.00	4704.	1192.
15AH	-1.00	-1.00	-1.00	0.96	-1.00	0.29	-1.00	4689.	1192.
15AHAI	-1.00	-1.00	-1.00	0.64	-1.00	0.21	-1.00	4676.	1192
16AD	-1.00	-1.00	6.90	0.29	0.00	0.37	-1.00	4815.	1169.
16ADAE	-1.00	-1.00	-1.00	1.04	-1.00	0.50	-1.00	4794.	1169.
17AG	-1.00	-1.00	4.40	0.57	-1.00	0.22	-1.00	4717.	1132.
C 97	168.10	182.60	12.50	0.60	-1.00	0.66	31.00	4809.	1236.
C 98	192.00	204.20	7.60	0.21	-1.00	0.30	36.90	4809.	1180.
C 310	224.80	260.20	-1.00	0.75	0.05	0.34	28.00	4793.	1208.
C 319	183.70	197.70	10.70	1.04	0.07	0.28	28.50	4746.	1218.
C 400	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4875.	1250.
C 402	327.10	328.70	1.20	0.32	0.02	0.02	0.00	4686.	1131.
C 405	130.00	130.70	0.50	0.11	0.06	0.14	0.00	4869.	1248.
C 658	203.56	234.00	17.20	0.33	0.05	0.11	31.90	4693.	1145.
C1127 D	-1.00	-1.00	9.80	0.42	0.02	0.08	-1.00	4719.	1210.
C1131 D	-1.00	-1.00	11.30	0.67	0.01	0.17	-1.00	4730.	1210.
C1133 D	-1.00	-1.00	10.80	0.82	0.02	0.16	-1.00	4745.	1210.
C1134 D	-1.00	-1.00	14.40	0.48	0.01	0.11	-1.00	4725.	1210.
C1137 D	-1.00	-1.00	12.20	0.69	0.02	0.14	-1.00	4736.	1210.
C1139 D	-1.00	-1.00	11.50	0.93	0.06	0.31	-1.00	4770.	1209.
C1143 D	-1.00	-1.00	10.10	1.01	0.03	0.36	-1.00	4788.	1209.
C1145 D	-1.00	-1.00	13.50	0.75	0.03	0.19	-1.00	4765.	1209.
C1146 D	-1.00	-1.00	9.60	0.90	0.06	0.36	-1.00	4775.	1209.
C1147 D	-1.00	-1.00	12.40	0.36	0.01	0.07	-1.00	4715.	1210.
C1148 D	-1.00	-1.00	14.70	0.34	0.02	0.08	-1.00	4709.	1210.
C1150 D	-1.00	-1.00	10.20	0.53	0.03	0.49	-1.00	4795.	1209.
C1151 D	-1.00	-1.00	10.50	1.29	0.04	0.41	-1.00	4782.	1209.
C1157 D	-1.00	-1.00	12.00	0.90	0.06	0.20	-1.00	4760.	1209.
C1158 D	-1.00	-1.00	14.60	0.27	0.02	0.09	-1.00	4750.	1210.
C1161 D	-1.00	-1.00	13.80	0.70	0.05	0.70	-1.00	4755.	1210.
C1162 D	-1.00	-1.00	7.40	0.70	0.02	0.38	-1.00	4800.	1209.
C1163 D	-1.00	-1.00	7.50	0.24	0.02	0.36	-1.00	4805.	1209.
C1164	5.44	9.76	4.30	0.21	0.02	0.26	19.00	4820.	1208.
C1166	6.93	8.70	1.80	0.24	0.02	0.50	0.00	4829.	1208.
C1167	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4835.	1208.
C1301	108.48	121.81	10.10	0.89	0.03	0.06	4.70	4752.	1235.
C1308	108.25	117.81	7.60	0.56	0.02	0.18	17.20	4749.	1248.
C1311 D	-1.00	-1.00	10.80	0.47	0.02	0.09	-1.00	4764.	1274.

C1316	102.62	112.52	9.90	0.79	0.05	0.53	19.50	4789.	1239.
C1318 D	-1.00	-1.00	9.80	0.78	0.03	0.13	-1.00	4748.	1275.
C1321 D	-1.00	-1.00	10.40	0.92	0.02	0.14	-1.00	4738.	1275.
C1325 D	-1.00	-1.00	9.30	0.81	0.03	0.11	-1.00	4793.	1274.
C1327 D	-1.00	-1.00	8.50	0.74	0.02	0.11	-1.00	4779.	1274.
C1328 D	-1.00	-1.00	10.10	0.81	0.03	0.15	-1.00	4810.	1274.
C1330 D	-1.00	-1.00	18.00	0.47	0.04	0.25	-1.00	4839.	1274.
C1333	89.20	98.60	6.70	0.73	0.02	0.26	29.80	4766.	1262.
C1334 D	-1.00	-1.00	4.60	0.75	0.06	0.13	-1.00	4825.	1274.
C1337 D	-1.00	-1.00	15.50	0.36	0.03	0.24	-1.00	4884.	1273.
C1338 D	-1.00	-1.00	15.20	0.44	0.03	0.31	-1.00	4870.	1273.
C1353	107.20	123.90	10.60	0.62	0.03	0.45	7.80	4734.	1260.
C1356	79.50	88.80	8.40	0.95	0.07	0.56	0.00	4806.	1252.
C1359	69.00	81.60	12.40	0.29	0.03	0.45	15.10	4842.	1261.
C1365	-1.00	-1.00	0.30	-1.00	-1.00	-1.00	-1.00	4843.	1217.
C1381 D	-1.00	-1.00	11.40	0.82	0.03	0.11	-1.00	4750.	1232.
C1382 D	-1.00	-1.00	10.20	0.76	0.05	0.23	-1.00	4761.	1231.
C1383 D	-1.00	-1.00	7.00	2.42	0.06	0.28	-1.00	4770.	1231.
C1385 D	-1.00	-1.00	9.10	0.78	0.05	0.19	-1.00	4780.	1231.
C1386 D	-1.00	-1.00	10.80	0.89	0.10	0.41	-1.00	4790.	1231.
C1388 D	-1.00	-1.00	15.50	0.48	0.02	0.09	-1.00	4728.	1232.
C1390 D	-1.00	-1.00	13.30	0.62	0.02	0.21	-1.00	4740.	1232.
C1431 D	-1.00	-1.00	5.60	0.18	0.01	0.30	-1.00	4829.	1231.
C1433 D	-1.00	-1.00	10.70	0.78	0.06	0.56	-1.00	4819.	1231.
C1434 D	-1.00	-1.00	9.50	0.88	-1.00	0.50	-1.00	4811.	1231.
C1435	-1.00	-1.00	-1.00	0.10	0.03	0.27	-1.00	4835.	1231.
C1446	68.25	71.94	3.70	0.50	0.07	0.52	0.00	4751.	1131.
C1449	50.32	59.20	6.60	0.75	0.06	0.31	3.80	4757.	1173.
C1451	72.00	76.50	3.50	0.62	0.04	0.37	8.90	4750.	1135.
C1454	49.84	70.32	19.80	0.46	-1.00	0.13	26.80	4721.	1152.
C1456	59.00	68.50	9.50	0.76	0.04	0.24	12.10	4718.	1134.
C1458	49.30	59.12	7.70	0.40	-1.00	0.12	43.30	4720.	1168.
C1462	39.30	50.14	10.60	0.27	0.02	0.18	21.80	4697.	1142.
C1463	37.60	62.25	21.60	0.11	0.01	0.05	56.30	4693.	1157.
C1466	84.80	87.70	2.90	1.09	-1.00	0.42	0.00	4793.	1146.
C1469	75.08	78.73	3.50	0.32	-1.00	0.30	46.30	4820.	1164.
C1470	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4749.	1110.
C1474	64.65	70.75	3.80	0.59	-1.00	0.43	9.30	4813.	1175.
C1475	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4724.	1116.
C1478	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4817.	1106.
C1482	-1.00	-1.00	0.00	-1.00	-1.00	-1.00	-1.00	4818.	1134.
C1494	60.40	84.92	10.40	0.65	-1.00	0.25	21.70	4725.	1188.
C1502	76.34	90.00	9.20	0.53	-1.00	0.07	19.40	4756.	1196.
C1503	66.05	83.22	11.90	0.60	-1.00	0.21	31.60	4782.	1188.
C1505	75.25	81.37	3.60	0.22	-1.00	0.24	15.00	4811.	1198.
C1516	91.90	107.40	14.30	0.36	0.03	0.43	-1.00	4842.	1253.
C1894 D	0.00	7.30	15.00	0.84	0.00	0.14	-1.00	4740.	1195.

Flist - End of file

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Flist... File (?DB4TW) Date 4:23 PM MON., 7 JULY, 1986 Page001

1 21 1 21 4955. 1175. 10. 10.
75 1000
0.00 0.70 45. 45. 1.50
0.07 0.13 75. 0. 1.00
0.25 0.49 75. 0. 1.00
0.13 0.26 75. 0. 1.00
35 BATTERY WEST LENS ABOVE 17 LEVEL (860414.1146)

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
C 2	11.70	21.10	7.90	0.48	-1.00	-1.00		4866.	1336.
C 3	26.10	35.40	9.10	0.88	-1.00	-1.00		4894.	1330.
C 4	17.80	27.30	6.60	0.65	-1.00	-1.00		4869.	1326.
C 5	18.40	41.90	9.70	0.94	-1.00	-1.00		4871.	1315.
C 63	70.00	70.00	0.00	-1.00	-1.00	-1.00		4867.	1294.
C 97	66.50	87.00	16.40	0.25	-1.00	0.08		4809.	1291.
C 98	116.50	126.50	6.00	0.51	-1.00	0.11		4809.	1240.
C 274	170.10	184.80	9.50	0.15	0.03	0.09		4749.	1230.
C 585	13.10	18.40	5.30	0.52	-1.00	0.13		4874.	1344.
C1469	105.00	105.00	0.00	-1.00	-1.00	-1.00		4806.	1176.
C1775	80.00	80.00	0.00	-1.00	-1.00	-1.00		4850.	1291.
C1779	85.50	85.50	0.00	-1.00	-1.00	-1.00		4888.	1317.
C1785	68.30	69.20	0.90	0.12	0.01	0.30		4783.	1210.
C1792	79.50	86.30	6.40	0.41	0.03	0.27		4854.	1301.
C1794	68.00	68.00	0.00	-1.00	-1.00	-1.00		4782.	1183.
C1796	84.60	95.70	10.20	0.59	0.03	0.15		4859.	1311.
C1816	0.70	16.80	12.10	0.36	0.04	0.11		4854.	1338.
C1838	73.40	79.30	4.80	0.57	0.01	0.23		4781.	1237.
C1847	95.90	102.90	5.00	0.59	0.05	0.17		4787.	1265.
C1849	61.00	61.00	0.00	-1.00	-1.00	-1.00		4920.	1334.
C1854	68.00	68.00	0.00	-1.00	-1.00	-1.00		4921.	1316.
C1858	54.30	60.50	6.00	0.85	0.08	0.40		4913.	1355.
C1861	91.50	104.00	8.70	0.30	0.01	0.09		4809.	1282.
C1863	25.90	30.10	3.90	0.49	0.01	0.12		4883.	1334.
C1864	87.40	93.10	5.70	0.42	0.01	0.03		4753.	1195.
C1867	23.70	28.70	4.70	0.67	0.03	0.23		4885.	1352.
C1872	92.80	95.60	2.80	-1.00	-1.00	-1.00		4722.	1175.
C1873	108.80	117.30	5.10	0.47	0.03	0.11		4811.	1262.
C1881	85.90	95.60	7.70	0.85	0.02	0.06		4804.	1301.
C1884	80.00	80.00	0.00	-1.00	-1.00	-1.00		4720.	1219.
C1900	79.60	89.00	8.90	0.39	0.00	0.03		4737.	1165.
C1903	119.40	129.80	5.40	0.58	0.00	0.16		4810.	1247.
C1906	70.00	70.00	0.00	-1.00	-1.00	-1.00		4737.	1156.
C1927	106.60	109.80	2.70	0.27	0.01	0.18		4718.	1136.
SURFACE	-1.00	-1.00	4.00	-1.00	-1.00	-1.00		4935.	1381.
C2040	52.60	56.30	3.70	0.70	0.01	0.07		4911.	1353.

Flist - End of file

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Flist... File (?DBATE) Date 4:23 PM MON., 7 JULY, 1986 Page001

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     0.10       0.18        75.         0.      1.00
     0.17       0.32        75.         0.      1.00
     0.09       0.21        75.         0.      1.00
   28  BATTERY EAST LENS ABOVE 17 LEVEL  <860414.1147>
```

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
C 1	29.40	31.20	0.90	1.07	-1.00	-1.00		4890.	1316.
C 63	42.00	42.00	0.00	-1.00	-1.00	-1.00		4868.	1312.
C 77	65.00	65.00	0.00	-1.00	-1.00	-1.00		4931.	1303.
C 97	45.00	45.00	0.00	-1.00	-1.00	-1.00		4810.	1310.
C 274	140.80	144.80	2.60	0.03	0.01	0.06		4749.	1256.
C 400	49.00	65.50	12.00	0.99	0.13	0.42		4831.	1302.
C 976	122.50	125.10	2.00	0.55	0.03	0.29		4839.	1218.
C1703	98.00	98.00	0.00	-1.00	-1.00	-1.00		4852.	1278.
C1775	100.80	105.30	4.40	1.00	0.10	0.28		4845.	1294.
C1779	110.00	110.00	0.00	-1.00	-1.00	-1.00		4888.	1329.
C1785	78.20	79.40	1.10	0.30	0.01	0.06		4784.	1212.
C1792	106.80	109.40	2.40	0.41	0.05	0.26		4849.	1307.
C1794	77.00	77.00	0.00	-1.00	-1.00	-1.00		4782.	1181.
C1796	116.20	118.20	1.80	1.09	0.07	0.25		4856.	1321.
C1804	102.40	104.90	2.20	0.64	0.05	0.41		4839.	1244.
C1838	83.00	84.80	1.40	1.06	0.05	0.26		4781.	1241.
C1847	108.80	114.00	3.70	0.66	0.08	0.18		4788.	1273.
C1849	37.00	38.80	1.80	0.63	0.07	0.34		4920.	1337.
C1854	42.70	46.10	3.20	0.72	0.07	0.28		4920.	1325.
C1858	31.80	37.50	5.60	0.81	0.06	0.19		4917.	1350.
C1861	122.50	128.70	4.30	0.24	0.03	0.22		4810.	1263.
C1864	104.50	107.60	3.10	0.22	0.01	0.06		4753.	1194.
C1872	104.20	106.20	2.00	0.51	0.04	0.18		4722.	1173.
C1873	134.20	136.10	1.20	0.91	0.04	0.29		4813.	1246.
C1881	112.50	117.30	3.80	0.11	0.00	0.03		4803.	1286.
C1900	98.20	102.40	3.90	0.54	0.01	0.11		4736.	1160.
C1903	137.40	140.40	2.00	0.57	0.08	0.11		4810.	1235.
C1906	110.30	112.70	2.10	0.38	0.02	0.12		4735.	1135.
C2040	27.90	30.80	3.50	0.85	0.07	0.16		4912.	1362.

Flist - End of file

Flist... File (?DBAT) Date 4:24 PM MON.. 7 JULY, 1986 Page001

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     0.20       0.44        50.        0.      1.00
     0.12       0.29        45.        0.      1.00
     0.06       0.15        55.        0.      1.00
   17  BATTERY LENS BELOW 17 LEVEL   (860414.1147)
```

DDHFACE	FROM	TO	WIDTH	%SNT	%SNS	%CU	INT.W%	NORTH	RL
C1155	460.40	462.60	1.20	0.26	0.03	0.35		4675.	1053.
C1255	639.70	654.30	8.30	2.07	0.04	0.17		4654.	940.
C1446	110.00	110.00	0.00	-1.00	-1.00	-1.00		4757.	1132.
C1470	117.00	123.30	6.00	0.53	0.02	0.18		4752.	1098.
C1475	125.00	125.00	0.00	-1.00	-1.00	-1.00		4708.	1098.
C1512	131.00	155.80	21.00	0.42	0.01	0.30		4747.	1054.
C1513	244.70	250.10	4.00	0.05	0.01	0.13		4751.	954.
C1524	121.40	150.00	23.40	1.25	0.06	0.41		4712.	1055.
C1528	185.00	195.60	7.60	0.67	0.04	0.36		4720.	998.
C1536	98.00	102.70	3.90	0.80	0.05	0.44		4686.	1076.
C1539	183.40	195.50	8.30	0.82	0.05	0.43		4698.	997.
C1544	182.20	196.30	9.50	0.57	0.06	0.25		4679.	991.
C1554	180.55	181.90	0.90	0.42	0.07	0.53		4657.	994.
C2025	27.50	44.30	14.50	0.13	0.00	0.15		4780.	1058.
C2026	57.60	70.00	7.50	-1.00	-1.00	-1.00		4778.	1022.
C2027	19.40	32.50	11.20	-1.00	-1.00	-1.00		4785.	1084.
C2028	54.10	68.70	9.50	-1.00	-1.00	-1.00		4746.	1028.

Flist - End of file

APPENDIX II

RESERVE CALCULATION COMPUTER SYSTEM

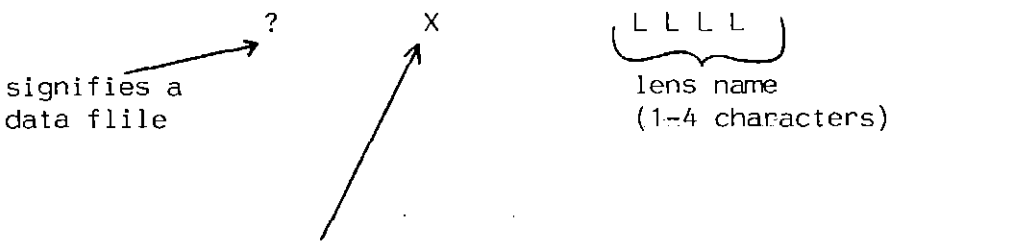
RESERVE CALCULATION COMPUTER SYSTEM

1. INTRODUCTION

The computer system used in this assessment is basically the same as used in 1982 but with minor modifications.

2. FILE NAMING

All files used in the system are ASCII sequential files stored on a disk with standard file names.



D	lens intersection
O	mineralized area polygon co-ordinates
K	kriged block estimates
P	polygon edited kriged block estimates - mineralized area
I	mined out data
W	dilution, mining recovery data
M	mineable reserves block estimates

3. FILE FORMAT

3.1 ? D LLLL FILES - LENS INTERSECTION DATA

RECORD NO.	COLS.	FORMAT	DESCRIPTION
1	1 - 5	I5	First block row number (RL)
(block	6 - 10	I5	Last block row number (RL)
Specification)	10 - 15	I5	First block column number (North)
	16 - 20	I5	Last block column number (North)
	21 - 30	F10.0	Northing of northern-most block edge
	31 - 40	F10.0	R.L. of lowermost block edge
	41 - 50	F10.0	Block Size in North direction
	51 - 60	F10.0	Block Size in R.L. direction
2	1 - 5	I5	Maximum search distance
(sample search)	9 - 10	I2	Maximum number of samples used for each estimate
	11	I1	List weights 1 = Yes 0 = No
	12	I1	List data 1 = Yes 0 = No
3 Hor. Width	1 - 10	F10.2	Nugget effect
4 % SnT	11 - 20	F10.2	Sill - Nugget effect
5 % SnS	21 - 30	F10.0	Range
6 % Cu	31 - 40	F10.0	Angle of anistropy for major axis
	41 - 50	F10.0	Anisotropy factor
(variogram parameters)			
8	1 - 5	I5	Number of inter-sections
	6 - 80	A75	Title and time stamp
9			Column headings

3.1 ? D LLLL FILES - LENS INTERSECTION DATA (cont.)

RECORD NO.	COLS.	FORMAT	DESCRIPTION
10 - (last -1)	1 - 7	A7	Intersection name
(Intersections)	8 - 14	F7.2	From
	15 - 21	F7.2	To
	22 - 28	F7.2	Horizontal width
	29 - 35	F7.2	% SnT
	36 - 42	F7.2	% SnS
	43 - 49	F7.2	% Cu
	50 - 63	14X	Filler
	64 - 70	F7.0	Northing
	71 - 77	F7.0	R.L.
Last	1 - 80	80X	To satisfy variogram program

3.2 ? O LLLL FILES - POLYGON CO-ORDINATES

RECORD NO.	COLS.	FORMAT	DESCRIPTION
1	1 - 5	I5	Number of polygon points
2 - last	1 - 10	F10.0	Northing
	11 - 20	F10.0	R.L.

3.3 ? K,P LLLL FILES - KRIGED ESTIMATES

RECORD NO.	COLS.	FORMAT	DESCSRIPTION
1 - last	1 - 5	I5	Block row number (R.L.)
	6 - 10	I5	Block column number (North)
	11 - 20	F10.1	Block Centre Northing
	21 - 30	F10.1	Block Centre R.L.
	31 - 40	F10.2	Hor. Width Estimate
	41 - 50	F10.2	Hor. Width Kriging Variance
	51 - 60	F10.2	% SnT estimate
	61 - 70	F10.2	% SnT kriging variance
	71 - 80	F10.3	% SnS estimate
	81 - 90	F10.2	% SnS kriging variance
	91 -100	F10.2	% Cu estimate
	101 -110	F10.2	% Cu kriging variance

3.4 ? W LLLL FILES - MINING & METALLURGY FACTOR DATA

RECORD NO.	COLS.	FORMAT	DESCSRIPTION
1 - last	1 - 5	I5	Block row number (R.L.)
	6 -10	I5	Block column number (North)
	11 - 15	I5	Dilution
	16 - 20	I5	Mining recovery
	21 - 25	I5	Mill productivity co-efficient (MPC)

3.5 ? M LLLL FILES - MINEABLE RESERVES DATA

RECORD NO.	COLS.	FORMAT	DESCRIPTION
1 - last	1 - 5	I5	Block row number (R.L.)
	6 - 10	I5	Block column number (North)
	11 - 20	F10.1	Block centre northing
	21 - 30	F10.1	Block centre R.L.
	31 - 37	F7.0	Geological resource tonneage
	38 - 44	F7.0	Total haulage tonneage
	45 - 51	F7.0	Mill feed tonneage
	52 - 58	F7.0	Low grade tonneage
	59 - 64	F6.2	Geological % SnT
	65 - 70	F6.2	Geological % Cu
	71 - 76	F6.2	Mill feed % SnT
	77 - 82	F6.2	Mill feed % Cu
	83 - 88	F6.2	Mill recoverable % SnT
	89 - 94	F6.2	Mill recoverable % Cu
	95 -100	F6.2	Mill recoverable % SnT equivalent
	101 -106	F6.2	Low grade % Cu
	107 -111	F5.1	Horizontal width
	112 -116	F5.0	Grade control sorting recovery
	117 -121	I5	Mill productivity co-efficient (MPC)
	122 -126	I5	Mined out status

Flist... File (?VECDL1 / Date 9:23 AM TUE., 8 JULY, 1986 Page001

```
  HENRYS POD 1                EXPERIMENTAL VARIOGRAM (ISOTROPIC)
0 0000110          5          0        100
16700
(21X,5F7.2,7X,2F7.0)
            HORIZONTAL WIDTH                              (850621.1434)


## Flist - End of File ##
```

123

Flist... File (ORANJA) Date 8:25 AM TUE., 8 JULY, 1986 Page001

20

5055	1301
5052	1311
5052	1326
5050	1341
5053	1350
5063	1361
5068	1365
5071	1364
5072	1357
5070	1349
5070	1338
5073	1328
5076	1328
5080	1332
5084	1333
5089	1330
5088	1324
5081	1315
5074	1305
5055	1301

Flist - End of File

Flist... File SYIH03A) Date 8:25 AM TUE., 8 JULY, 1986 Page001

1	1	0
1	2	0
1	3	0
1	4	0
1	5	0
2	1	0
2	2	0
2	3	25
2	4	50
2	5	50
3	1	0
3	2	0
3	3	65
3	4	100
3	5	100
4	1	0
4	2	15
4	3	70
4	4	100
4	5	100
5	1	0
5	2	0
5	3	20
5	4	100
5	5	85
6	1	0
6	2	0
6	3	100
6	4	100
6	5	100
7	1	0
7	2	0
7	3	100
7	4	100
7	5	0

Flist - End of file

Flist... File <?KHN3A > Date 8:28 AM TUE.. 8 JULY, 1986 Page001

1	1	5090.0	1300.0	4.66	.87	.93	.24	.10	.08	.66	.13	0
1	2	5080.0	1300.0	3.54	.71	.93	.21	.10	.07	.62	.09	0
1	3	5070.0	1300.0	5.69	.66	.93	.16	.10	.07	.60	.06	0
1	4	5060.0	1300.0	7.39	.66	.94	.17	.10	.07	.65	.07	0
1	5	5050.0	1300.0	5.06	.67	1.10	.23	.11	.08	.56	.10	0
2	1	5090.0	1310.0	3.76	.64	.88	.22	.10	.08	.78	.09	0
2	2	5060.0	1310.0	.89	.12	.87	.16	.10	.07	.68	.05	0
2	3	5070.0	1310.0	5.23	.09	1.03	.06	.10	.03	.62	.01	0
2	4	5060.0	1310.0	11.47	.12	1.04	.06	.12	.03	.67	.01	0
2	5	5050.0	1310.0	5.50	.11	.95	.16	.11	.06	.65	.06	0
3	1	5090.0	1320.0	2.65	.53	.99	.15	.11	.06	.91	.05	0
3	2	5080.0	1320.0	3.61	.46	.89	.11	.10	.05	.81	.02	0
3	3	5070.0	1320.0	3.95	.51	1.06	.11	.11	.06	.61	.03	0
3	4	5060.0	1320.0	7.29	.53	1.13	.13	.12	.06	.60	.04	0
3	5	5050.0	1320.0	3.00	.49	1.16	.18	.12	.07	.63	.07	0
4	1	5090.0	1330.0	1.82	.23	.93	.15	.11	.06	.91	.05	0
4	2	5080.0	1330.0	4.32	.21	.97	.10	.10	.05	.74	.02	0
4	3	5070.0	1330.0	4.70	.10	1.28	.08	.10	.03	.46	.01	0
4	4	5060.0	1330.0	7.70	.21	1.26	.16	.11	.07	.52	.05	0
4	5	5050.0	1330.0	1.32	.08	1.18	.21	.11	.07	.63	.09	0
5	1	5090.0	1340.0	2.49	.82	1.17	.21	.11	.08	.73	.10	0
5	2	5080.0	1340.0	1.70	.59	1.32	.17	.11	.07	.58	.06	0
5	3	5070.0	1340.0	3.09	.26	1.64	.11	.12	.05	.44	.02	0
5	4	5060.0	1340.0	3.86	.29	1.41	.12	.12	.06	.55	.03	0
5	5	5050.0	1340.0	1.06	.32	1.16	.19	.11	.07	.67	.08	0
6	1	5090.0	1350.0	3.44	.87	1.33	.25	.11	.09	.66	.13	0
6	2	5080.0	1350.0	1.29	.34	1.53	.22	.11	.09	.55	.08	0
6	3	5070.0	1350.0	1.50	.31	1.82	.11	.13	.05	.47	.02	0
6	4	5060.0	1350.0	2.45	.45	1.49	.09	.12	.07	.64	.02	0
6	5	5050.0	1350.0	1.17	.32	1.56	.23	-1.00	-1.00	.62	.09	0
7	1	5090.0	1360.0	2.07	.93	1.33	.25	.11	.09	.66	.15	0
7	2	5080.0	1360.0	3.03	.86	1.39	.25	.11	.09	.61	.12	0
7	3	5070.0	1360.0	2.63	.95	1.49	.21	.11	.09	.61	.09	0
7	4	5060.0	1360.0	2.89	.87	1.67	.23	-1.00	-1.00	.55	.09	0
7	5	5050.0	1360.0	2.50	.97	1.63	.27	-1.00	-1.00	.58	.13	0

Flist - End of file

Flist... File (PHM3A) Date 8:29 AM TUE., 8 JULY, 1986 Page001

1	1	5090.0	1300.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
1	2	5080.0	1300.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
1	3	5070.0	1300.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
1	4	5060.0	1300.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
1	5	5050.0	1300.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
2	1	5090.0	1310.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
2	2	5080.0	1310.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
2	3	5070.0	1310.0	5.23	.09	1.03	.06	.10	.03	.62	.01	25
2	4	5060.0	1310.0	11.47	.12	1.04	.06	.12	.03	.67	.01	50
2	5	5050.0	1310.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
3	1	5090.0	1320.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
3	2	5080.0	1320.0	3.61	.46	.89	.11	.10	.05	.81	.02	0
3	3	5070.0	1320.0	3.95	.51	1.06	.11	.11	.06	.61	.03	65
3	4	5060.0	1320.0	7.29	.63	1.13	.13	.12	.06	.60	.04	100
3	5	5050.0	1320.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
4	1	5090.0	1330.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
4	2	5080.0	1330.0	4.32	.21	.97	.10	.10	.05	.74	.02	15
4	3	5070.0	1330.0	4.70	.10	1.28	.08	.10	.03	.46	.01	70
4	4	5060.0	1330.0	7.70	.21	1.26	.16	.11	.07	.52	.05	100
4	5	5050.0	1330.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
5	1	5090.0	1340.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
5	2	5080.0	1340.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
5	3	5070.0	1340.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
5	4	5060.0	1340.0	3.86	.29	1.41	.12	.12	.06	.55	.03	100
5	5	5050.0	1340.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
6	1	5090.0	1350.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
6	2	5080.0	1350.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
6	3	5070.0	1350.0	1.50	.31	1.82	.11	.13	.05	.47	.02	100
6	4	5060.0	1350.0	2.45	.45	1.49	.09	.12	.07	.64	.02	100
6	5	5050.0	1350.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
7	1	5090.0	1360.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
7	2	5080.0	1360.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
7	3	5070.0	1360.0	2.63	.85	1.49	.21	.11	.09	.61	.09	100
7	4	5060.0	1360.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1
7	5	5050.0	1360.0	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1

Flist - End of File

Flist... File (ZHN3A) Date 8:57 AM TUE., 8 JULY, 1986 Page001

.20	6569.	.856	.572	.599
.21	6569.	.856	.572	.599
.22	6569.	.856	.572	.599
.23	6569.	.856	.572	.599
.24	6569.	.856	.572	.599
.25	6569.	.856	.572	.599
.26	6569.	.856	.572	.599
.27	6569.	.856	.572	.599
.28	6569.	.856	.572	.599
.29	6569.	.856	.572	.599

Flist - End of file

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Flist... File (?WHN3A) Date 8:39 AM TUE., 8 JULY, 1986 Page001

1	1	30	90	65
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1	3	30	90	65
1	4	30	90	65
1	5	30	90	65
2	1	30	90	65
2	2	30	90	65
2	3	30	90	65
2	4	30	90	65
2	5	30	90	65
3	1	30	90	65
3	2	30	90	65
3	3	30	90	65
3	4	30	90	65
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4	2	30	90	65
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4	5	30	90	65
5	1	30	90	65
5	2	30	90	65
5	3	30	90	65
5	4	30	90	65
5	5	30	90	65
6	1	30	90	65
6	2	30	90	65
6	3	30	90	65
6	4	30	90	65
6	5	30	90	65
7	1	30	90	65
7	2	30	90	65
7	3	30	90	65
7	4	30	90	65
7	5	30	90	65

Flist - End of file

Flist... File (CHANNEL) Date 8:42 AM TUE., 8 JULY, 1986 Page001

1	1	5090.0	1300.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
1	2	5080.0	1300.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
1	3	5070.0	1300.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
1	4	5060.0	1300.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
1	5	5050.0	1300.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
2	1	5090.0	1310.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
2	2	5080.0	1310.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
2	3	5070.0	1310.0	1196.	1400.	1320.	61.	1.03	.62	.86	.52	.56	.32	.60	.17	5.2	94.	65	25
2	4	5060.0	1310.0	1749.	2047.	1938.	85.	1.04	.67	.87	.56	.57	.35	.61	.18	11.5	95.	65	50
2	5	5050.0	1310.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
3	1	5090.0	1320.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
3	2	5080.0	1320.0	1101.	1288.	1134.	103.	.89	.81	.78	.71	.51	.44	.56	.25	3.6	88.	65	0
3	3	5070.0	1320.0	422.	493.	470.	18.	1.06	.61	.88	.51	.57	.31	.61	.16	3.9	95.	65	65
3	4	5060.0	1320.0	0.	0.	0.	0.	0.00	.69	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
3	5	5050.0	1320.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
4	1	5090.0	1330.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
4	2	5080.0	1330.0	1120.	1310.	1204.	76.	.97	.74	.83	.63	.54	.39	.58	.21	4.3	92.	65	15
4	3	5070.0	1330.0	430.	503.	503.	0.	1.28	.46	1.00	.36	.65	.22	.68	.10	4.7	100.	65	70
4	4	5060.0	1330.0	0.	0.	0.	0.	0.00	.52	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
4	5	5050.0	1330.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
5	1	5090.0	1340.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
5	2	5080.0	1340.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
5	3	5070.0	1340.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
5	4	5060.0	1340.0	0.	0.	0.	0.	0.00	.55	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
5	5	5050.0	1340.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
6	1	5090.0	1350.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
6	2	5080.0	1350.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
6	3	5070.0	1350.0	0.	0.	0.	0.	0.00	.47	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
6	4	5060.0	1350.0	0.	0.	0.	0.	0.00	.64	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
6	5	5050.0	1350.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
7	1	5090.0	1360.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
7	2	5080.0	1360.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
7	3	5070.0	1360.0	0.	0.	0.	0.	0.00	.61	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.	65	100
7	4	5060.0	1360.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1
7	5	5050.0	1360.0	-1.	-1.	-1.	-1.	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.0	-1.	-1	-1

Flist - End of file

APPENDIX III

FORTRAN PROGRAMS

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First... File (&CVAR1 ... Date 7:54 AM TUE., 8 JULY, 1986 Page001

```
FTN4X,L,D
$FILES(0,3)
      PROGRAM CVAR1(4,200), Cleveland 2-d variograms 80col output
      DIMENSION TOT(20,5),TOTVAR(20,5),NF48(6),NF49(6)
      COMMON VAR(20,5),IHEAD(40),LOG,CLAS,BLIM,ANG,SMEAN,VARI,STD,N,NN
      COMMON IPC,L,SPR,ISCAL,TMAX,NREL
      COMMON IOUT,IPT,IPCH,ICOMP,ITAPE,ITITLE(40),MAXN
      COMMON DATA(1000,4),IFRMT(40),LD,NO,IE,IA,KJ,KK
      COMMON ISEL,YMIN,YMAX,XMIN,XMAX,ABCD
      DATA TOT,TSUM,TSUM2/102*0.0/
      MAXN=1000 $ IPT=48  $ ITAPE=49 $ IPCH=7
      WRITE(1,1)
    1 FORMAT(25/,23X,'** PROGRAM CVAR **'//' Variogram option file ')
      READ(1,2)NF48
      WRITE(1,3)
    3 FORMAT(//' Data file ')
    2 FORMAT(6A2)
      READ(1,2)NF49
      IOUT=9
      OPEN(48,FILE=NF48,ERR=30)
      OPEN(49,FILE=NF49,BLANK='ZE')
C*************************************************************************
C
C
C
C*************************************************************************
C  This programm was written by Harvey P Knudsen and typed in by K G Palmer.
C  Documentation  in this programm is originally by Young C. Kim but is
C  significantly modified by K.G. Palmer and minor mods by G.J.McArthur
C  This programm was specifically tailored for use by the U.S. ERDA personnel
C  to compute variograms directly from 'SCOR'  tapes. It has now been modified
C   to become a general purpose variogram computation programm having
C   many user options.Consequently the respective users should be familiar
C   with the documentation and the method of setting up and modifying the
C   option file which is identified in the programm as `?UGM'.To properly use
C   the main programm each user should create his own option file and
C   suitably modify the programm `CVAR' to read from it.
C
C   The main options are
C                1). Choice of the format with which the programm will
C                    read from the data file.
C                2). Choice of the Titles to be Listed with the output
C
C                3). Choice of the variable to be used in computing
C                    the variogram.
C                4). Option to specify the rectangular limits within
C                    which the program may select data to compute the
C                    variogram.
C                5). Option to compute the variogram using LOG
C                    transformation  of the variable to be considered.
C                6). Option to decide whether the user wishes to have
C                    relative variograms computed.
C                7). Option to allow the user to choose to compute the
C                    variogram of the ACCUMULATION (length times the
C                    respective chosen variable.)
C                8). Choice of automatic scaling of the Variogram Plot
C                    on the line printer
```

```
C
C   Program CVAR calculates the horizontal variograms in any
C   direction and the user may vary the azimuth and the window to get the
C   variogram in a specific direction  to determine isometric or directional
C   relationships.Each data record must have an identification, coordinates,
C   and variable values. but data does not have to be ordered.
C
C   This programm is capable of processing a single data group or muitiple
C   data groups,all during the same run.it is currently dimensioned to
C   handle up to 1000 total data points or records within a single data
C   group.
C
C   Up to 20 class intervals along a given direction are allowed in variogram
C   computation.
C
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
C             DESCRIPTION OF CONTROL DATA IN FILE '?UGM'
C              TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT*
C   LINE 1
C  Column 1-80     40A2      HEAD     Alpha-numeric description
C
C  LINE 2
C  Column    1      I1       INPT     Input data device.For the current HP1000
C                                     configuration only 0(zero) may be used.
C            2      I1                Not used.
C
C            3      I1       LOG      Option for log transformation of data.
C                                     0=no,1=yes(normally 0)
C            4      I1       ITAL     Average variogram option. 0=no, 1=yes
C                                     This is the average of all the variograms
C                                     from the several data groups.(Normaliy=0)
C            5      I1       IPC      Punch out option for program 'VARPLOT'.This
C                                     MUST be set at 0 since  the plotting
C                                     programm is not yet available.
C            6      I1       LL       Variogram display option. 1=Moment centre,
C                                     0=Gamma(H).Normally 0.(Moment centre is
C                                     the value of the variogram taking into
C                                     account the actual distance between each
C                                     pair of values rather than assuming that
C                                     they are seperated by distance 'h'.That
C                                     is ,it is the weighted value.
C            7      I1       ISCAL    Automatic scaling of the graph.1=yes
C                                     0=no,(normally =1)
C
C            8      I1       NREL     Relative variogram option.1=yes,0=no.
C
C            9      I1       ICHIP    Assay data read in option.For the HP1000
C                                     only 0(zero) may be used
C        11-20   F10.0       CLAS     Class interval to be used to group
C                                     distances.It is also used to limit the
C                                     distance between holes for which the
C                                     variogram is to be computed.i.e.20*CLAS
C                                     = maximum distance (H)
C        21-30   F10.0       ANG      Angle in degrees along which the variogram
C                                     is to be calculated.
C                                     0=East-west          45=NE-SW
C                                     90=North-South      -45=NW-SW
```

```
Flist...  File (&CVAR1      )  Date  7:54 AM  TUE.,  8  JULY, 1986   Page003
C        31-40   F10.0      SPR     Allowable angle deviation in degrees.Sets
C                                    up the window for non-grid located data.
C                                    Range is 0 to 180.The maximum gives the
C                                    average variogram for all directions.
C        41-50   F10.0      TMAX    Maximum variogram value on Y-axis of the
C                                    graph when automatic scaling option
C                                    is not used.if ISCAL =1 this value is
C                                    ignored.
C
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
C
C  LINE 3,INPUT DATA SPECIFICATION LINE.
C
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
C
C  Column   1         I1      LO      This specifies the data column containing
C                                     the variable to be used in the variogram
C                                     computation.It is a single number from
C                                     1 to 7 *********SPECIAL FOR CLEVELAND
C           2         I1      NO      The data column containing the northing,
C                                     must be from 1 to 7  ^^^^^^^^^^^^^^^
C           3         I1      IE      The data column containing the easting,
C                                     must be from 1 to 7 ^^^^^^^^^^^^^^^
C           4         I1      ISEL    Data selection option,1=yes,0=no.Allows
C                                     the user to limit the rectangular area
C                                     within which data may be read to compute
C                                     the variogram.If yes, the appropriate
C                                     boundaries within which to search the
C                                     assay data must be specified later in
C                                     this line.
C           5       I1        KO      Allows the user to select the option
C                                     for grade thickness accumulations.
C                                     1=yes(accumulation)
C                                     0=straight variable
C           6       I1        KK      Specifies location of thickness.Must be
C                                     from 1 to 7.Used when the accumulation
C                                     option is selected.** SPECIAL FOR G.J.M.
C       11-20   F10.0       YMIN    Minimum North coord. if ISEL =1.Otherwise
C                                     not used.
C       21-30   F10.0       YMAX    Maximum North coord. as above.
C
C       31-40   F10.0       XMIN    Minimum East coord. as above.
C
C       41-50   F10.0       XMAX    Maximum East coord. as above.
C
C@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
C
C LINE 4 , VARIABLE FORMAT LINE FOR DATA READ IN
C@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
C Column 1-80   40A2        IFMT    Format specification , must be enclosed
C                                   in brackets  ()
C
C&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&
C
C LINE 5,TITLE OF VARIOGRAM TO BE OUTPUT FOR EACH DATA GROUP
C
C&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&
```

```
Flist...  File (&CVAR1      )  Date  7:54 AM  TUE.,  8  JULY, 1986  Page004
C
C Column  1-80    40A2    TITLE   Alpha numeric description..
C
C
C
C!!!
```

```
Flist...  File 20(VAR1      )  Date  7:54 AM TUE.,  8 JULY, 1986  Page005
C##################READ IN CARD THREE FOR INPUT OPTION(INPT)  ZERO
      READ(IPT,22)LO,NO,IE,ISEL,KJ,KK,YMIN,YMAX,XMIN,XMAX
   22 FORMAT(6I1,4X,4F10.0)
      WRITE(1,458)LO,NO,IE,ISEL,KJ,KK,YMIN,YMAX,XMIN,XMAX
  458 FORMAT(6(2X,I1),4F10.0)
C     IF(EOF(IPT).NE.0)GO TO 200
      IF(INPT.EQ.1)GO TO 23
C%%%%%%%%%%%%%%%%READ IN CARD FOUR FOR VARIABLE FORMAT SPECS.
      READ(IPT,71)IFRMT
   71 FORMAT(40A2)
C^^^^ WRITE(IOUT,71)IFRMT
C     IF(EOF(IPT).NE.0)GO TO 200
   23 IF(INPT.EQ.1.AND.LO.LE.9)GO TO 75
      IF((LO.LE.9).AND.(NO.LE.9).AND.(IE.LE.9))GO TO 75
   30 WRITE(IOUT,1234)
 1234 FORMAT("SPECIFIED ORDER OF DATA IS IN ERROR")
C############STOP THIS RUN
      GO TO 201
C#############READ IN ASSAY DATA FROM APPROPRIATE SUBROUTINES BASED ON
C    INPUT VALUE
   75 WRITE(IOUT,78)
   78 FORMAT(/)
   79 IF(INPT.EQ.0) CALL RDM(IEXIT)
      IF(INPT.EQ.1)GO TO 200
      GO TO (85,185,201)IEXIT
   85 IF(LOG.NE.1.)GO TO 91
      DO 90 I=1,N
      DATA(I,1)=ALOG(DATA(I,1))
   90 CONTINUE
   91 NI=N-1
      DO 130 I=1,NI
      Q1=DATA(I,1)
      Y1=DATA(I,2)
      X1=DATA(I,3)
      II=I+1
      DO 130 J=II,N
      Q2=DATA(J,1)
      Y2=DATA(J,2)
      X2=DATA(J,3)
      X=X1-X2
      Y=Y1-Y2
      Q=Q1-Q2
      DIS=SQRT(Y*Y+X*X) +.0001
      IF(DIS.GT.DLIM.OR.DIS.LT.0.0001)GO TO 130
C$$$$$$$$$$$$$$$$$$$$$$$$$$COMPARE DIRECTION WITH ACCEPTABLE DIRECTION
      DOT=(X*CST+Y*SIT)/DIS
      ADOT=ABS(DOT)
      IF(ADOT.LT.CSPR) GO TO 130
      K=DIS/CLAS +1
      IF(K.GT.20) GO TO 130
C%%%%%%%%%%%%%%%%%%%%%%%%%KEEP TRACK OF THE DATA POINTS USED IN THE CALCULATION
C                        OF THE VARIOGRAM
      DATA(I,4)=1
      DATA(J,4)=1
      DIS=DIS-.0001
      Q=SIGN(Q,DOT)
      QSQR=Q*Q
```

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```
      DISQ=DIS*QSQR
      TOT(K,1)=DIS+TOT(K,1)
      TOT(K,2)=Q+TOT(K,2)
      TOT(K,3)=QSQR+TOT(K,3)
      TOT(K,4)=DISQ+TOT(K,4)
      TOT(K,5)=TOT(K,5)+1.0
  130 CONTINUE
C###################CALCULATE MEAN AND STANDARD DEVIATION OF SAMPLES
      SUM=0.0
      SUM2=0.0
      DO 100 I=1,N
      IF(DATA(I,4).NE.1)GO TO 100
      SUM=SUM+DATA(I,1)
      SUM2=SUM2+DATA(I,1)**2
  100 CONTINUE
      VARI=(FLOAT(N)*SUM2-SUM*SUM)/(FLOAT(N)*FLOAT(N-1))
      SMEAN=SUM/FLOAT(N)
      SMU2=SMEAN*SMEAN
      STD=SQRT(VARI)
      DO 150 I=1,20
      AN=TOT(I,5)
      IF(AN.EQ.0.0)GO TO 150
      VAR(I,1)=TOT(I,1)/AN
C^^^^^^^^^WRITE(IOUT,147)VAR(I,1)
C^^^^^^^^ 147 FORMAT("FIRST TIME VAR(I,1)",E10.3)
      VAR(I,2)=TOT(I,2)/AN
      IF(NREL.EQ.0)GO TO 148
      TOT(I,3)=TOT(I,3)/SMU2
      TOT(I,4)=TOT(I,4)/SMU2
  148 VAR(I,3)=TOT(I,3)/(2.0*AN)
      IF(TOT(I,4).EQ.0) GO TO 149
      VAR(I,4)=TOT(I,4)/(TOT(I,1)*2.0)
  149 VAR(I,5)=TOT(I,5)
  150 CONTINUE
C################   PRINT OUT RESULTS OF VARIOGRAM
      CALL VAROT
C################   COMBINE DATA IF AVERAGE  VARIOGRAM IS TO BE CALCULATED
      IF(ITAL.EQ.0) GO TO 170
      DO 160 I=1,20
      DO 160 J=1,5
      TOTVAR(I,J)=TOTVAR(I,J) +TOT(I,J)
  160 CONTINUE
      TSUM=SUM+TSUM
      TSUM2=SUM2+TSUM2
      NN=NN+N
C################ ZERO TOT AND VAR ARRAYS
  170 DO 180 I=1,20
      DO 180 J=1,5
      TOT(I,J)=0.0
      VAR(I,J)=0.0
  180 CONTINUE
      GO TO 75
  185 IF(ITAL.EQ.0) GO TO 194
C################ CALCULATE AVERAGE VARIOGRAM
      VARI=(FLOAT(NN)*TSUM2-TSUM*TSUM)/(FLOAT(NN)*FLOAT(NN-1))
      SMEAN=TSUM/FLOAT(NN)
      STD=SQRT(VARI)
```

137


```
      N=NN
      DO 190 I=1,20
      AN=TOTVAR(I,5)
      IF(AN.EQ.0.0)GO TO 189
      VAR(I,1)=TOTVAR(I,1)/AN
      VAR(I,2)=TOTVAR(I,2)/AN
      VAR(I,3)=TOTVAR(I,3)/(AN*2.0)
      IF(TOTVAR(I,4).EQ.0)GO TO 189
      VAR(I,4)=TOTVAR(I,4)/(TOTVAR(I,1)*2.0)
  189 VAR(I,5)=AN
  190 CONTINUE
C&&&&&&&&&&&&&&&&&&&&& PRINT OUT RESULTS OF AVERAGE VARIOGRAM
C     TITLE(1)="AVERAGE"
C     TITLE(2)="VARIOGRAM"
      CALL VAROT
  194 WRITE(IOUT,195)
  195 FORMAT(20X,"NORMAL END OF JOB")
      WRITE(IOUT,196)
  196 FORMAT('
```

```
                )
      GO TO 201
  200 WRITE(IOUT,191)
  191 FORMAT("END OF FILE ENCOUNTERED.ERROR IN JOB SET UP.")
  201 STOP
      END
      SUBROUTINE VAROT
C$$$
```

```
    1 CONTINUE
C
      IF(L.EQ.3) GO TO 8
      DO 7 I=1,13
      D(I+10)=E(I)
    7 CONTINUE
    8 C(1)=0.
      DO 85 I=2,11
      C(I)=CLAS*2.0 +C(I-1)
   85 CONTINUE
C$$$$$$$$$$$$$$$ PRINT OUT PAGE ONE OUTPUT
      WRITE(IOUT,10)
   10 FORMAT(35X,"VARIOGRAM")
      WRITE(IOUT,20)ITITLE
   20 FORMAT(40A2)
      NL=LOG+1
      NR=NREL+1
      WRITE(IOUT,20)IHEAD
      WRITE(IOUT,25)
   25 FORMAT(48X,"DATA USED IN CALCULATIONS")
      RVA=VARI/(SMEAN*SMEAN)
      WRITE(IOUT,30)ANG,SFR,SMEAN,CLAS,VARI,OLIM,RVA,(LOG(NL),ILOG(NR),NN
   30 FORMAT("DIRECTION    =",F5.0,3X,"WINDOW",F5.0,15X,"MEAN",10X,"="
     1,E10.3,/"CLASS SIZE   =",F5.0,29X,"VARIANCE      =",E10.3,/,
     2"MAX DISTANCE =",F10.0,24X,"REL.VARIANCE  =",E10.3,/,
     3"LOGARITHMS -",A2,5X,"RELATIVE VARIOGRAM -",A2,5X,"NO OF SAMPLES
     4=",I10)
C
      IF(ISEL.NE.0)WRITE(IOUT,110)YMIN,YMAX,XMIN,XMAX
  110 FORMAT(" COORDINATE SELECTION- NORTH(",2F10.0,")",3X,"EAST(",2F10.0
     1,")")
      WRITE(IOUT,40)
   40 FORMAT(5X,"DISTANCE",6X,"PAIRS",4X,"AV.DISTANCE",5X,"GAMMA",
     1" H",5X,"DRIFT",3X,"MOMENT CENTRE")
      DO 50 I= 1,20
      LOW=(I-1)*CLAS
      LUP=I*CLAS
      IF(VAR(I,5).GT.0.)WRITE(IOUT,45)LOW,LUP,VAR(I,5),VAR(I,1),VAR(I,3)
     1,VAR(I,2),VAR(I,4)
   45 FORMAT(16," ----",I6,F10.0,F12.1,3X,3(2X,E10.3))
   50 CONTINUE
C@@@
```

```
      TEMP=TMAX
      DO 75 K=1,50
      TOP=TEMP
      BOT=TEMP-DIV
      DO 65 I=1,20
      IF(VAR(I,5).EQ.0.) GO TO 65
      IF((VAR(I,L).GT.TOP).OR.VAR(I,L).LE.BOT) GO TO 65
      J=VAR(I,1)/UNIT +1
C     WRITE(1,*)I,J,VAR(I,L),TEMP,UNIT,DIV
      KA(J)=1HX
      IF(VAR(I,5).LT.30.)KA(J)=1H*
   65 CONTINUE
C@@@
```

```
Flist...  File (@CVAR1      )  Date  7:54 AM  TUE.,  8  JULY, 1986  Page010
C
C-----WRITE(IOUT,IFRMT)(Z(JJ),JJ=1,7)
C
C----IF data column containing the variable is a (-1.0) then ignore it.
      IF(Z(LD).EQ.-1.) GO TO 80
C----IF a blank line is encountered then that's the end of the data file.
      IF(Z(5).EQ.0..AND.Z(6).EQ.0..AND.Z(7).EQ.0.) GO TO 85
C----IF rectangular limits were not required then go to statement 81..
      IF(ISEL.EQ.0)GO TO 81
      IF(Z(ND).LT.YMIN.OR.Z(ND).GT.YMAX)GO TO 80
      IF(Z(IE).LT.XMIN.OR.Z(IE).GT.XMAX)GO TO 80
C----DATA selected.... increase the counter.....................
   81 N=N+1
C----IF maximum no. of data points exceeded then error..........
      IF(N.GT.MAXN) GO TO 83
C----IF accumulation was not requested then go to statement 82.....
      IF(KJ.EQ.0) GO TO 82
C----IF the thickness is (-1.0) decrease counter & forget you ever saw it..
         IF(Z(KK).EQ.-1.0) THEN
           N=N-1
           GO TO 80
         END IF
      ABCD=Z(KK)*Z(LD)
      DATA(N,1)=ABCD
      GO TO 84
   82 DATA(N,1)=Z(LD)
   84 DATA(N,2)=Z(ND)
      DATA(N,3)=Z(IE)
      DATA(N,4)=0.
      GO TO 90
C----NORMAL return ... blank line in data file was found.....................
   85 IEXIT=1
      IF(N.GT.1)RETURN
   83 WRITE(IOUT,210) N
  210 FORMAT("INPUT DATA ERROR",3X,I5,"DATA POINTS PRESENT")
      IEXIT=3
  220 RETURN
      END

## Flist - End of file ##
```

```
Flist... File (&CKRIG      )   Date  7:59 AM  TUE.,  8  JULY, 1986   Page001
Ftn
$FILES(0,3)                                    (     <850912.1639>
      PROGRAM CKRIG(4,500). Cleveland Tin - 2D-Kriging
c
      COMMON IPT,IOUT,IPR,IOBUG,IOPR,IMAPR,NOUT
      COMMON WX2,WY2,WX4,WY4,WX8,WY8
      COMMON C0(4),C(4),RANG(4),DST(4),SIT(4),AFH(4)
      COMMON IHOL(51),GA(51),R(51)
      COMMON YN(351),XE(351),GD(351,4)
      DIMENSION B(2),DIST(51),BLKVAR(4),VARKG(4),ANG(4)
      DIMENSION GR(4),NF48(6),NF49(6)
c
      Dimension Jbatch(5)
      Logical Batch,ErrorK
c
c
c**********************************************************************
c      THIS PROGRAM WAS WRITTEN BY HARVEY P. KNUDSEN AND TRANSCRIBED
c      BY K.G. PALMER,MARCH 1982.$$$ UPDATE GJH 10-06-1983   $$$$$$
c-----------------------------------------------
c      Updated: ajk 12/09/1985
c      1)1st intersection input record was being skipped because %IW
c        was not being kriged and user deleted variogram parameters
c        record from intersection file - fixed - skip 1 less record
c      2)Deleted ALL references to %IW
c      3)Enhanced debug output listing (if selected)
c      4)Enhanced drillhole listing (if selected)
c      5)Notified user No.of drillholes selected (read from comp.file)
c      6)Extra documentation in program
c      7)NOTE: 3 or more drillholes are required to estimate a block.
c-----------------------------------------------
c
c      PROGRAM CKRIG IS A KRIGING PROGRAM DESIGNED FOR BEDDED TABULAR
c      DEPOSITS.BOTH THE MOP.WIDTH AND GRADES FOR 3 ELEMENTS
c      ARE KRIGED.THIS PROGRAM ASSUMES THAT THE VARIOGRAM MODEL FOR
c      KRIGING IS A SPHERICAL VARIOGRAM.
c
c      This program currently accepts up to (351) drillholes in core.
c      Change ALL 351's to NEW value if increasing number in core.
c      Batch processing option AND error termination option included..
c
c      Intersection input file description:
c      ------------------------------------
c      Record  1      Definition of area to be kriged
c         COL    1 -5   NBC     STARTING COLUMN.NORMALLY=1
c                6 -10  NEC     ENDING COLUMN
c               11 -15  NBR     STARTING ROW.AS ABOVE.
c               16 -20  NER     ENDING ROW.AS ABOVE.
c               21 -30  YMA     MAXIMUM NORTHING (ROW 1).TRUE NORTHING
c                               IF THE SECTION IS A LONG SECTION LOOKING
c                               WEST (EXTREME R.H. EDGE OF AREA)
c               31 -40  XMIN    ACTUALLY MINIMUM R.L. IN
c                               THE ABOVE CASE (EXTREME LOWER EDGE)
c               41 -50  WIDY    BLOCK WIDTH IN NORTH DIRECTION
c               51 -60  WIDX    BLOCK WIDTH IN R.L. DIRECTION
c
c      Record  2     Distance acceptance/Max.holes & debugging params
```

```
c          COL    1 -5   RMAX     MAXIMUM DISTANCE FROM BLOCK FOR
c                                  HOLE TO BE INCLUDED IN KRIGING
c                                  Note: If an element variogram range is less
c                                  than the maximum distance (Rmax) then ; If
c                                  a drillhole is greater than the range but
c                                  less than (Rmax) then the Sill value will
c                                  be allotted as the variogram value returned
c                                  from subroutine 'Subgm'  If ALL drillholes
c                                  are less than (Rmax) and greater than the
c                                  range, then the estimated grade will be
c                                  effectively the average of the drillhole
c                                  grades.
c                6 -10  NK       MAXIMUM NUMBER OF HOLES TO BE USED
c                                  FOR EACH BLOCK.MUST BE LESS THAN OR
c                                  EQUAL TO 50 (LITTLE BENEFIT NK>15)
c               11      IDBUG    DEBUG (1=YES,0=NO)
c               12      ILIST    LIST DRILL HOLES(1=YES,0=NO)
c
c       Record  3-6   Variogram parameters for Width,%SnT,%Sn5,%Cu ONLY..
c          COL    1 -10  C0       NUGGET VALUE
c                11 -20  C        C VALUE OF VARIOGRAM (SILL=C+C0)
c                21 -30  RANG     RANGE OF VARIOGRAM
c                                  Note: The range should NOT be greater than
c                                  (Rmax) else you will lose drillhole info.
c                31 -40  ANG      ANGLE OF ANISOTROPY IN DEGREES OF
c                                  MAJOR AXIS TO THE VERTICAL.
c                                  Examples for Cleveland:
c                                  Ang = -60deg or +120deg means the orebody
c                                     is plunging DOWN -30deg from horizontal
c                                     towards NORTH.
c                                  Ang = +10deg or -170deg means the orebody
c                                     is plunging DOWN -80deg from horizontal
c                                     towards SOUTH.
c                41 -50  AFH      ANISOTROPY FACTOR(Major axis OVER Minor axis)
c                                  Example:  If (Afh) is 4, then there is
c                                     four times LESS the range in the MINOR
c                                     direction than the MAJOR axis.
c                                     E.g. (Rang) = 40, Minor axis range = 10
c
c       Record  7-8  Header information for user only.. (skipped by program)
c
c
c       Record  9 to end of file.   Intersection data values
c          COL    1 - 8  Jdum     Drillhole intersection name (a8)
c          COL    9 -21  dummy    User From/To (skipped by program)
c          COL   22 -28  Gd(1)    Width value (f7.2)
c          COL   29 -35  Gd(2)    %SnT  value (f7.2)
c          COL   36 -42  Gd(3)    %Sn5  value (f7.2)
c          COL   43 -49  Gd(4)    %Cu   value (f7.2)
c          COL   50 -63  dummy    columns skipped by program
c          COL   64 -70  Yn       Intersection NORTHING (f7.0)
c          COL   71 -77  Ze       Intersection Reduced Level (f7.0)
c                   i.e Format of data MUST be (a8,13x,4f7.2,14x,2f7.0)
c
c*****************************************************************************
c
c       MAXH   = MAX. NUMBER OF DATA POINTS CURRENTLY DIMENSIONED. (351)
```

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```
c       MAXK   = MAX. NUMBER OF SURROUNDING POINTS TO BE USED FOR KRIGING (50)
c       MAXPR. = MAX NUMBER OF DEBUG PRINTOUTS ALLOWED. (4)
c       IDPR   = TOTAL DEBUG PRINTOUT COUNTER.
c       B()    = TEMPORARY ARRAY FOR STORING THE DISTANCE COMPONENTS.
c       II     = ACTUAL NO. OF DATA POINTS USED TO KRIG THE CURRENT BLOCK
c       GA     = ARRAY WHICH CONTAINS THE COVARIANCE BETWEEN THE BLOCK
c                AND THE SURROUNDING DATA POINTS.OBTAINED DURING KRIGING
c       R      = ARRAY CONTAINING THE KRIGING WEIGHTS
c
c    Jbatch(5) = Batch option - read when system routine RMPAR called..
c                (1) = 3rd and 4th characters in input/output file name.
c                (2) = 5th and 6th characters in input/output file name.
c       Batch  = Logical - if true, then this is a batch job..
c       ErrorK = Logical - Error trap - if error AND true then program STOPS..
c                If BATCH. AND Error, then program stops immediately..
c       Nout   = Logical unit device for output.. 1=screen
c
c*************************************************************************
c*************************************************************************
c====Call system routine RMPAR to check if this is a BATCH JOB
      Call RMPAR(Jbatch)                        ! Get BATCH parameters..
c
c====Define default variables====================
       MaxH  = 351                              ! Maximum No.of holes
       Maxpr = 4                                ! Maximum No.of debug prints
       Idpr  = 0                                ! Total debug printout counte
       MaxK  = 50                               ! Max.No.of holes in Kriging.
       Nout  = 1                                ! Default output is screen..
       Jesc  = 15400b                           ! Escape character..
       JescD = 15400b + 104b                    ! Backspace sequence..
       EnJ   = 4h  $  EnB = 4h          ! Enhanced fields..
       EnC   = 4h  $  EnZ = 4h          ! Enhanced fields..
       Jff   = 6008B                            ! Form feed control..
       Batch = .false.                          ! NOT batch job default..
       Errork= .false.                          ! Do NOT stop on error default
c
c====Check whether BATCH JOB=====================
       If(Jbatch(1).gt.1) Batch = .true.
c
c====Batch Job - NO message to terminal - ALL to System printer
c
      If(Batch)  Then                           ! Batch job ONLY
         Nout = 6                               ! Output is system printer
         ErrorK = .true.                        ! STOP on error in program
         Nf48(1)=2h?O $ Nf48(4)=2h:O $ Nf48(5)=2hR: $ Nf48(6)=2h23
         Nf49(1)=2h?K $ Nf49(4)=2h:O $ Nf49(5)=2hP: $ Nf49(6)=2h23
         If(Jbatch(2).le.9)  Then               ! Numeric Values for 1st byte
            Jdum = Rcvt(Jbatch(2))              ! Convert to Ascii..
            Jbatch(2) = 2h                      ! Blank original buffer..
            Call SPUT(Jbatch,3,Jdum)            ! Place byte - left justified
         End if
         Nf48(2) = Jbatch(1) $ Nf48(3) = Jbatch(2)  ! 3rd & 4th char.filename
         Nf49(2) = Jbatch(1) $ Nf49(3) = Jbatch(2)  ! 3rd & 4th char.filename
c
      Else                                      ! ONLINE via terminal screen.
c
         Write(1,100) (Jesc,je=1,3),EnB,EnZ,Jesc
```

```
  100     Format(a1'm'a1'h'a1'?'/10x,a4,
     +           ' Program CKRIG - Cleveland 2d Kriging program',12x,a4
     +          //a1'1'//'Ckrig - rev. 12th Sep.1985')
          Write(1,110) End,EndZ,(DescD,je=1,12)
  110     Format(//'Specify intersection data file NAME ?? )'a4,12x,a4,
     +            12(a2),'_')
          Read(1,120) NF48                        ! Read input filenamr..
  120     Format(6a2)
c
          Write(1,130) End,EndZ,(DescO,je=1,12)
  130     Format(/ 'Specify kriging output file NAME ?? )'a4,12x,a4,
     +            12(a2),'_')
          Read(1,120) NF49                        ! Read output filenamr..
c
  131     Write(1,132) End,EndZ
  132     Format(/a4' 1=Output to screen  9=output to printer'a4
     +           /'Specify Logical unit for output ?? )_')
          Read(1,*,Err=131) Nout
          If(Nout.ne.1.and.Nout.ne.9) Go to 131 ! Error trap..must be 1 or 9
c
          Write(1,133)
  133     Format(/'Do you want the program to STOP if an ERROR is',
     +            ' encountered (Y/N) ?? )_')
          Read(1,134) Jrep
  134     Format(a1)
          If(Jrep.eq.2hY .or.Jrep.eq.2hy ) ErrorK = .true.  ! STOPS on error..
c
          If(Nout.eq.9) Write(Nout,135) Desc    ! Compressed mode (9 only)
  135     Format(a1'&K2S')
      End if
c
c
c====Batch and Screen both come here==============
c====Open BOTH files and check for errors========
c
      OPEN(48,FILE=NF48,IOSTAT=IOS,ERR=98)      ! OPEN intersection file
      OPEN(49,FILE=NF49,IOSTAT=IOS,ERR=99)      ! OPEN krige estimates file
c
c
c====Read 1st header record from intersection file
      READ(48,10,Iostat=ios,Err=96)NBC,NEC,NBR,NER,YMAX,XMIN,WIDY,WIDX
   10 FORMAT(4I5,4F10.0)

c====Read 2nd header record from intersection file
      READ(48,12,Iostat=ios,Err=96)RMAX,NK,IDBUG,ILIST
   12 FORMAT(2F5.0,2I1)
      IF(NK.GT.MAXK)  NK=MAXK
      WRITE(NOUT,15)Jf,NF48,NF49,YMAX,XMIN,NBC,NEC,NBR,NER
   15 FORMAT(1x,A1//1x'Ckrig - Cleveland 2d kriging ........'
     1//5x'Input file ('6a2')    Output file ('6a2')'
     2//5x'DESCRIPTION OF AREA TO BE KRIGED'
     3//5x'NORTHING OF ROW 1'.T25,F10.2//5X'R.L.    OF COL 1'
     4,T25,F10.2//5X,'KRIGED AREA IS BOUNDED BY'
     5//5X'COLUMNS',T25,I5,' AND'I5,//.5X,'ROWS',T25,I5,
     6' AND',I5)
      WRITE(NOUT,16)WIDY,WIDX
   16 FORMAT(1x"BLOCK DIMENSIONS ARE (",F5.1,"X",F5.1,")")
```

```
      WRITE(NOUT,17)RMAX,NK
   17 FORMAT(1x"MAX RANGE OF INFLUENCE OF HOLE "T45,F6.1,/,
     1  1x"MAX NUMBER OF HOLES USED TO KRIG A BLOCK".T45,I6)
c
c
c====Read in header records 3 to 6 from intersection file
c====Variogram parameters for Width,%SnT,%SnS,%Cu ONLY===
      DO 26 I=1,4
      READ(48,20,Iostat=ios,Err=96) C0(I),C(I), RANG(I),ANG(I),AFH(I)
   20 FORMAT(5F10.0)
      WRITE(NOUT,25)C0(I),C(I),RANG(I),ANG(I),AFH(I)
   25 FORMAT(1x"Variogram parameters",/5X"C0".T29,F10.4,/,
     15X"C",T29,F10.4,/,5X"RANGE",T25,F10.2,/6X"ANGLE OF ROTATION",
     2T25,F10.2,/10X"ANISOTROPY ",T25,F10.2,/)
      RA=ANG(I)*0.017453292
      CST(I)=COS(RA)
      SIT(I)=SIN(RA)
   26 CONTINUE
c
c
      WX2=WIDX/2.0
      WY2=WIDY/2.0
      WX4=WIDX/4.0
      WY4=WIDY/4.0
      WX8=WIDX/8.0
      WY8=WIDY/8.0
c
c====Skip 2 header records (note 1 slash)
      READ(48,31,Iostat=ios,Err=96)
   31 FORMAT(/)
c
c====If user listing intersections, print header first
      If(Ilist.ne.0) Then
        Write(Nout,51)
   51   format(
     +1x"No. Drillhole   Hor.W   %SnT   %SnS   %Cu   North      R1")
      End if
c
c====Now read in ALL intersection locations (print if requested)
      I=0
   40 I=I+1
      READ(48,30,Iostat=ios,Err=96,END=50) Jddh1,Jddh2,Jddh3,Jddh4,
     +                        (GD(I,M),M=1,4),YN(I),XE(I)
   30 FORMAT(4a2,13X,4F7.2,14X,2F7.0)
      If(I.lt.Maxh) Then
        If(Ilist.eq.0) Go to 40
        Write(Nout,52) I,Jddh1,Jddh2,Jddh3,Jddh4,
     +                        (Gd(I,m),m=1,4), Yn(I), Xe(I)
 52     Format(1x,I3,1x,4a2,2x,4F7.2, 2f8.1)
        Go to 40
      Else
        Write(NOUT,45)
   45   Format(//10X,'**THERE ARE MORE DATA POINTS THAN ALLOWED -- '
     1       ,'IGNORE THE REMAINING DATA POINTS'/)
      End if
c
c
```

```
c====Notify user number of intersections=========
   50 Nhol=I-1                                    ! No.of intersections..
      Write(Nout,'(/1x"("i3") intersections read from file.."/)') Nhol
c
c
c====Calculate variance of the block, notify user
   55 DO 155 I=1,4
       CALL BLOCK(BLKVAR(1,I)
       WRITE(NOUT.56)I,BLKVAR(I)
   56  FORMAT(1x "Block variance for element ("i1") = ",F8.4)
  155 CONTINUE
c
c
c====START KRIGING THE BLOCKS====================
      YM=YMAX + .5*WIDY
      XM=XMIN - .5*WIDY
      WRITE(NOUT,62)JJ
   62 FORMAT(1x,A1,10X,"***OUTPUT OF KRIGED RESULTS***"//2X,"COL  ROW"
     1,"    NORTH      R.L."T39."HOR.WIDTH"T62,"%GNT"T82."%GNS"
     2T103,"%CU"T120,"          "/T38,"EST"T48."VAR"T58,"EST"
     3T68."VAR"T78,"EST"T88,"VAR"T98,"EST"T108,"VAR"T118,"    "
     4T128."   "//)
c
      NOS=0
      DO 60 J=NBC,NEC
      B(1)=XM + J*WIDX
      DO 80 K=NBR,NER
      B(2) =YM - K*WIDY
c
c====FIND NEAREST NK HOLES FOR KRIGING
      IOPR=IOPR + 1
      R2 = RMAX**2
c
      DO 162 M=1,4                                ! Loop for the FOUR grades
      II = 0
c
      DO 60 L = 1,NHOL                            ! Loop ALL intersections
        DY =B(2) - YN(L)
        DX =B(1) -XE(L)
        DIS =(DX*CST(M)+DY*SIT(M))**2+(AFHOM)*(DY*CST(M)-DX*SIT(M)))**2
        IF(GD(L,M).LT.0.0) GO TO 60
        IF(DIS.GT.R2) GO TO 60
        IF(II.GE.NK.AND.DIS.GT.DIST(II)) GO TO 60
        II = II+1
        DIST(II)=DIS
        IHOL(II)=L
        IF(II.EQ.1) GO TO 60
c
c=======ARRANGE HOLES IN INCREASING ORDER OF DISTANCE BY CALLING DSORT.
        CALL DSORT(DIST,IHOL,II)
        IF(II.GT.NK)II=NK
   60 CONTINUE
c
      IF(II.LE.2) GO TO 72
      GO TO 77
c
c##################################################################################
```

```
Flist...  File (&KRIG      )   Date  7:59 AM  TUE.,  8 JULY, 1986   Page007
c     In the case of insufficient points to Krige the value -1 is listed
c      in both the output file and on the printer!! Hope!
c*************************************************************************
c
   72 GR(M)=-1.0
      VARKG(M)=-1.0
      GO TO 162
c
c****KRIG THE BLOCK IF THERE ARE MORE THAN TWO DATA POINTS.
   77 CALL KRIG (B,II,M,IFERR)
      IF (IFERR.EQ.0) GO TO 61
c
c====Kriging error has occurred==================
         WRITE(NOUT,73) EnC,J,K
   73    FORMAT(1x,a4'**** ERROR IN MATRIX SOLUTION BLOCK ****",2I5)
         DO 900 III=1,II
           LL=IHOL(III)
           WRITE(NOUT,757)XN(LL),XE(LL)
 757        Format(10x,2f10.2)
  900    CONTINUE
c
         If(ErrorK) Then                        ! STOP program..
           Write(Nout,9000) EnC
 9000      Format(//1x,a4'Program has been aborted.....')
           Go to 1000                           ! STOP immediately..
         End if
         GO TO 72                               ! Continue as NORMAL..
c
c
c****CALCULATE THE KRIGED VALUE AND THE KRIGING VARIANCE
c
   61 AG=0
      GR(M)=0
      IF(IDBUG.GE.1.AND.IOPR.LT.MAXPR)WRITE(NOUT,65)
   65 FORMAT(" Ddh     North     R.L.    Grade   Weight")
c
      DO 70 L=1,II
        LL=IHOL(L)
        AG=AG+GA(L)*R(L)
        GR(M)=GR(M)+GD(LL,M)*R(L)
        IF(IDBUG.GE.1.AND.IOPR.LT.MAXPR)WRITE(NOUT,75) II,YN(LL),
     +  XE(LL),GD(LL,M),R(L)
   75   FORMAT(1x,i3,1x,3F9.2,F9.3)
   70 CONTINUE
c
      VARKG(M)=BLKVAR(I)-AG-R(II+1)
  162 CONTINUE
c
c
c@@@
```

```
Flist...  File (&CKRIG      )   Date  7:59 AM  TUE.,  8  JULY, 1986   Page008
     +          J,K,B(2),B(1),VGR(M),VARKG(M),M=1,4),MDS
   78 FORMAT(2I5,2F10.1,8F10.2,I10)
   80 CONTINUE
C
C====End of program==============================
C
 1000 Endfile 49                                  ! End of file..
      Close (48,Iostat=Ios)                       ! Close input file..
      Close (49,Iostat=Ios)                       ! Close output file..
      If(Batch) Go to 1005
      Write(Nout,1001) Desc
      If(Nout.ne.1) Write(1,1001) Desc
 1001 Format(//1x'End of program - Ckrig...'a1'm')
      If(Nout.eq.9) Write(Nout,1002) Desc
 1002              Format(1x,a1'&k0S')
 1005 Call EXEC(6)
C
C====ERROR traps ================================
C
   96 Write(Nout,961) Enc,Ios,Nf48
  961 Format(//a4,i5' FTN4% READ error - file is '6a2)
      Go to 1000
C
   97 Write(Nout,971) Enc,Ios,Nf49
  971 Format(//a4,i5' FTN4% WRITE error - file is '6a2)
      Go to 1000
C
   98 Write(Nout,981) Enc,Ios,Nf48
  981 Format(//a4,i5' FTN4% OPEN error - file is '6a2)
      Go to 1000
C
   99 Write(Nout,991) Enc,Ios,Nf49
  991 Format(//a4,i5' FTN4% OPEN error - file is '6a2)
      Go to 1000
      End
C
      SUBROUTINE KRIG(S,NS,N,IFERR)
C*****************************************************************************
C     THIS SUBROUTINE PERFORMS THE BASIC MECHANICS OF KRIGING BY
C     SEQUENTIALLY CALLING OTHER SUPPORTING SUBROUTINES
C*****************************************************************************
      COMMON IPT,IOUT,IPR,IDBUG,IOPR,MAXPR,NOUT
      COMMON WX2,WY2,WX4,WY4,WX8,WY8
      COMMON C0(4),C(4),R4NG(4),CST(4),SIT(4),AFH(4)
      COMMON IHOL(51),GA(51),R(51)
      COMMON XN(351),XE(351),GD(351,4)
      DIMENSION P1(2),P2(2),B(2),A(51,52)
C***CALCULATE COVARIANCES AND SET UP MATRIX FOR SIMULTANEOUS EQUATIONS
C     A  = A SYMETRIC MATRIX
C     R  = SOLUTION IN TERMS OF KRIGING WEIGHTS.
C     GA = THE CONSTANT TERMS CONSISTING OF THE COVARIANCES BETWEEN
C          THE BLOCK AND THE SURROUNDING DATA POINTS.
C     GH = VARIOGRAM VALUE. OBTAINED FROM SUBROUTINE SUBGAM.
C    GHOV= AVERAGE VALUE OF THE VARIOGRAM IN THE BLOCK.
      DO 15 K=1,NS
      KK=IHOL(K)
      P1(1)=XE(KK)
```

```
      P1(2)=YN(KK)
      K1=K+1
c****COMPUTE COVARIANCE BETWEEN THE CURRENT HOLE AND OTHER HOLES.
      IF(K1.GT.NS) GO TO 11
      DO 10 L=K1,NS
      LL=IHOL(L)
      P2(1)=XE(LL)
      P2(2)=YN(LL)
      CALL SUBGM(P1,P2,GH,M)
      A(K,L)=C0(M)+C(M)-GH
      A(L,K)=C0(M)+C(M)-GH
   10 CONTINUE
c**** COMPUTE COVARIANCE BETWEEN THE CURRENT HOLE AND THE BLOCK
   11 A(K,K)=C0(M)+C(M)
      CALL COVAR(B,P1,GMOY,M)
      NS1=NS+1
      NS2=NS+2
      A(K,NS2)=C0(M)+C(M)-GMOY
      GA(K)=A(K,NS2)
      A(K,NS1)=1.0
      A(NS1,K)=1.0
   15 CONTINUE
      A(NS1,NS2)=1.0
      A(NS1,NS1)=0.0
c***SOLVE SIMULTANEOUS EQUATIONS
      IF(IDBUG.NE.1.OR.IOPR.GE.MAXPR) GO TO 20
      WRITE(NOUT,90)(GA(IX),IX=1,NS2)
      WRITE(NOUT,18)
   18 FORMAT(1x,"AUGMENTED MATRIX")
      DO 19 IX=1,NS1
      WRITE(NOUT,90) (A(IX,IY),IY=1,NS2)
   19 CONTINUE
   90 FORMAT(15F7.2)
   20 CALL FINDT(A,R,NS1,IFERR)
c***R CONTAINS THE SOLUTION
      RETURN
      END
      SUBROUTINE BLOCK(BLKVAR,M)
c*************************************************************************
c     THIS SUBROUTINE COMPUTES THE BLOCK VARIANCE IN THE DEPOSIT FOR A
c     GIVEN SIZE BLOCK,USING 16 EQUALLY SPACED DATA POINT APPROXIMATION
c     FOR THE BLOCK AREA INTEGRATION
c*************************************************************************
      COMMON IPT,IOUT,IPR,IDBUG,IOPR,MAXPR,NOUT
      COMMON WX2,WY2,WX4,WY4,WX8,WY8
      COMMON C0(4),C(4),RANS(4),DST(4),SIT(4),AFH(4)
      COMMON IHOL(51),GA(51),R(51)
      COMMON YN(351),XE(351),GO(351,4)
      DIMENSION P1(2),P2(2)
      GMOY=0.0
      P1(1)=WX2
      P1(2)=WY2
      DO 10 I= 1,4
      P2(1)=WX2+(I-3)*WX4+WX8
      DO 10 J=1,4
      P2(2)=WY2+(J-3)*WY4+WY8
      CALL COVAR(P1,P2,GH,M)
```

```
      GMOY=GMOY+GH
   10 CONTINUE
      BLKVAR=C0(N)+C(N)-GMOY/16
      RETURN
      END
      SUBROUTINE COVAR(P1,P2,GH,N)
c*************************************************************************
c     THIS ROUTINE COMPUTES THE COVARIANCE BETWEEN A HOLE AND A BLOCK
c     USING 16 POINT APPROXIMATION
c*************************************************************************
      DIMENSION D(2),P1(2),P2(2)
        COMMON IPT,IOUT,IPR,IDBUG,IDPR,MAXPR,NOUT
        COMMON WX2,WY2,WX4,WY4,WX8,WY8
        COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
        COMMON IHOL(51),GA(51),R(51)
        COMMON YN(351),XE(351),GD(351,4)
      GMOY=0.0
      D(1)=P1(1)-2.*WX4-WX8
      DO 10 I=1,4
      D(1)=D(1)+WX4
      D(2)=P1(2)-2.0*WY4-WY8
      DO 10 J=1,4
      D(2)=D(2)+WY4
      CALL SUBGM(D,P2,GH,N)
      GMOY=GMOY+GH
   10 CONTINUE
      GH=GMOY/16
      RETURN
      END
      SUBROUTINE SUBGM(P1,P2,GH,N)
c*************************************************************************
c     THIS SUBROUTINE COMPUTES THE VARIOGRAM VALUE FOR A GIVEN DISTANCE
c     USING A SPHERICAL MODEL.CONSEQUENTLY THIS ROUTINE MUST BE MODIFIED
c     IF SOME OTHER TYPE MODEL IS TO BE USED.
c*************************************************************************
      DIMENSION P1(2),P2(2)
        COMMON IPT,IOUT,IPR,IDBUG,IDPR,MAXPR,NOUT
        COMMON WX2,WY2,WX4,WY4,WX8,WY8
        COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
        COMMON IHOL(51),GA(51),R(51)
        COMMON YN(351),XE(351),GD(351,4)
      XD=P1(1)-P2(1)
      YD=P1(2)-P2(2)
      D=SQRT((XD*CST(N)+YD*SIT(N))**2+AFH(N)*AFH(N)*(YD*CST(N)-
     1XD*SIT(N))**2)
      IF(D.GT.RANG(N)) GO TO 20
      GH=C0(N)+C(N)*(1.5*D/RANG(N)-.5*(D/RANG(N))**3)
      IF(D.EQ.0.0) GH=0.0
      RETURN
   20 GH=C0(N)+C(N)
      RETURN
      END
      SUBROUTINE FINDT(A,X,N,IFERR)
c*************************************************************************
c     THIS ROUTINE SOLVES A SET OF SIMULTANEOUS LINEAR EQUATIONS USING
c     THE GAUSSIAN ELIMINATION TECHNIQUE.
c     THE FACT THAT THE DIAGONAL ELEMENT IS ALWAYS THE LARGEST ONE IN
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c     KRIGING IS TAKEN INTO ACCOUNT IN SOLUTION.
c*****************************************************************************
      DIMENSION A(51,52),X(51)
      IFERR=0
      NP=N+1
      DO 10 I=1,N
      IP=I+1
c---PERFORM ELIMINATION.I IS PIVOT ROW A(I,I) IS PIVOT ELEMENT.
      DO 10 J=1,N
      IF(I.EQ.J) GO TO 10
      IF(A(I,I).EQ.0) GO TO 30
      F= (-A(J,I))/A(I,I)
      DO 9 K=IP,NP
    9 A(J,K)=A(J,K)+F*A(I,K)
   10 CONTINUE
      DO 20 I=1,N
   20 X(I)=A(I,N+1)/A(I,I)
      RETURN
   30 IFERR=1
      END
      SUBROUTINE DSORT(DS,IHOL,N)
c*****************************************************************************
c     THIS IS A SORTING ROUTINE IN INCREASING ORDER
c*****************************************************************************
      DIMENSION DS(1),IHOL(1)
      DO 5 I=1,N-1
      DO 15 J=I+1,N
      IF (DS(I).LT.DS(J)) GO TO 15
      DNEW=DS(I)
      NEW=IHOL(I)
      DS(I)=DS(J)
      IHOL(I)=IHOL(J)
      DS(J)=DNEW
      IHOL(J)=NEW
   15 CONTINUE
    5 CONTINUE
      RETURN
      END

## Flist - End of File ##
```

```
Flist... File (&AKRIG      )   Date  8:04 AM  TUE.,  8 JULY, 1986   Page001
FTN
$FILES(0,3)
      PROGRAM AKRIG(4.500), Cleveland Tin - 2D-Kriging  (accumulations)
       COMMON IPT,IOUT,IPR,IDBUG,IOPR,MAXPR,NOUT
       COMMON WX2,WY2,WX4,WY4,WX8,WY8
       COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
       COMMON IHOL(51),GA(51),R(51)
       COMMON YN(200),XE(200),GD(200,4)
       DIMENSION B(2),DIST(51),BLKVAR(4),VARKG(4),ANG(4)
       DIMENSION GR(4),NF48(6),NF49(6)
       MAXH=200
       MAXPR=4
       IOPR=0
       MAXK=50
C*************************************************************************
C      THIS PROGRAM WAS WRITTEN BY HARVEY P. KNUDSEN AND TRANSCRIBED
C      BY K.G. PALMER,MARCH 1982.$$$$ UPDATE GJM 10-06-1983   $$$$$$
C      PROGRAM AKRIG IS A KRIGING PROGRAM DESIGNED FOR BEDDED TABULAR
C      DEPOSITS.BOTH THE HOR.WIDTH AND GRADES FOR 3 ELEMENTS
C      ARE KRIGED.THIS PROGRAM ASSUMES THAT THE VARIOGRAM MODEL FOR
C      KRIGING IS A SPHERICAL VARIOGRAM.
C      PROGRAM AKRIG IS PRESENTLY DIMENSIONED TO ACCEPT UP TO 200
C      ASSAY VALUES.
C
C      DESCRIPTION OF INPUT ROWS FROM DISC FILE
C      CARD ONE.DEFINITION OF AREA TO BE KRIGED
C         COL    1 -5   NBC     STARTING COLUMN.NORMALLY=1
C                6 -10  NEC     ENDING COLUMN
C               11 -15  NBR     STARTING ROW.AS ABOVE.
C               16 -20  NER     ENDING ROW.AS ABOVE.
C               21 -30  YMAX    MAXIMUM NORTHING (ROW 1).TRUE NORTHING
C                               IF THE SECTION IS A LONG SECTION LOOKING
C                               WEST (EXTREME R.H. EDGE OF AREA)
C               31 -40  XMIN    ACTUALLY MINIMUM R.L. IN
C                               THE ABOVE CASE (EXTREME LOWER EDGE)
C               41 -50  WIDY    BLOCK WIDTH IN NORTH DIRECTION
C               51 -60  WIDX    BLOCK WIDTH IN R.L. DIRECTION
C      CARD TWO.HOLE ACCEPTANCE AND DEBUGGING PARAMETERS
C         COL    1 -5   RMAX    MAXIMUM DISTANCE FROM BLOCK FOR
C                               HOLE TO BE INCLUDED IN KRIGING
C                6 -10  NK      MAXIMUM NUMBER OF HOLES TO BE USED
C                               FOR EACH BLOCK.MUST BE LESS THAN OR
C                               EQUAL TO 50 (LITTLE BENEFIT NK>15)
C               11      IDBUG   DEBUG (1=YES,0=NO)
C               12      ILIST   LIST DRILL HOLES(1=YES,0=NO)
C      CARDS 3-7  VARIOGRAM PARAMETERS FOR WIDTH,%SNI,%SNS,%CU,%IW
C         COL    1 -10  C0      NUGGET VALUE
C               11 -20  C       C VALUE OF VARIOGRAM (SILL=C+C0)
C               21 -30  RANG    RANGE OF VARIOGRAM
C               31 -40  ANG     ANGLE OF ANISOTROPY IN DEGREES OF
C                               MAJOR AXIS TO THE VERTICAL.THE ANGLE IS
C                               +VE FOR NORTHERLY PLUNGE DOWN
C                               AND -VE FOR SOUTHERLY PLUNGE DOWN
C               41 -50  AFH     ANISOTROPY FACTOR(MAJOR
C                               AXIS OVER MINUS AXIS)
C
C       DATA CARDS.
```

```
C       CARD ONE. VARIABLE FORMAT CARD TO READ IN SUBSEQUENT ASSAY DATA
C       CARD TWO AND THEREAFTER:
C                       GD      ARRAY CONTAINING 4 ASSAY VALUES
C                       YN      NORTHING OF THE DATA POINT
C                       XE      R.L. OF THE DATA POINT
C               THE ABOVE INFORMATION REGARDING A DATA POINT MUST
C               BE GIVEN AS ONE RECORD OR ONE DATA CARD.
C
C*************************************************************************
C       MAXH   = MAX. NUMBER OF DATA POINTS CURRENTLY DIMENSIONED.
C       MAXN   = MAX. NUMBER OF SURROUNDING POINTS TO BE USED FOR KRIGING
C       MAXPR. = MAX NUMBER OF DEBUG PRINTOUTS ALLOWED.
C       IOPR   = TOTAL DEBUG PRINTOUT COUNTER.
C       B()    = TEMPORARY ARRAY FOR STORING THE DISTANCE COMPONENTS.
C       II     = ACTUAL NO. OF DATA POINTS USED TO KRIG THE CURRENT BLOCK
C       GA     = ARRAY WHICH CONTAINS THE COVARIANCE BETWEEN THE BLOCK
C                AND THE SURROUNDING DATA POINTS.OBTAINED DURING KRIGING
C       R      = ARRAY CONTAINING THE KRIGING WEIGHTS
C*************************************************************************
C*************************************************************************
      IFF=60008
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM KRRIG **',//)
      WRITE(1,110)
  110 FORMAT(/' Intersection data file name?')
      READ(1,120)NF48
  120 FORMAT(6A2)
      WRITE(1,130)
  130 FORMAT(/' Krige output file name?')
      READ(1,120)NF49
      OPEN(48,FILE=NF48,IOSTAT=IOS,ERR=98)
      OPEN(49,FILE=NF49,IOSTAT=IOS1,ERR=99)
      WRITE(1,111)
  111 FORMAT(/' 1=Output to screen  6=output to Helb.printer')
      READ(1,*)NOUT
      READ(48,10)NBC,NEC,NBR,NER,XMAX,XMIN,WIDY,WIDX
   10 FORMAT(4I5,4F10.0)
C***READ THE SECOND LINE IN THE FILE
      READ(48,12)RMAX,NK,IDBUG,ILIST
   12 FORMAT(2F5.0,2I1)
      IF(NK.GT.MAXK)  NK=MAXK
      WRITE(NOUT,15)IFF,XMAX,XMIN,NBC,NEC,NBR,NER
   15 FORMAT(A1,"DESCRIPTION OF AREA TO BE KRIGED"/,5X
     1"NORTHING OF ROW 1",T25,F10.0,/,5X,"R.L.    OF COL 1"
     2,T25,F10.0,/5X,"KRIGED AREA IS BOUNDED BY"/
     35X,"COLUMNS",T25,I5," AND",I5,/,5X,"ROWS",T25,I5,
     4" AND",I5)
      WRITE(NOUT,16)WIDY,WIDX
   16 FORMAT(1H0,"BLOCK DIMENSIONS ARE (",F5.0,"X",F5.0,")")
      WRITE(NOUT,17)RMAX,NK
   17 FORMAT(1H0,"MAX RANGE OF INFLUENCE OF HOLE "T45,F6.0,/,
     1" MAXNUMBER OF HOLES USED TO KRIG A BLOCK",T45,I6)
C****READ IN THIRD TO SEVENTH CONTROL CARDS-VARIOGRAM PARAMETERS.
      DO 26 I=1,4
      READ(48,20)C0(I),C(I), RANG(I),ANG(I),AFH(I)
   20 FORMAT(5F10.0)
      WRITE(NOUT,25)C0(I),C(I),RANG(I),ANG(I),AFH(I)
```

```
Flist...  File (&AKRIG      )  Date  8:04 AM  TUE.,  8  JULY, 1986  Page003
   25 FORMAT(1H0,"VARIOGRAM PARAMETERS",/5X"C0".T29,F10.4,/,
     15X"C",T29,F10.4,/,5X"RANGE",T25,F10.0,/5X"ANGLE OF ROTATION",
     2T25,F10.0,/10X"ANISOTROPY ".T25,F10.0,/)
      RA=ANG(I)*0.017453292
      CST(I)=COS(RA)
      SIT(I)=SIN(RA)
   26 CONTINUE
      WX2=WIDX/2.0
      WY2=WIDY/2.0
      WX4=WIDX/4.0
      WY4=WIDY/4.0
      WX8=WIDX/8.0
      WY8=WIDY/8.0
C****NOW ESTABLISH THE DATA INPUT FORMAT
   30 FORMAT(21X,4F7.2,14X,2F7.0)
      I=0
C****READ IN DRILL HOLE DATA
      READ(48,31)
   31 FORMAT(//)
   40 I=I+1
      READ(48,30,END=50)(GD(I,M),M=1,4),YN(I),XE(I)
      GD(I,2)=GD(I,2)*GD(I,1)
      GD(I,3)=GD(I,3)*GD(I,1)
      GD(I,4)=GD(I,4)*GD(I,1)
      IF(I.LT.MAXH) GO TO 40
      WRITE(NOUT,45)
   45 FORMAT(//10X,'***THERE ARE MORE DATA POINTS THAN ALLOWED -- '
     1       ,'IGNORE THE REMAINING DATA POINTS'/)
   50 NHOL=I-1
      IF(ILIST.EQ.0) GO TO 55
      WRITE(NOUT,51)
   51 FORMAT(1H0.T15"HOR.WIDTH   %SNT"T37,"%SNS"T48,"%CU    INT.W"
     1T76,"NORTH"T87,"RL",//)
      DO 54 I=1,NHOL
      WRITE(NOUT,52)I,(GD(I,J),J=1,4),YN(I),XE(I)
   52 FORMAT(I10,5F10.2,10X,2F10.0)
   54 CONTINUE
C****CALCULATE THE VARIANCE OF A BLOCK IN THE DEPOSIT
   55 DO 155 I=1,4
      CALL BLOCK(BLKVAR(I),I)
      WRITE(NOUT,56)I,BLKVAR(I)
   56 FORMAT(1H0,"BLOCK VARIANCE FOR ELEMENT ",I1,F8.4)
  155 CONTINUE
C****START KRIGING THE BLOCKS
      YM=YMAX + .5*WIDY
      XM=XMIN - .5*WIDY
      WRITE(NOUT,62)IFF
   62 FORMAT(A1,10X,"***OUTPUT OF KRIGED RESULTS***"//2X,"COL  ROW"
     1,"    NORTH      R.L."T39,"HOR.WIDTH"T62."%SNT"T82,"%SNS"
     2T103,"%CU"T120,"%INT.WASTE"/T38,"EST"T48,"VAR"T58,"EST"
     3T68,"VAR"T78,"EST"T88."VAR"T98,"EST"T108,"VAR"T118,"EST"
     4T128,"VAR"//)
      MOS=0
      DO 80 J=NBC,NEC
      B(1)=XM + J*WIDX
      DO 80 K=NBR,NER
      B(2) =YM - K*WIDY
```

```
C****FIND NEAREST NK HOLES FOR KRIGING
      IOPR=IOPR + 1
      R2 = RMAX**2
      DO 162 M=1,4
      II = 0
      DO 60 L = 1,NHOL
      DY =B(2) - YN(L)
      DX =B(1) -XE(L)
      DIS =(DX*CST(M)+DY*SIT(M))**2+(AFH(M)*(DY*CST(M)-DX*SIT(M)))**2
      IF(GO(L,M).LT.0.0) GO TO 60
      IF(DIS.GT.R2) GO TO 60
      IF(II.GE.NK.AND.DIS.GT.DIST(II)) GO TO 60
      II = II+1
      DIST(II)=DIS
      IHOL(II)=L
      IF(II.EQ.1) GO TO 60
C****ARRANGE HOLES IN INCREASING ORDER OF DISTANCE BY CALLING DSORT.
      CALL DSORT(DIST,IHOL,II)
      IF(II.GT.NK)II=NK
   60 CONTINUE
      IF(II.LE.2) GO TO 72
      GO TO 77
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
C     In the case of insufficient points to Krige the value -1 is listed
C      in both the output file and on the printer[I hope]
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
   72 GR(M)=-1.0
      VARKG(M)=-1.0
      GO TO 162
C****KRIG THE BLOCK IF THERE ARE MORE THAN TWO DATA POINTS.
   77 CALL KRIG (B,II,M,IFERR)
      IF (IFERR.EQ.0) GO TO 61
      WRITE(NOUT,73)J,K
   73 FORMAT(" ERROR IN MATRIX SOLUTION BLOCK ",2I5)
      DO 900 III=1,II
      LL=IHOL(III)
      WRITE(NOUT,75)YN(LL),XE(LL)
  900 CONTINUE
      GO TO 72
C****CALCULATE THE KRIGED VALUE AND THE KRIGING VARIANCE
   61 AG=0
      GR(M)=0
      IF(IDBUG.GE.1.AND.IOPR.LT.MAXPR)WRITE(NOUT,65)
   65 FORMAT(1H0," HOLE"T11,"NORTH"T22,"R.L."T42,"GRADE"
     1T52,"WEIGHT")
      DO 70 L=1,II
      LL=IHOL(L)
      AG=AG+GA(L)*R(L)
      GR(M)=GR(M)+GO(LL,M)*R(L)
      IF(IDBUG.GE.1.AND.IOPR.LT.MAXPR)WRITE(NOUT,75)YN(LL),
     1XE(LL),GO(LL,M),R(L)
   75 FORMAT(1H0,4X,2F10.3,10X,2F10.3)
   70 CONTINUE
      VARKG(M)=BLKVAR(M)-AG-R(II+1)
  162 CONTINUE
C$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
C     At this point the kriged results are output to the printer and file.
```

```
c      if your output is spooled then the printer listing is generated
c      on Log-off.
C$$$
```

```
      A(K,NS2)=C0(M)+C(M)-GMOY
      GA(K)=A(K,NS2)
      A(K,NS1)=1.0
      A(NS1,K)=1.0
   15 CONTINUE
      A(NS1,NS2)=1.0
      A(NS1,NS1)=0.0
C***SOLVE SIMULTANEOUS EQUATIONS
      IF(IDBUG.NE.1.OR.IDPR.GE.MAXPR) GO TO 20
      WRITE(NOUT,90)(GA(I),I=1,NS2)
      WRITE(NOUT,18)
   18 FORMAT(1H0,"AUGMENTED MATRIX")
      DO 19 IX=1,NS1
      WRITE(NOUT,90) (A(IX,IY),IY=1,NS2)
   19 CONTINUE
   90 FORMAT(15F7.2)
   20 CALL FINDT(A,R,NS1,IFERR)
C***R CONTAINS THE SOLUTION
      RETURN
      END
      SUBROUTINE BLOCK(BLKVAR,N)
C*************************************************************************
C     THIS SUBROUTINE COMPUTES THE BLOCK VARIANCE IN THE DEPOSIT FOR A
C     GIVEN SIZE BLOCK,USING 16 EQUALLY SPACED DATA POINT APPROXIMATION
C     FOR THE BLOCK AREA INTEGRATION
C*************************************************************************
      COMMON IPT,IOUT,IPR,IDBUG,IDPR,MAXPR,NOUT
      COMMON WX2,WY2,WX4,WY4,WX8,WY8
      COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
      COMMON IHOL(51),GA(51),R(51)
      COMMON YN(200),XE(200),GD(200,4)
      DIMENSION P1(2),P2(2)
      GMOY=0.0
      P1(1)=WX2
      P1(2)=WY2
      DO 10 I= 1,4
      P2(1)=WX2+(I-3)*WX4+WX8
      DO 10 J=1,4
      P2(2)=WY2+(J-3)*WY4+WY8
      CALL COVAR(P1,P2,GH,M)
      GMOY=GMOY+GH
   10 CONTINUE
      BLKVAR=C0(M)+C(M)-GMOY/16
      RETURN
      END
      SUBROUTINE COVAR(P1,P2,GH,M)
C*************************************************************************
C     THIS ROUTINE COMPUTES THE COVARIANCE BETWEEN A HOLE AND A BLOCK
C     USING 16 POINT APPROXIMATION
C*************************************************************************
      DIMENSION D(2),P1(2),P2(2)
        COMMON IPT,IOUT,IPR,IDBUG,IDPR,MAXPR,NOUT
        COMMON WX2,WY2,WX4,WY4,WX8,WY8
        COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
        COMMON IHOL(51),GA(51),R(51)
        COMMON YN(200),XE(200),GD(200,4)
      GMOY=0.0
```

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```
      D(1)=P1(1)-2.*WX4-WX8
      DO 10 I=1,4
      D(1)=D(1)+WX4
      D(2)=P1(2)-2.0*WY4-WY8
      DO 10 J=1,4
      D(2)=D(2)+WY4
      CALL SUBGM(D,P2,GH,M)
      GMOY=GMOY+GH
   10 CONTINUE
      GH=GMOY/16
      RETURN
      END
      SUBROUTINE SUBGM(P1,P2,GH,M)
C*****************************************************************************
C     THIS SUBROUTINE COMPUTES THE VARIOGRAM VALUE FOR A GIVEN DISTANCE
C     USING A SPHERICAL MODEL.CONSEQUENTLY THIS ROUTINE MUST BE MODIFIED
C     IF SOME OTHER TYPE MODEL IS TO BE USED.
C*****************************************************************************
      DIMENSION P1(2),P2(2)
        COMMON IPT,IOUT,IPR,IDBUG,IOPR,MAXPR,NOUT
        COMMON WX2,WY2,WX4,WY4,WX8,WY8
        COMMON C0(4),C(4),RANG(4),CST(4),SIT(4),AFH(4)
        COMMON IHOL(51),GA(51),R(51)
        COMMON YN(200),XE(200),GD(200,4)
      XD=P1(1)-P2(1)
      YD=P1(2)-P2(2)
      D=SQRT((XD*CST(M)+YD*SIT(M))**2+AFH(M)*AFH(M)*(YD*CST(M)-
     1XD*SIT(M))**2)
      IF(D.GT.RANG(M)) GO TO 20
      GH=C0(M)+C(M)*(1.5*D/RANG(M)-.5*(D/RANG(M))**3)
      IF(D.EQ.0.0) GH=0.0
      RETURN
   20 GH=C0(M)+C(M)
      RETURN
      END
      SUBROUTINE PIVOT(A,X,N,IFERR)
C*****************************************************************************
C     THIS ROUTINE SOLVES A SET OF SIMULTANEOUS LINEAR EQUATIONS USING
C     THE GAUSSIAN ELIMINATION TECHNIQUE.
C     THE FACT THAT THE DIAGONAL ELEMENT IS ALWAYS THE LARGEST ONE IN
C     KRIGING IS TAKEN INTO ACCOUNT IN SOLUTION.
C*****************************************************************************
      DIMENSION A(51,52),X(51)
      IFERR=0
      NP=N+1
      DO 10 I=1,N
      IP=I+1
C---PERFORM ELIMINATION.I IS PIVOT ROW A(I,I) IS PIVOT ELEMENT.
      DO 10 J=1,N
      IF(I.EQ.J) GO TO 10
      IF(A(I,I).EQ.0) GO TO 30
      F= (-A(J,I))/A(I,I)
      DO 9 K=IP,NP
    9 A(J,K)=A(J,K)+F*A(I,K)
   10 CONTINUE
      DO 20 I=1,N
   20 X(I)=A(I,N+1)/A(I,I)
```

```
Flist...  File (BAKRIG      )   Date  8:04 AM  TUE.,  8  JULY, 1986   Page008
      RETURN
   30 IFERR=1
      END
      SUBROUTINE DSORT(DS,IHOL,N)
C*************************************************************************
C     THIS IS A SORTING ROUTINE IN INCREASING ORDER
C*************************************************************************
      DIMENSION DS(1),IHOL(1)
      DO 5 I=1,N-1
      DO 15 J=I+1,N
      IF (DS(I).LT.DS(J)) GO TO 15
      DNEW=DS(I)
      NEW=IHOL(I)
      DS(I)=DS(J)
      IHOL(I)=IHOL(J)
      DS(J)=DNEW
      IHOL(J)=NEW
   15 CONTINUE
    5 CONTINUE
      RETURN
      END

## Flist - End of file ##
```

```
Flist...  File (&CPOLY      )   Date  8:07 AM  TUE.,  8 JULY, 1986   Page001
FTN4X,Q
$FILES(0,3)
      PROGRAM CPOLY(4,200), Cleveland polygon edit
C     ********************************************************************
C     *                                                                  *
C     *        PROGRAM:   CPOLY                                          *
C     *                                                                  *
C     *             AUTHOR: G.J.McArthur                                 *
C     *                                                                  *
C     *             DATE: May 1982 (Modified <999999.9999> )             *
C     *                                                                  *
C     *             PURPOSE: Takes a block krige estim. file and flags   *
C     *              those blocks whose centre lies outside the          *
C     *               perimeter of a multi-sided polygon                 *
C     *                                                                  *
C     ********************************************************************
C
C
C     ####################################################################
C      CURRENTLY DIMENSIONED TO ACCEPT UP TO 100 POINTS
C     ####################################################################
C
C
      DIMENSION POLYN(100),POLYR(100),GR(4),VAR(4)
C
C
C     ####################################################################
C      NF47 - FILENAME FOR POLYGON COORDINATES, UNIT 47
C      NF48 - FILENAME FOR INPUT KRIGE ESTIMATES, UNIT 48
C      NF49 - FILENAME FOR OUTPUT KRIGE ESTIMATES, UNIT 49
C     ####################################################################
C
C
      DIMENSION NF47(6),NF48(6),NF49(6)
      WRITE(1,10)
   10 FORMAT(25/,20X,'** PROGRAM CPOLY **',//)
      WRITE(1,20)
   20 FORMAT('Polygon coordinate filename? _')
      READ(1,30)NF47
   30 FORMAT(6A2)
      WRITE(1,40)
   40 FORMAT('Krige estimate filename? _')
      READ(1,30)NF48
      WRITE(1,50)
   50 FORMAT(' OUTPUT FILE NAME?')
      READ(1,30)NF49
C
C
C     ####################################################################
C      POLOUT IS THE FLAG TO INDICATE A BLOCK OUTSIDE THE POLYGON
C      PERIMETER AS DELINEATED BY THE COORDINATED POINTS
C     ####################################################################
C
C
      POLOUT=-1.0
      OPEN(47,FILE=NF47,IOSTAT=IOS,ERR=99)
      OPEN(48,FILE=NF48,IOSTAT=IOS1,ERR=999)
```

```
      OPEN(49,FILE=NF49,IOSTAT=IOS2,ERR=9999)
C
C
C     ##################################################################
C     READ IN THE POLYGON COORDINATE DATA
C      THERE ARE NPOLY COORDINATE PAIRS (1ST=LAST)
C     ##################################################################
C
C
      READ(47,100)NPOLY
  100 FORMAT(I5)
      READ(47,110) (POLYN(I),POLYR(I),I=1,NPOLY)
  110 FORMAT(2F10.0)
C
C
C     ##################################################################
C      IF THE COORDS OF 1ST & LAST POINTS ARE NOT EQUAL THEN THE
C      INPUT IS INVALID - PRINT AN ERROR MESSAGE
C     ##################################################################
C
C
      IF (POLYN(1).EQ.POLYN(NPOLY).AND.POLYR(1).EQ.POLYR(NPOLY))GO TO 5
      WRITE(1,120)
  120 FORMAT('    **ERROR**  1ST AND LAST COORDS DO NOT MATCH!')
      GO TO 55
C
C
C     ##################################################################
C     READ IN THE KRIGED DATA FILE
C     ##################################################################
C
C
    5 NOUT=0
      NIN=0
    6 READ(48,130,END=45) JJ,KK,RNTH,RL,(GR(I),VAR(I),I=1,4),MOS
  130 FORMAT(2I5,2F10.1,8F10.2,I10)
C
C
C     ##################################################################
C     RUN THROUGH THE POLYGON EXCLUSION ALGORITHM
C       ALGORITHM COURTESY R.FOX (EX M.I.M.) 1974
C     ##################################################################
C
C
      TEST=-1.0
      DO 15 I=2,NPOLY
      J=I-1
      A0=RNTH-(POLYN(J)-0.01)
      B0=RNTH-(POLYN(I)-0.01)
      C0=A0*B0
      IF (C0 .GT. 0.0) GO TO 15
      W1=((1000000.0-POLYR(J))*B0)-((1000000.0-POLYR(I))*A0)
      W2=((RL-POLYR(J))*B0)-((RL-POLYR(I))*A0)
      W3=W1*W2
      IF (W3 .LE. 0.0) TEST=TEST*(-1.0)
   15 CONTINUE
C
```

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Flist... File (&CPOLY) Date 8:07 AM TUE., 8 JULY, 1986 Page003

```
C
C     ##########################################################################
C     IF TEST=+1 THEN BLOCK IS INSIDE POLYGON
C
C     IF TEST=-1 THEN BLOCK IS OUTSIDE POLYGON (SET VALUES TO -1)
C     ##########################################################################
C
C
      IF (TEST .EQ. 1.0) GO TO 25
      WRITE(49,130) JJ,KK,RNTH,RL,(POLOUT,I=1,9)
C
C
C     ##########################################################################
C      KEEP A RUNNING COUNT OF BLOCKS OUTSIDE THE POLYGON
C     ##########################################################################
C
C
      NOUT=NOUT+1
      GO TO 6
   25 WRITE(49,130) JJ,KK,RNTH,RL,(GR(I),VAR(I),I=1,4),MOS
C
C
C     ##########################################################################
C      KEEP A RUNNING COUNT OF BLOCKS INSIDE THE POLYGON
C     ##########################################################################
C
C
      NIN=NIN+1
      GO TO 6
   45 WRITE(1,140)NIN,NOUT
  140 FORMAT(I5,' BLOCKS ACCEPTED'/I5,' BLOCKS REJECTED')
      GO TO 55
C
C
C     ##########################################################################
C      ERROR MESSAGES DUE TO FILE STUFF-UPS
C     ##########################################################################
C
C
   99 WRITE(1,150)IOS
  150 FORMAT('  **ERROR #',I3,' IN POLYGON FILE')
      GO TO 55
  999 WRITE(1,160)IOS1
  160 FORMAT('  **ERROR #',I3,' IN KRIGE FILE')
      GO TO 55
 9999 WRITE(1,170)IOS2
  170 FORMAT('  **ERROR #',I3,' IN OUTPUT FILE')
   55 STOP
      END
```

Flist - End of File

```
Flist...  File (&CMOCO      )   Date  8:10 AM  TUE.,  8  JULY, 1986   Page001
FTN4X,Q
$FILES(0,2)
      PROGRAM CMOCO(4,200), Cleveland copy mined out file
C     ****************************************************************
C     *                                                              *
C     *          PROGRAM:        CMOCO                               *
C     *                                                              *
C     *          AUTHOR:         G.J.McArthur                        *
C     *                                                              *
C     *          DATE:           (830705.0901)                       *
C     *                                                              *
C     *          PURPOSE:        Reads an existing 1982 ?P____ file  *
C     *                          and creates a mined out file        *
C     *                                                              *
C     ****************************************************************
C
C
C     ###############################################################
C      NF47 - FILENAME FOR KRIGE ESTIMATE FILE, UNIT 47
C      NF48 - FILENAME FOR MINED OUT DATA FILE, UNIT 48
C     ###############################################################
C
C
      DIMENSION NF47(6),NF48(6)
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM CMOCO **',//)
      WRITE(1,110)
  110 FORMAT('Krige estimate filename? _')
      READ(1,120) NF47
  120 FORMAT(6A2)
      WRITE(1,130)
  130 FORMAT('Mined out data filename? _')
      READ(1,120) NF48
      OPEN(47,FILE=NF47,IOSTAT=IOS47,ERR=947)
      OPEN(48,FILE=NF48,IOSTAT=IOS48,ERR=948)
C
C
C     ###############################################################
C      READ THE EXISTING MINED OUT STATUS FOR EACH BLOCK AND REFORMAT
C      FOR THE NEW FILE
C     ###############################################################
C
C
    5 READ(47,140,END=25) JC,JR,MOS
  140 FORMAT(2I5,100X,I10)
      WRITE(48,150) JC,JR,MOS
  150 FORMAT(3I5)
      GO TO 5
  947 WRITE(1,160) IOS47
  160 FORMAT(' **ERROR #',I3,' IN KRIGE FILE')
      GO TO 25
  948 WRITE(1,170) IOS48
  170 FORMAT(' **ERROR #',I3,' IN MINED OUT FILE')
   25 STOP
      END

## Flist - End of file ##
```

```
Flist..  File (&CMOAD     )  Date  8:11 AM  TUE.,  8  JULY, 1986  Page001
FTN4X,Q
$FILES(0,3)
      PROGRAM CMOAD(4,200), Cleveland merge mined out file
C     ********************************************************************
C     *                                                                  *
C     *          PROGRAM:      CMOAD                                     *
C     *                                                                  *
C     *          AUTHOR:       G.J.McArthur                              *
C     *                                                                  *
C     *          DATE:         (840410.1401)                             *
C     *                                                                  *
C     *          PURPOSE:      Merges the mined out data into the krige  *
C     *                        estimate file                             *
C     *                                                                  *
C     ********************************************************************
C
C
C     ####################################################################
C      NF47 - FILENAME FOR KRIGE ESTIMATE FILE, UNIT 47
C      NF48 - FILENAME FOR MINED OUT DATA FILE, UNIT 48
C     ####################################################################
C
C
      DIMENSION NF47(6),NF48(6),GR(4),VAR(4)
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM CMOAD **',//)
      WRITE(1,110)
  110 FORMAT('Krige estimates filename? _')
      READ(1,120) NF47
  120 FORMAT(6A2)
      WRITE(1,130)
  130 FORMAT(/,'Mined out data filename? _')
      READ(1,120) NF48
      OPEN(47,FILE=NF47,IOSTAT=IOS47,ERR=947)
      OPEN(48,FILE=NF48,IOSTAT=IOS48,ERR=948)
      OPEN(49,STATUS='SCRATCH')
C
C
C     ####################################################################
C      READ THE BLOCK RECORDS ONE AT A TIME
C     ####################################################################
C
C
    5 READ(47,140,END=25) JC,JR,RNTH,RL,(GR(J),VAR(J),J=1,4)
  140 FORMAT(2I5,2F10.1,8F10.2)
      READ(48,150) JCM,JRM,MOS
  150 FORMAT(3I5)
C
C
C     ####################################################################
C      CHECK THAT ROW AND COLUMN NUMBERS COINCIDE
C      IF OK, WRITE MERGED RECORD TO THE SCRATCH FILE
C     ####################################################################
C
C
      IF (JC.EQ.JCM .AND. JR.EQ.JRM) GO TO 30
      WRITE(1,160)
```

```
Flist...  File (&CMDAD      )  Date  8:11 AM  TUE.,  8  JULY, 1986  Page002
  160 FORMAT('**ERROR - ROWS AND/OR COLUMNS MISMATCH!')
      GO TO 55
   30 IF(GR(1)+1.00)15,20,15
   20 MOS=-1
   15 WRITE(49,170)JC,JR,RNTH,RL,(GR(J),VAR(J),J=1,4),MOS
  170 FORMAT(2I5,2F10.1,8F10.2,I10)
      GO TO 5
C
C
C     ##########################################################################
C      COPY THE SCRATCH FILE BACK TO THE KRIGED ESTIMATE FILE
C     ##########################################################################
C
C
   25 REWIND 47
      REWIND 49
   35 READ(49,170,END=45) JC,JR,RNTH,RL,(GR(J),VAR(J),J=1,4),MOS
      WRITE(47,170) JC,JR,RNTH,RL,(GR(J),VAR(J),J=1,4),MOS
      GO TO 35
   45 CLOSE(49,STATUS='DELETE')
      CLOSE(48,STATUS='KEEP')
      CLOSE(47,STATUS='KEEP')
      WRITE(1,171)
  171 FORMAT(//,'F I L E S  M E R G E D  S U C C E S S F U L L Y',//)
      GO TO 55
  947 WRITE(1,180) IOS47
  180 FORMAT('**ERROR #',I3,' IN KRIGE FILE')
      GO TO 55
  948 WRITE(1,190) IOS48
  190 FORMAT('**ERROR #',I3,' IN MINED OUT FILE')
   55 STOP
      END

## Flist - End of file ##
```

```
Flist...  File (&CORD      )  Date  8:12 AM  TUE.,  8  JULY, 1986  Page001
FTN4X,L,Q,X
$FILES(0,1)
      PROGRAM CORD(4,200). Cleveland mining and mill factors
C     ****************************************************************
C     *                                                              *
C     *       PROGRAM:    CORD                                       *
C     *                                                              *
C     *       AUTHOR:     G.J.McArthur                               *
C     *                                                              *
C     *       DATE:       May 1982  modified   (830705.0904)         *
C     *                                                              *
C     *       PURPOSE:    Creates or edits a file containing         *
C     *                   dilution and mining recovery factors and   *
C     *                   mill productivity coefficients for krige   *
C     *                   ore reserve blocks                         *
C     *                                                              *
C     ****************************************************************
C
C
C     ################################################################
C      CURRENTLY DIMENSIONED TO ACCEPT UP TO 40 RL ROWS AND 50 NORTHING
C      COLUMNS. NF48 - FILENAME FOR DILUTION/RECOVERY FILE, UNIT 48
C     ################################################################
C
C
      DIMENSION IDIL(40,50),IREC(40,50),MPC(40,50),NF48(6)
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM CORD **',//)
      WRITE(1,110)
  110 FORMAT(' File name (IN____)')
      READ(1,120)NF48
  120 FORMAT(6A2)
      OPEN(48,FILE=NF48,IOSTAT=IOS,ERR=999)
    5 WRITE(1,130)
C
C
C     ################################################################
C      THIS PROGRAM WILL EITHER CREATE A NEW FILE OR AMEND AN EXISTING
C      ONE - IF AMENDMENT REQUIRED THE EXISTING DATA IS READ INTO CORE
C     ################################################################
C
C
  130 FORMAT(/' 1=Create new file  2=amend existing file')
      READ(1,*) NCA
      IF (NCA.NE.1.AND.NCA.NE.2) GO TO 5
      IF (NCA.EQ.1) GO TO 35
   15 READ(48,140,END=25) JJ,KK,IDIL(JJ,KK),IREC(JJ,KK),MPC(JJ,KK)
  140 FORMAT(5I5)
      GO TO 15
   25 REWIND 48
      NCOL=KK
      NROW=JJ
      WRITE(1,150)NCOL,NROW
  150 FORMAT(/' Your existing file has ',I3,' blocks in north'
     +       ,' direction'/20x,'and ',I3,' blocks in R.L. direction')
      GO TO 65
C
```

```
C
C     ##################################################################
C      IF CREATING A NEW FILE LIMITS MUST BE INPUT TO COINCIDE EXACTLY
C      WITH THE KRIGED ESTIMATE FILE
C     ##################################################################
C
C
   35 WRITE(1,160)
  160 FORMAT(/'No.of northing columns, R.L. rows')
      READ(1,*)NCOL,NROW
C
C
C     ##################################################################
C      TO MINIMISE AMENDMENTS SET ALL VALUES TO THE MOST PREVALENT ONES
C     ##################################################################
C
C
      WRITE(1,170)
  170 FORMAT(/' Most common dilution,recovery,MPC')
      READ(1,*)IDIL0,IREC0,MPC0
      DO 45 I=1,NROW
      DO 55 J=1,NCOL
      IDIL(I,J)=IDIL0
      IREC(I,J)=IREC0
      MPC(I,J)=MPC0
   55 CONTINUE
   45 CONTINUE
   65 WRITE(1,180)
  180 FORMAT(/' Now you can specify the new dilution and mining'
     +       /' recovery factors and MPC for any size rectangular area'
     +       /' you like. Remember that the blocks are referenced'
     +       /' from the lower northernmost corner'//)
   75 WRITE(1,190)
  190 FORMAT(/' Northing column from,to (-ve to exit)')
      READ(1,*)NCOL1,NCOL2
C
C
C     ##################################################################
C      NEGATIVE INPUT FLAGS AMENDMENT HAS FINISHED
C     ##################################################################
C
C
      IF (NCOL1.LT.0) GO TO 115
C
C
C     ##################################################################
C      IF BLOCKS ARE OUTSIDE GRID LIMITS THEY ARE INVALID
C     ##################################################################
C
C
      IF(NCOL1.GT.NCOL.OR.NCOL2.GT.NCOL.OR.NCOL2.LT.NCOL1)GO TO 75
   85 WRITE(1,200)
  200 FORMAT(/' R.L. row from,to')
      READ(1,*)NROW1,NROW2
      IF(NROW1.GT.NROW.OR.NROW2.GT.NROW.OR.NROW2.LT.NROW1)GO TO 85
      WRITE(1,210)
  210 FORMAT(/' Dilution,mining recovery factors and MPC?')
```

```
      READ(1,*)IDIL1,IREC1,MPC1
C
C
C     ##########################################################################
C      SET ALL THE BLOCKS IN THE RECTANGULAR AREA TO THE NEW DILUTION/
C      RECOVERY DATA (STORED AS INTEGERS)
C     ##########################################################################
C
C
      DO 95 I=NROW1,NROW2
      DO 105 J=NCOL1,NCOL2
      IDIL(I,J)=IDIL1
      IREC(I,J)=IREC1
      MPC(I,J)=MPC1
  105 CONTINUE
   95 CONTINUE
C
C
C     ##########################################################################
C      GO BACK FOR THE NEXT AMENDMENT
C     ##########################################################################
C
C
      GO TO 75
  115 WRITE(1,220)
  220 FORMAT(/' Now rewriting the file. Hang on a bit!')
      DO 125 JJ=1,NROW
      DO 135 KK=1,NCOL
      WRITE(48,140)JJ,KK,IDIL(JJ,KK),IREC(JJ,KK),MPC(JJ,KK)
  135 CONTINUE
  125 CONTINUE
      GO TO 9
  999 WRITE(1,230)IOS
  230 FORMAT('**ERROR #',I3,' IN FILE')
    9 STOP
      END
```

Flist - End of file

```
Flist,,,  File (8CMINE      )  Date  8:13 AM  TUE,,  8  JULY, 1986   Page001
FTN4X,L,Q,X
$FILES(0,3)
      PROGRAM CMINE(4,200). Cleveland build mineable reserves file
C     ****************************************************************
C     *                                                              *
C     *          PROGRAM:    CMINE                                   *
C     *                                                              *
C     *          AUTHOR:     G.J.McArthur                            *
C     *                                                              *
C     *          DATE:       June 1982   modified   <830711.2038>    *
C     *                                                              *
C     *          PURPOSE:    Reads a krige file and the dilution/    *
C     *                      recovery file and then calculates       *
C     *                      mineable tonnes and grade for each      *
C     *                      block. This data is written to a new    *
C     *                      file as follows:-                       *
C     *                                                              *
C     *                           DATA                 COLS          *
C     *                                                              *
C     *                    1  Geological tonnes          31- 37      *
C     *                    2  Total haulage tonnes       38- 44      *
C     *                    3  Mill Feed tonnes           45- 51      *
C     *                    4  Low Grade tonnes           52- 58      *
C     *                    5  Geological %SnT            59- 64      *
C     *                    6  Geological %Cu             65- 70      *
C     *                    7  Mill Feed %SnT             71- 76      *
C     *                    8  Mill Feed %Cu              77- 82      *
C     *                    9  Mill Recoverable %SnT      83- 88      *
C     *                   10  Mill Recoverable %Cu       89- 94      *
C     *                   11  Mill Recoverable %SnTEq     95-100      *
C     *                   12  Low Grade %Cu              101-106      *
C     *                   13  Horizontal Width           107-111      *
C     *                   14  Grade Control sorting recov.  112-116   *
C     *                   15  Mill Productivity Coefficient 117-121   *
C     *                   16  Mined out %                122-126      *
C     *                                                              *
C     ****************************************************************
C
C
C     ################################################################
C      CURRENTLY DIMENSIONED TO ACCEPT UP TO 40 RL ROWS AND 50 NORTHING
C      COLUMNS - NF47 - GEOLOGICAL KRIGE ESTIMATE INPUT FILENAME, UNIT 47
C                NF48 - DILUTION/RECOVERY INPUT FILENAME, UNIT 48
C                NF49 - MINEABLE RESERVES OUTPUT FILENAME, UNIT 49
C     ################################################################
C
C
      DIMENSION NF47(6),NF48(6),NF49(6),GR(4),VAR(4),IDIL(40,50)
      DIMENSION IREC(40,50),NPC(40,50)
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM CMINE **',//)
      WRITE(1,110)
  110 FORMAT(/' Krige file name?')
      READ(1,111)NF47
  111 FORMAT(6A2)
      WRITE(1,120)
  120 FORMAT(/' Dilution/recovery file name?')
```

171


```
      READ(1,111)NF48
      WRITE(1,130)
  130 FORMAT(/' New mineable reserves file name?')
      READ(1,111)NF49
      WRITE(1,131)
  131 FORMAT(/' S.G.?')
      READ(1,*)SG
      OPEN(47,FILE=NF47,IOSTAT=IOS7,ERR=997)
      OPEN(48,FILE=NF48,IOSTAT=IOS8,ERR=998)
      OPEN(49,FILE=NF49,IOSTAT=IOS9,ERR=999)
C
C
C     ##########################################################################
C      READ IN ALL THE DILUTION/RECOVERY DATA
C     ##########################################################################
C
C
    5 READ(48,140,END=15)JJ,KK,IDIL(JJ,KK),IREC(JJ,KK),MPC(JJ,KK)
  140 FORMAT(5I5)
      GO TO 5
C
C
C     ##########################################################################
C      READ IN THE GEOLOGICAL ESTIMATES AND MOS DATA
C     ##########################################################################
C
C
   15 READ(47,150,END=45)JJJ,KKK,RNTH,RL,(GR(I),VAR(I),I=1,4),MOS
  150 FORMAT(2I5,2F10.1,8F10.2,I10)
C
C
C     ##########################################################################
C      IF THE HOR.WIDTH & %SNT ARE NON-NEGATIVE THEN THE BLOCK HAS GEOL.
C      ESTIMATES THEN MINEABLE RESERVES CAN BE CALCULATED FROM THEM.
C      OTHERWISE THERE IS NO GEOLOGICAL ESTIMATE (NO DATA OR OUTSIDE THE
C      LENS) AND ALL MINEABLE DATA IS SET TO -1 TO FLAG THE FACT
C     ##########################################################################
C
C
      IF (GR(1).GE.0.0.AND.GR(2).GE.0.0) GO TO 18
      GTONN=-1.0 $ THAUL=-1.0 $ FMTONN=-1.0 $ FMSNGR=-1.0 $ FMCUGR=-1.0
      GLTONN=-1.0 $ GLCUGR=-1.0 $ GCSR=-1.0 $ RMSNGR=-1.0 $ RMCUGR=-1.0
      MPC(JJJ,KKK)=-1 $ TEMRGR=-1.0
      GO TO 35
C
C
C     ##########################################################################
C      IF COMPLETELY MINED OUT THEN SET ALL MINEABLE DATA TO ZERO TO
C      INDICATE ESTIMATE AVAILABLE BUT NO IN SITU ORE REMAINS
C     ##########################################################################
C
C
   18 IF (MOS.LT.100) GO TO 17
      GTONN=0.0 $ GR(1)=0.0 $ GR(2)=0.0 $ THAUL=0.0 $ FMTONN=0.0
      FMSNGR=0.0 $ FMCUGR=0.0 $ GLTONN=0.0 $ GLCUGR=0.0 $ GCSR=0.0
      RMSNGR=0.0 $ RMCUGR=0.0 $ TEMRGR=0.0
      GO TO 35
```

```
C
C
C     ##########################################################################
C      CONVERT INTEGERS TO REAL FOR CONVENIENCE
C     ##########################################################################
C
C
   17 DIL=FLOAT(IDIL(JJJ,KKK))
      REC=FLOAT(IREC(JJJ,KKK))
      PCOEFF=FLOAT(MPC(JJJ,KKK))
C
C
C     ##########################################################################
C      GEOLOGICAL RESOURCE TONNEAGE IS AREA OF BLOCK (100 SQ.M.) X
C      HOR.WIDTH X S.G., SUITABLY ADJUSTED FOR THE % MINED OUT
C     ##########################################################################
C
C
      GTONN=100.0*SG*GR(1)*(100.0-FLOAT(MOS))/100.0
C
C
C     ##########################################################################
C      CALCULATE CU/SNT RATIO FOR ESTIMATING CU GRADE OF MILL FEED AND
C      LOW GRADE STOCKPILES
C     ##########################################################################
C
C
      CUSNT=GR(4)/GR(2)
C
C
C     ##########################################################################
C      DILUTED SN GRADE IS GEOLOGICAL SN GRADE ADJUSTED FOR DILUTION -
C      ASSUME WASTE DILUTION HAS GRADE OF 0.05%SNT AND (0.05*CU/SNT RATIO)
C      %CU
C     ##########################################################################
C
C
      DSNGR=(GR(2)*100.0+0.05*DIL)/(100.0+DIL)
      DCUGR=(GR(4)*100.0+0.05*CUSNT*DIL)/(100.0+DIL)
C
C
C     ##########################################################################
C      CALCULATE GRADE CONTROL SORTING RECOVERY (TO MILL FEED) FROM THE
C      ALGORITHM, MAKE SURE IT DOES NOT EXCEED 100%
C     ##########################################################################
C
C
      X=DSNGR
      GCSR=-0.087+57.155*X-961.877*X**2+3300.089*X**3-5045.25*X**4-
     +     3747.764*X**5+1083.707*X**6
      IF (GCSR.GT.100.0) GCSR=100.0
C
C
C     ##########################################################################
C      CALCULATE GRADE CONTROL RECOVERY TO LOW GRADE STOCKPILE FROM THE
C      ALGORITHM, MAKE SURE MILL FEED + LOW GRADE DOES NOT EXCEED 100%
C     ##########################################################################
```

```
C
C
      GCLG=-0.06+160.311*X-223.57*X**2-606.998*X**3+1746.408*X**4-
     +     1574.583*X**5+498.154*X**6
      IF ((GCLG+GCSR).GT.100.0) GCLG=100.0-GCSR
C
C
C     ##########################################################################
C      TONNES HAULED ( BEFORE GRADE CONTROL) IS GEOLOGICAL TONNEAGE
C      ADJUSTED FOR DILUTION AND MINING RECOVERY
C     ##########################################################################
C
C
      THAUL=GTONN*((DIL+100.0)/100.0)*(REC/100.0)
C
C
C    ###########################################################################
C     MILL FEED TONNEAGE IS TOTAL HAULAGE X GRADE CONTROL SORTING RECOVERY
C    ###########################################################################
C
C
      FMTONN=THAUL*GCSR/100.0
C
C
C     ##########################################################################
C      LOW GRADE TONNEAGE IS TOTAL HAULAGE X LOW GRADE SORTING RECOVERY
C     ##########################################################################
C
C
      GLTONN=THAUL*GCLG/100.0
C
C
C     ##########################################################################
C      CALCULATE MILL FEED SN GRADE USING ALGORITHM, MAKE SURE THIS DOES
C      NOT EXCEED THE GEOLOGICAL SN GRADE
C      IF DILUTED TIN GRADE EXCEEDS 1% THEN GRADE CONTROL SORTING IS ZERO
C     ##########################################################################
C
C
      IF (X.LT.1.0) GO TO 19
      FMSNGR=X ; GO TO 21
   19 FMSNGR=0.05+1.384*X-2.517*X**2+11.718*X**3-25.321*X**4+
     +       24.011*X**5-8.324*X**6
      IF (FMSNGR .GT. GR(2)) FMSNGR=GR(2)
C
C
C     ##########################################################################
C      MILL FEED CU GRADE IS MILL FEED SN GRADE X CU/SNT RATIO
C     ##########################################################################
C
C
   21 FMCUGR=FMSNGR*CUSNT
C
C
C     ##########################################################################
C      ASSUMING LOW GRADE STOCKPILE IS ALWAYS 0.28%SNT THEN LOW GRADE
C      CU GRADE IS 0.28 X CU/SNT RATIO
```

```
C     ##################################################################
C
C
      GLCUGR=0.28*CUSNT
C
C
C     ##################################################################
C      IF MINING RECOVERY IS ZERO THEN SET MINEABLE DATA TO ZERO, BUT
C      LEAVE GEOLOGICAL DATA AS IS
C     ##################################################################
C
C
      IF (REC .GT. 0.0) GO TO 34
      FMSNGR=0.0 $ FMCUGR=0.0 $ GLCUGR=0.0 $ GCSR=0.0 $ RMSNGR=0.0
      RMCUGR=0.0 $ TEMRGR=0.0
C
C
C     ##################################################################
C      CALCULATE MILL RECOVERABLE %SNT GRADE FROM MPC FACTOR
C     ##################################################################
C
C
   34 RMSNGR=(FMSNGR*PCOEFF)/100.0
C
C
C     ##################################################################
C      MILL RECOVERABLE CU GRADE ASSUMES CONSTANT 62% RECOVERY AND
C      NORMAL THROUGHPUT RATES
C     ##################################################################
C
C
      RMCUGR=FMCUGR*0.62
C
C
C     ##################################################################
C      CALCULATE MILL RECOVERABLE TIN EQUIVALENT FROM RATIO OF METAL
C      PRICES - CU/SN = $14/$119 = 0.12
C     ##################################################################
C
C
      TEMRGR=RMSNGR+0.12*RMCUGR
C
C
C     ##################################################################
C      WRITE THE MINEABLE DATA TOGETHER WITH GEOLOGICAL TONNES, %SNT
C     ##################################################################
C
C
   35 WRITE(49,160)JJJ,KKK,RNTH,RL,GTONN,THAUL,FNTONN,GLTONN,GR(2)
     +            ,GR(4),FMSNGR,FMCUGR,RMSNGR,RMCUGR,TEMRGR,GLCUGR,GR(1)
     +            ,GCSR,MPC(JJJ,KKK),NOB
  160 FORMAT(2I5,2F10.1,4F7.0,2F6.2,F5.1,F5.0,2I5)
C
C
C     ##################################################################
C      GET THE NEXT BLOCK (PHEW!)
C     ##################################################################
```

```
C
C
      GO TO 15
   45 GO TO 9
C
C
C     ##########################################################################
C      ERROR MESSAGES FOR FILE STUFF-UPS
C     ##########################################################################
C
C
  997 WRITE(1,170)IOS7
  170 FORMAT(' **ERROR #',I3,' IN KRIGE FILE')
      GO TO 9
  998 WRITE(1,180)IOS8
  180 FORMAT(' **ERROR #',I3,' IN DILUTION/RECOVERY FILE')
      GO TO 9
  999 WRITE(1,190)IOS9
  190 FORMAT(' **ERROR #',I3,' IN OUTPUT FILE')
    9 STOP
      END
```

Flist - End of file

```
Flist..  File (&CGLPP      )  Date  8:16 AM  TUE.,  8  JULY, 1986  Page001
FTN4X,Q
#FILES(0,1)
      PROGRAM CGLPP (4.200),Geol.Res.line printer plot (830705.0906)
      DIMENSION NF48(6),DATA(9),NPLOT(40,50),NASS(6),ULIM(8)
      WRITE(1,100)
  100 FORMAT(25/,20X,'** PROGRAM CGLPP **',//)
      WRITE(1,110)
  110 FORMAT(' Krige file name? _')
      READ(1,120)NF48
  120 FORMAT(6A2)
      OPEN(48,FILE=NF48,IOSTAT=IOS,ERR=948)
    5 READ(48,130,END=15) JR,JC
  130 FORMAT(2I5)
      GO TO 5
   15 REWIND 48
      NROW=JR
      NCOL=JC
      WRITE(1,140) NCOL,NROW
  140 FORMAT(/,'Your file has ',I3,' blocks in the north direction'
     +,       ' and',/,14X,I3,' blocks in the R.L. direction'/)
      WRITE(1,150)
  150 FORMAT(/,'Input no.of characters for each cell: north,RL _')
      READ(1,*) NCN,NCR
  155 WRITE(1,160)
  160 FORMAT(/,'Name of data to be plotted _')
      READ(1,120) NASS
      WRITE(1,170)
  170 FORMAT(/,'Hor.Width   estimate = 1',/
     +,        '            variance = 2',/
     +,        '% SnT       estimate = 3',/
     +,        '            variance = 4',/
     +,        '% SnS       estimate = 5',/
     +,        '            variance = 6',/
     +,        '% Cu        estimate = 7',/
     +,        '            variance = 8',/
     +,        '% Mined out          = 9  _')
      READ(1,*) NACOL
      IF (NACOL.LT.0) GO TO 999
      WRITE(1,180)
  180 FORMAT(/,'Upper limits for - . , : I X * W  shading _')
      READ(1,*) (ULIM(J),J=1,8)
   25 READ(48,181,END=55) JR,JC,RNTH,RL,(DATA(J),J=1,8),MOS
  181 FORMAT(2I5,2F10.1,8F10.2,I10)
      DATA(9)=FLOAT( MOS)
      JCN=NCOL+1-JC
      JRN=NROW+1-JR
      DO 35 I=1,8
      IF (DATA(NACOL).LE.ULIM(I)) GOTO 45
   35 CONTINUE
   45 NPLOT(JRN,JCN)=I
      IF (DATA(NACOL).LT.0.0) NPLOT(JRN,JCN)=0
      GO TO 25
   55 WRITE(1,182)
  182 FORMAT(/'Plot rows from,to and columns from,to _')
      READ(1,*) NRMIN,NRMAX,NCMIN,NCMAX
      IF (NRMIN.LT.1 .OR. NCMIN.LT.1 .OR.
     +    NRMAX.GT.NROW .OR. NCMAX.GT.NCOL) GO TO 155
```

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```
      WRITE(1,190) NF48,NA55
  190 FORMAT(/,35X,6A2,//,35X,6A2,//)
      DO 65 IROW=NRMIN,NRMAX
      DO 75 ICROW=1,NCR
      DO 85 ICOL=NCMIN,NCMAX
      DO 95 ICCOL=1,NCN
      M=NPLOT(IROW,ICOL)
      IF (M.EQ.0.OR.M.GT.8) ASSIGN 200 TO NFORM
      IF (M.EQ.1) ASSIGN 201 TO NFORM
      IF (M.EQ.2) ASSIGN 202 TO NFORM
      IF (M.EQ.3) ASSIGN 203 TO NFORM
      IF (M.EQ.4) ASSIGN 204 TO NFORM
      IF (M.EQ.5) ASSIGN 205 TO NFORM
      IF (M.EQ.6) ASSIGN 206 TO NFORM
      IF (M.EQ.7) ASSIGN 207 TO NFORM
      IF (M.EQ.8) ASSIGN 208 TO NFORM
      WRITE(1,FMT=NFORM)
  200 FORMAT(' _')
  201 FORMAT('-_')
  202 FORMAT('._')
  203 FORMAT(',_')
  204 FORMAT(':_')
  205 FORMAT ('1_')
  206 FORMAT ('X_')
  207 FORMAT ('*_')
  208 FORMAT ('W_')
   95 CONTINUE
   85 CONTINUE
      WRITE(1,210)
  210 FORMAT(' ')
   75 CONTINUE
   65 CONTINUE
      WRITE(1,211)
  211 FORMAT(///'  0 _')
      DO 105 I=1,8
      IF (I.EQ.1) ASSIGN 201 TO NFORM
      IF (I.EQ.2) ASSIGN 202 TO NFORM
      IF (I.EQ.3) ASSIGN 203 TO NFORM
      IF (I.EQ.4) ASSIGN 204 TO NFORM
      IF (I.EQ.5) ASSIGN 205 TO NFORM
      IF (I.EQ.6) ASSIGN 206 TO NFORM
      IF (I.EQ.7) ASSIGN 207 TO NFORM
      IF (I.EQ.8) ASSIGN 208 TO NFORM
      DO 115 J=1,3
      WRITE(1,FMT=NFORM)
  115 CONTINUE
      IF (I.EQ.8) GO TO 106
      WRITE(1,212)ULIM(I)
  212 FORMAT(F6.2,' _')
  105 CONTINUE
  106 WRITE(1,213)
  213 FORMAT(' ')
      RNMIN=RNTH+(NCMIN-1)*10.0
      RNMAX=RNTH+(NCMAX-1)*10.0
      RLMIN=RL-(NRMAX-1)*10.0
      RLMAX=RL-(NRMIN-1)*10.0
      WRITE(1,214)RNMIN,RNMAX,RLMIN,RLMAX
```

```
Flist..  File (&DGLPP      )   Date  8:16 AM  TUE..  8 JULY, 1986   Page003
  214 FORMAT(/25X,F8.1,'N - '.F8.1,'N  ',F8.1,'RL - '.F8.1,'RL')
      REWIND 48
      GOTO 99
  948 WRITE(1,220) IOS,NF48
  220 FORMAT(' **ERROR #',I3.' IN FILE: ',6A2)
  999 CLOSE (48)
      STOP
      END

## Flist - End of file ##
```

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```
FTN4X... File (&CGRE6      )   Date  8:18 AM  TUE.,  8 JULY, 1986   Page001
FTN4X,L,X,Q
$FILES(0,1)
      PROGRAM CGRE6(4,200), Cleveland geol. res. tabulator
C     ********************************************************************
C     *                                                                  *
C     *           PROGRAM:  CGRE6                                        *
C     *                                                                  *
C     *           AUTHOR:  G.J.McArthur                                  *
C     *                                                                  *
C     *           DATE:    <860618.0913>                                 *
C     *                                                                  *
C     *           PURPOSE:  Accepts any number of krige files (?K____    *
C     *                     or ?P____) and calculates resources for      *
C     *                     up to 10 specified cutoffs                   *
C     *                     Reads only a portion of the file if req'd    *
C     *                                                                  *
C     ********************************************************************
C
C
C     ####################################################################
C      CURRENTLY DIMENSIONED FOR UP TO 10 CUTOFFS
C      NF46 - GEOLOGICAL KRIGE ESTINATE INPUT FILENAME. UNIT 48
C     ####################################################################
C
C
      DIMENSION CO(10),TONN(10,4),KOUNT(10),AVGR(10,4),AVVAR(10,4)
      DIMENSION GR(4),VAR(4),NF48(6),NTIT(15)
  100 FORMAT( //,28X,'*** PROGRAM CGRE6 ***',///)
      WRITE(40,100)
      WRITE(1,117)
  117 FORMAT( //,'Virgin resource? (0=yes   1=no) _')
      READ(1,*)N
      IF (N.EQ.1) GO TO 137
      WRITE(40,118)
  118 FORMAT(31X,'VIRGIN RESOURCE',///)
C
C
C     ####################################################################
C      ACCEPTS UP TO 10 %SNT CUTOFFS, MUST BE IN ASCENDING ORDER
C     ####################################################################
C
C
  137 WRITE(1,138)
  138 FORMAT(/,'Block size: north,ri _')
      READ(1,*) BLOKN,BLOKR
    5 WRITE(1,120)
  120 FORMAT(/,'How many cutoffs? (1-10) _')
      READ(1,*)NCO
      IF (NCO .LE. 0 .OR. NCO .GT. 10) GO TO 5
      DO 15 I=1,NCO
      WRITE(1,130)I
  130 FORMAT(/,'Cutoff #',I2,' _')
      READ(1,*)CO(I)
   15 CONTINUE
      WRITE(1,113)
  113 FORMAT(/,'Title of tabulation (30 chars.) _')
      READ(1,114) NTIT
```

```
  114 FORMAT(15A2)
    4 WRITE(1,111)
  111 FORMAT(/,'Krige File name? _')
      READ(1,112)NF48
  112 FORMAT(6A2)
      OPEN(48,FILE=NF48,IOSTAT=IOS,ERR=99)
      WRITE(1,140)
  140 FORMAT(/,'S.G. _')
      READ(1,*)SG
    8 WRITE(1,116)
  116 FORMAT(/,'Northing columns, RL rows (0=all -1=exit) _')
      READ(1,*) ICOL1,ICOL2,IROW1,IROW2
      IF (ICOL1.LT.0) GO TO 7
C
C
C     ##########################################################################
C      TONNEAGE FACTOR IS BLOCK AREA X S.G.
C     ##########################################################################
C
C
      TF=BLOKN*BLOKR*SG
C
C
C     ##########################################################################
C      WRITE OUT A HEADING
C     ##########################################################################
C
C
C
C
C     ##########################################################################
C      READ IN THE ESTIMATE DATA FOR A BLOCK
C     ##########################################################################
C
C
   25 READ(48,150,END=54) IROW,ICOL,(GR(I),VAR(I),I=1,4),MOS
  150 FORMAT(2I5,20X,8F10.2,6X,I4)
C
C
C     ##########################################################################
C      IF THE BLOCK HAS NON-POSITIVE HOR.WIDTH (NO ESTIMATE) OR IS
C      COMPLETELY MINED OUT THEN SKIP IT AND GET THE NEXT BLOCK
C     ##########################################################################
C
C
      IF (ICOL1.EQ.0) GO TO 6
      IF (ICOL.LT.ICOL1.OR.ICOL.GT.ICOL2.OR.IROW.LT.IROW1.OR.IROW
     +    .GT.IROW2) GO TO 25
    6 IF (GR(1).LE.0.0.OR.MOS.EQ.100) GO TO 25
C
C
C     ##########################################################################
C      CHECK EACH CUTOFF ONE BY ONE - IF THE SNT GRADE IS ABOVE THE
C      CUTOFF THEN COUNT THE BLOCK AND ACCUMULATE THE TONNEAGE
C      (ADJUSTED FOR THAT MINED OUT)
C     ##########################################################################
C
```

```
C
      DO 35 K=NCO,1,-1
      IF (GR(2) .LT. CO(K)) GO TO 35
      KOUNT(K)=KOUNT(K)+1
      BTONN=TF*GR(1)*(100.0-FLOAT(MOS))/100.0
      TONN(K,1)=TONN(K,1)+BTONN
C
C
C     ##################################################################
C      ACCUMULATE HOR.WIDTH ESTIMATE (GR(1)) AND VARIANCE (VAR(1))
C      AND GRADE X TONNEAGE AND VARIANCE X TONNEAGE FOR SNT,SNS,CU,IW
C     ##################################################################
C
C
      DO 45 L=1,4
      IF (L .GT. 1) GO TO 26
      AVGR(K,1)=AVGR(K,1)+GR(1)
      AVVAR(K,1)=AVVAR(K,1)+VAR(1)
      GO TO 45
   26 IF (GR(L).LT.0.0) GO TO 45
      TONN(K,L)=TONN(K,L)+BTONN
      AVGR(K,L)=AVGR(K,L)+BTONN*GR(L)
   27 AVVAR(K,L)=AVVAR(K,L)+BTONN*VAR(L)
   45 CONTINUE
   35 CONTINUE
      GO TO 25
   54 REWIND 48 $ GO TO 8
    7 WRITE(1,101)
  101 FORMAT(/,'1=Another file  2=Exit _')
      READ(1,*)IEXIT
      IF(IEXIT.EQ.2)GO TO 55
      CLOSE (UNIT=48)
      GO TO 4
C
C
C     ##################################################################
C      FOR EACH ELEMENT FOR EACH CUTOFF DIVIDE ACCUMULATIONS BY EITHER
C      NO.OF BLOCKS OR TOTAL TONNEAGE AS APPLICABLE
C     ##################################################################
C
C
   55 DO 65 L=1,4
      DO 75 K=1,NCO
      IF (KOUNT(K).EQ.0) GO TO 75
      IF (L .GT. 1) GO TO 56
      AVGR(K,1)=AVGR(K,1)/KOUNT(K)
      AVVAR(K,1)=AVVAR(K,1)/KOUNT(K)
      GO TO 75
   56 IF (TONN(K,L).EQ.0.0) GO TO 75
      AVGR(K,L)=AVGR(K,L)/TONN(K,L)
   57 AVVAR(K,L)=AVVAR(K,L)/TONN(K,L)
   75 CONTINUE
   65 CONTINUE
C
C
C     ##################################################################
C      WRITE OUT THE COLUMN HEADINGS AND THEN THE RESOURCE TOTALS
```

```
Flist...  File (&CGRE6      )  Date  8:18 AM  TUE.,  8  JULY, 1986   Page004
C      IN ASCENDING CUTOFF ORDER
C     ##################################################################
C
C
      WRITE(40,115)NTIT
  115 FORMAT(//,31X,15A2,//)
      WRITE(40,160)
  160 FORMAT(/,8X,' C/O  No.  Tonnes     Hor.W.        %SnT     '
     +,'   %SnS        %Cu'/,8X,' %SnT Blk                '
     +,4('Mean  Var   ')//)
      WRITE(40,170) (CO(I),KOUNT(I),TONN(I,1),(AVGR(I,J),AVVAR(I,J),
     +             J=1,4),I=1,NCO)
  170 FORMAT(/,8X,F5.2,I4,F8.0,1X,8F6.3)
      GO TO 85
   99 WRITE(1,180)IOS
  180 FORMAT(' *** ERROR #',I3,' IN INPUT FILE')
   85 STOP
      END

## Flist - End of file ##
```

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```
FTN4X,L,Q
$FILES(0,2)
      PROGRAM CMRE8(4,200)
C     ********************************************************************
C     *                                                                  *
C     *       PROGRAM:    CMRE8                                          *
C     *                                                                  *
C     *       AUTHOR:     G.J.McArthur(Modified by A.D.Fudge)            *
C     *                                                                  *
C     *       DATE:       July 1982                                      *
C     *                                                                  *
C     *       PURPOSE:    Accepts a mineable block file (?M____) and     *
C     *                   calculates reserves and average grades         *
C     *                   within an area specified by either polygon     *
C     *                   or rectangular block edges                     *
C     *                                                                  *
C     ********************************************************************
      DIMENSION GR(5),VAR(5),NF48(6),ITLE(40),GMIN(100)
      DIMENSION POLYN(100),POLYR(100),ETMRGR(100),NF49(6)
      DIMENSION KOUNT(100),TGTON(100),AHORW(100),AGSNT(100)
     +,TMFTON(100),AMFSN(100),ANFCU(100),TLGTON(100),ALGSN(100),
     +AGCSR(100),ET(100),ZMSNS(100),ZMCUG(100)
     +,ALGCU(100),TTHAUL(100)
      WRITE(1,100)
  100 FORMAT(4/,20X,'** PROGRAM CMRE8 **',//)
      WRITE(1,110)
  110 FORMAT(' Mineable blocks file name?')
      READ(1,120)NF48
  120 FORMAT(6A2)
      WRITE(1,111)
  111 FORMAT('Output file name ')
      READ(1,120)NF49
      WRITE(1,112)
  112 FORMAT('Input how many cut offs required ?')
      READ(1,113)IK
  113 FORMAT(I3)
      WRITE(1,114)
  114 FORMAT('Input minimum cut off')
      READ(1,115)GMIN(1)
  115 FORMAT(F5.3)
      IF(IK .EQ. 1)GO TO 118
      WRITE(1,116)
  116 FORMAT('Input cut off increment')
      READ(1,117)CO
  117 FORMAT(F6.4)
  118 CONTINUE
      OPEN(UNIT=49,FILE=NF49,STATUS='UNKNOWN')
   44 OPEN(UNIT=48,FILE=NF48,IOSTAT=IOS,ERR=999)
      NOUT=1
   25 WRITE(1,170)
  170 FORMAT(/' 1=Select blocks by polygon'/
     +       ,' 2=Select blocks by rectangular choice'/
     +       ,' 3=Accept all blocks. Now which do you want?')
      READ(1,*)NSEL
      IF (IK .EQ. 1)GO TO 121
      DO 5 II=1,IK
      GMIN(II+1)=GMIN(II)+CO
```

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```
    5 CONTINUE
  121 CONTINUE
      IF (NSEL.LE.0.OR.NSEL.GT.3) GO TO 25
      IF (NSEL.EQ.3) GO TO 65
      IF (NSEL.EQ.2) GO TO 55
   35 WRITE(1,180)
  180 FORMAT(/' Okay, so you want to use a polygon.'//
     +        ' How many polygon points? (4-100)')
      READ(1,*)NPOLY
      DO 45 I=1,NPOLY
      WRITE(1,190)I
  190 FORMAT(/' Point #',I3,' North,R.L.?')
      READ(1,*)POLYN(I),POLYR(I)
   45 CONTINUE
   46 CONTINUE
      IF(POLYN(1).NE.POLYN(NPOLY).OR.POLYR(1).NE.POLYR(NPOLY))GO TO 35
      GO TO 65
   55 WRITE(1,200)
  200 FORMAT(/' Okay, so you want to use rectangular selection.'//
     +        ' Northing columns from,to')
      READ(1,*)NCOL1,NCOL2
      WRITE(1,210)
  210 FORMAT(/' R.L. rows from,to')
      READ(1,*)NROW1,NROW2
   65 CONTINUE
      IF(IK .EQ. 1)GO TO 6
      DO 77 II=1,IK
      ET(II)=0.0
      ETMRGR(II)=0.0
      ZMSNG(II)=0.0
      ZMCUG(II)=0.0
      ALGSN(II)=0.0
      KOUNT(II)=0
      TGTON(II)=0.0
      AHORW(II)=0.0
      AGSNT(II)=0.0
      TTHAUL(II)=0.0
      TMFTON(II)=0.0
      AMFSN(II)=0.0
      AMFCU(II)=0.0
      TLGTON(II)=0.0
      ALGCU(II)=0.0
      AGCSR(II)=0.0
   77 CONTINUE
    6 CONTINUE
   66 READ(48,220,END=125)JJ,KK,RNTH,RL,GTONN,THAUL,FMTONN,GLTONN,
     +GSNT,GCU,FMSNGR,FMCUGR,RMSNGR,RMCUGR,TEMRGR,GLCUGR,HORW,GCSR,
     +MPC,MOS
  220 FORMAT(2I5,2F10.1,4F7.0,8F6.2,F5.1,F5.0,2I5)
      II=0
  222 II=II+1
      IF(NSEL .EQ. 3)GOTO85
      IF (NSEL.EQ.2) GO TO 75
      CALL POLY(POLYN,POLYR,NPOLY,RNTH,RL,TEST)
      IF (TEST.EQ.-1.0) GO TO 66
      GO TO 35
   75 IF (JJ.LT.NROW1.OR.JJ.GT.NROW2.OR.KK.LT.NCOL1.OR.KK.GT.NCOL2)
```

```
     +    GO TO 66
   85 IF (THAUL.LE.0.0.OR.MOS.EQ.100) GO TO 66
      IF (TEMRGR .LT.GMIN(II))GO TO 66
      KOUNT(II)=KOUNT(II)+1
      TGTON(II)=TGTON(II)+GTONN
      AHORW(II)=AHORW(II)+HORW
      AGSNT(II)=AGSNT(II)+(GTONN*GSNT)
      TTHAUL(II)=TTHAUL(II)+THAUL
      TMFTON(II)=TMFTON(II)+FMTONN
      AMFSN(II)=AMFSN(II)+(FMTONN*FMSNGR)
      AMFCU(II)=AMFCU(II)+(FMTONN*FMCUGR)
      TLGTON(II)=TLGTON(II)+GLTONN
      ALGSN(II)=ALGSN(II)+(GLTONN*0.28)
      ALGCU(II)=ALGCU(II)+(GLTONN*GLCUGR)
      AGCSR(II)=AGCSR(II)+(THAUL*GCSR)
      ET(II)=ET(II)+(FMTONN*TEMRGR)
      ZMSNG(II)=ZMSNG(II)+(FMTONN*FMSNGR)
      ZMCUG(II)=ZMCUG(II)+(FMTONN*FMCUGR)
      IF(II .LT.IK)GO TO 222
      GO TO 66
  125 DO 251 II=1,IK
      AHORW(II)=AHORW(II)/KOUNT(II)
      ZMSNG(II)=ZMSNG(II)/TMFTON(II)
      ZMCUG(II)=ZMCUG(II)/TMFTON(II)
      ETMRGR(II)=ET(II)/TMFTON(II)
      AGSNT(II)=AGSNT(II)/TGTON(II)
      AMFSN(II)=AMFSN(II)/TMFTON(II)
      AMFCU(II)=AMFCU(II)/TMFTON(II)
      ALGSN(II)=ALGSN(II)/TLGTON(II)
      ALGCU(II)=ALGCU(II)/TLGTON(II)
      AGCSR(II)=AGCSR(II)/TTHAUL(II)
      IF(II.GT.1)GO TO 101
      WRITE(1,845)
  845 FORMAT('Input 1=Screen 9=Printer')
      READ(1,*)NOUT
      WRITE(NOUT,230)NF48
  230 FORMAT(30X,'*** PROGRAM CMRE8 ***',//,30X,6A2,
     +       ' FILE',//)
      WRITE(NOUT,240)
  240 FORMAT('No.SnEq Geological Resource   Total       Mill Feed'
     +,6X,'L.Gr ',1X,'Mill Recoveable'/
     +'Blk C/O  Tonnes  Horw %SnT  Haulage'
     +,'  Tonnes   %SnT  %Cu  Tonne   %Sn  %Cu SnEq'/)
  101 CONTINUE
      IF(TTHAUL(II) .EQ. 0.0)GOTO 251
      WRITE(NOUT,250)KOUNT(II),GMIN(II),TGTON(II),AHORW(II),AGSNT(II),
     +TTHAUL(II),TMFTON(II),AMFSN(II),AMFCU(II),TLGTON(II),ZMSNG(II),
     +ZMCUG(II),ETMRGR(II)
  250 FORMAT(I3,1X,F3.2,F9.0,F6.1,F5.2,2F9.0,F6.2,F5.2,F8.0,2F4.2,
     +1X,F4.2)
      WRITE(49,252)GMIN(II),TMFTON(II),AMFSN(II),AMFCU(II),ETMRGR(II)
  252 FORMAT(F4.2,F9.0,3F5.3)
  251 CONTINUE
      GO TO 9
  999 WRITE(1,260)IOS
  260 FORMAT(' **ERROR #',I3,' IN INPUT FILE')
    9 CONTINUE
```

```
      WRITE(NOUT,777)
  777 FORMAT('
```

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```
      99 STOP
         END
         SUBROUTINE POLY(POLYN,POLYR,NPOLY,RNTH,RL,TEST)
         DIMENSION POLYN(100),POLYR(100)
         TEST=-1.0
         DO 5 I=2,NPOLY
         J=I-1
         A0=RNTH-(POLYN(J)-0.01)
         B0=RNTH-(POLYN(I)-0.01)
         C0=A0*B0
         IF(C0.GT.0.0) GO TO 5
         W1=((1000000.0-POLYR(J))*B0)-((1000000.0-POLYR(I))*A0)
         W2=((RL-POLYR(J))*B0)-((RL-POLYR(I))*A0)
         W3=W1*W2
         IF (W3.LE.0.0) TEST=TEST*(-1.0)
       5 CONTINUE
         RETURN
         END
```

Flist - End of file

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Flist... File (&RESV2) Date 8:22 AM TUE., 8 JULY, 1986 Page001

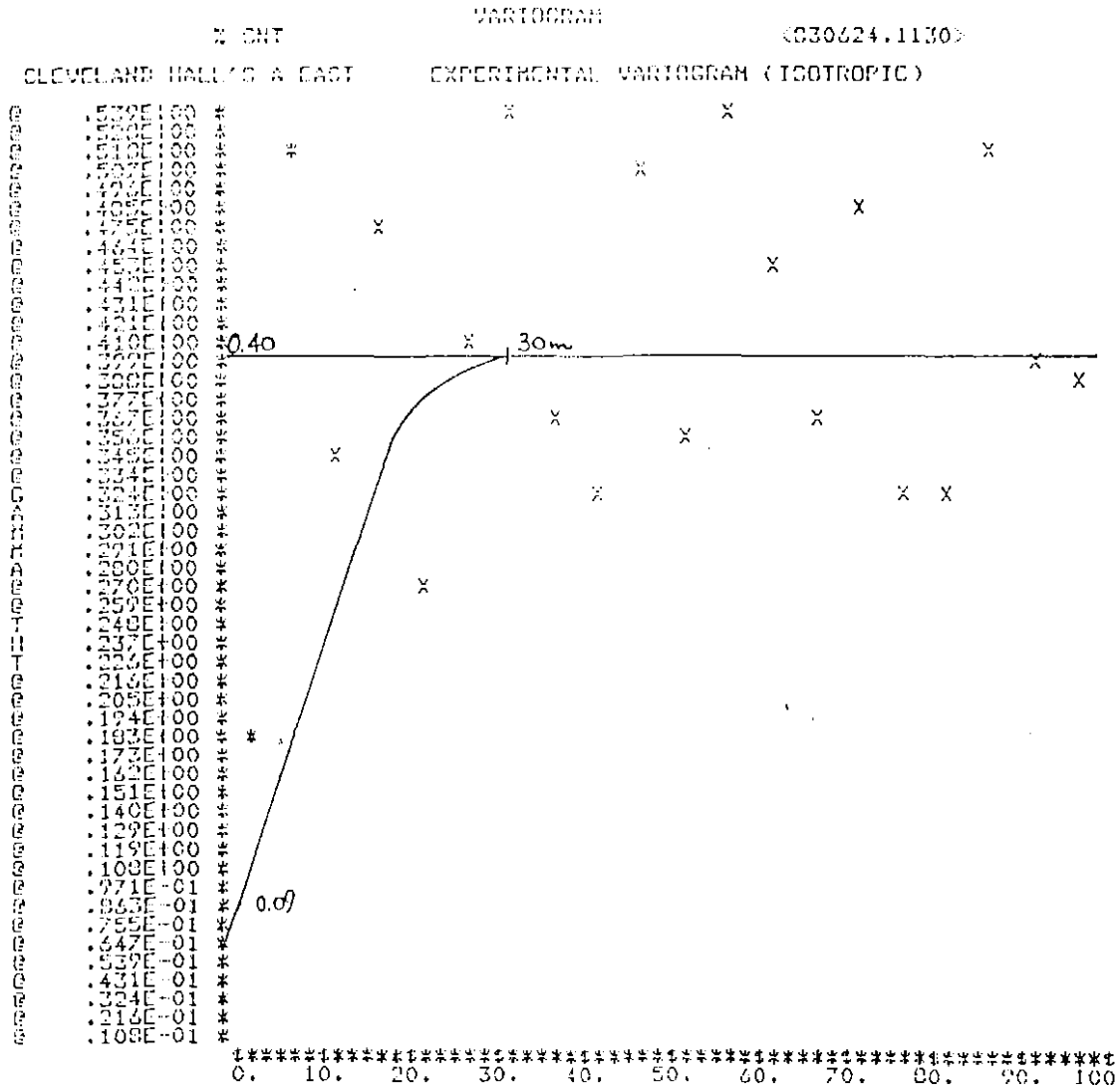
```
FTN4X,L,Q
$FILES(0,1)
      PROGRAM RESV2(4.200)
      DIMENSION NMF(6),A(50),B(50),C(50),D(50),E(50)
      WRITE(1,1)
    1 FORMAT('How many input files')
      READ(1,7)N
    7 FORMAT(I2)
      WRITE(1,2)
    2 FORMAT('Input number of cut offs')
      READ(1,5)L
    5 FORMAT(I2)
      Q=0
   28 Q=Q+1
   30 WRITE(1,35)
   35 FORMAT('Input file name')
      READ(1,40)NMF
   40 FORMAT(6A2)
      O=0
      OPEN (UNIT=21,FILE=NMF,STATUS='OLD')
      DO 80 I=1,L
      IF(O .GT. 0)GO TO 80
      READ(21,60,END=90)RG,TMF,SN,CU,TQ
   60 FORMAT(F4.2,F9.0,3F5.3)
      A(I)=RG
      B(I)=B(I)+TMF
      C(I)=C(I)+(TMF*SN)
      D(I)=D(I)+(TMF*CU)
      E(I)=E(I)+(TMF*TQ)
      GO TO 80
   90 O=1
   80 CONTINUE
  200 CLOSE(UNIT=21)
      IF(N .NE. Q)GO TO 28
      DO 210 I=1,L
      C(I)=C(I)/B(I)
      D(I)=D(I)/B(I)
      E(I)=E(I)/B(I)
  210 CONTINUE
      WRITE(1,201)
  201 FORMAT(' Cut off  Mill feed    SnT      Cu      SnEq',/,
     +'  SnEq%     Tonnes        %        %        %')
      DO 220 I=1,L
      IF(B(I) .EQ. 0.0)GO TO 240
      WRITE(1,230)A(I),B(I),C(I),D(I),E(I)
  230 FORMAT(F4.2,4X,F9.0,3(4X,F5.3))
  240 CONTINUE
  220 CONTINUE
      STOP
      END

## Flist - End of file ##
```

APPENDIX IV

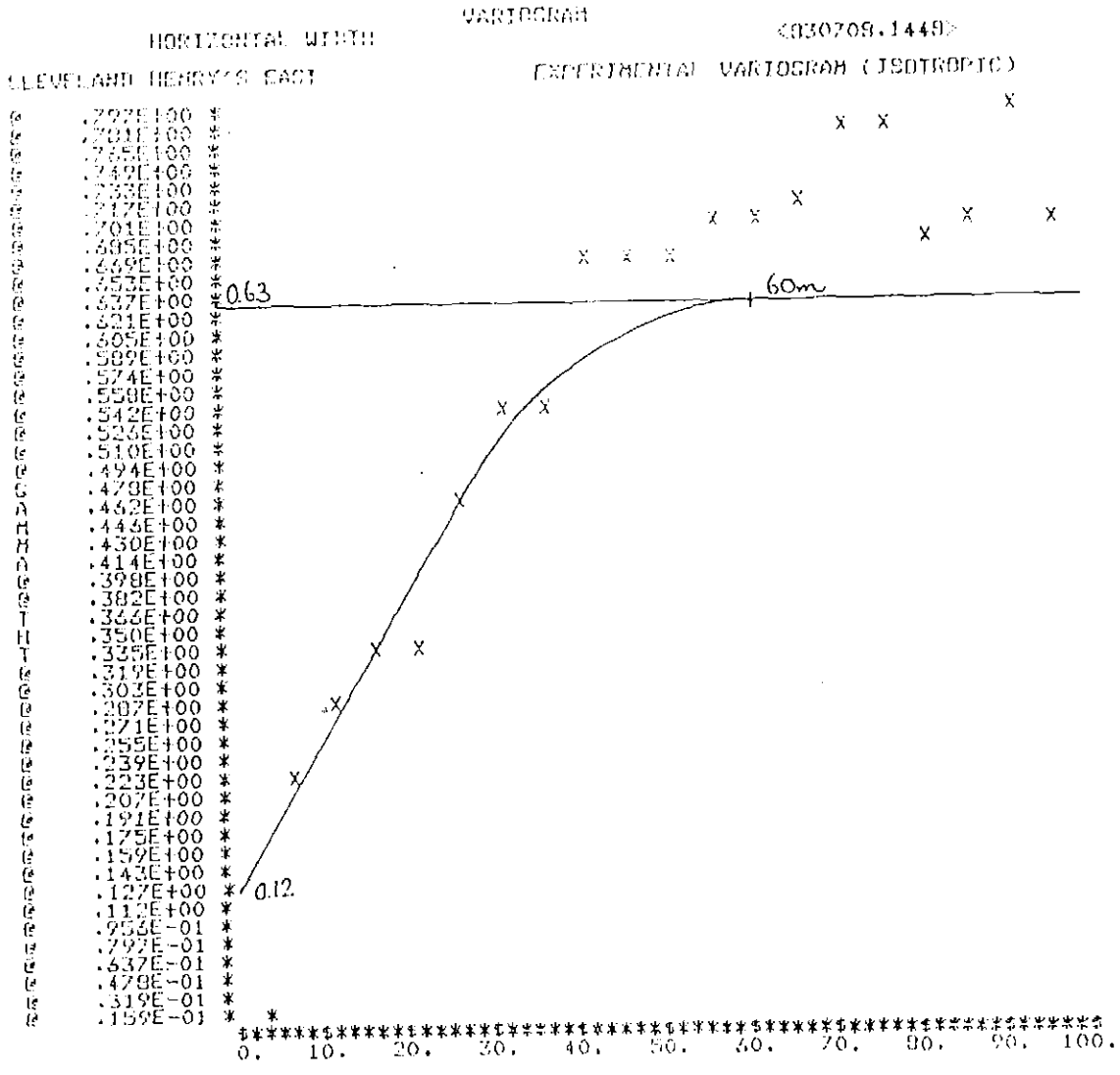
TYPICAL VARIOGRAMS

TYPICALLY BAD

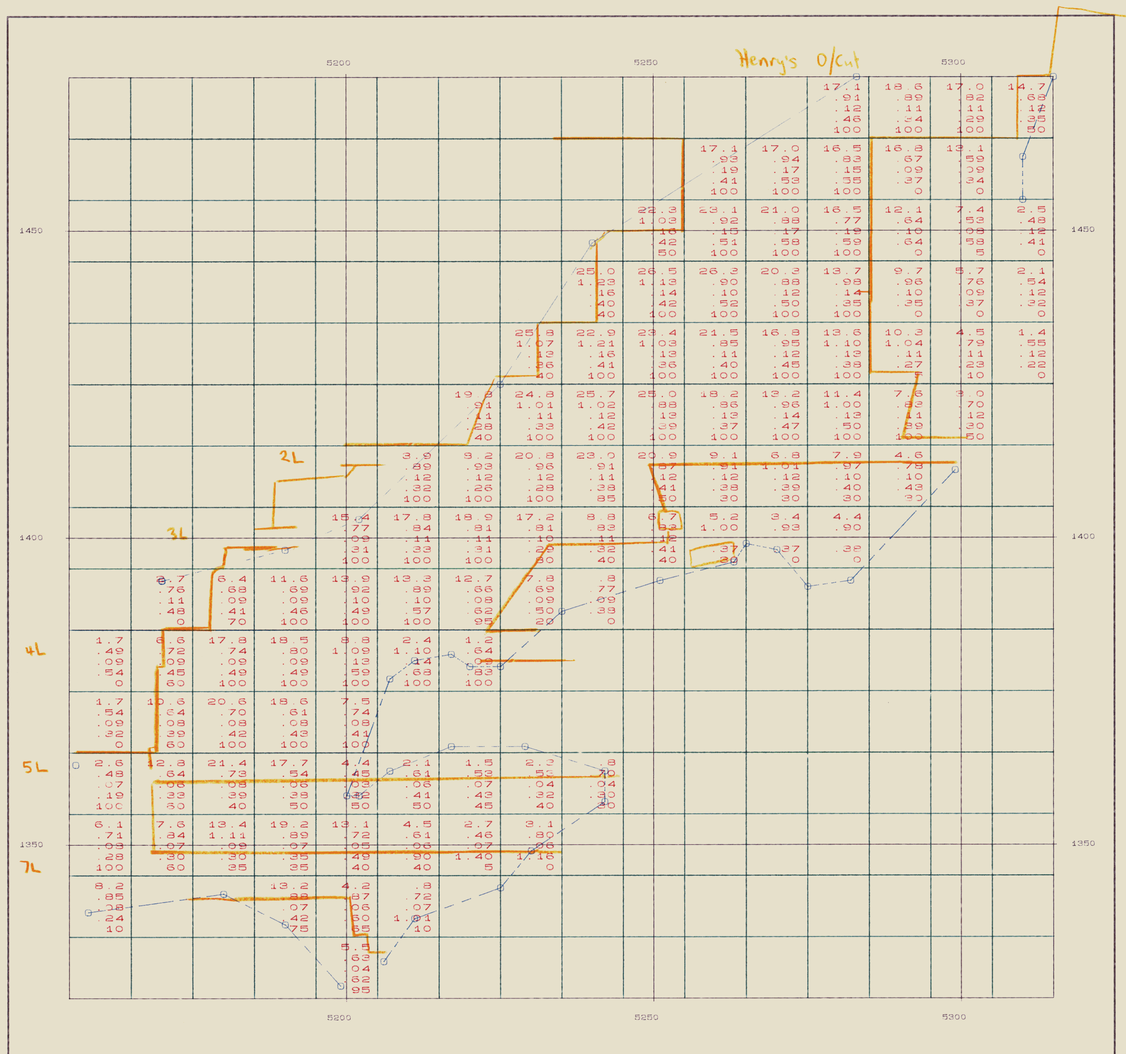


NORMAL END OF JOB

TYPICALLY GOOD



NORMAL END OF JOB

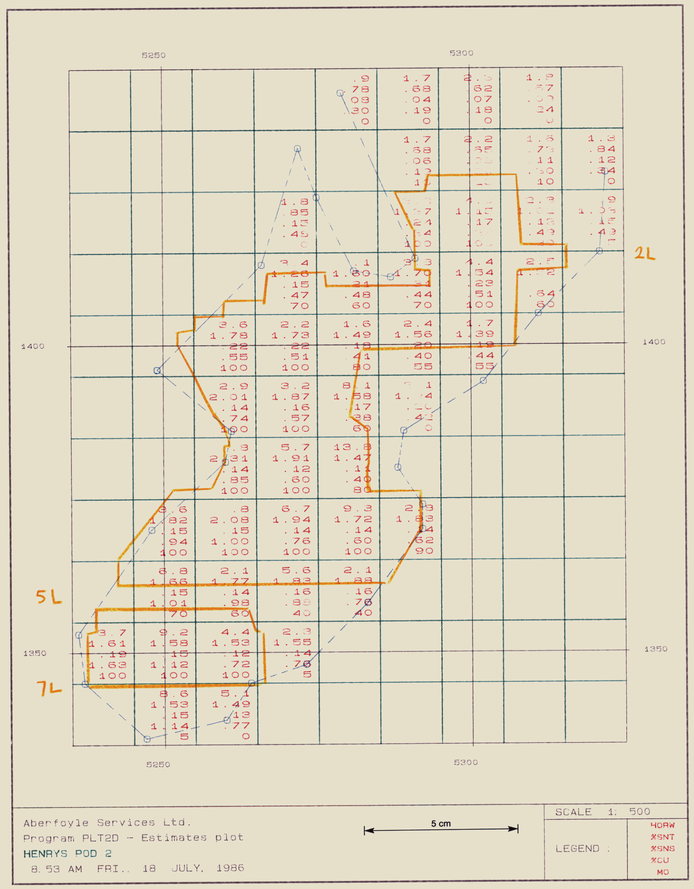


Upper levels (above 4L) metallurgically difficult.

Unstable floor (7 Level) for extraction of 5L → 7L ore

Rest mined out.

86-264



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 2
8.53 AM FRI., 18 JULY, 1986

5 cm

SCALE 1: 500

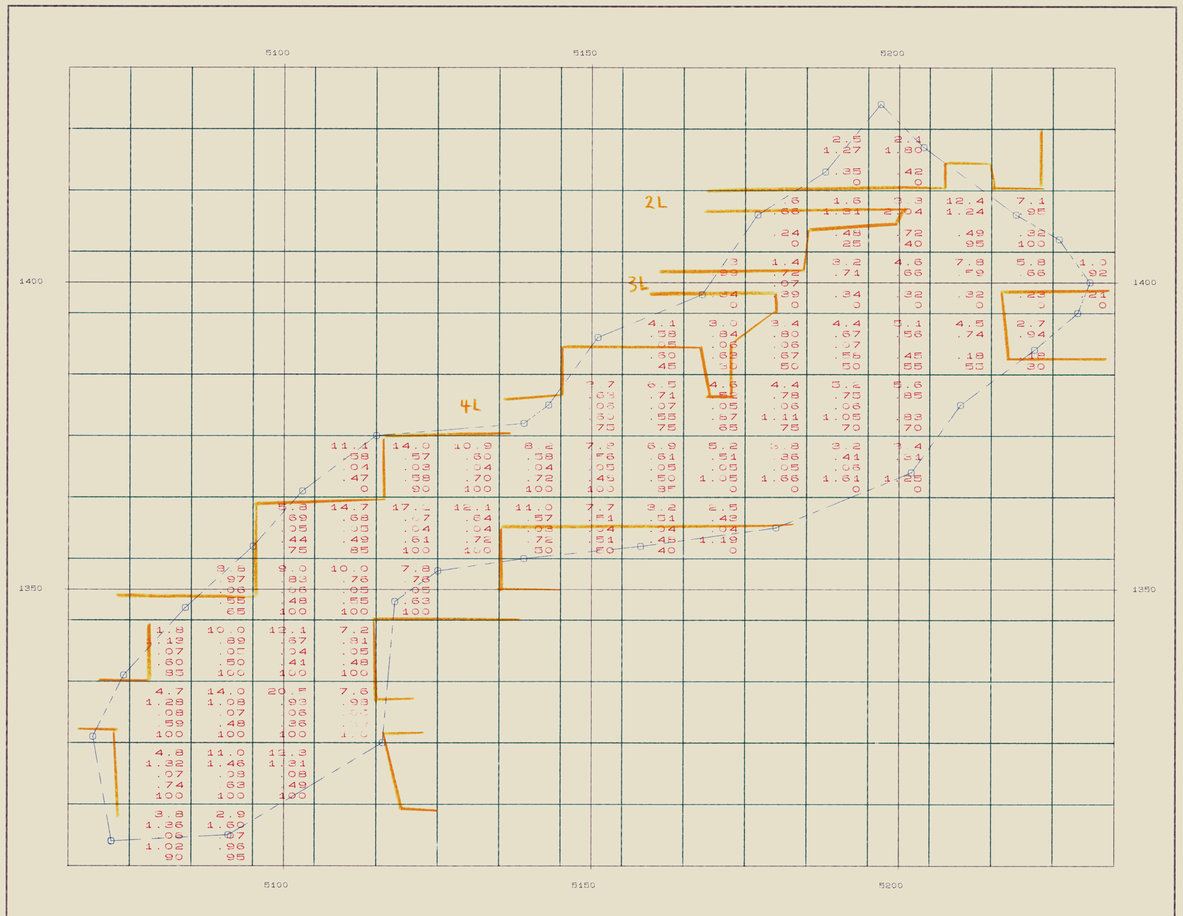
LEGEND :

%DRW
%SNT
%SNB
%CU
MD

Mined Out

No access to bottom levels

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 3
8.55 AM FRI., 18 JULY, 1986

5 cm

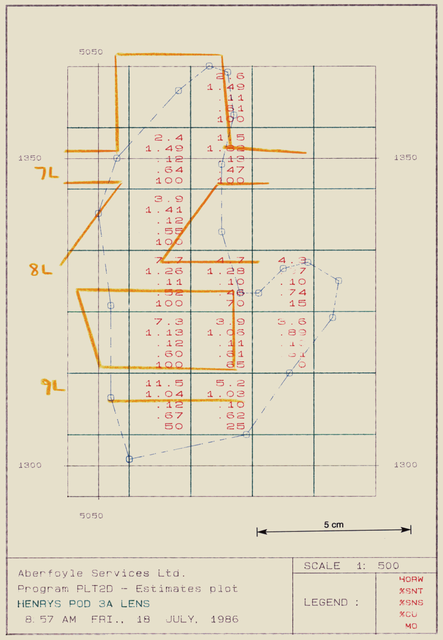
SCALE 1: 500

LEGEND :

NORW
XSNT
XSNS
XCU
MO

Mined Out

36-2624.



No Access Bottom levels.

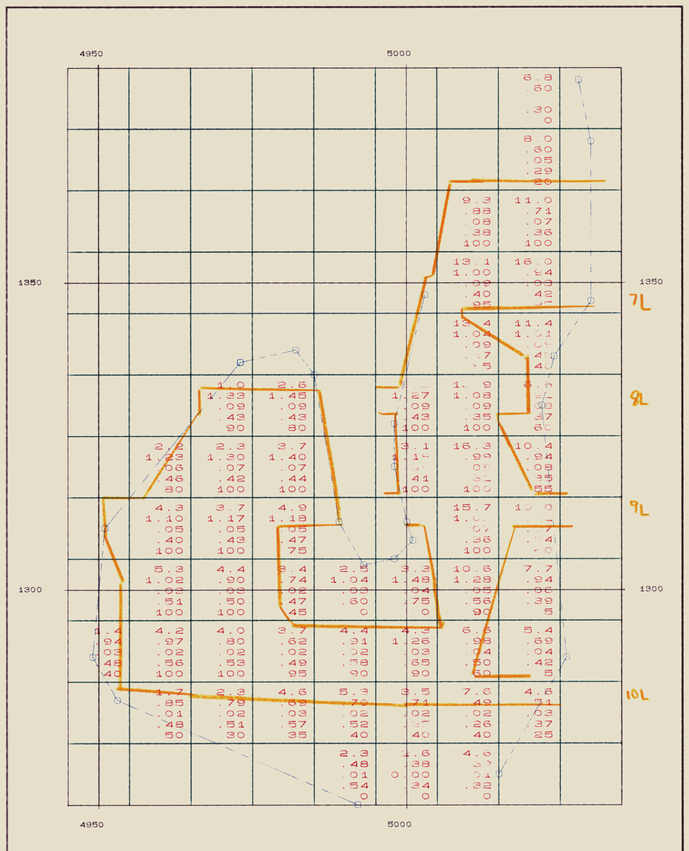
Mined Out

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 3A LENS
8.57 AM FRI., 18 JULY, 1986

SCALE 1: 500

LEGEND :

%ORW
%SNT
%SNS
%CU
MD



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 5
8.58 AM FRI., 18 JULY, 1986

5 cm

SCALE 1: 500

LEGEND :

HORW
%SNT
%SNB
%CU
MO

Mined Out

No Access Lower levels

86-2624

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 6
9.00 AM FRI., 18 JULY, 1986

5 cm

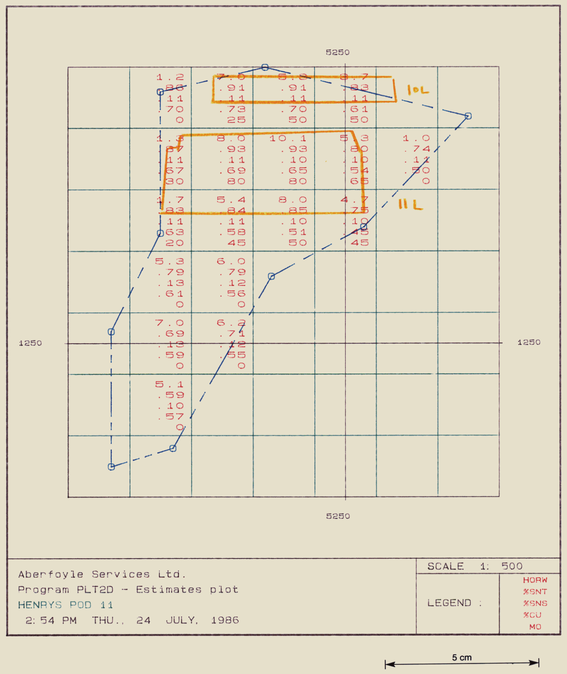
SCALE 1: 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO

Mined Out
No Access Lower Levels

86-264



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS POD 11
2:54 PM THU., 24 JULY, 1986

SCALE 1: 500

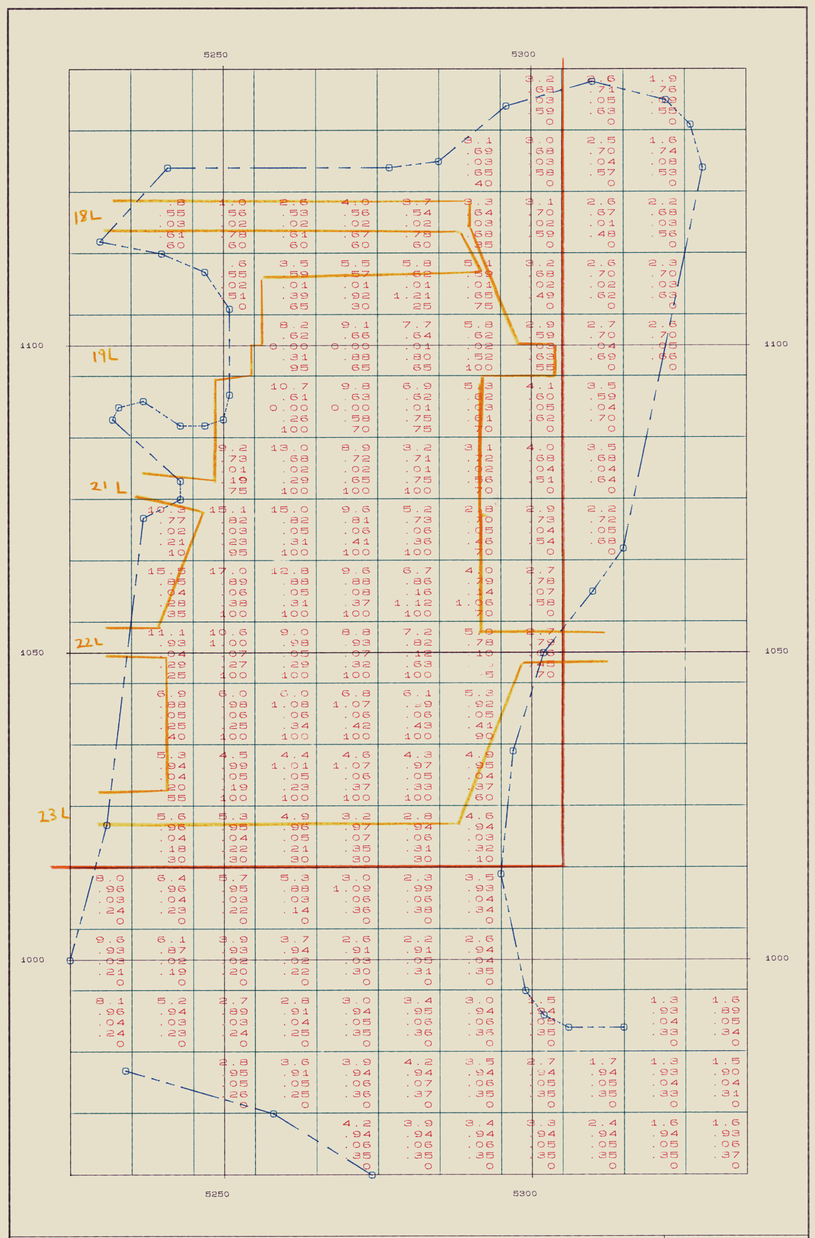
LEGEND :

HORW
%SNT
%SNS
%CU
MO

5 cm

No Access

Mined Out



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS WEST BELOW NADIR FLT.
3.00 PM THU., 24 JULY, 1986

SCALE 1: 500

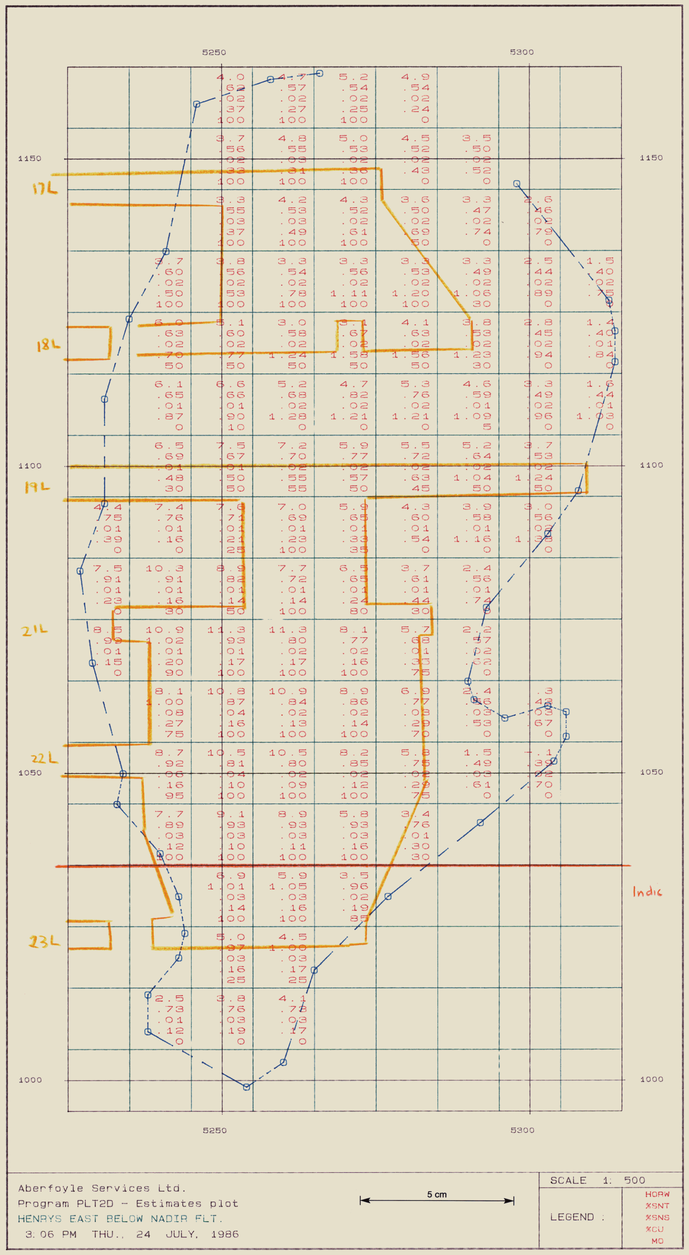
5 cm

LEGEND .

HORW
%SNT
%SNS
%CU
MO

Metallurgically difficult? lower levels

BF-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HENRYS EAST BELOW NADIR FLT.
3.06 PM THU., 24 JULY, 1986

5 cm

SCALE 1: 500

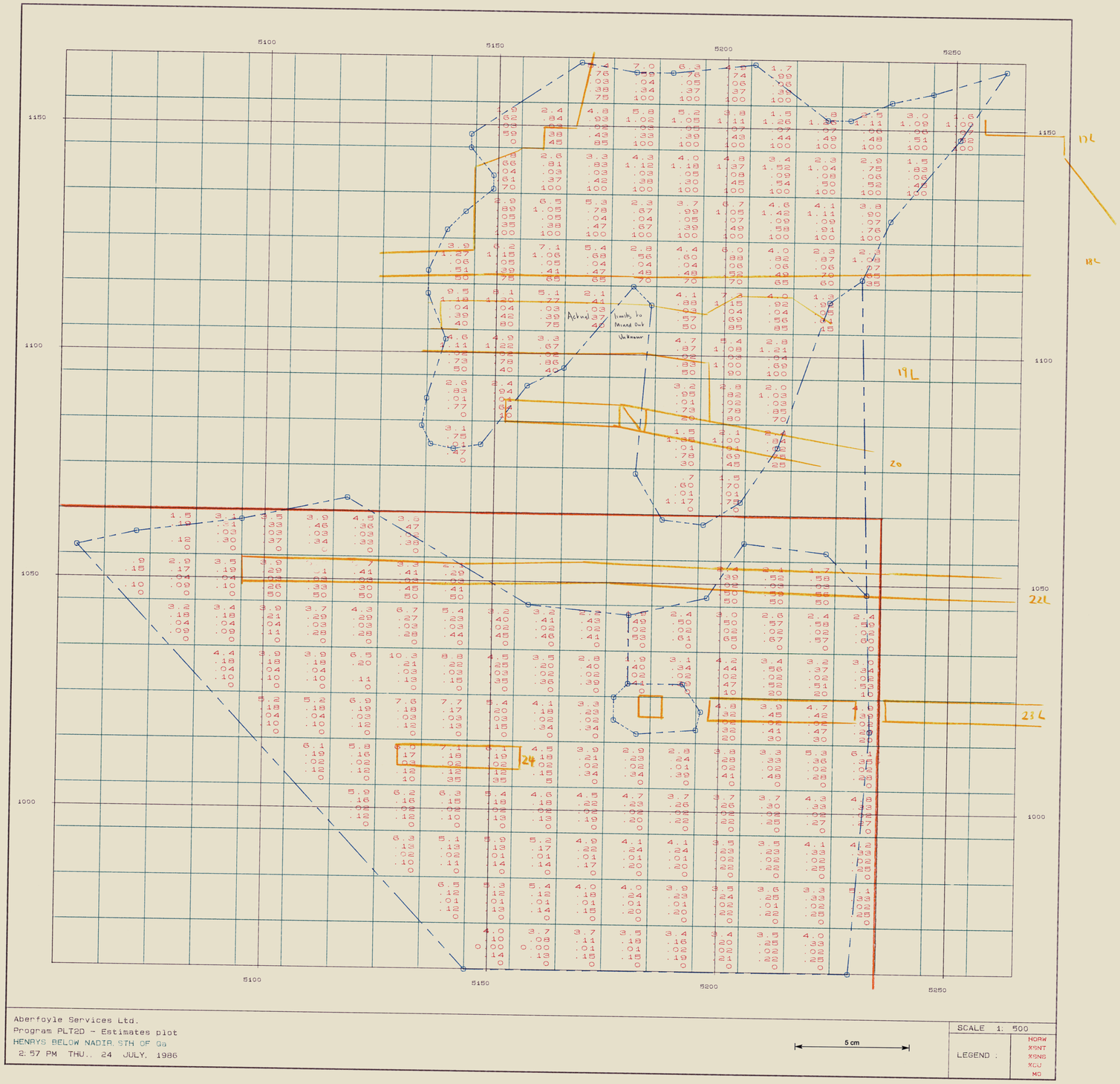
LEGEND :

HORW
%SNT
%SNS
%CLI
MO

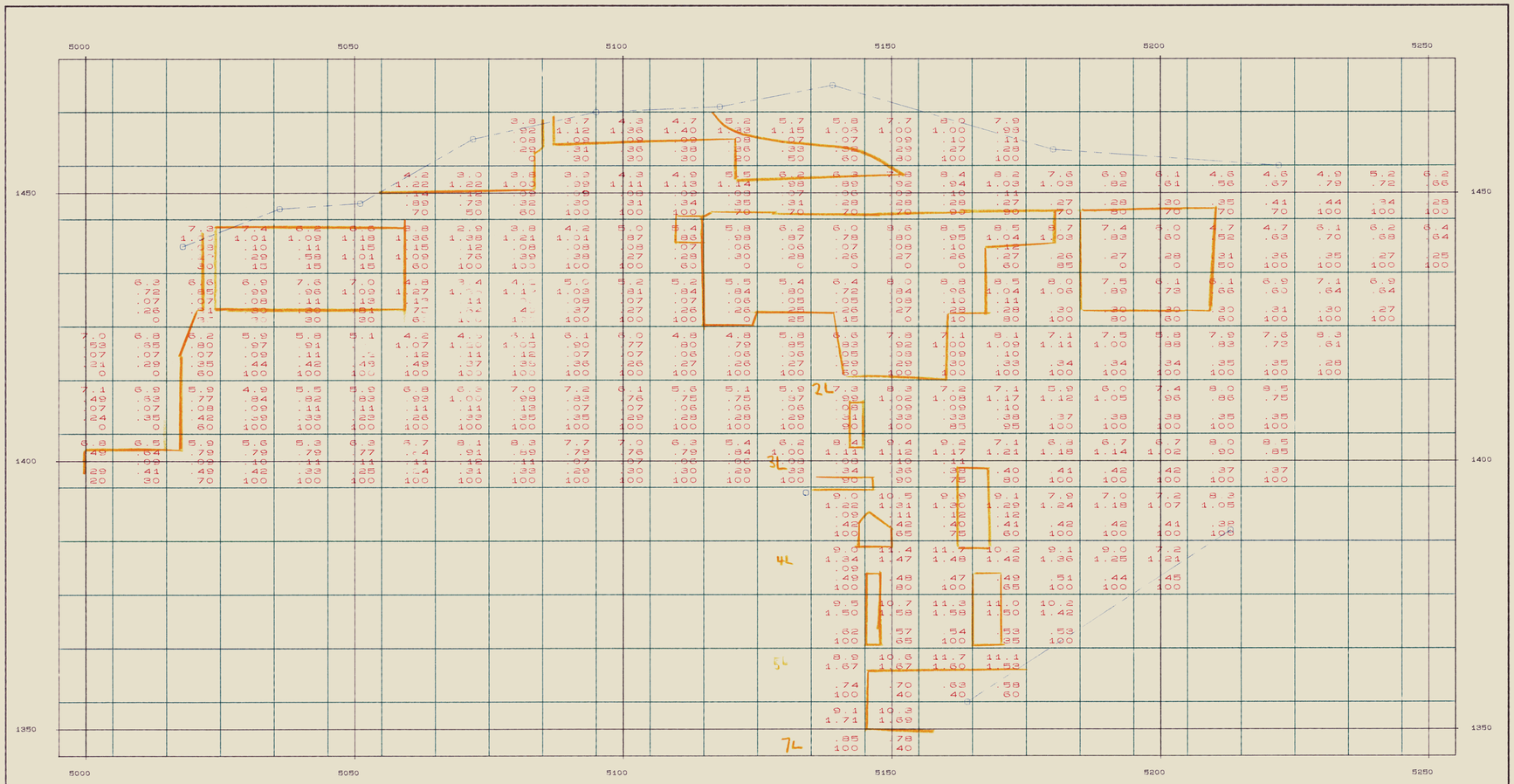
Broken ore in stope.

No access 19 Level.

23-2624



Lower levels (Below 22L)
Metallurgically difficult.



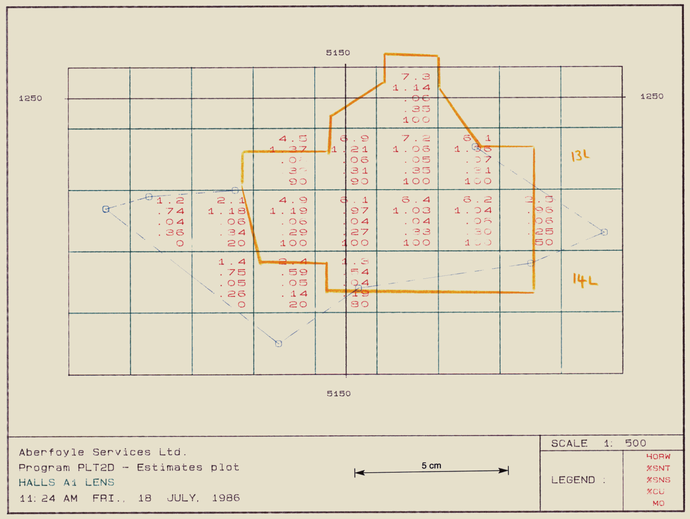
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A LENS ABOVE W FAULT
9.38 AM FRI., 18 JULY, 1986

5 cm

SCALE 1: 500

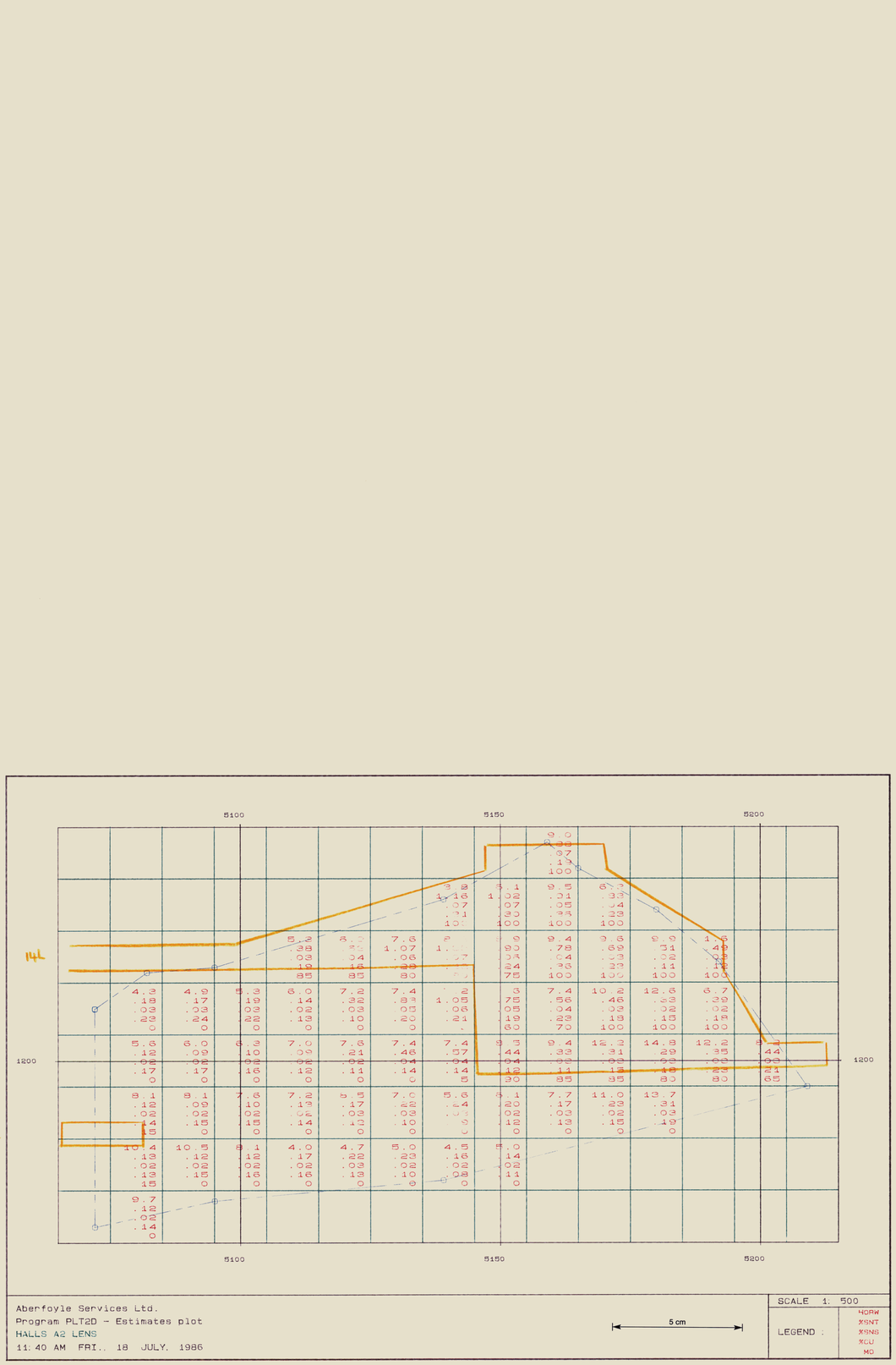
LEGEND :

HORW
%GNT
%SNS
%CU
MO


5150
1250
1250
5150
7.3
1.14
.58
33
100
4.5
1.37
.07
3
90
8.9
1.21
.06
.31
90
7.2
1.05
.05
.33
100
8.1
1.38
.07
.31
100
13L
1.2
.74
.04
.35
0
2.1
1.18
.06
.34
20
4.9
1.19
.06
.29
100
8.1
.97
.04
.27
100
8.4
1.03
.04
.33
100
8.2
1.34
.05
.30
100
2.3
.95
.05
.25
50
1.4
.75
.05
.26
0
2.1
.59
.05
.14
20
1.3
.54
.04
.19
90
14L
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A1 LENS
11:24 AM FRI., 18 JULY, 1986
5 cm
SCALE 1: 500
LEGEND :
NORW
XSNT
XSNS
XCU
MO

No Access

36-2624



No Access

Fill in slope

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A2 LENS
11:40 AM FRI., 18 JULY, 1986

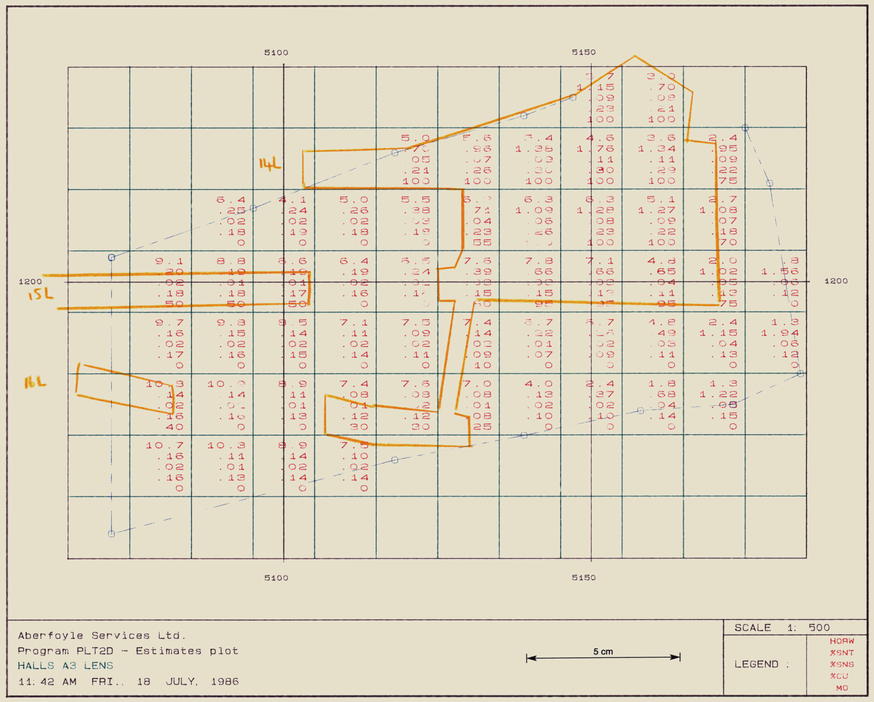
5 cm

SCALE 1: 500

LEGEND :

%ORW
%SNT
%SNB
%CU
MO

16-264



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A3 LENS
11.42 AM FRI. 18 JULY. 1986

5 cm

SCALE 1: 500

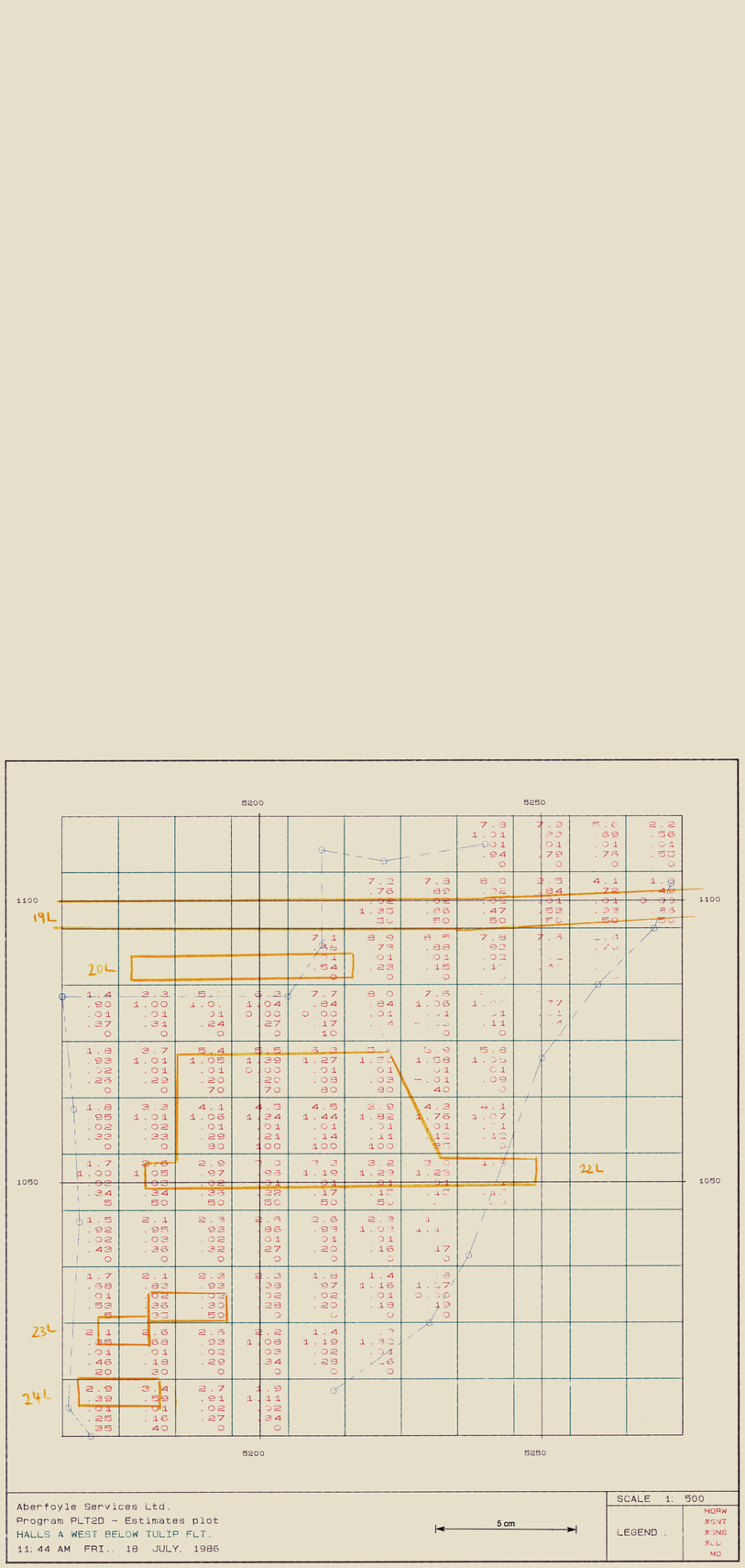
LEGEND :

HORW
%SNT
%SNS
%CU
MC

Low grades

No Access to north

20-262



No Access North of 20 Level Develop End

Met. Difficult below 22 L

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A WEST BELOW TULIP FLT.
11.44 AM FRI., 18 JULY, 1986

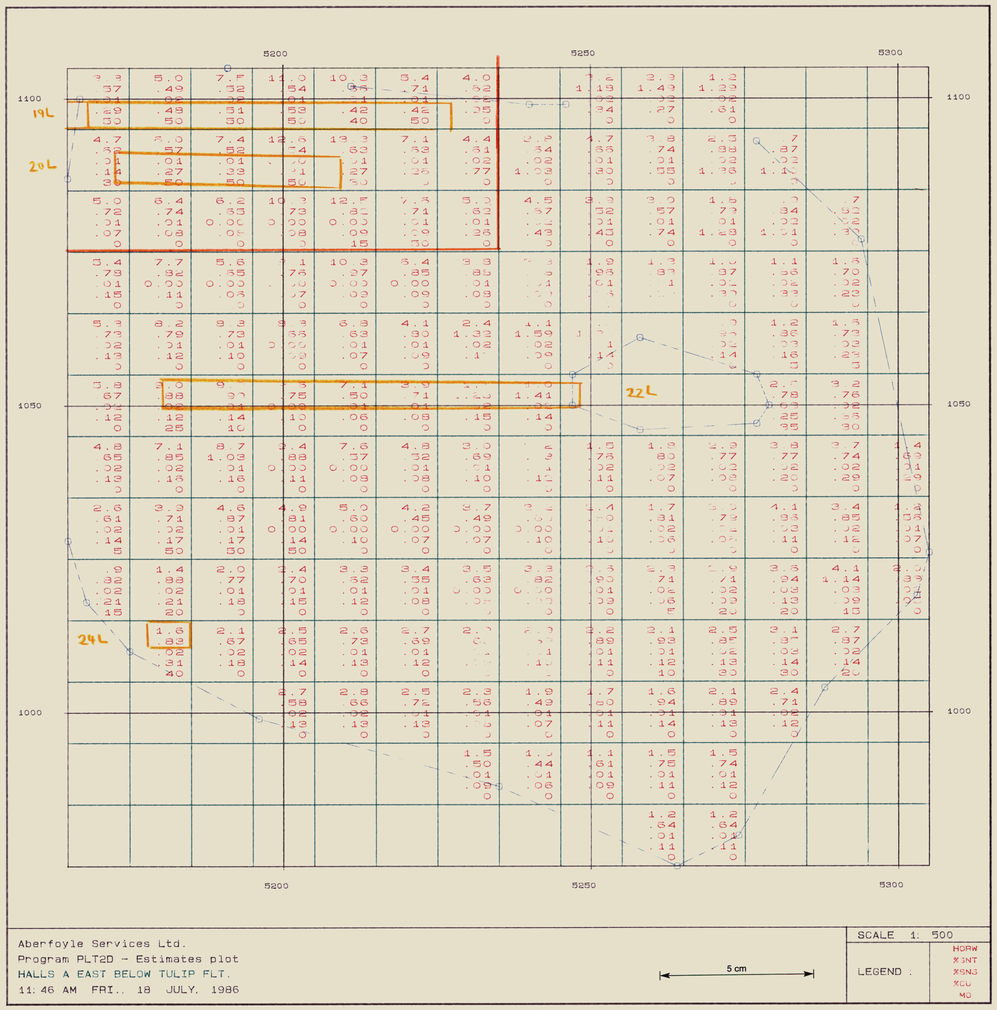
5 cm

SCALE 1: 500

LEGEND :

HORW
%SNT
%INS
%LC
MD

86-264



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS A EAST BELOW TULIP FLT.
11:46 AM FRI., 18 JULY, 1986

5 cm

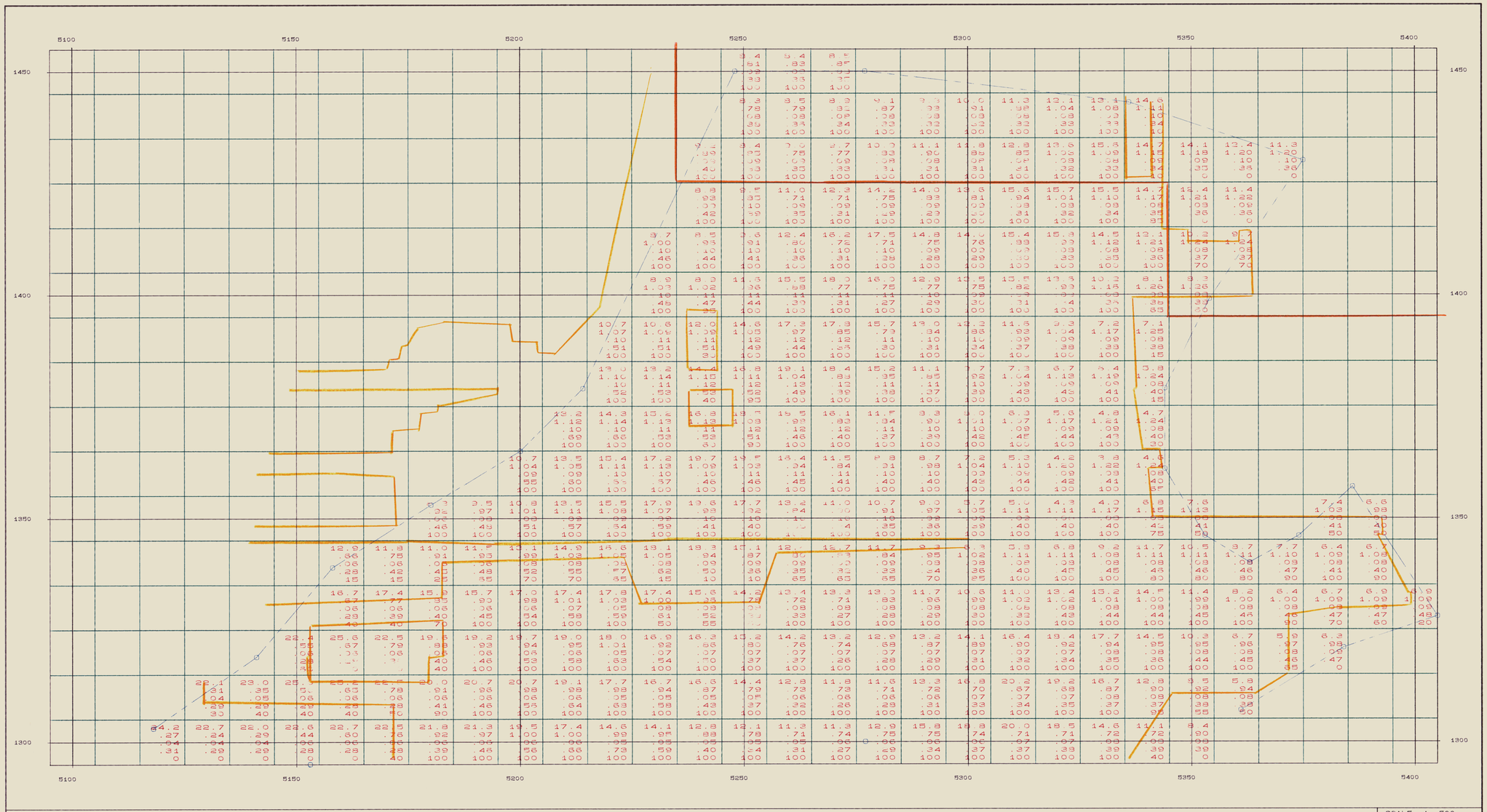
SCALE 1: 500

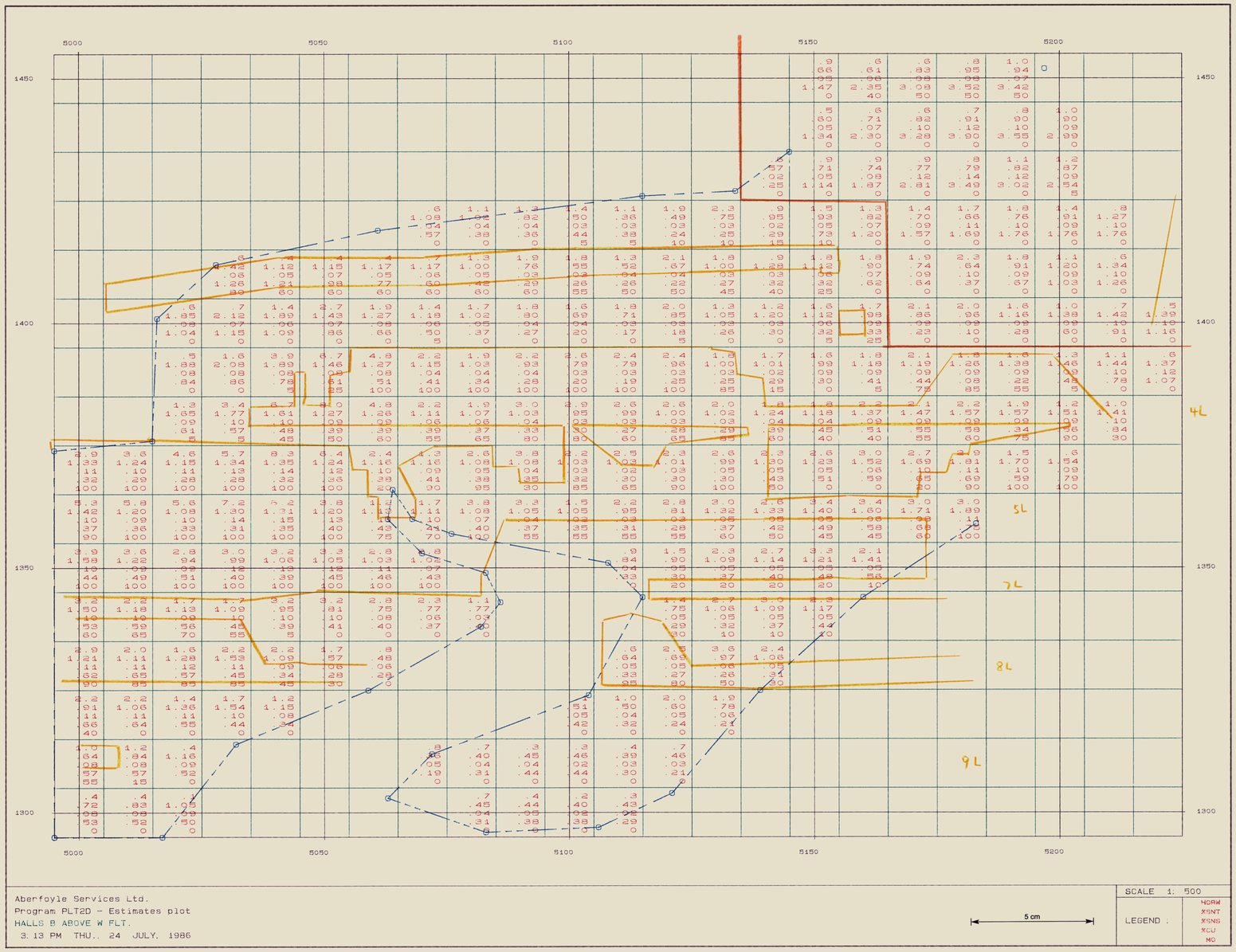
LEGEND :

HORW
%3NT
%5N3
%CU
MO

Locally
metallurgically
difficult

CC-2624


5100
5150
5200
5250
5300
5350
5400
1450
1400
1350
1300
Mined Out
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS B W-RATCHET FLTS (UPPER)
11.21 AM FRI., 18 JULY, 1986
5 cm
SCALE 1: 500
LEGEND :
%ORW
%SNT
%SNS
%CU
MG



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS B ABOVE W FLT.
3.13 PM THU., 24 JULY, 1986

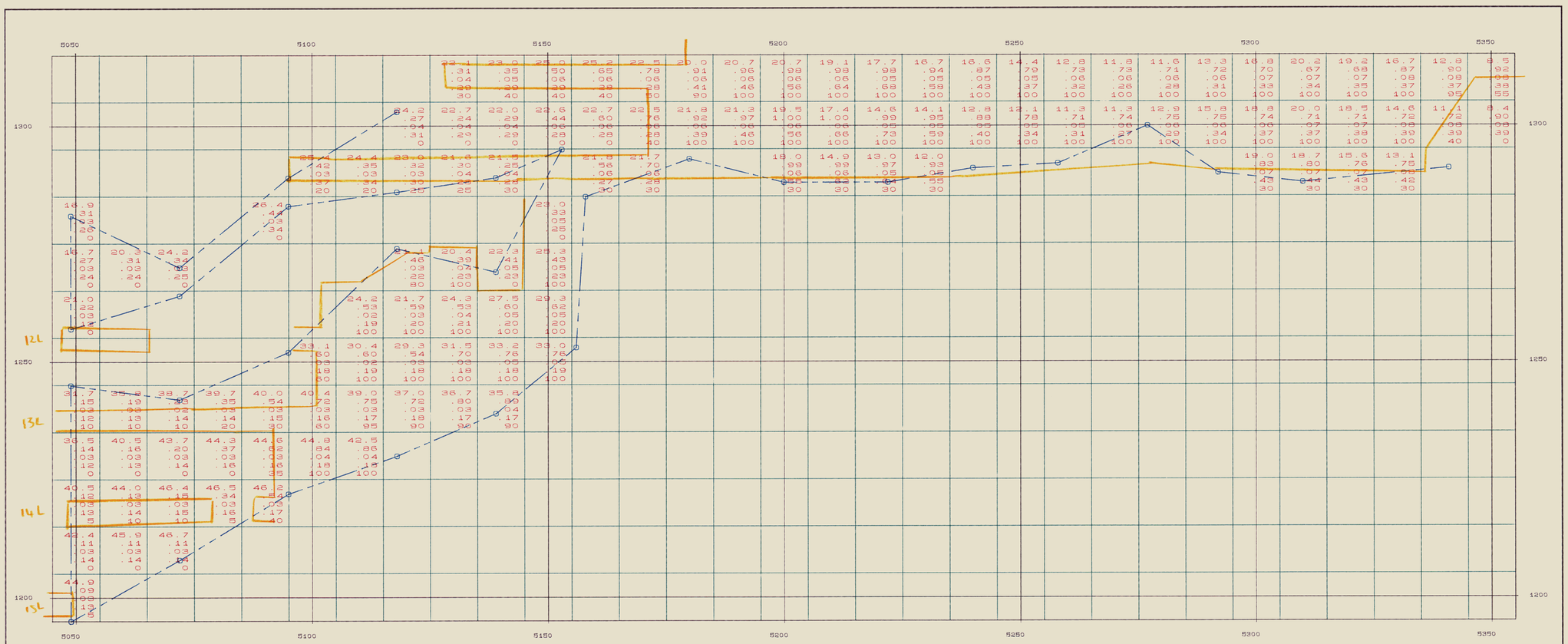
5 cm

SCALE 1: 500

LEGEND :

%DRW
%SNT
%SNS
%CU
MD

86-2624



Mined Out
Low Grade Remnants

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS 8 W-RATCHET FLTS.
3.22 PM THU., 24 JULY, 1986

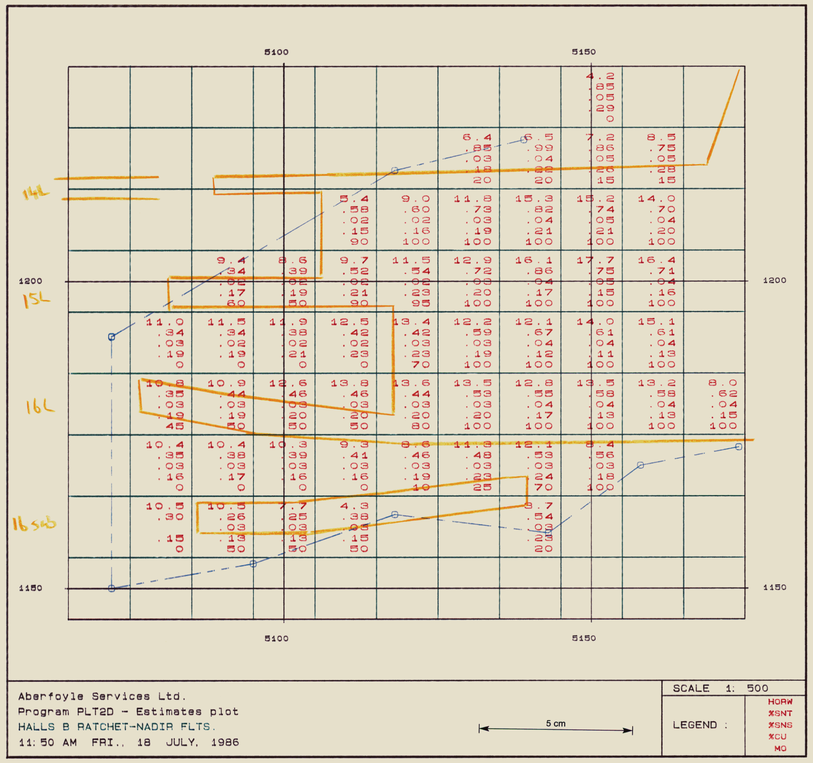
SCALE 1: 500

5 cm

LEGEND :

HORW
XSNT
XSNS
XCU
MG

30-2624



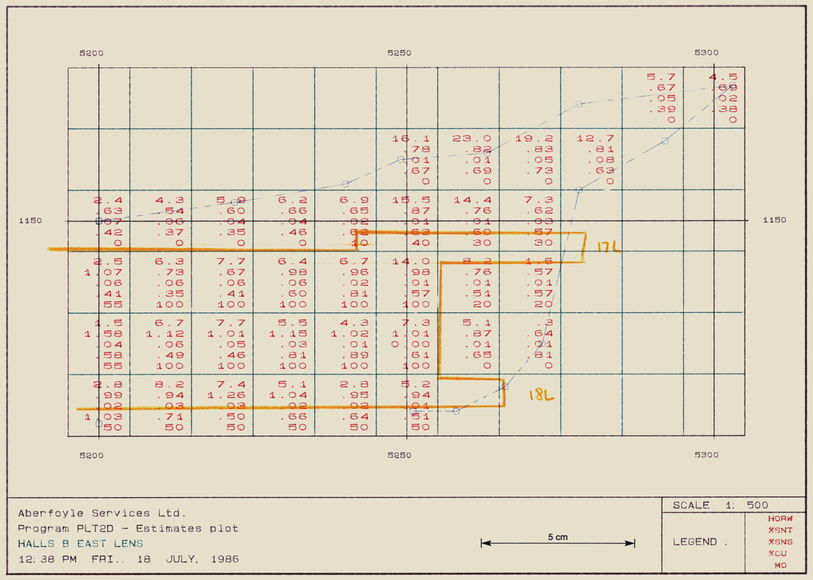
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS B RATCHET-NADIR FLTS.
11:50 AM FRI., 18 JULY, 1986

5 cm

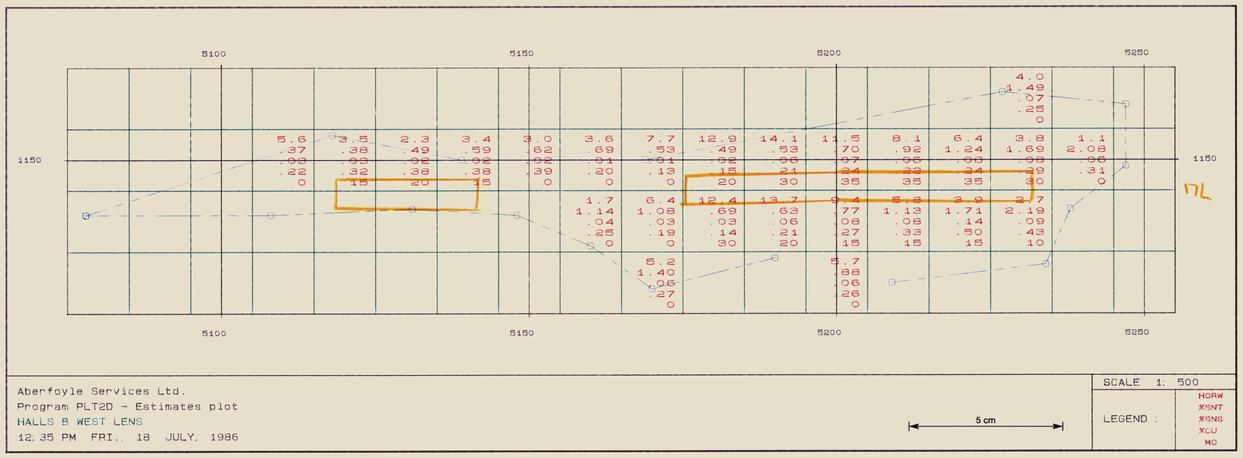
SCALE 1: 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO

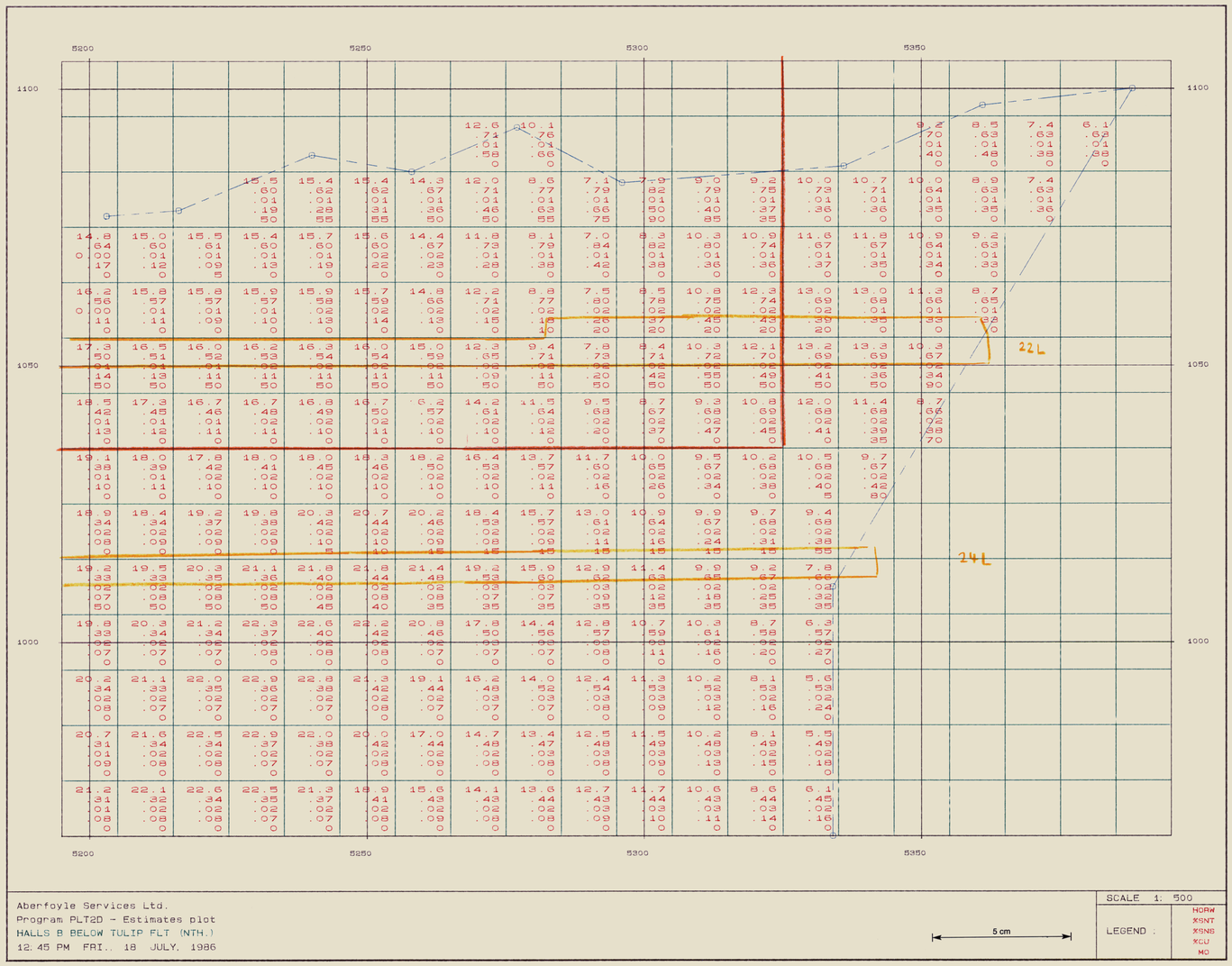

5200
5250
5300
1150
1150
5.7 .67 .05 .35 0
4.5 .69 .02 .38 0
16.1 .78 .01 .67 0
23.0 .82 .01 .69 0
19.2 .83 .05 .73 0
12.7 .81 .08 .63 0
2.4 .63 .07 .42 0
4.3 .54 .06 .37 0
5.2 .60 .04 .35 0
6.2 .66 .04 .46 0
6.9 .65 .02 .40
15.5 .87 .01 .62 40
14.4 .76 .01 .60 30
7.3 .62 .03 .57 30
17L
2.5 1.07 .06 .41 55
6.3 .73 .06 .35 100
7.7 .67 .08 .41 100
6.4 .98 .06 .60 100
6.7 .96 .02 .81 100
14.0 .98 .01 .57 100
8.2 .76 .01 .51 20
4.6 .57 .01 .57 20
1.5 1.58 .04 .58 55
6.7 1.12 .06 .49 100
7.7 1.01 .05 .46 100
5.5 1.15 .03 .81 100
4.3 1.02 .01 .89 100
7.3 1.01 0.00 .61 100
5.1 .87 .01 .65 0
.3 .64 .01 .81 0
2.8 .99 .02 1.03 50
8.2 .94 .03 .71 50
7.4 1.26 .03 .50 50
5.1 1.04 .02 .66 50
2.8 .95 .03 .64 50
5.2 .94 .01 .51 50
18L
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS B EAST LENS
12.38 PM FRI.. 18 JULY, 1986
5 cm
SCALE 1: 500
LEGEND :
HORW
%SNT
%SNS
%CU
MO

86-2624



Metallurgically
Dr Ffrench. ?

83-2624



Aberfoyle Services Ltd.
Program PLT2D → Estimates plot
HALLS B BELOW TULIP FLT (NTH.)
12.45 PM FRI., 18 JULY, 1986

SCALE 1: 500

5 cm

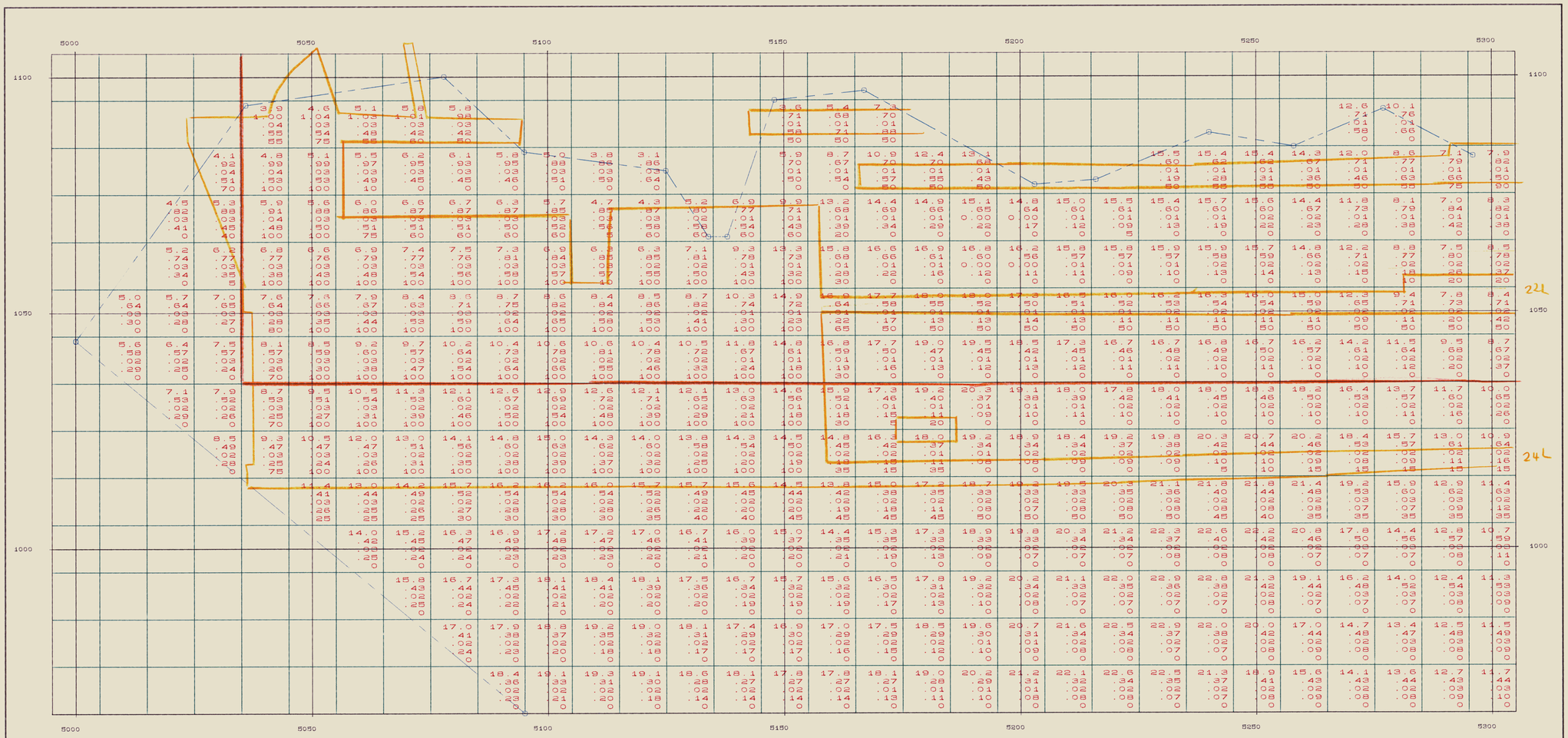
LEGEND :

HORW
%SNT
%SNS
%CU
MO

Metallurgically Difficult
Below 22L.

Scale stepping northern 22 level limits across

CS-2621



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS B BELOW TULIP FLT. (STH.)
12.41 PM FRI.. 18 JULY, 1986

SCALE 1: 500

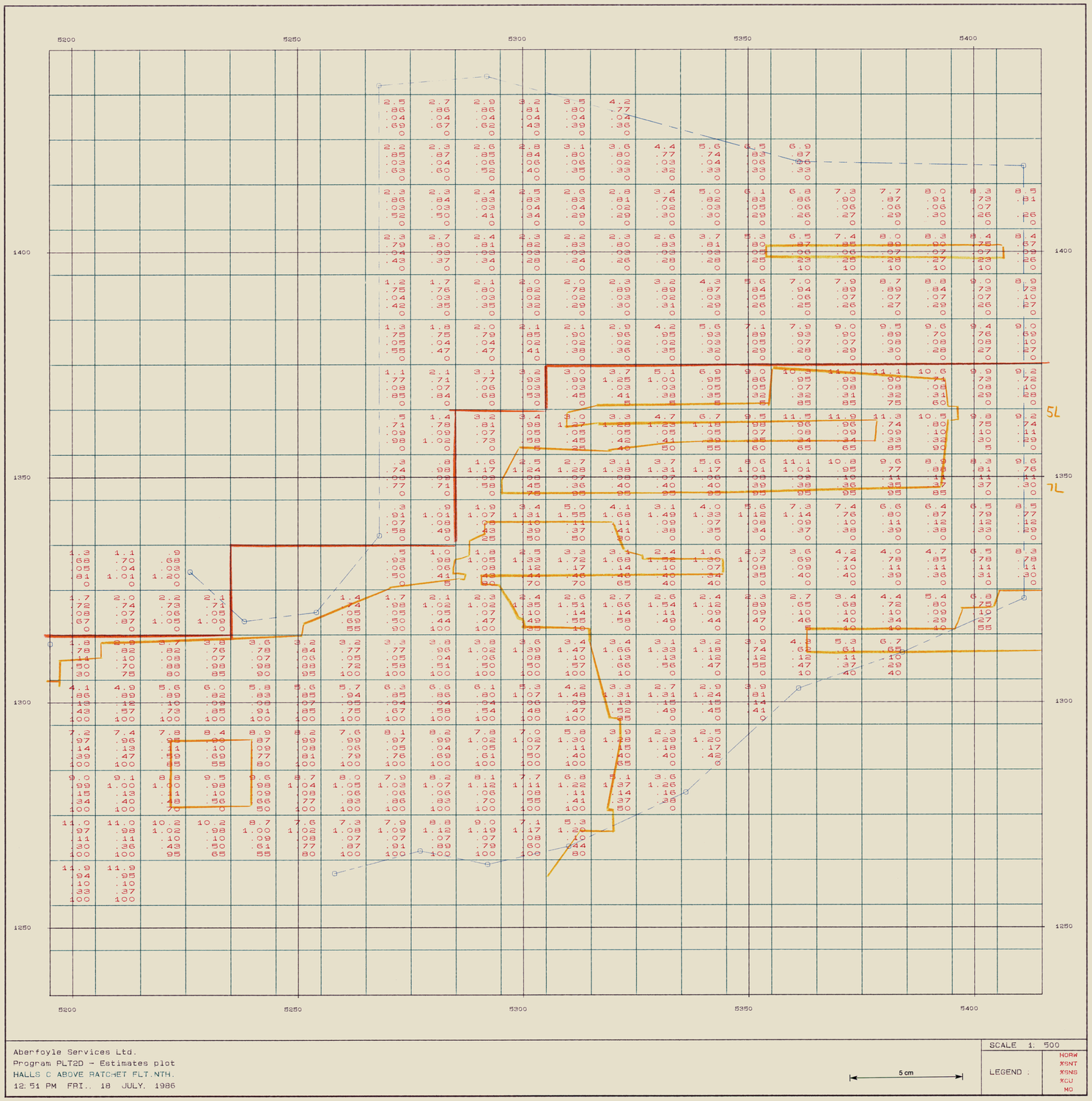
5 cm

LEGEND :

HORW
%SNT
%SNS
%CU
MO

Metallurgically difficult
North of N Sect= below
22 level

86-2624



No Access through
N Rib Pillar to
remnant ore

Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C ABOVE RATCHET FLT.NTH.
12:51 PM FRI., 18 JULY, 1986

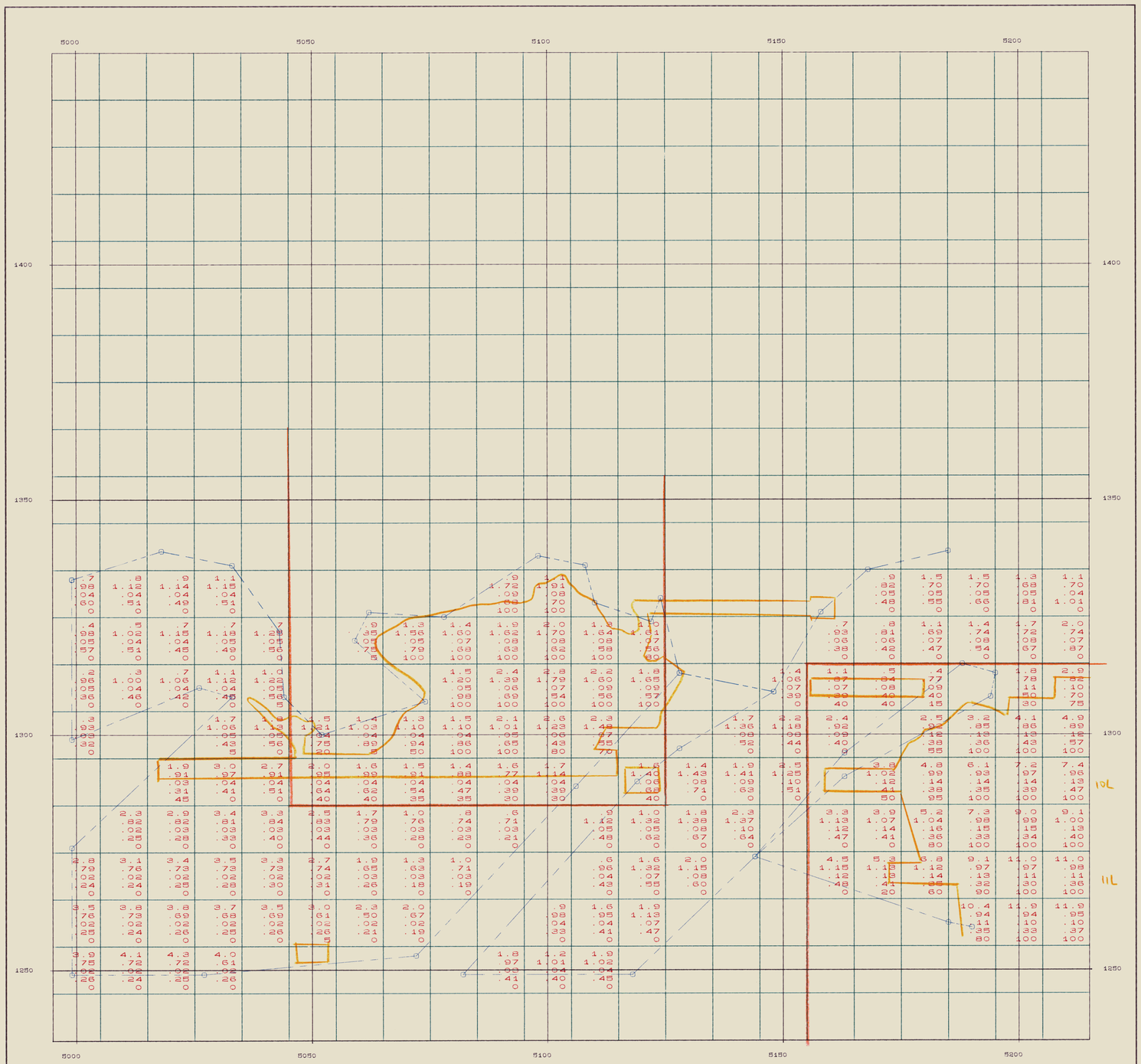
5 cm

SCALE 1: 500

LEGEND :

HORW
XSNT
XSNS
XCU
MO

8C-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C ABOVE RATCHET FLT.STH.
12.49 PM FRI.. 18 JULY. 1986

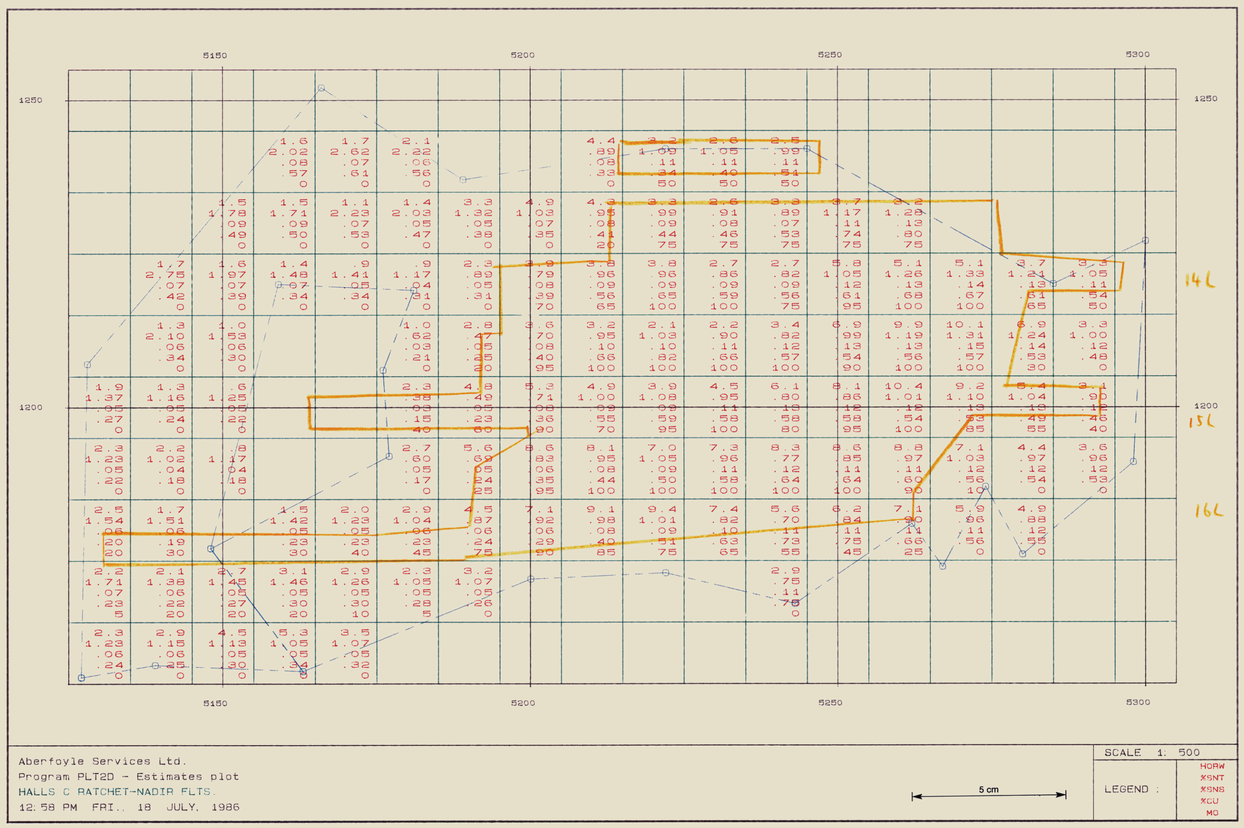
SCALE 1: 500

5 cm

LEGEND .

HORW
%NT
%NB
%CU
MD

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C RATCHET-NADIR FLTS.
12:58 PM FRI., 18 JULY, 1986

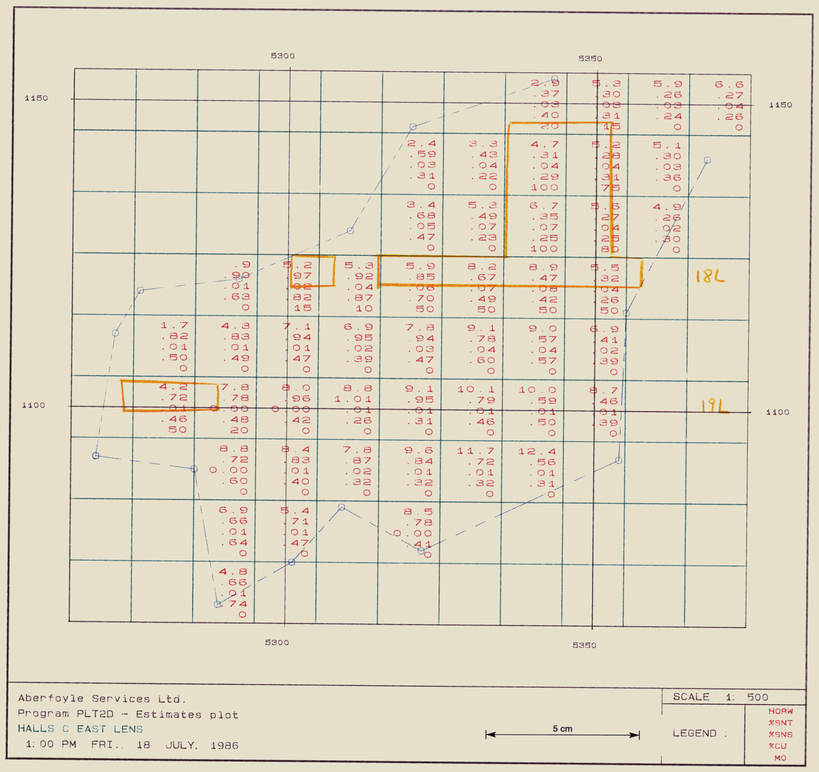
SCALE 1: 500

5 cm

LEGEND :

HORW
%SNT
%SNS
%CU
MG

33-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C EAST LENS
1:00 PM FRI., 18 JULY, 1986

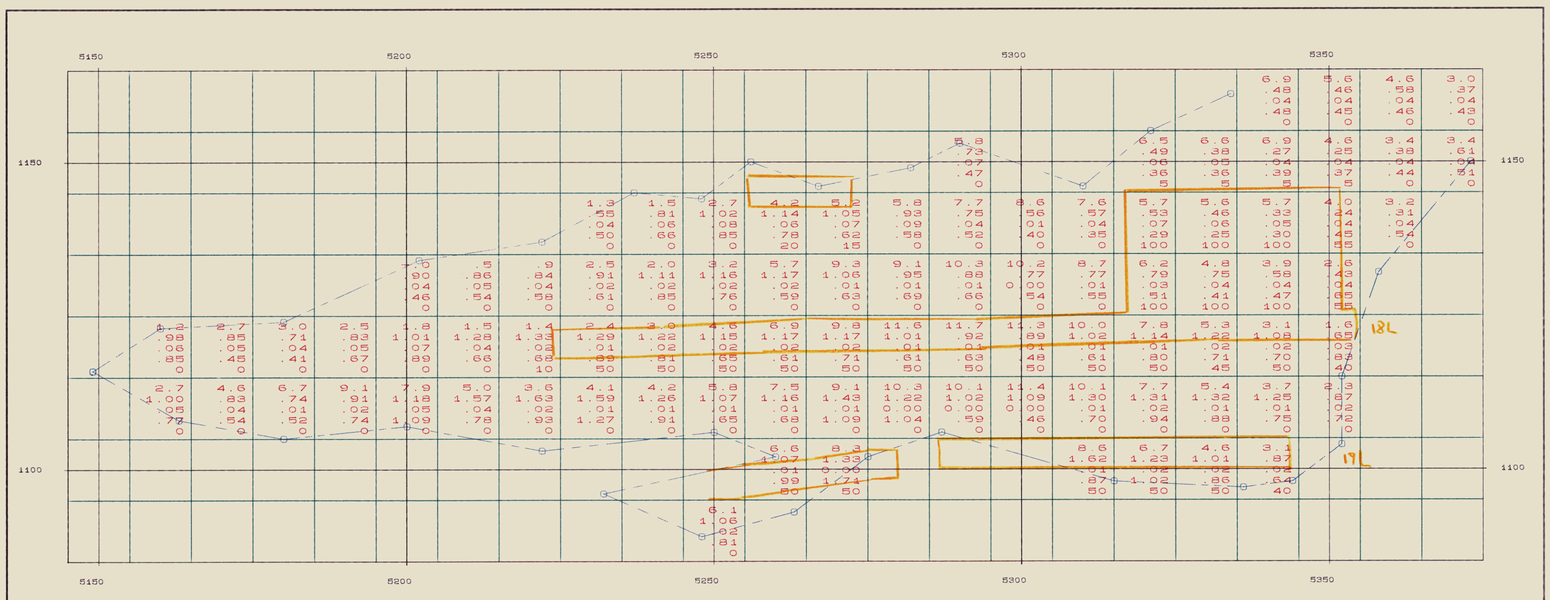
SCALE 1: 500

5 cm

LEGEND :

HORW
XSNT
XSNS
XCU
MO

33 2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C WEST LENS
1.02 PM FRI., 18 JULY, 1986

5 cm

SCALE 1: 500

LEGEND :

HORW
XSNT
XSNS
XCU
MD

5100 5150 5200 5250 5300 5350

1050 1000

22L 24L

Metallurgically Difficult below 22L ?

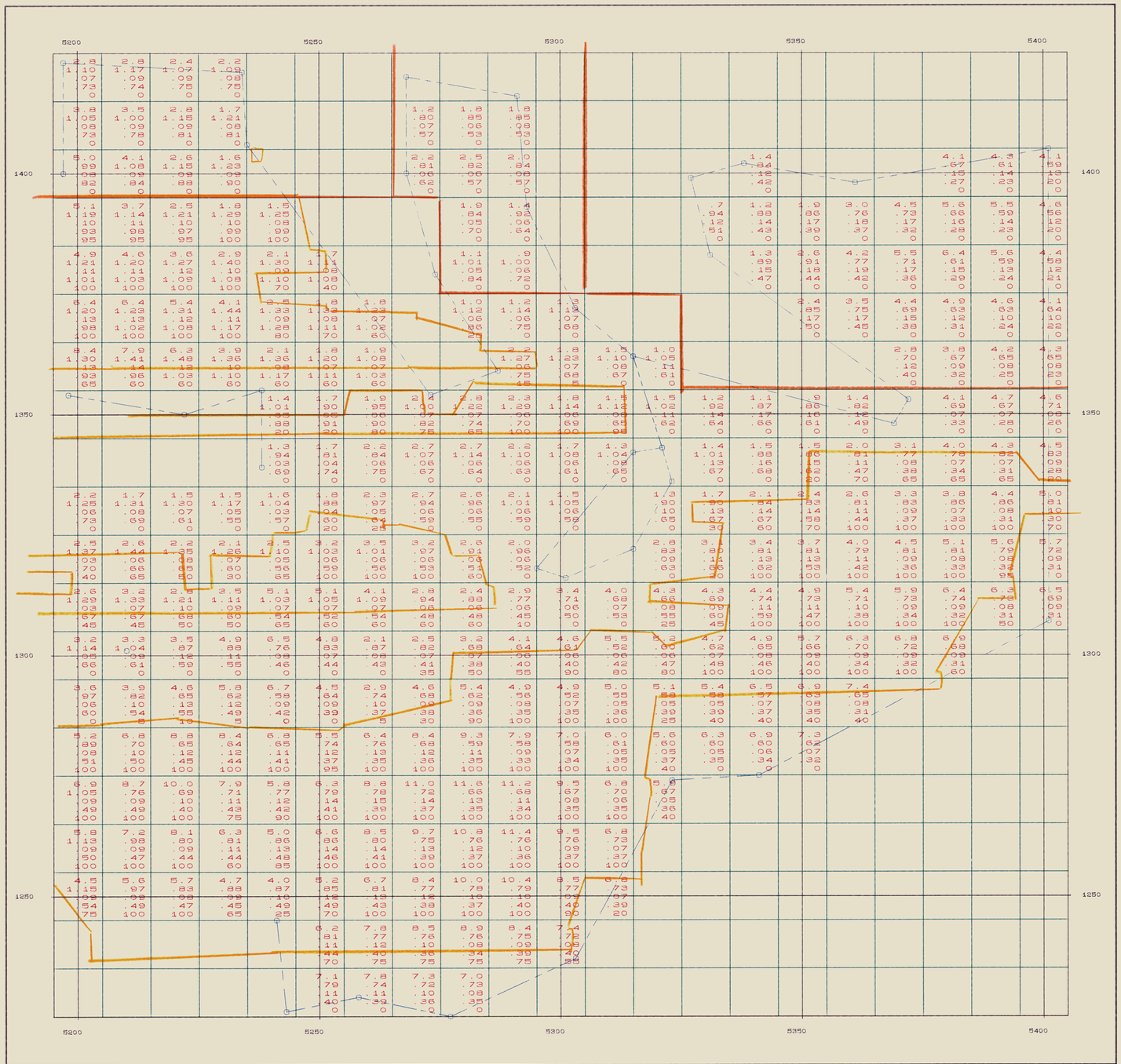
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS C BELOW TULIP FLT.
1:03 PM WED., 23 JULY, 1986

SCALE 1: 500

5 cm

LEGEND :

HORW
%SNT
%SNS
%CU
MO



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS D ABOVE RATCHET (NORTH)
1.10 PM WED., 23 JULY, 1986

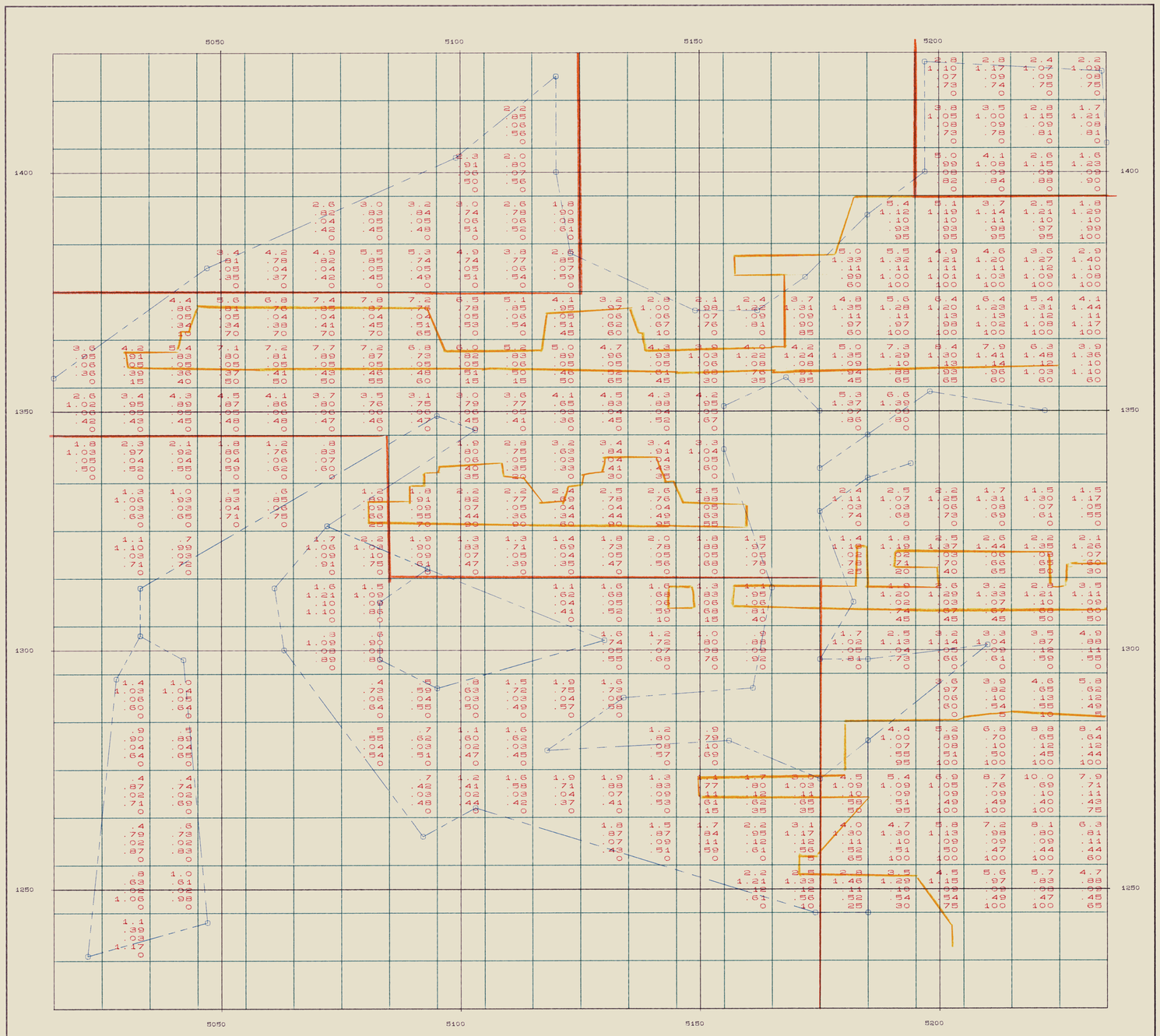
5 cm

SCALE 1: 500

LEGEND :

HORW
XSNT
XSNS
XCU
MO

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS D ABOVE RATCHET (SOUTH)
1.07 PM WED.. 23 JULY, 1986

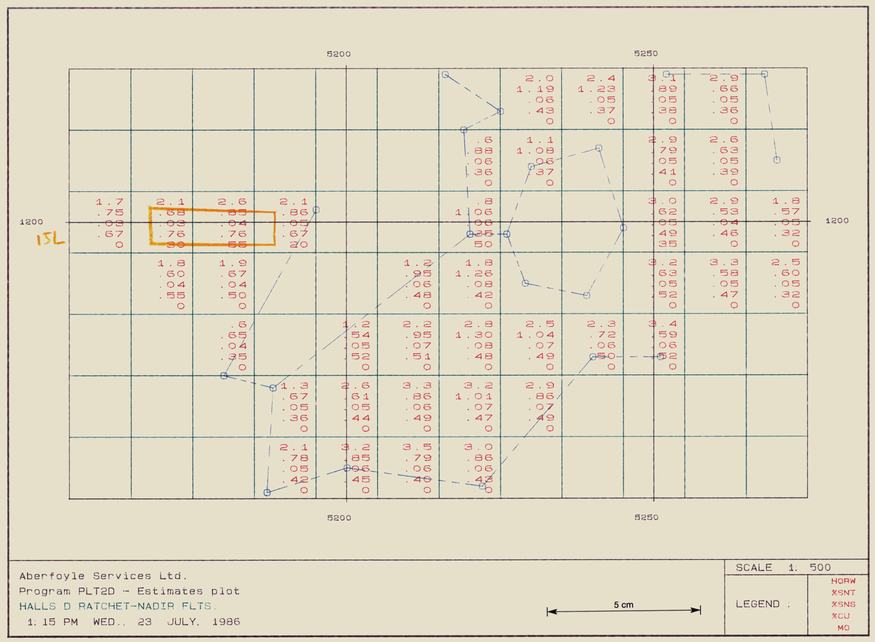
SCALE 1: 500

5 cm

LEGEND :

HORW
%SNT
%SNS
%CU
MO

83-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS D RATCHET-NADIR FLTS.
1.15 PM WED.. 23 JULY, 1986

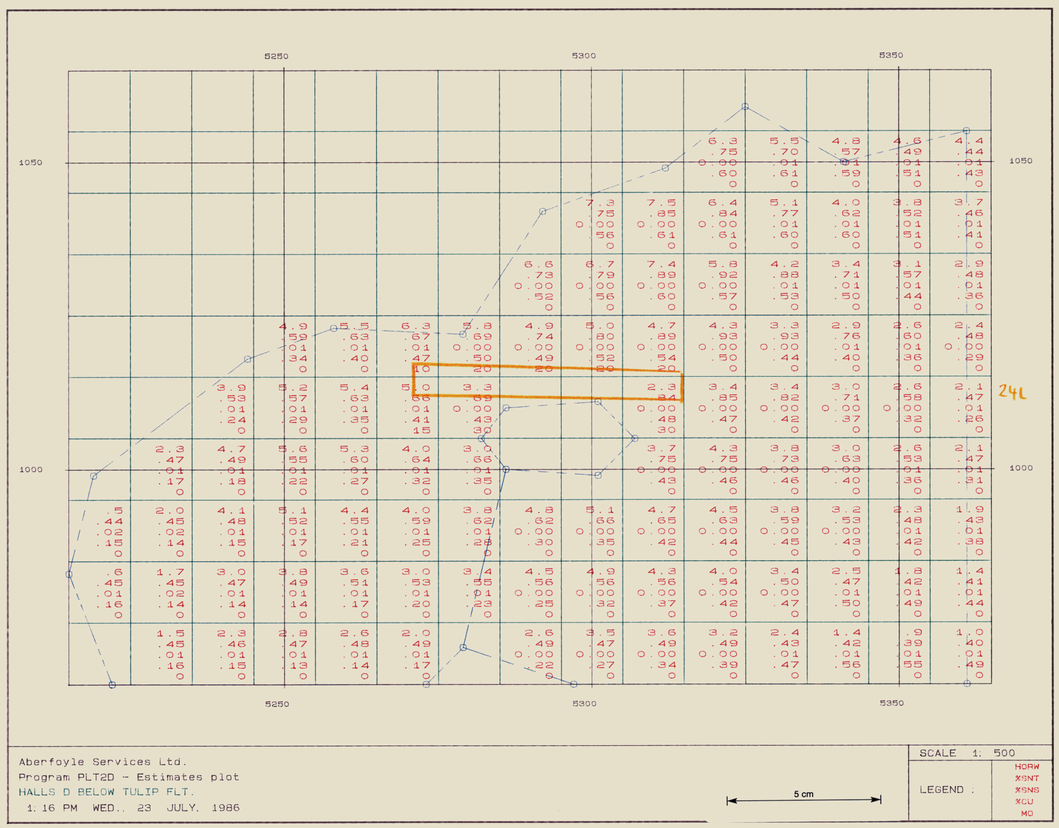
5 cm

SCALE 1. 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO

8 6 2 4



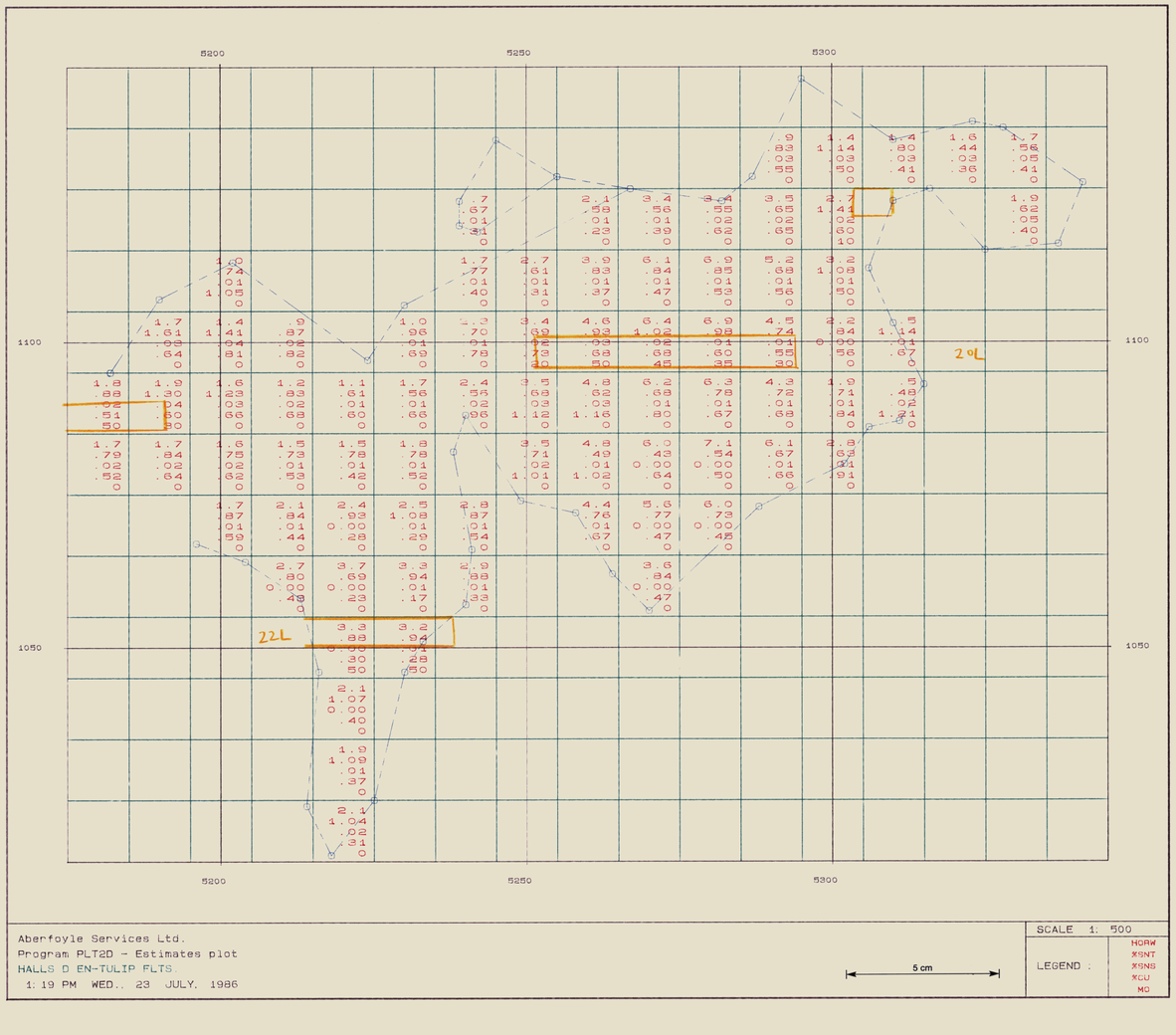
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS D BELOW TULIP FLT.
1:16 PM WED., 23 JULY, 1986

5 cm

SCALE 1: 500

LEGEND .

HORW
%SNT
%SNS
%CU
MO



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS D EN-TULIP FLTS.
1:19 PM WED., 23 JULY, 1986

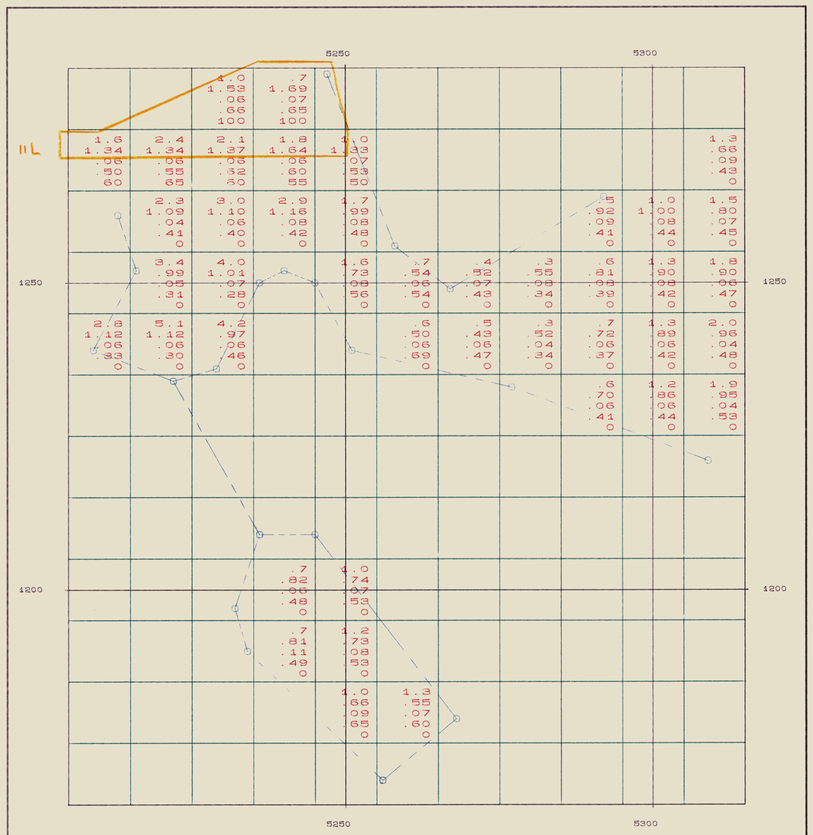
5 cm

SCALE 1: 500

LEGEND :

HORW
XSNT
XSNS
YCU
MD

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS E ABOVE RATCHET FLT.
1.22 PM WED., 23 JULY, 1986

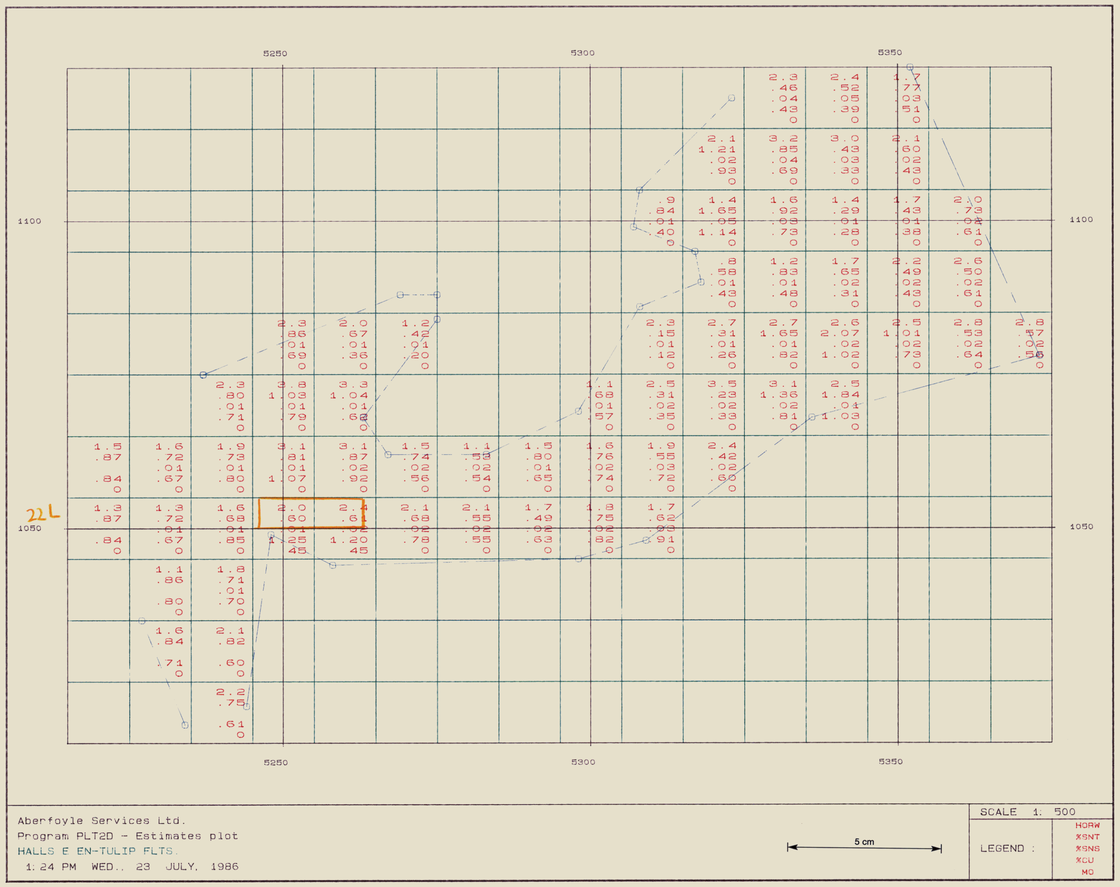
5 cm

SCALE 1: 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
HALLS E EN-TULIP FLTS.
1:24 PM WED., 23 JULY, 1986

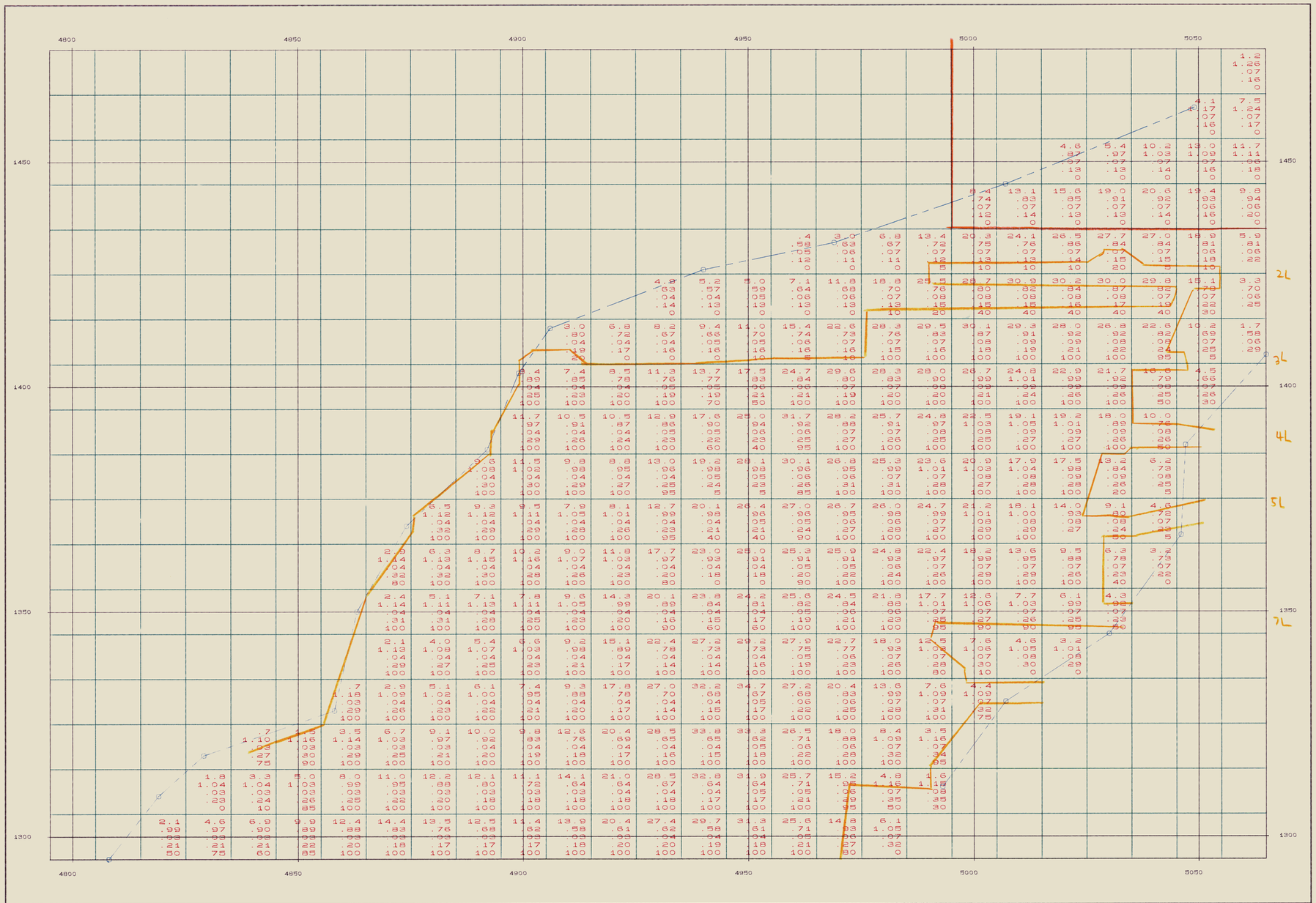
5 cm

SCALE 1: 500

LEGEND :

NORW
%SNT
%SNS
%CU
MO

36-2624



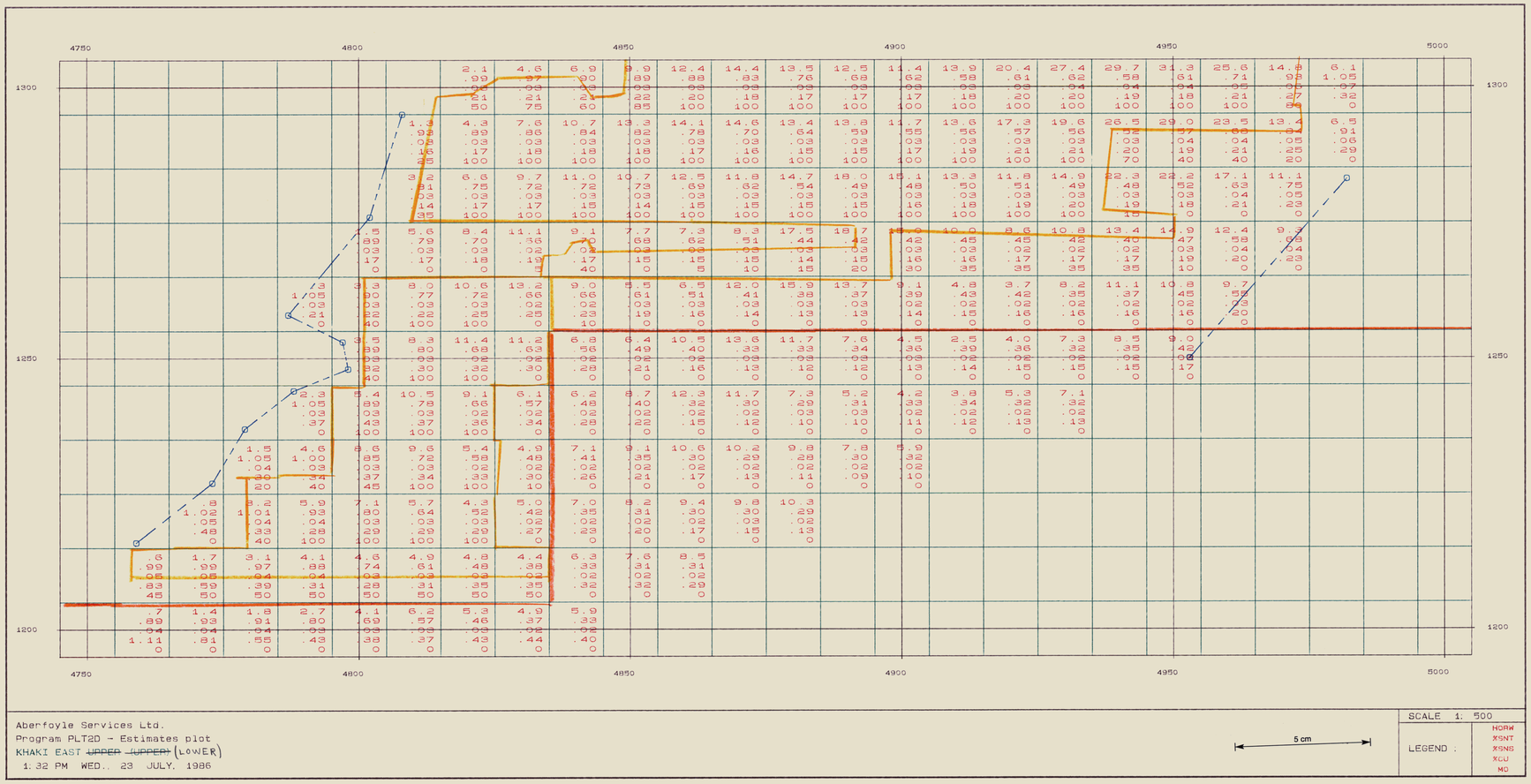
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
KHAKI EAST UPPER (UPPER)
1.30 PM WED.. 23 JULY, 1986

5 cm

SCALE 1: 500

LEGEND .

HORW
%SNT
%SNS
%CU
MO



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
KHAKI EAST ~~UPPER~~ ~~UPPER~~ (LOWER)
1.32 PM WED.. 23 JULY. 1986

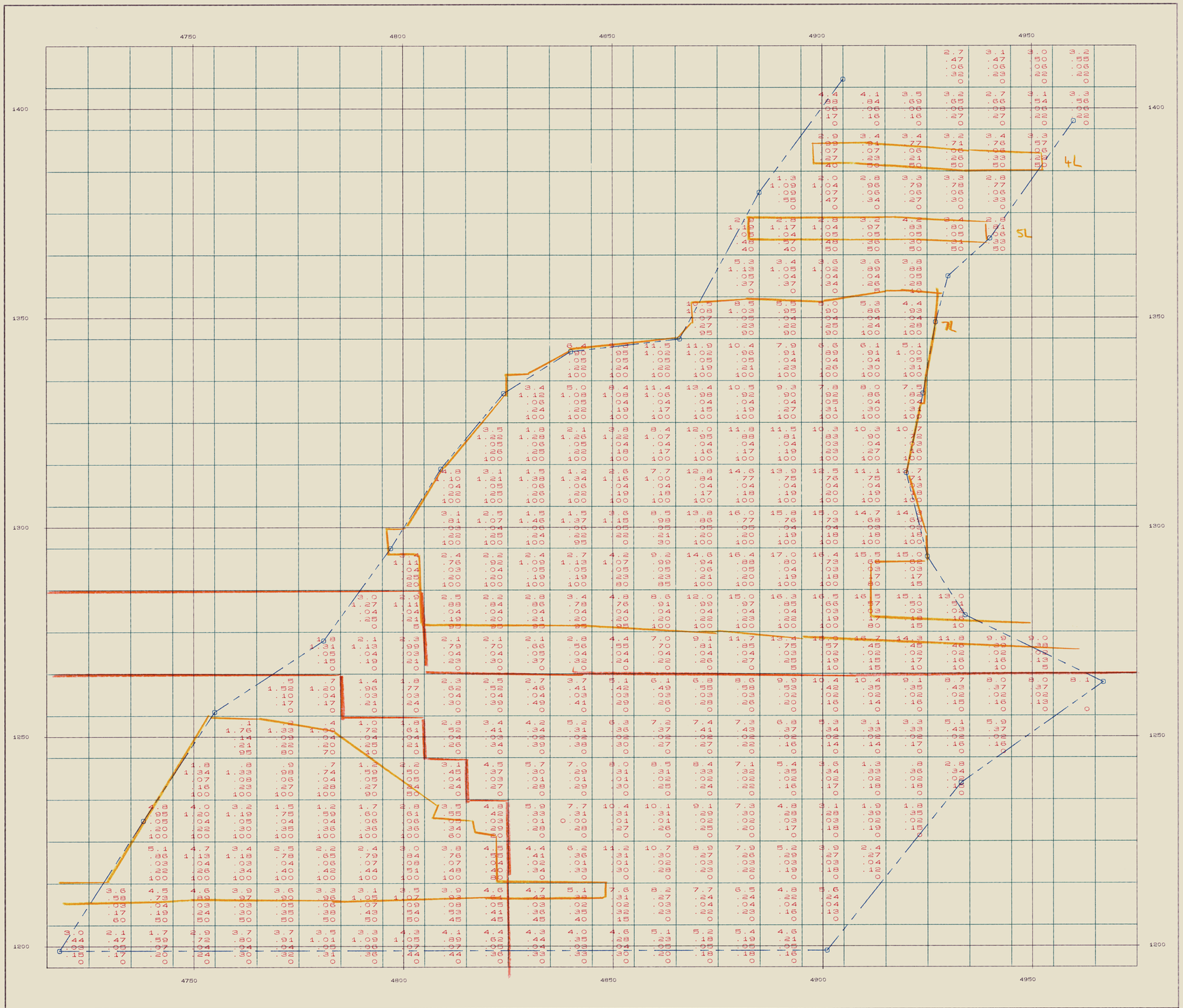
SCALE 1: 500

5 cm

LEGEND :

HORW
%SNT
%SNS
%CU
MO

86-2624



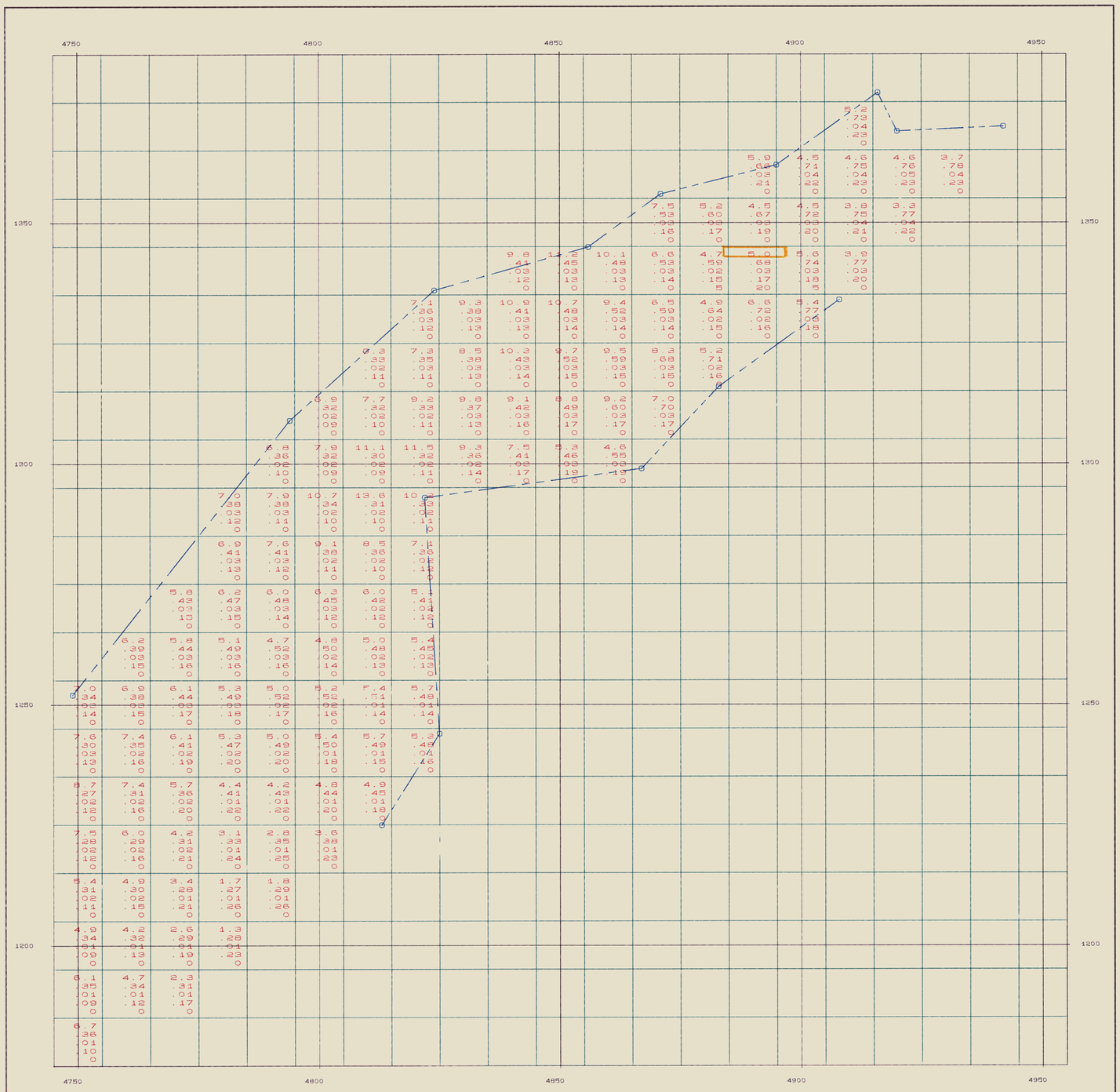
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
KHAKI WEST LENS
1:37 PM WED., 23 JULY, 1986

5 cm

SCALE 1: 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
BATTERY WEST ABOVE 17 LEVEL.
1:46 PM WED., 23 JULY, 1986

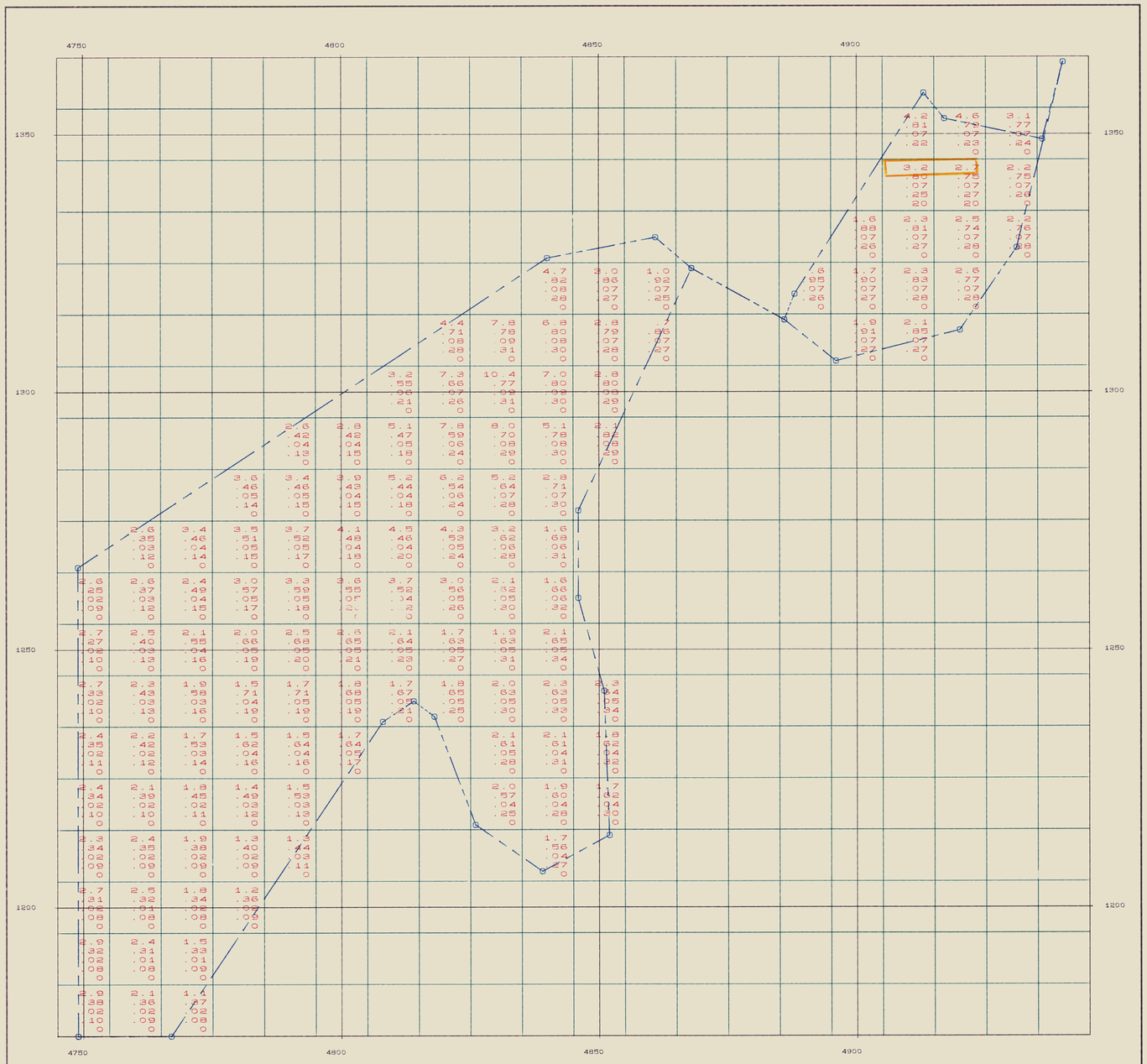
5 cm

SCALE 1: 500

LEGEND :

HORW
%SNT
%SNS
%CU
MO

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
BATTERY EAST ABOVE 11 LEVEL
1:49 PM WED., 23 JULY, 1986

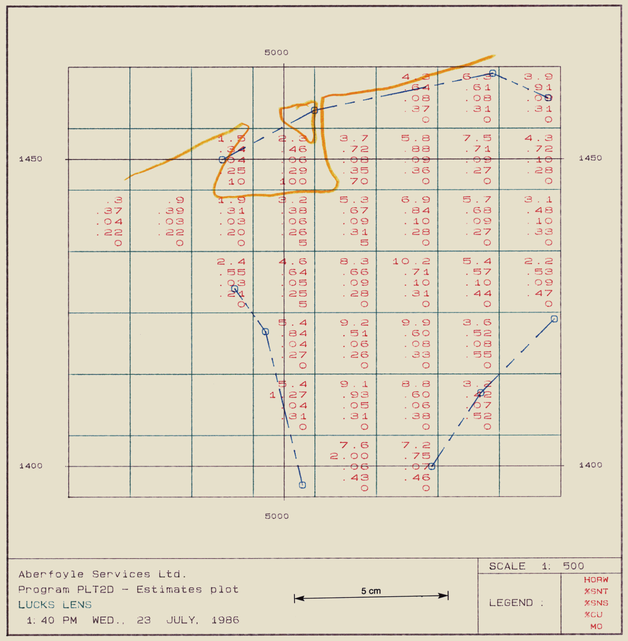
5 cm

SCALE 1: 500

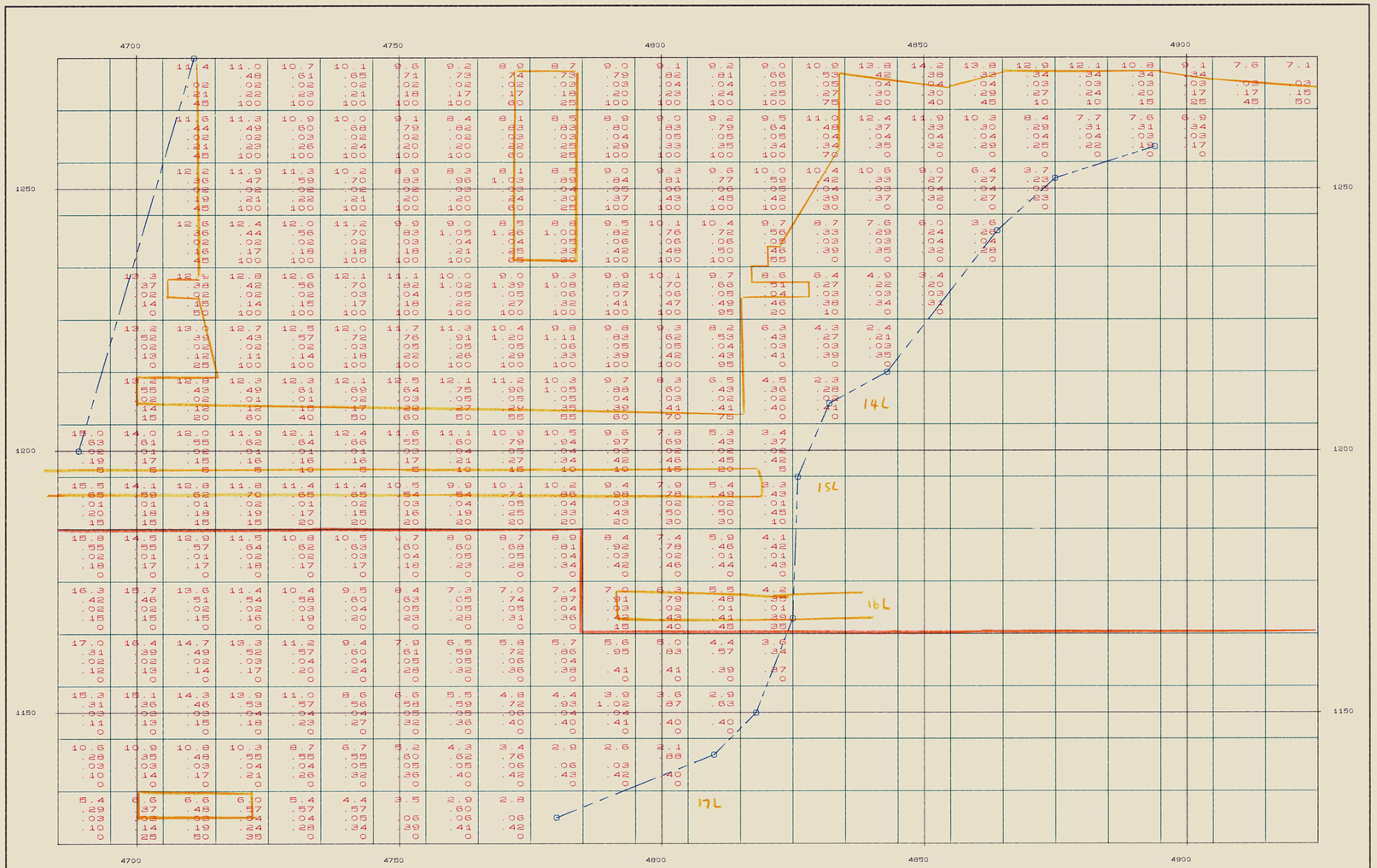
LEGEND :

NORW
XSNT
XSNS
XCU
MO

86-2624


5000
1450
1400
5000
Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
LUCKS LENS
1.40 PM WED.. 23 JULY, 1986
5 cm
SCALE 1: 500
LEGEND :
HORW
%SNT
%SNS
%CU
MO

66-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
B-SOUTH BELOW 11 LEVEL
1:43 PM WED.. 23 JULY, 1986

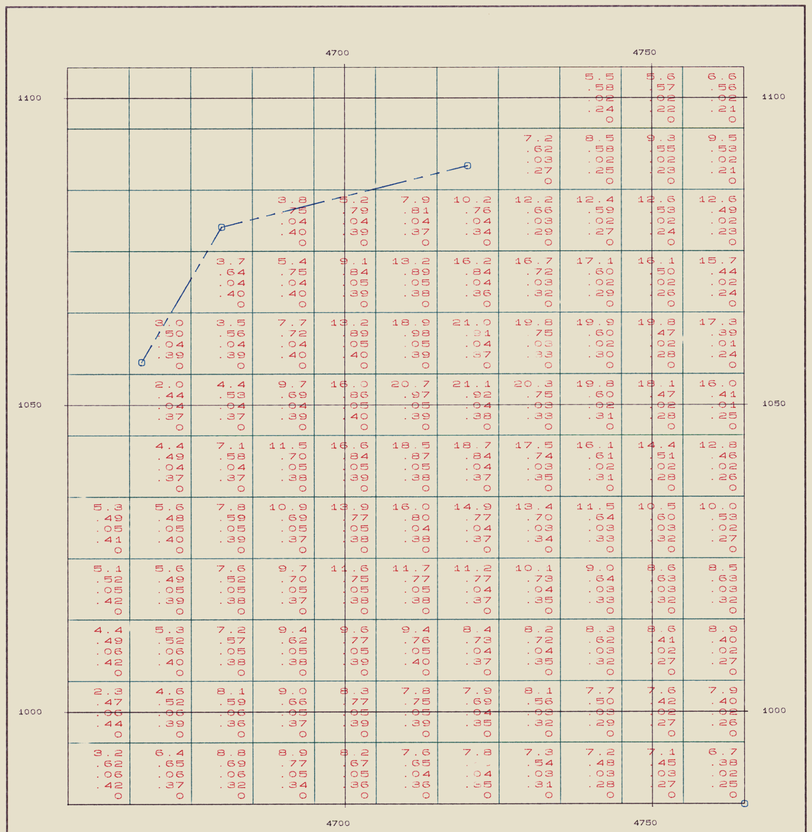
5 cm

SCALE 1: 500

LEGEND :

HORW
XSNT
XSNS
XCU
MO

86-2624



Aberfoyle Services Ltd.
Program PLT2D - Estimates plot
BATTERY LENS BELOW 17 LEVEL.
1:51 PM WED., 23 JULY, 1986

5 cm

SCALE 1: 500

LEGEND :

HORW
%INT
%SNS
%CU
MO