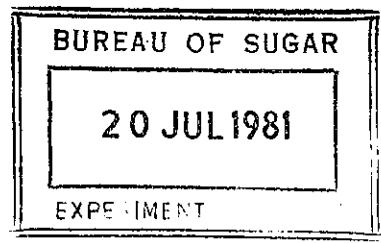


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BUREAU OF SUGAR EXPERIMENT STATIONS
QUEENSLAND AUSTRALIA

/33

**DATA-BASE AND DATA
HANDLING PROGRAMS
FOR PLANT DATA RECORD**

by

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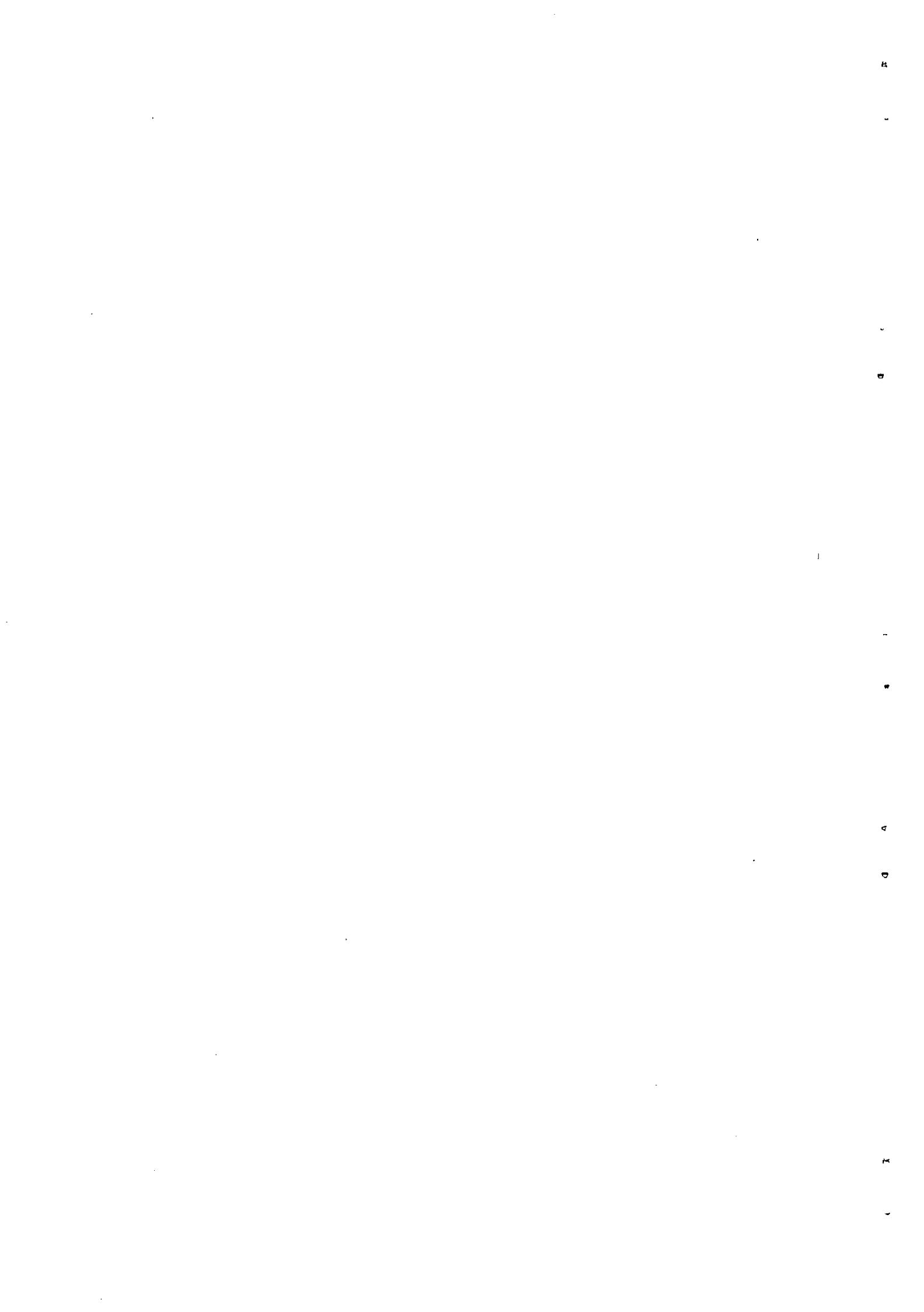
Bundaberg,
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1000-50-2

SUMMARY

The information contained in the BSES Plant Data Record is stored in computer data-bases for reporting and reference. Data for both the 1979 and 1980 seasons is stored at Bundaberg and reports for each of these years were generated using the data-base software. Listings of the forms required for the collection of new information have also been produced with this system.

The system offers many advantages over the previous manual techniques, including speed and accuracy of report preparation, and the ability to manipulate stored data and report it as required.



1 INTRODUCTION

A previous report (DYNE, Feb. 1980) described the data-base system and procedures used to prepare the 1978 Plant Data Supplement. This report details the data-base system developed to handle the complete Plant Data Record.

The Hewlett-Packard IMAGE/1000 Data Base Management System has been used for this work, and further detail of this system is available in the IMAGE/1000 Reference Manual. The following description of a data-base is given in that manual:

A data base is a collection of logically related files containing both data and structural information. Pointers within the data base allow a user to gain access to related data and to index data across files. The organization of a data base may take one of several forms; two examples are a hierachial structure and a network structure.

The hierachial structure is a natural growth from earlier conventional file management techniques. Data must be accessed through levels of qualifiers. For example, to get to information about an employee, information about division and department must first be accessed. Cross reference files and linkage files are extensively used to relate files for logical association and accessibility. When the number of data files grows and the interrelationships among them become more complex, the requirements for cross reference files and linkage files tends to increase exponentially. An inherent result is that more overhead is required to access data.

The network data base is structured under the premise that only when one logical group of data (data set or file) is related to another logical group of data, is a direct linkage constructed between them. Thus, separate cross reference files and linkage files are no longer required. The increase of complexity is directly proportional to the number of direct relationships existing among a number of logical data sets.

When logical data sets are considered as nodes with direct accessing paths connecting them, a network data base is formed.

2. DATA-BASE STRUCTURE

The data pertaining to each of the stations in the factory is stored in separate detail data sets as described in the previous section. The number of variables involved in a full edition of the record exceeded the capacity of the IMAGE/1000 system, so data has been stored in two separate data bases for each year. This represents an inconvenience in that the separate DB's need to be accessed, but data storage and handling is not compromised.

The DB's containing 1979 data are PLANT1 and PLANT2 respectively. They are stored on disc 19. PL80A and PL80B (on disc 25) contain the 1980 information. The structure of these differ slightly as some alterations have been made for 1980.

2.1 Data Base Schema.

The actual information is stored in detail data sets with links to a manual master set containing factory number and name, and to other automatic master sets for mill number or entry number dependent on the particular data set. Automatic masters have been included for train (A or B), mill number (1-6), evaporator number (0-5), and entry number (0-15 to allow for multiple entries for any particular item of equipment), pan number, etc.

A complete listing of the variables used is given in Appendix A.

Detail data sets containing entries for each station in the factory are included. The structure of the DB's are defined in "SCHEMA" and listings of these are given in Appendix B.

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2.2 GENERATING THE D.B.'S

The Image/1000 Program DBDS is scheduled to generate the particular DB required as below.

:RU,DBDS,&PL80A,'PL80A,PU

Schema files are prefixed with "&" and list files with "'". Appendix C contains abbreviated listings of DBDS output for the four DB's.

On successful termination of this stage, the DB is ready for data entry.

3. DATA ENTRY

Application programs have been developed for data entry, with separate programs being used for each detail data set. Table I contains a summary of the data sets, their description and the data entry program name used for that set. The data entry programs are run interactively with prompts at the terminal for factory and mill or item number, and then the data items in that set.

TABLE I. DATA SETS, ENTRY PROGRAMS AND REPORT PROCEDURES.

DATA	DATA SET	ENTRY PROGRAM	REPORT
Transport Equipment	TRANS	&PDEN1	&PGE1 &PGE2
Carriers	CARR	&PDEN2	&PGE3 &PGE4
Knives	KNIVES	&PDEN3	&PGE5
Shredder	SHRED	&PDEN4	&PGE6
Milling Equipment	MILLS	&PDEN5	&PGE7 &PGE8
Mill Feeding Devices	FEEDS	&PDEN6	&PGE9 &PGE10
Pressure Feeder Grooving	PRESS	&PDEN7	&PGE11
Diffuser	DIFFUS	&PDEN8	&PGE12
Juice Screens	SCREEN	&PDEN9	&PGE13
Juice Heaters	HEATER	&PDN10	&PGE14
Clarifiers	CLARIF	&PDN11	&PGE15
Bagasse separators	SEPAR	&PDN12	&PGE16
Evaporators	EVAP	&PDN13	&PGE17
Pastage vessels	PANS	&PDN20	&PGE20
Stock Tanks	STOCK	&PDN21	&PGE21
Vacuum Pumps	PUMPS	&PDN22	&PGE22
Crystallizers	CRYST	&PDN23	&PGE23
High Grade Centrifugals	HGFUG	&PDN24	&PGE24
Low Grade Centrifugals	LGFUG	&PDN25	&PGE25
Sugar Dryers	DRYER	&PDN26	&PGE26
Boilers	BOILER	&PDN27	&PGE27 &PGE28
Storage Bins	BINS	&PDN28	&PGE29
Electrical Plant	ELECT	&PDN29	&PGE30 &PGE31

These programs were developed for the 1979 report (data bases PLANT1 and PLANT2), and are listed in Appendix D. They have not been altered for the 1980 DB's. The 1980 data is an edited copy of the 1979 report, and editing was done using "QUERY". Consideration should be given to modifying the programs for the current D.B. structure, and also incorporating an editing mode in each for future editions.

4. DATA REPORTS

To date all listings of the data have been generated using the reporting facility of the QUERY program. Formatting of data using these procedures is relatively straight forward and sufficiently powerful to perform current requirements.

4.1 Procedure Files

To generate a report it is necessary to access the DB, find the required data and list it according to a procedure specified in a disc file. Table I contains a listing of reporting procedures which have been written for the various pages of output in the record.

Three versions of each of these reporting procedures are necessary -

&PGE-- . Lists data in the format as for the final record.
Suitable for use at the printer or terminal.

\$PGE-- . Same format as above, except that headings are included. Used for listing to disc file for later presentation on the HP 9872S plotter.

#PGE-- . Slightly different format to the above (more spaces between lines of output). Used for generating forms for an individual factory for collection of data for next year.

Listings of these are presented in Appendix E.

4.2 GENERATING A REPORT

The final report contains listings of each of the formats of Table I with some multiple listings where the same procedure is used for each of the mills in the train.

4.2.1 At the Printer

Query allows procedures to be developed to perform all of the tasks necessary to generate these reports on a batch basis. Appendix F contains listings of files which will generate at the printer a complete edition of the record.

To generate the listings schedule QUERY in batch mode -

:RU,QUERY,Q1

Q1 opens the first DB in the required mode, and transfers to the file PROCF. This procedure searches for the required entry lists at the printer as required, and continues through the report.

Similarly for the second half of the report

:RU, QUERY, Q2

which transfers to the batch procedure PROCF2.

4.2.2 At the Plotter

To list the data at the plotter, it is necessary to spool the QUERY generated reports to disc files and then list them at the plotter using a program 'PDLST' developed using the Graphics/1000 Software.

The source code for PDLST is listed in Appendix G. PDLST lists files at 60 lines per A4 page with 132 characters across the page. Block headings are generated if the first two characters of the record are "\$\$", and a form feed is generated for "\$\$" as the third and fourth characters of the record. The report procedures \$PGE-- generate "\$\$" as required together with a heading for printing in block mode.

Plotter listings can be generated by -

* Spooling QUERY Output to a disc file

```
:CR,LISTA::25:4:24  
:SL,6,LISTA::25,WR  
:RU,QUERY,Q1  
:CS,6
```

Note that the procedure file PROCF should be edited so that the \$PGE-- versions of the reports are listed.

* Editing the list file (LISTA) to include page numbers at the top of pages, and to include mill numbers at the top of the respective reports.

* Listing the edited file at the plotter -

:RU,PDLST,LISTA,25

4.2.3 Title Pages

Apart from the data listed as detailed above there are only four further pages required to complete the report. These are -

- * Title page
- * Contents
- * Key to factory numbers
- * Diagrams of feeding devices

These can be printed on the 9872S using the list program PDLS2. The source code for this program is listed in Appendix H.

This program is similar to PDLST except that it prints 80 characters across an A4 page.

Appendix I contains a listing of a file "PDHEAD" which contains the information used for the 1980 Record.

4.3 GENERATING FORMS FOR DISTRIBUTION TO FACTORIES

These are listings of the same information as the complete report, but with data listed separately for each factory. A different set of procedures is required to generate these reports. Care should be taken in insuring that data is entered for each find command in these procedures as QUERY will terminate if a report is requested and no records have been found.

Appendix J contains listings of the necessary procedures.

To list (at the printer) the set of forms for forwarding to factories for 1981 data -

PD81RP

these transfer to a series of procedures for each of the factories (one for each DB)

PD8001 - PD8030
and PD8A01 - PD8A30 respectively.

These procedures use the QUERY reporting files #PGE-- as listed in Appendix E.

5. GENERATING THE NEXT SET OF DB's

As mentioned previously, data is retained for each year in separate DB's. The DB for the following year is generated by copying the existing DB's and editing this data as indicated by the returns from each factory. The following briefly describes the steps involved in this process.

5.1 Unload Current D.B.

This will probably have already been done to back-up the data. See section 6 of this report.

:RU,DBULD,1,\$PL80::25,PL80A:GD,GD,AB

will store the data from the first DB in the file \$PL80A.

5.2 Alter the schema as required

The only alterations that should be required are:-

- * rename DB (to PL81A)
- * alter cartridge references

If an attempt is made to store data for different years on the one cartridge, duplicate data sets will occur unless all of the data sets are renamed. It is preferable to maintain the same detail data set names throughout. Thus data for each year must be stored on separate cartridges. Considerable space is required for each years' data, and a complete 7900 disc needs to be provided for each year.

5.3 Generate DB with DBDS

The new schema is used to generate the DB on the new cartridge

:RU,DBDS,&PL81A,'PL81A,PU

5.4 Load existing data into the new data base

The Image/1000 utility program DBLOAD is used

:RU,DBLOAD,1,\$PL80A::25,PL80A:GD,CO

5.5 Edit the data

QUERY can be used to update the information in the DB as required by alterations to the forms returned by the factories. Refer to the Image/1000 reference manual and the lists of data sets (Table I) and variables (Appendix A) given in this report.

The data entry programs used for storing the data in the DB could be relatively easily modified to perform data edits as well. Consideration should be given to making these alterations since editing with QUERY has two disadvantages:-

- (a) the syntax is extremely long-winded
- (b) it is difficult to examine the current variable value prior to alteration. This facility gives a valuable check on the accuracy of the edit.

6. SECURITY OF DATA

Data stored in the DB is backed up in two ways:

- (a) Complete cartridge backed up on second disc. This is the normal procedure with all discs at Bundaberg.
- (b) As well as the DB files, an unloaded version of the DB should be stored on the disc.

After a number of alterations have been made to the data the following procedures should be followed:

- * check the DB with the utility DBSPA.
- * attempt to unload the data with the utility DBULD.

If the unload on the original DB is successful, the DB is still sound and all of the alterations have been successfully incorporated.

Should this fail -

- * mount the duplicate disc and attempt to re-load the original data base from the unload on the duplicate.
- * If this in turn fails attempt to unload the duplicate DB. On successfully unloading this, load the original from this file.

It is now safe to copy the whole disc onto its duplicate. To do this use the RTE utilities 'COPY' and 'VERIFY'.

Mount the original disc in Drive 0 (LU 9) and the duplicate in Drive 1 (LU 10).

```
:RU,COPY,1,0,9,10  
VERIFY? YES  
TRACK SIZE BUFFER? YES
```

After this track by track copy, it will be necessary to re-number and rename the duplicate disc. Refer to the Terminal Users Manual.

```
:IN,XX,-10,20,PLANT2,0,3,96
```

If these procedures are successfully completed periodically, the integrity of the data will be maintained.

Should a problem arise at any stage, for example as a result of a system crash, the DB should be recoverable (at least to the extent of the previous backup).

7. ANNUAL SUMMARY

A summary of some of the more important items of plant can be prepared using the procedure 'ANNREP'.

This procedure is listed in Appendix K and is performed using the command

:RU, QUERY, ANNREP.

A listing of factory and state totals is generated.

APPENDIX A: LIST OF VARIABLES.

BGBIN	BAGASSE BIN TYPE
BGCAP	BAGASSE BIN CAPACITY
BGPOS	BAGASSE BIN POSITION IN CIRCUIT
BO#	BOILER NUMBER
BOAA	BOILER AREA AIRHEATER
BOBA	BOILER AREA BOILER TUBES
BOEA	BOILER AREA ECONOMISER
BOFA	BOILER AREA FURNACE
BOGA	BOILER GRATE AREA
BOGTE	BOILER GRATE TYPE
BOIARR	BOILER SOOT ARRESTOR
BOICO	BOILER COAL FEEDERS?
BOIFD	BOILER FORCED DRAUGHT?
BOIOB	BOILER OIL BURNERS?
BOISTD	BOILER STACK DIAMETER
BOISTH	BOILER STACK HEIGHT
BOMAKE	BOILER MAKE
BOMCR	BOILER MCR
BOPRES	BOILER PRESSURE
BOSA	BOILER AREA SUPERHEATER
BOSHT	BOILER NOMINAL SUPERHEAT
BOSPR	BOILER SPREADER
BOWW	BOILER WATERWALLS?
CAPAC	TRUCK CAPACITY
CDVE	CARRIER DRIVE
CFEED	CARRIER FED FROM
CINCL	CARRIER INCLINATION
CLAREA	CLARIFIER AREA
CLDIA	CLARIFIER DIAMETER
CLEN	CARRIER LENGTH
CLPOS	CLARIFIER POSITION
CLTRAY	CLARIFIER NUMBER OF TRAYS
CLTYPE	CLARIFIER TYPE
CLVOL	CLARIFIER VOLUME
CPOS	CARRIER POSITION
CPWR	CARRIER POWER
CREM	REMARKS
CROPG	PERCENTAGE OF CROP ON GOVT. LINE
CROPP	PERCENTAGE OF CROP ON PRIVATE LINE
CROPR	PERCENTAGE OF CROP ON ROAD
CS#	CRYSTALLIZER NUMBER
CSAREA	CRYSTALLIZER AREA
CSGDE	CRYSTALLIZER GRADE MATERIAL
CSMAKE	CRYSTALLIZER MAKE
CSMODE	CRYSTALLIZER MODE
CSPD.	CARRIER SPEED
CSTYPE	CRYSTALLIZER TYPE
CSVOL	CRYSTALLIZER VOLUME
CTCAP	COOLING TOWER CAPACITY
CTCELL	COOLING TOWER NUMBER OF CELLS

CTPWR	COOLING TOWER FAN POWER
CTTYP	COOLING TOWER TYPE
CTYPE	CARRIER TYPE
CWID	CARRIER WIDTH
DDIA	SUGAR DRYER DIAMETER
DFAN	SUGAR DRYER FAN INSTALLED?
DHTR	SUGAR DRYER HEATER INSTALLED?
DLEN	SUGAR DRYER LENGTH
DLEN	DIFFUSER LENGTH
DMAKE	DIFFUSER MAKE
DPOSN	DIFFUSER POSITION IN TRAIN
DPWR	SUGAR DRYER DRIVE POWER
DPWR	DIFFUSER DRIVE POWER
DRAC	SUGAR DRYER AIR-CONDITIONING?
DSPD	SUGAR DRYER ROTATIONAL SPEED
DSPD	DIFFUSER CARRIER SPEED
DTYPE	SUGAR DRYER TYPE
DWID	DIFFUSER WIDTH
ENG	ENGINE TYPE
ENTRY#	ENTRY NUMBER
EPDM	MAXIMUM DEMAND
EPEXP	EXPORT POWER
EPIC	RATING I.C. GENERATOR SETS
EPIRD	MAXIMUM IRRIGATION DEMAND
EMLD	MAXIMUM LOAD
EPMR	RATING MOTORS
EPRTG	RATING STEAM GENERATOR SETS
EPSUR	SURPLUS POWER
EVAP#	EVAPORATOR NUMBER IN SET
EVBLD	BLEED TO
EVCDIA	EVAP CONDENSER DIAMETER
EVCHGT	EVAP CONDENSER HEIGHT
EVDIA	EVAPORATOR DIAMETER
EVLEN	EVAP TUBE LENGTH
EVMLD	EVAP MATERIAL HEATED
EVOD	EVAP TUBE O.D.
EVSURF	EVAPORATOR HEATING SURFACE
EVTH	EVAP TUBE THICKNESS
FACT#	FACTORY NUMBER
FAREA	FILTER AREA
FH#	HIGH GRADE FUGAL NUMBER
FHAREA	HIGH GRADE FUGAL AREA
FHDEP	HIGH GRADE FUGAL DEPTH
FHDIA	HIGH GRADE FUGAL DIAMETER
FHDVE	HIGH GRADE FUGAL DRIVE
FHMAKE	HIGH GRADE FUGAL MAKE
FHMASS	HIGH GRADE FUGAL MASSECUIITE
FHPWR	HIGH GRADE FUGAL DRIVE POWER
FHSPD	HIGH GRADE FUGAL SPEED
FIL#	FILTER NUMBER

FL#	LOW GRADE FUGAL NUMBER
FLBANG	LOW GRADE FUGAL BASKET ANGLE
FLBIA	LOW GRADE FUGAL SCREEN AREA INCLINED
FLBMAX	LOW GRADE FUGAL BASKET MAXIMUM
FLBMIN	LOW GRADE FUGAL BASKET MINIMUM
FLBVA	LOW GRADE FUGAL SCREEN AREA VERTICAL
FLDEP	LOW GRADE FUGAL DEPTH
FLDIA	LOW GRADE FUGAL DIAMETER
FLMAKE	LOW GRADE FUGAL MAKE
FLMODE	LOW GRADE FUGAL TYPE
FLPWR	LOW GRADE FUGAL DRIVE POWER
FLSPD	LOW GRADE FUGAL SPEED
FTDIA	FLASH TANK DIAMETER
FTHGT	FLASH TANK HEIGHT
FTYPE	FILTER TYPE
GAUGE	LOCOMOTIVE GAUGE
GAUGEL	GAUGE OF LINE
GDE	PAN GRADE - HG OR LG
GS#	GENERATOR SET NUMBER
GSEX	GENERATOR SET PRIME MOVER EXHAUST
GSMAKE	GENERATOR SET MAKE
GSPM	GENERATOR SET PRIME MOVER
GSPR	GENERATOR SET PRIME MOVER PRESSURE
GSRTG	GENERATOR SET RATING
GSSH	GENERATOR SET PRIME MOVER SUPERHEAT
GSSPD	GENERATOR SET PRIME MOVER SPEED
GSVOL	GENERATOR SET VOLTAGE
HTVOL	HOLDING TANK VOLUME
JH#	JUICE HEATER - NUMBER
JHAREA	JUICE HEATER - AREA
JHDIA	JUICE HEATER TUBE DIAMETER
JHHT	JUICE HEATER HEATING MEDIUM
JHLEN	JUICE HEATER TUBE LENGTH
JHMATL	JUICE HEATER TUBE MATERIAL
JHPASS	JUICE HEATER NO OF PASSES
JHTUBE	JUICE HEATER NO. OF TUBES PER PASS
JHUSE	JUICE HEATER - MATERIAL HEATED
JLEN	SCREEN LENGTH
JS#	NUMBER OF SCREENS
JSAPER	SCREEN OPENING
JTTHCK	JUICE HEATER TUBE THICKNESS
JTYPE	JUICE SCREEN TYPE
JWID	SCREEN WIDTH
K2BL#	SECOND KNIVES BLADE NUMBER
K2CLR	SECOND KNIVES CLEARANCE
K2DVE	SECOND KNIVES DRIVE
K2PWR	SECOND KNIVES POWER
K2SPD	SECOND KNIVES SPEED
K2TYPE	SECOND KNIVES TYPE
KBL#	BLADE NUMBER

KCLR	CLEARANCE
KDVE	KNIVES DRIVE
KPWR	KNIVES POWER
KSPD	KNIVES SPEED
KTYPE	KNIFE TYPE
LBL#	NO. OF BLADES
LCLR	LEVELLER CLEARANCE
LDVE	DRIVE TYPE
LOCOS	NO. OF LOCOMOTIVES
LPWR	LEVELLER POWER
LSPD	LEVELLER SPEED
LTYPE	LEVELLER TYPE
MAA	MILL APRON FEEDER DIMENSION A
MAB	MILL APRON FEEDER DIMENSION B
MAC	MILL APRON FEEDER DIMENSION C
MAD	MILL APRON FEEDER DIMENSION D
MAE	MILL APRON FEEDER DIMENSION E
MAGV	VOLUME OF MAGMA STORAGE TANKS
MARL	MILL AVERAGE ROLL LIFT
MASS	LOCOMOTIVE MASS
MCA	MILL CHUTE DIMENSION A
MCB	MILL CHUTE DIMENSION B
MCC	MILL CHUTE DIMENSION C
MCD	MILL CHUTE DIMENSION D
MCLF	MILL CLOSED CHUTE DIMENSION F
MCLG	MILL CLOSED CHUTE DIMENSION G
MCLH	MILL CLOSED CHUTE DIMENSION H
MCLI	MILL CLOSED CHUTE DIMENSION I
MDIA	MILL NOMINAL DIAMETER OF ROLLS
MFRATE	MILL FIBRE RATE USED FOR THESE SETTINGS
MH#	NO. OF MASSECUISTE RE-HEATERS
MHAREA	AREA OF RE-HEATERS
MHJ	MILL HINGED PLATE DIMENSION J
MHK	MILL HINGED PLATE DIMENSION K
MHL	MILL HINGED PLATE DIMENSION L
MHM	MILL HINGED PLATE DIMENSION M
MHR	MILL HYDRAULICS?
MHRL	MILL HYDRAULIC ROLL LOAD
MHRMX	MILL MAXIMUM LIFT OF TOP ROLL
MHTYPE	RE-HEATER TYPE
MILL#	MILL NUMBER (POSITION IN TRAIN)
MJDD	MILL DEL JUICE ROLL GROOVES DEPTH
MJDP	MILL DEL JUICE ROLL GROOVES PITCH
MJDW	MILL DEL JUICE ROLL GROOVES WIDTH
MJFD	MILL FEED JUICE ROLL GROOVES DEPTH
MJFP	MILL FEED JUICE ROLL GROOVES PITCH
MJFW	MILL FEED JUICE ROLL GROOVES WIDTH
MLEN	MILL NOMINAL LENGTH OF ROLLS
MOA	MILL OVER-FEED ROLL DIMENSION A
MOB	MILL OVER-FEED ROLL DIMENSION B

MOC MILL OVER-FEED ROLL DIMENSION C
MOD MILL OVER-FEED ROLL DIMENSION D
MODA MILL DELIVERY ROLL GROOVES ANGLE
MODD MILL DELIVERY ROLL GROOVES DEPTH
MODP MILL DELIVERY ROLL GROOVES PITCH
MOFA MILL FEED ROLL GROOVES ANGLE
MOFD MILL FEED ROLL GROOVES DEPTH
MOFP MILL FEED ROLL GROOVES PITCH
MOLVA VOLUME OF A MOLASSES STORAGE TANKS
MOLVB VOLUME OF B MOLASSES STORAGE TANKS
MOTA MILL TOP ROLL GROOVES ANGLE
MOTD MILL TOP ROLL GROOVES DEPTH
MOTP MILL TOP ROLL GROOVES PITCH
MPA PRESSURE FEEDER DIMENSION A
MPB PRESSURE FEEDER DIMENSION B
MPC PRESSURE FEEDER DIMENSION C
MPD PRESSURE FEEDER DIMENSION D
MPDR PRESSURE FEEDER DRIVE TYPE
MPE PRESSURE FEEDER DIMENSION E
MPF PRESSURE FEEDER DIMENSION F
MPGR PRESSURE FEEDER TO MILL GEAR RATIO
MPWO PRESSURE FEEDER WORK OPENING
MSOD MILL SET OPENING DELIVERY
MSOF MILL SET OPENING FEED
MSPD MILL PERIPHERAL SPEED OF TOP ROLL
MTDIA MILL TOP ROLL DIAMETER
MTPH MILL TRASH PLATE OPENING HEEL
MTPT MILL TRASH PLATE OPENING TOE
MTPWR MILL TURBINE SPEED
MTSPD MILL TURBINE SPEED
MUA MILL UNDERFEED ROLL DIMENSION A
MUB MILL UNDERFEED ROLL DIMENSION B
MUC MILL UNDERFEED ROLL DIMENSION C
MUD MILL UNDERFEED ROLL DIMENSION D
MUE MILL UNDERFEED ROLL DIMENSION E
MUROLL MILL UNDERFEED ROLL TYPE
MWOD MILL WORK OPENING DELIVERY
MWOF MILL WORK OPENING FEED
NAME FACTORY NAME
P# PAN REF #
PCDIA PAN CONDENSER DIAMETER
PCHGT PAN CONDENSER LENGTH
PDIA PAN DIAMETER
PFJLD PRESSURE FEEDER LOWER ROLL JUICE GVES DEPTH
PFJLP PRESSURE FEEDER LOWER ROLL JUICE GVES PITCH
PFJLW PRESSURE FEEDER LOWER ROLL JUICE GVES WIDTH
PFJUD PRESSURE FEEDER UPPER ROLL JUICE GVES DEPTH
PFJUP PRESSURE FEEDER UPPER ROLL JUICE GVES PITCH
PFJUW PRESSURE FEEDER UPPER ROLL JUICE GVES WIDTH
PFOLA PRESSURE FEEDER LOWER ROLL GROOVES ANGLE

PFOLD PRESSURE FEEDER LOWER ROLL GROOVES DEPTH
PFOLP PRESSURE FEEDER LOWER ROLL GROOVES PITCH
PFOUA PRESSURE FEEDER UPPER ROLL GROOVES ANGLE
PFOUD PRESSURE FEEDER UPPER ROLL GROOVES DEPTH
PFOUP PRESSURE FEEDER UPPER ROLL GROOVES PITCH
PMATL PAN MATERIAL
POWER ENGINE POWER
PRAT PAN SURFACE/VOLUME RATIO
PSTSP PAN STIRRER SPEED
PSURF PAN SURFACE AREA
PTYPE PAN TYPE
PVOL PAN VOLUME
RHAMP RESISTANCE HEATER CURRENT
RHDIA RESISTANCE HEATER DIAMETER
RHVLT RESISTANCE HEATER VOLTAGE
SB# SUGAR BIN NUMBER
SBCAP SUGAR BIN CAPACITY
SBTOT SUGAR BIN TOTAL CAPACITY
SCLEAR SHREDDER TIP CLEARANCE
SDIA SHREDDER DIAMETER
SDVE SHREDDER DRIVE
SHAM# SHREDDER HAMMER NUMBER
SLEN SHREDDER LENGTH
SMASS SHREDDER HAMMER MASS
SPAREA BAGASSE SEPARATOR AREA
SPHGT BAGASSE SEPARATOR SCREEN HEIGHT
SPOP BAGASSE SEPARATOR SCREEN OPENING
SPPWR BAGASSE SEPARATOR DRIVE POWER
SPTYPE BAGASSE SEPARATOR TYPE
SPWDTH BAGASSE SEPARATOR SCREEN WIDTH
SPWR SHREDDER POWER
SSPD SHREDDER SPEED
SSTMP SHREDDER STEAM PRESSURE
STYPE SHREDDER TYPE
SYRUPV VOLUME OF SYRUP STORAGE TANKS
TGauge TRUCK GAUGE
TRAIN# TRAIN NUMBER (A OR B)
TRAML LENGTH OF TRAMLINE
TRUCK TRUCK TYPE
TRUCK# TRUCK NUMBER
TYPE LOCOMOTIVE TYPE
VBORE VACUUM PUMP CYLINDER BORE
VCYL# VACUUM PUMP NO. OF CYLINDERS
VDISPL VACUUM PUMP DISPLACEMENT
VLEN VACUUM PUMP STROKE
VMAKE VACUUM PUMP MAKE
VP# VACUUM PUMP NUMBER
VPWR VACUUM PUMP POWER
VSPD VACUUM PUMP SPEED
VTYPE VACUUM PUMP TYPE

VUSE

VACUUM PUMP USE

APPENDIX B: DATA-BASE SCHEMA.

* &PL79A(PLANT1) * 2:25 PM WED., 29 APR., 1981 * 1*

1 \$CONTROL: NOLIST, FIELD, ERRORS=10, ROOT, SET, TABLE;

2 BEGIN DATA BASE: PLANT1: GD: 19;

3 LEVELS;;

4 ITEMS:

5 FACT#, I1;	<<	FACTORY NUMBER	>>
6 NAME, X16;	<<	FACTORY NAME	>>
7 TRAIN#, X2;	<<	TRAIN NUMBER (A OR B)	>>
8 MILL#, I1;	<<	MILL NUMBER (POSITION IN TRAIN)	>>
9 ENTRY#, I1;	<<	ENTRY NUMBER	>>
10 LOCOS, I1;	<<	NO. OF LOCOMOTIVES	>>
11 TYPE, X8;	<<	LOCOMOTIVE TYPE	>>
12 ENG, X8;	<<	ENGINE TYPE	>>
13 POWER, I1;	<<	ENGINE POWER	>>
14 MASS, I1;	<<	LOCOMOTIVE MASS	>>
15 GAUGE, I1;	<<	LOCOMOTIVE GAUGE	>>
16 TRUCK, X16;	<<	TRUCK TYPE	>>
17 TRUCK#, I1;	<<	TRUCK NUMBER	>>
18 CAPAC, I1;	<<	TRUCK CAPACITY	>>
19 TGauge, I1;	<<	TRUCK GAUGE	>>
20 TRAML, I1;	<<	LENGTH OF TRAMLINE	>>
21 GAUGEL, I1;	<<	GAUGE OF LINE	>>
22 CROPP, I1;	<<	PERCENTAGE OF CROP ON PRIVATE LINE	>>
23 CROPG, I1;	<<	PERCENTAGE OF CROP ON GOVT. LINE	>>
24 CROPR, I1;	<<	PERCENTAGE OF CROP ON ROAD	>>
25 CPOS, X16;	<<	CARRIER POSITION	>>
26 CTYPE, X32;	<<	CARRIER TYPE	>>
27 CLEN, I1;	<<	CARRIER LENGTH	>>
28 CWID, I1;	<<	CARRIER WIDTH	>>
29 CINCL, I1;	<<	CARRIER INCLINATION	>>
30 CSPD, I1;	<<	CARRIER SPEED	>>
31 CDVE, X16;	<<	CARRIER DRIVE	>>
32 CPWR, I1;	<<	CARRIER POWER	>>
33 CFEED, X16;	<<	CARRIER FED FROM	>>
34 CREM, X30;	<<	REMARKS	>>
35 LTYPE, X10;	<<	LEVELLER TYPE	>>
36 LBL#, I1;	<<	NO. OF BLADES	>>
37 LCLR, I1;	<<	LEVELLER CLEARANCE	>>
38 LSPD, I1;	<<	LEVELLER SPEED	>>
39 LDVE, X10;	<<	DRIVE TYPE	>>
40 LPWR, I1;	<<	LEVELLER POWER	>>
41 KTYPE, X10;	<<	KNIFE TYPE	>>
42 KBL#, I1;	<<	BLADE NUMBER	>>
43 KCLR, I1;	<<	CLEARANCE	>>
44 KSPD, I1;	<<	KNIVES SPEED	>>
45 KDVE, X10;	<<	KNIVES DRIVE	>>
46 KPWR, I1;	<<	KNIVES POWER	>>
47 K2TYPE, X10;	<<	SECOND KNIVES TYPE	>>
48 K2BL#, I1;	<<	SECOND KNIVES BLADE NUMBER	>>
49 K2CLR, I1;	<<	SECOND KNIVES CLEARANCE	>>
50 K2SPD, I1;	<<	SECOND KNIVES SPEED	>>

* &PL79A(PLANT1) * 2:36 PM WED., 29 APR., 1981 * 2*

51	K2DVE, X10;	<<	SECOND KNIVES DRIVE	>>
52	K2PWR, I1 ;	<<	SECOND KNIVES POWER	>>
53	STYPE, X12;	<<	SHREDDER TYPE	>>
54	SDIA, I1;	<<	SHREDDER DIAMETER	>>
55	SLEN, I1;	<<	SHREDDER LENGTH	>>
56	SCLEAR, I1;	<<	SHREDDER TIP CLEARANCE	>>
57	SSPD, I1;	<<	SHREDDER SPEED	>>
58	SMASS, I1;	<<	SHREDDER HAMMER MASS	>>
59	SDVE, X10;	<<	SHREDDER DRIVE	>>
60	SSTMP, I1;	<<	SHREDDER STEAM PRESSURE	>>
61	SSTM, I1;	<<	SHREDDER STEAM TEMPERATURE	>>
62	SPWR, I1;	<<	SHREDDER POWER	>>
63	MDIA , I1;	<<	MILL NOMINAL DIAMETER OF ROLLS	>>
64	MLEN , I1;	<<	MILL NOMINAL LENGTH OF ROLLS	>>
65	MSPD , I1;	<<	MILL PERIPHERAL SPEED OF TOP ROLL	>>
66	MHR , X4;	<<	MILL HYDRAULICS?	>>
67	MHRL , I1;	<<	MILL HYDRAULIC ROLL LOAD	>>
68	MSOF , I1;	<<	MILL SET OPENING FEED	>>
69	MSOD , I1;	<<	MILL SET OPENING DELIVERY	>>
70	MARL , I1;	<<	MILL AVERAGE ROLL LIFT	>>
71	MWOF , I1;	<<	MILL WORK OPENING FEED	>>
72	MWOD , I1;	<<	MILL WORK OPENING DELIVERY	>>
73	MRAT , I1;	<<	MILL RATIO	>>
74	MHRMX, I1;	<<	MILL MAXIMUM LIFT OF TOP ROLL	>>
75	MTPT , I1;	<<	MILL TRASH PLATE OPENING TOE	>>
76	MTPH , I1;	<<	MILL TRASH PLATE OPENING HEEL	>>
77	MOTP , I1;	<<	MILL TOP ROLL GROOVES PITCH	>>
78	MOTD , I1;	<<	MILL TOP ROLL GROOVES DEPTH	>>
79	MOTA , I1;	<<	MILL TOP ROLL GROOVES ANGLE	>>
80	MOFP , I1;	<<	MILL FEED ROLL GROOVES PITCH	>>
81	MOFD , I1;	<<	MILL FEED ROLL GROOVES DEPTH	>>
82	MOFA , I1;	<<	MILL FEED ROLL GROOVES ANGLE	>>
83	MODP , I1;	<<	MILL DELIVERY ROLL GROOVES PITCH	>>
84	MODD , I1;	<<	MILL DELIVERY ROLL GROOVES DEPTH	>>
85	MODA , I1;	<<	MILL DELIVERY ROLL GROOVES ANGLE	>>
86	MJTP , I1;	<<	MILL TOP JUICE ROLL GROOVES PITCH	>>
87	MJTD , I1;	<<	MILL TOP JUICE ROLL GROOVES DEPTH	>>
88	MJTW , I1;	<<	MILL TOP JUICE ROLL GROOVES WIDTH	>>
89	MJFP , I1;	<<	MILL FEED JUICE ROLL GROOVES PITCH	>>
90	MJFD , I1;	<<	MILL FEED JUICE ROLL GROOVES DEPTH	>>
91	MJFW , I1;	<<	MILL FEED JUICE ROLL GROOVES WIDTH	>>
92	MFRATE, I1;	<<	MILL FIBRE RATE USED FOR THESE SETTINGS	>>
93	MCA, I1;	<<	MILL CHUTE DIMENSION A	>>
94	MCB, I1;	<<	MILL CHUTE DIMENSION B	>>
95	MCC, I1;	<<	MILL CHUTE DIMENSION C	>>
96	MCD, I1;	<<	MILL CHUTE DIMENSION D	>>
97	MPA, I1;	<<	PRESSURE FEEDER DIMENSION A	>>
98	MPB, I1;	<<	PRESSURE FEEDER DIMENSION B	>>
99	MPC, I1;	<<	PRESSURE FEEDER DIMENSION C	>>
100	MPD, I1;	<<	PRESSURE FEEDER DIMENSION D	>>

* &PL79A(PLANT1) * 2:47 PM WED., 29 APR., 1981 * 3*

101	MPE,I1;	<<	PRESSURE FEEDER DIMENSION E	>>
102	MPF,I1;	<<	PRESSURE FEEDER DIMENSION F	>>
103	MPWO,I1;	<<	PRESSURE FEEDER WORK OPENING	>>
104	MPGR,I1;	<<	PRESSURE FEEDER TO MILL GEAR RATIO	>>
105	MPDR,X6;	<<	PRESSURE FEEDER DRIVE TYPE	>>
106	MAA,I1;	<<	MILL APRON FEEDER DIMENSION A	>>
107	MAB,I1;	<<	MILL APRON FEEDER DIMENSION B	>>
108	MAC,I1;	<<	MILL APRON FEEDER DIMENSION C	>>
109	MAD,I1;	<<	MILL APRON FEEDER DIMENSION D	>>
110	MAE,I1;	<<	MILL APRON FEEDER DIMENSION E	>>
111	MOA,I1;	<<	MILL OVER-FEED ROLL DIMENSION A	>>
112	MOB,I1;	<<	MILL OVER-FEED ROLL DIMENSION B	>>
113	MOC,I1;	<<	MILL OVER-FEED ROLL DIMENSION C	>>
114	MOD,I1;	<<	MILL OVER-FEED ROLL DIMENSION D	>>
115	MUA,I1;	<<	MILL UNDERFEED ROLL DIMENSION A	>>
116	MUB,I1;	<<	MILL UNDERFEED ROLL DIMENSION B	>>
117	MUC,I1;	<<	MILL UNDERFEED ROLL DIMENSION C	>>
118	MUD,I1;	<<	MILL UNDERFEED ROLL DIMENSION D	>>
119	MUE,I1;	<<	MILL UNDERFEED ROLL DIMENSION E	>>
120	MUROLL,X4;	<<	MILL UNDERFEED ROLL TYPE	>>
121	MCLF,I1;	<<	MILL CLOSED CHUTE DIMENSION F	>>
122	MCLG,I1;	<<	MILL CLOSED CHUTE DIMENSION G	>>
123	MCLH,I1;	<<	MILL CLOSED CHUTE DIMENSION H	>>
124	MCLI,I1;	<<	MILL CLOSED CHUTE DIMENSION I	>>
125	MHJ,I1;	<<	MILL HINGED PLATE DIMENSION J	>>
126	MHK,I1;	<<	MILL HINGED PLATE DIMENSION K	>>
127	MHL,I1;	<<	MILL HINGED PLATE DIMENSION L	>>
128	MHM,I1;	<<	MILL HINGED PLATE DIMENSION M	>>
129	PFOUP,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES PITCH	>>
130	PFOUD,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES DEPTH	>>
131	PFOUA,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES ANGLE	>>
132	PFJUP,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES PITCH	>>
133	PFJUD,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES DEPTH	>>
134	PFJUW,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES WIDTH	>>
135	PFOLP,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES PITCH	>>
136	PFOLD,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES DEPTH	>>
137	PFOLA,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES ANGLE	>>
138	PFJLP,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES PITCH	>>
139	PFJLD,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES DEPTH	>>
140	PFJLW,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES WIDTH	>>
141	DMAKE,X12;	<<	DIFFUSER MAKE	>>
142	DWID,I1;	<<	DIFFUSER WIDTH	>>
143	DLEN,I1;	<<	DIFFUSER LENGTH	>>
144	DSPD,I1;	<<	DIFFUSER CARRIER SPEED	>>
145	DPWR,I1;	<<	DIFFUSER DRIVE POWER	>>
146	DPOSN,X24;	<<	DIFFUSER POSITION IN TRAIN	>>
147	JTYPE,X16;	<<	JUICE SCREEN TYPE	>>
148	JS#,I1;	<<	NUMBER OF SCREENS	>>
149	JLEN,I1;	<<	SCREEN LENGTH	>>
150	JWID,I1;	<<	SCREEN WIDTH	>>

* &PL79A(PLANT1) * 3:02 PM WED., 29 APR., 1981 * 4*

151	JSAPER, I1;	<<	SCREEN OPENING	>>
152	HTVOL, I1;	<<	HOLDING TANK VOLUME	>>
153	FTDIA, I1;	<<	FLASH TANK DIAMETER	>>
154	FTHGT, I1;	<<	FLASH TANK HEIGHT	>>
155	JH#, I1;	<<	JUICE HEATER - NUMBER	>>
156	JHUSE, X16;	<<	JUICE HEATER - MATERIAL HEATED	>>
157	JHAREA, I1;	<<	JUICE HEATER - AREA	>>
158	JHHT, X16;	<<	JUICE HEATER HEATING MEDIUM	>>
159	JHPASS, I1;	<<	JUICE HEATER NO OF PASSES	>>
160	JHTUBE, I1;	<<	JUICE HEATER NO. OF TUBES PER PASS	>>
161	JHLEN, I1;	<<	JUICE HEATER TUBE LENGTH	>>
162	JHDIA, I1;	<<	JUICE HEATER TUBE DIAMETER	>>
163	JHMATL, X10;	<<	JUICE HEATER TUBE MATERIAL	>>
164	JTTHCK, I1;	<<	JUICE HEATER TUBE THICKNESS	>>
165	CLPOS, X12;	<<	CLARIFIER POSITION	>>
166	CLTYPE, X12;	<<	CLARIFIER TYPE	>>
167	CLTRAY, I1;	<<	CLARIFIER NUMBER OF TRAYS	>>
168	CLDIA, I1;	<<	CLARIFIER DIAMETER	>>
169	CLAREA, I1;	<<	CLARIFIER AREA	>>
170	CLVOL, I1;	<<	CLARIFIER VOLUME	>>
171	FTYPE, X16;	<<	FILTER TYPE	>>
172	FIL#, I1;	<<	FILTER NUMBER	>>
173	FAREA, I1;	<<	FILTER AREA	>>
174	SPTYPE, X12;	<<	BAGASSE SEPARATOR TYPE	>>
175	SPAREA, I1;	<<	BAGASSE SEPARATOR AREA	>>
176	SPPOP, I1;	<<	BAGASSE SEPARATOR SCREEN OPENING	>>
177	SPWDTH, I1;	<<	BAGASSE SEPARATOR SCREEN WIDTH	>>
178	SPHGT, I1;	<<	BAGASSE SEPARATOR SCREEN HEIGHT	>>
179	SPPWR, I1;	<<	BAGASSE SEPARATOR DRIVE POWER	>>
180	EVAP#, I1;	<<	EVAPORATOR NUMBER IN SET	>>
181	EVDIA, I1;	<<	EVAPORATOR DIAMETER	>>
182	EVSURF, I1;	<<	EVAPORATOR HEATING SURFACE	>>
183	EVLEN, I1;	<<	EVAP TUBE LENGTH	>>
184	EVMATL, X10;	<<	EVAP MATERIAL HEATED	>>
185	EVOD, I1;	<<	EVAP TUBE O.D.	>>
186	EVTH, I1;	<<	EVAP TUBE THICKNESS	>>
187	EVCDIA, I1;	<<	EVAP CONDENSER DIAMETER	>>
188	EVCHGT, I1;	<<	EVAP CONDENSER HEIGHT	>>
189	EVBLD, X12;	<<	BLEED TO	>>
190	SETS:			
191	<<			>>
192	<<		FACTORY NAMES	>>
193	<<			>>
194	NAME:		NAMES: 19, M:	
195	ENTRY:		FACT#(13),	
196			NAME:	
197	CAPACITY:		35,	
198	<<			>>
199	<<		MILL NUMBERS - AUTOMATIC MASTER	>>
200	<<			>>

* &PL79A(PLANT1) * 3:13 PM WED., 29 APR., 1981 * 5*

201 NAME: NUMBS: 19, A;
202 ENTRY: MILL#(3);
203 CAPACITY: 6;
204 << >>
205 << TRAIN NUMBER - AUTOMATIC MASTER >>
206 << >>
207 NAME: TRAINS: 19, A;
208 ENTRY: TRAIN#(8);
209 CAPACITY: 2;
210 << >>
211 << EVAPORATOR NUMBER - AUTOMATIC MASTER >>
212 << >>
213 NAME: EVAPS: 19, A;
214 ENTRY: ENTRY#(1);
215 CAPACITY: 7;
216 << >>
217 << ITEM ENTRY - AUTOMATIC MASTER >>
218 << >>
219 NAME: ENTRYs: 19, A;
220 ENTRY: ENTRY#(9);
221 CAPACITY: 10;
222 << >>
223 << >>
224 <<----- DETAIL DATA SETS ----->>
225 << >>
226 << >>
227 << TRANSPORT INFORMATION >>
228 << >>
229 NAME: TRANS: 19, D;
230 ENTRY:
231 FACT#(NAMES),
232 ENTRY#(ENTRYs),
233 LOCOS,
234 TYPE,
235 ENG,
236 POWER,
237 MASS,
238 GAUGE,
239 TRUCK,
240 TRUCK#,
241 CAPAC,
242 TGauge,
243 TRAML,
244 GAUGEL,
245 CROPP,
246 CROPG,
247 CROPR;
248 CAPACITY: 175;
249 << >>
250 << CARRIER DATA >>

* &PL79A(PLANT1) * 1:58 PM FRI., 29 MAY , 1981 * 8*

351 << >>
352 << MILL FEEDING DEVICES >>
353 << >>
354 NAME: FEEDS: 19, D;
355 ENTRY:
356 FACT#(NAMES),
357 TRAIN#(TRAINS),
358 MILL#(NUMBS),
359 MCA,
360 MCB,
361 MCC,
362 MCD,
363 MPA,
364 MPB,
365 MPC,
366 MPD,
367 MPE,
368 MPF,
369 MPWO,
370 MPGR,
371 MPDR,
372 MAA,
373 MAB,
374 MAC,
375 MAD,
376 MAE,
377 MOA,
378 MOB,
379 MOC,
380 MOD,
381 MUA,
382 MUB,
383 MUC,
384 MUD,
385 MUE,
386 MUROLL,
387 MCLF,
388 MCLG,
389 MCLH,
390 MCLI,
391 MHJ,
392 MHK,
393 MHL,
394 MHM;
395 CAPACITY: 175;
396 << >>
397 << PRESSURE FEEDER GROOVING >>
398 << >>
399 NAME: PRESS: 19, D;
400 ENTRY:

* &PL79A(PLANT1) * 2:02 PM FRI., 29 MAY 1981 * 9*

401 FACT#(NAMES),
402 TRAIN#(TRAINS),
403 MILL#(NUMBS),
404 PFOUP,
405 PFOUD,
406 PFOUA,
407 PFJUP,
408 PFJUD,
409 PFJUW,
410 PFOLP,
411 PFOLD,
412 PFOLA,
413 PFJLP,
414 PFJLD,
415 PFJLW,
416 CAPACITY: 175;
417 << >>
418 << DIFFUSER DATA >>
419 << >>
420 NAME: DIFFUS: 19, D;
421 ENTRY: >>
422 FACT#(NAMES),
423 TRAIN#(TRAINS),
424 ENTRY#(ENTRYS),
425 DMAKE,
426 DWID,
427 DLEN,
428 DSPD,
429 DPWR,
430 DPOSN;
431 CAPACITY: 35;
432 << >>
433 << JUICE SCREENS >>
434 << >>
435 NAME: SCREEN: 19, D;
436 ENTRY: >>
437 FACT#(NAMES),
438 ENTRY#(ENTRYS),
439 JTYPE,
440 JS#,
441 JLEN,
442 JWID,
443 JSAPER,
444 HTVOL,
445 FTDIA,
446 FTHGT;
447 CAPACITY: 100;
448 << >>
449 << JUICE HEATER DATA >>
450 << >>

* &PL79A(PLANT1) * 2:08 PM FRI., 29 MAY , 1981 *10*

451 NAME: HEATER: 19, D;
452 ENTRY:
453 FACT#(NAMES),
454 ENTRY#(ENTRYS),
455 JH#,
456 JHUSE,
457 JHAREA,
458 JHHT,
459 JHPASS,
460 JHTUBE,
461 JHLEN,
462 JHDIA,
463 JHMATL,
464 JTTHCK;
465 CAPACITY: 150;
466 << >>
467 << CLARIFIER DATA >>
468 << >>
469 NAME: CLARIF: 19, D;
470 ENTRY:
471 FACT#(NAMES),
472 ENTRY#(ENTRYS),
473 CLPOS,
474 CLTYPE,
475 CLTRAY,
476 CLDIA,
477 CLAREA,
478 CLVOL,
479 << >>
480 << FILTERS >>
481 << >>
482 FTTYPE,
483 FIL#,
484 FAREA;
485 CAPACITY: 140;
486 << >>
487 << BAGASSE SEPARATOR DATA >>
488 << >>
489 NAME: SEPAR: 19, D;
490 ENTRY:
491 FACT#(NAMES),
492 ENTRY#(ENTRYS),
493 SPTYPE,
494 SPAREA,
495 SPOP,
496 SPWDTH,
497 SPHGT,
498 SPPWR;
499 CAPACITY: 105;
500 << >>

* &PL79A(PLANT1) * 2:13 PM FRI., 29 MAY , 1981 *11*

501 << EVAPORATING PLANT >>
502 << >>
503 NAME: EVAP# 19, D;
504 ENTRY: FACT#(NAMES),
505 TRAIN#(TRAINS),
507 EVAP#(EVAPS),
508 ENTRY#(ENTRYS),
509 EVDIA,
510 EVSURF,
511 EVLEN,
512 EVMATL,
513 EVOD,
514 EVTH,
515 EVCDIA,
516 EVCHGT,
517 EVBLD;
518 CAPACITY: 600;
519 END.

* &PL79B(PLANT1) * 6:07 PM WED., 6 MAY , 1981 * 1*

1 \$CONTROL: FIELD, NOLIST, ERRORS=10, ROOT, SET, TABLE;

2 BEGIN DATA BASE: PLANT2: GD: 19;

3 LEVELS:;

4 ITEMS:;

5	FACT#, I1;	<<	FACTORY NUMBER	>>
6	NAME, X16;	<<	FACTORY NAME	>>
7	ENTRY#, I1;	<<	ENTRY NUMBER	>>
8	GDE, X2;	<<	PAN GRADE - HG OR LG	>>
9	PTYPE, X18;	<<	PAN TYPE	>>
10	P#, I1;	<<	PAN REF #	>>
11	PMATL, X12;	<<	PAN MATERIAL	>>
12	PDIA, I1;	<<	PAN DIAMETER	>>
13	PVOL, I1;	<<	PAN VOLUME	>>
14	PSURF, I1;	<<	PAN SURFACE AREA	>>
15	PSTSP, I1;	<<	PAN STIRRER SPEED	>>
16	PRAT, I1;	<<	PAN SURFACE/VOLUME RATIO	>>
17	PCDIA, I1;	<<	PAN CONDENSER DIAMETER	>>
18	PCHGT, I1;	<<	PAN CONDENSER LENGTH	>>
19	SYRUPV, I1;	<<	VOLUME OF SYRUP STORAGE TANKS	>>
20	MOLVA, I1;	<<	VOLUME OF A MOLASSES STORAGE TANKS	>>
21	MOLVB, I1;	<<	VOLUME OF B MOLASSES STORAGE TANKS	>>
22	MAGV, I1;	<<	VOLUME OF MAGMA STORAGE TANKS	>>
23	MH#, I1;	<<	NO. OF MASSECUISTE RE-HEATERS	>>
24	MHAREA, I1;	<<	AREA OF RE-HEATERS	>>
25	MHTYPE, X16;	<<	RE-HEATER TYPE	>>
26	RHDIA, I1;	<<	RESISTANCE HEATER DIAMETER	>>
27	RHVLT, I1;	<<	RESISTANCE HEATER VOLTAGE	>>
28	RHAMP, I1;	<<	RESISTANCE HEATER CURRENT	>>
29	VP#, I1;	<<	VACUUM PUMP NUMBER	>>
30	VMAKE, X16;	<<	VACUUM PUMP MAKE	>>
31	VCYL#, X8;	<<	VACUUM PUMP NO. OF CYLINDERS	>>
32	VBORE, I1;	<<	VACUUM PUMP CYLINDER BORE	>>
33	VLEN, I1;	<<	VACUUM PUMP STROKE	>>
34	VDISPL, I1;	<<	VACUUM PUMP DISPLACEMENT	>>
35	VTYPE, X8;	<<	VACUUM PUMP TYPE	>>
36	VSPD, I1;	<<	VACUUM PUMP SPEED	>>
37	VPWR, I1;	<<	VACUUM PUMP POWER	>>
38	VUSE, X36;	<<	VACUUM PUMP USE	>>
39	CSMAKE, X20;	<<	CRYSTALLIZER MAKE	>>
40	CSGDE, X4;	<<	CRYSTALLIZER GRADE MATERIAL	>>
41	CS#, I1;	<<	CRYSTALLIZER NUMBER	>>
42	CSVOL, I1;	<<	CRYSTALLIZER VOLUME	>>
43	CSTYPE, X14;	<<	CRYSTALLIZER TYPE	>>
44	CSAREA, I1;	<<	CRYSTALLIZER AREA	>>
45	CSMODE, X10;	<<	CRYSTALLIZER MODE	>>
46	FHMAKE, X12;	<<	HIGH GRADE FUGAL MAKE	>>
47	FH#, I1;	<<	HIGH GRADE FUGAL NUMBER	>>
48	FHMASS, X4;	<<	HIGH GRADE FUGAL MASSECUISTE	>>
49	FHSPD, I1;	<<	HIGH GRADE FUGAL SPEED	>>
50	FHDIA, I1;	<<	HIGH GRADE FUGAL DIAMETER	>>

* &PL79B(PLANT1) * 6:18 PM WED., 6 MAY , 1981 * 2*

51	FHDEP , I1;	<<	HIGH GRADE FUGAL DEPTH	>>
52	FHAREA, I1;	<<	HIGH GRADE FUGAL AREA	>>
53	FHDVE , X2;	<<	HIGH GRADE FUGAL DRIVE	>>
54	FHPWR , I1;	<<	HIGH GRADE FUGAL DRIVE POWER	>>
55	FLMAKE, X16;	<<	LOW GRADE FUGAL MAKE	>>
56	FLMODE, X12;	<<	LOW GRADE FUGAL TYPE	>>
57	FL# , I1;	<<	LOW GRADE FUGAL NUMBER	>>
58	FLSPD, I1;	<<	LOW GRADE FUGAL SPEED	>>
59	FLDIA, I1;	<<	LOW GRADE FUGAL DIAMETER	>>
60	FLDEP, I1;	<<	LOW GRADE FUGAL DEPTH	>>
61	FLBMAX, I1;	<<	LOW GRADE FUGAL BASKET MAXIMUM	>>
62	FLBMIN, I1;	<<	LOW GRADE FUGAL BASKET MINIMUM	>>
63	FLBANG, I1;	<<	LOW GRADE FUGAL BASKET ANGLE	>>
64	FLBVA , I1;	<<	LOW GRADE FUGAL SCREEN AREA VERTICAL	>>
65	FLBIA , I1;	<<	LOW GRADE FUGAL SCREEN AREA INCLINED	>>
66	FLPWR , I1;	<<	LOW GRADE FUGAL DRIVE POWER	>>
67	DTYPE, X16;	<<	SUGAR DRYER TYPE	>>
68	DLEN, I1;	<<	SUGAR DRYER LENGTH	>>
69	DDIA, I1;	<<	SUGAR DRYER DIAMETER	>>
70	DSPD, I1;	<<	SUGAR DRYER ROTATIONAL SPEED	>>
71	DPWR, I1;	<<	SUGAR DRYER DRIVE POWER	>>
72	DFAN, X4;	<<	SUGAR DRYER FAN INSTALLED?	>>
73	DHTR, X4;	<<	SUGAR DRYER HEATER INSTALLED?	>>
74	DRAC, X4;	<<	SUGAR DRYER AIR-CONDITIONING?	>>
75	SB#, I1;	<<	SUGAR BIN NUMBER	>>
76	SBCAP, I1;	<<	SUGAR BIN CAPACITY	>>
77	SBTOT, I1;	<<	SUGAR BIN TOTAL CAPACITY	>>
78	BOMAKE, X16;	<<	BOILER MAKE	>>
79	BO#, I1;	<<	BOILER NUMBER	>>
80	BOPRES, I1;	<<	BOILER PRESSURE	>>
81	BOMCR , I1;	<<	BOILER MCR	>>
82	BOSHT , I1;	<<	BOILER NOMINAL SUPERHEAT	>>
83	BOBA , I1;	<<	BOILER AREA BOILER TUBES	>>
84	BOFA , I1;	<<	BOILER AREA FURNACE	>>
85	BOSA , I1;	<<	BOILER AREA SUPERHEATER	>>
86	BOAA , I1;	<<	BOILER AREA AIRHEATER	>>
87	BOEA , I1;	<<	BOILER AREA ECONOMISER	>>
88	BOGTE, X24;	<<	BOILER GRATE TYPE	>>
89	BOGA , I1;	<<	BOILER GRATE AREA	>>
90	BOWW , X4;	<<	BOILER WATERWALLS?	>>
91	BOSPR , X4;	<<	BOILER SPREADER	>>
92	BOIOB , X4;	<<	BOILER OIL BURNERS?	>>
93	BOICO , X4;	<<	BOILER COAL FEEDERS?	>>
94	BOIFD , X4;	<<	BOILER FORCED DRAUGHT?	>>
95	BOIARR, X18;	<<	BOILER SOOT ARRESTOR	>>
96	BOISTD, I1;	<<	BOILER STACK DIAMETER	>>
97	BOISTH, I1;	<<	BOILER STACK HEIGHT	>>
98	BGBIN, X12;	<<	BAGASSE BIN TYPE	>>
99	BGCAP, I1;	<<	BAGASSE BIN CAPACITY	>>
100	BGP0S, X8;	<<	BAGASSE BIN POSITION IN CIRCUIT	>>

* &PL79B(PLANT1) * 6:30 PM WED., 6 MAY , 1981 * 3*

101 CTTYP,X18; << COOLING TOWER TYPE >>
102 CTCELL,I1; << COOLING TOWER NUMBER OF CELLS >>
103 CTCAP,I1; << COOLING TOWER CAPACITY >>
104 CTPWR,I1; << COOLING TOWER FAN POWER >>
105 EPRTG,I1; << RATING STEAM GENERATOR SETS >>
106 EPIC,I1; << RATING I.C. GENERATOR SETS >>
107 EPMR,I1; << RATING MOTORS >>
108 EPMLD,I1; << MAXIMUM LOAD >>
109 EPDMD,I1; << MAXIMUM DEMAND >>
110 EPIRD,I1; << MAXIMUM IRRIGATION DEMAND >>
111 EPEXP,I1; << EXPORT POWER >>
112 EPSUR,I1; << SURPLUS POWER >>
113 GSMAKE,X14; << GENERATOR SET MAKE >>
114 GS#,I1; << GENERATOR SET NUMBER >>
115 GSRTG,I1; << GENERATOR SET RATING >>
116 GS VOL,I1; << GENERATOR SET VOLTAGE >>
117 GSPM,X14; << GENERATOR SET PRIME MOVER >>
118 GSSPD,I1; << GENERATOR SET PRIME MOVER SPEED >>
119 GSPR,I1; << GENERATOR SET PRIME MOVER PRESSURE >>
120 GSSH,I1; << GENERATOR SET PRIME MOVER SUPERHEAT >>
121 GSEX,I1; << GENERATOR SET PRIME MOVER EXHAUST >>
122 SETS:
123 << >>
124 << FACTORY NAMES >>
125 << >>
126 NAME: NAME2: 19,M;
127 ENTRY: FACT#(10),
128 NAME:
129 CAPACITY: 35;
130 << >>
131 << ITEM ENTRY - AUTOMATIC MASTER >>
132 << >>
133 NAME: ENTRY2: 19,A;
134 ENTRY: ENTRY#(10);
135 CAPACITY: 10;
136 << >>
137 << PAN GRADE - AUTOMATIC MASTER >>
138 << >>
139 NAME: GRADE: 19,A;
140 ENTRY: GDE(1);
141 CAPACITY: 2;
142 << >>
143 <<----->>
144 <<----- DETAIL DATA SETS ----->>
145 <<----->>
146 << >>
147 << PANSTAGE DATA >>
148 << >>
149 NAME: PANS: 19,D;
150 ENTRY:

* &PL79B(PLANT1) * 6:39 PM WED., 6 MAY , 1981 * 4*

151 FACT#(NAME2),
152 ENTRY#(ENTRY2),
153 GDE(GRADE),
154 PTYPE,
155 P#,
156 PMATL,
157 PDIA,
158 PVOL,
159 PSURF,
160 PSTSP,
161 PRAT,
162 PCDIA,
163 PCHGT,
164 CAPACITY: 700;
165 << >>
166 << PAN STOCK TANKS AND REHEATERS >>
167 << >>
168 NAME: STOCK::19,D;
169 ENTRY:
170 FACT#(NAME2),
171 ENTRY#(ENTRY2),
172 << >>
173 << STOCK TANKS >>
174 << >>
175 SYRUPV,
176 MOLVA,
177 MOLVB,
178 MAGV,
179 << >>
180 << REHEATERS >>
181 << >>
182 MH#,
183 MHAREA,
184 MHTYPE,
185 RHdia,
186 RHVLT,
187 RHAMP,
188 CAPACITY: 70;
189 << >>
190 << VACUUM PUMPS >>
191 << >>
192 NAME: PUMPS::19,D;
193 ENTRY:
194 FACT#(NAME2),
195 ENTRY#(ENTRY2),
196 VP#,
197 VMAKE,
198 VCYL#,
199 VBORE,
200 VLEN ,

* &PL79B(PLANT1) * 6:45 PM WED., 6 MAY , 1981 * 5*

201 VDISPL,
202 VTYPE,
203 VSPO ,
204 VPWR ,
205 VUSE ;
206 CAPACITY: 350;
207 << >>
208 << CRYSTALLIZER DATA >>
209 << >>
210 NAME: CRYST: 19, D;
211 ENTRY:
212 FACT#(NAME2),
213 ENTRY#(ENTRY2),
214 CSMAKE,
215 CSGDE,
216 CS#,
217 CSVOL,
218 CSTYPE,
219 CSAREA,
220 CSMODE;
221 CAPACITY: 350;
222 << >>
223 << HIGH GRADE FUGALS >>
224 << >>
225 NAME: HGFUG: 19, D;
226 ENTRY:
227 FACT#(NAME2),
228 ENTRY#(ENTRY2),
229 FHMAKE,
230 FH#,
231 FHMASS,
232 FHSPD ,
233 FHdia ,
234 FHDEP ,
235 FHAREA,
236 FHDE ,
237 FHPWR ;
238 CAPACITY: 140;
239 << >>
240 << LOW GRADE FUGALS >>
241 << >>
242 NAME: LGFUG: 19, D;
243 ENTRY:
244 FACT#(NAME2),
245 ENTRY#(ENTRY2),
246 FLMAKE,
247 FLMODE,
248 FL# ,
249 FLSPD,
250 FLDIA,

* &PL79B(PLANT1) * 6:50 PM WED., 6 MAY , 1981 * 6*

251 FLDEP,
252 FLBMAX,
253 FLBMIN,
254 FLBANG,
255 FLBVA ,
256 FLBIA ,
257 FLPWR ;
258 CAPACITY: 140;
259 << >>
260 << SUGAR DRYERS AND STORAGE >>
261 << >>
262 NAME: DRYER# 19, D;
263 ENTRY: FACT#(NAME2),
264 ENTRY#(ENTRY2),
265 << >>
266 << DRYERS >>
267 << >>
268 << >>
269 DTYPY,
270 DLEN,
271 DDIA,
272 DSPD,
273 DPWR,
274 DFAN,
275 DHTR,
276 DRAC,
277 << >>
278 << SUGAR STORAGE >>
279 << >>
280 SB#,
281 SBCAP,
282 SBTOT;
283 CAPACITY: 70;
284 << >>
285 << STEAM GENERATION PLANT >>
286 << >>
287 NAME: BOILER# 19, D;
288 ENTRY: FACT#(NAME2),
289 ENTRY#(ENTRY2),
290 BOMAKE,
291 BO#,
292 BOPRES,
293 BOMCR ,
294 BOSHT ,
295 BOBA ,
296 BOFA ,
297 BOSA ,
298 BOAA ,
299 BOEA ,
300

* &PL79B(PLANT1) * 6:56 PM WED., 6 MAY , 1981 * 7*

301 BOGTE,
302 BOGA ,
303 BOWW ,
304 BOSPR ,
305 BOI0B ,
306 BOIFD ,
307 BOICO ,
308 BOIARR,
309 BOISTD,
310 BOISTH;
311 CAPACITY: 140;
312 << >>
313 << BAGASSE STORAGE AND COOLING TOWERS >>
314 << >>
315 NAME: BINS: 19, D;
316 ENTRY:
317 FACT#(NAME2),
318 ENTRY#(ENTRY2),
319 BGBIN,
320 BGCAP,
321 BGPOS,
322 CTTYP,
323 CTCELL,
324 CTCAP ,
325 CTPWR ;
326 CAPACITY: 105;
327 << >>
328 << ELECTRICAL POWER PLANT >>
329 << >>
330 NAME: ELECT: 19, D;
331 ENTRY:
332 FACT#(NAME2),
333 ENTRY#(ENTRY2),
334 EPRTG ,
335 EPIC ,
336 EPMR ,
337 EPMLD ,
338 EPDMD ,
339 EPIRD ,
340 EPEXP ,
341 EPSUR ,
342 GSMAKE,
343 GS# ,
344 GSRTG ,
345 GSVOL ,
346 GSPM ,
347 GSSPD,
348 GSPPR ,
349 GSSH ,
350 GSEX ;

* &PL79B(PLANT1) * 7:01 PM WED., 6 MAY , 1981 * 8*

351 CAPACITY: 140;
352 END.

* &PL80A(PLANT1) * 7:56 PM WED., 6 MAY , 1981 * 1*

1 \$CONTROL, LIST, FIELD, ERRORS=10, ROOT, SET, TABLE;
2 BEGIN DATA BASE: PL80A, GD: 25;
3 LEVELS:
4 ITEMS:
5 FACT#, I1; << FACTORY NUMBER >>
6 NAME, X16; << FACTORY NAME >>
7 TRAIN#, X2; << TRAIN NUMBER (A OR B) >>
8 MILL#, I1; << MILL NUMBER (POSITION IN TRAIN) >>
9 ENTRY#, I1; << ENTRY NUMBER >>
10 LOCOS, I1; << NO. OF LOCOMOTIVES >>
11 TYPE, X8; << LOCOMOTIVE TYPE >>
12 ENG, X8; << ENGINE TYPE >>
13 POWER, I1; << ENGINE POWER >>
14 MASS, I1; << LOCOMOTIVE MASS >>
15 GAUGE, I1; << LOCOMOTIVE GAUGE >>
16 TRUCK, X16; << TRUCK TYPE >>
17 TRUCK#, I1; << TRUCK NUMBER >>
18 CAPAC, I1; << TRUCK CAPACITY >>
19 TGAUGE, I1; << TRUCK GAUGE >>
20 TRAML, I1; << LENGTH OF TRAMLINE >>
21 GAUGEL, I1; << GAUGE OF LINE >>
22 CROPP, I1; << PERCENTAGE OF CROP ON PRIVATE LINE >>
23 CROPG, I1; << PERCENTAGE OF CROP ON GOVT. LINE >>
24 CROPR, I1; << PERCENTAGE OF CROP ON ROAD >>
25 CPOS, X16; << CARRIER POSITION >>
26 CTYPE, X32; << CARRIER TYPE >>
27 CLEN, I1; << CARRIER LENGTH >>
28 CWID, I1; << CARRIER WIDTH >>
29 CINCL, I1; << CARRIER INCLINATION >>
30 CSPD, I1; << CARRIER SPEED >>
31 CDVE, X16; << CARRIER DRIVE >>
32 CPWR, I1; << CARRIER POWER >>
33 CFEED, X16; << CARRIER FED FROM >>
34 CREM, X30; << REMARKS >>
35 LTYPE, X10; << LEVELLER TYPE >>
36 LBL#, I1; << NO. OF BLADES >>
37 LCLR, I1; << LEVELLER CLEARANCE >>
38 LSPD, I1; << LEVELLER SPEED >>
39 LDVE, X10; << DRIVE TYPE >>
40 LPWR, I1; << LEVELLER POWER >>
41 KTYPE, X10; << KNIFE TYPE >>
42 KBL#, I1; << BLADE NUMBER >>
43 KCLR, I1; << CLEARANCE >>
44 KSPD, I1; << KNIVES SPEED >>
45 KDOVE, X10; << KNIVES DRIVE >>
46 KPWR, I1; << KNIVES POWER >>
47 K2TYPE, X10; << SECOND KNIVES TYPE >>
48 K2BL#, I1; << SECOND KNIVES BLADE NUMBER >>
49 K2CLR, I1; << SECOND KNIVES CLEARANCE >>
50 K2SPD, I1; << SECOND KNIVES SPEED >>

* &PL80A(PLANT1) * 8:06 PM WED., 6 MAY , 1981 * 2*

51	K2DVE, X10;	<<	SECOND KNIVES DRIVE	>>
52	K2PWR, I1;	<<	SECOND KNIVES POWER	>>
53	STYPE, X12;	<<	SHREDDER TYPE	>>
54	SDIA, I1;	<<	SHREDDER DIAMETER	>>
55	SLEN, I1;	<<	SHREDDER LENGTH	>>
56	SCLEAR, I1;	<<	SHREDDER TIP CLEARANCE	>>
57	SSPD, I1;	<<	SHREDDER SPEED	>>
58	SHAM#, I1;	<<	SHREDDER HAMMER NUMBER	>>
59	SDVE, X10;	<<	SHREDDER DRIVE	>>
60	SSTMP, I1;	<<	SHREDDER STEAM PRESSURE	>>
61	SMASS, I1;	<<	SHREDDER HAMMER MASS	>>
62	SPWR, I1;	<<	SHREDDER POWER	>>
63	MDIA, I1;	<<	MILL NOMINAL DIAMETER OF ROLLS	>>
64	MLEN, I1;	<<	MILL NOMINAL LENGTH OF ROLLS	>>
65	MSPD, I1;	<<	MILL PERIPHERAL SPEED OF TOP ROLL	>>
66	MHR, X4;	<<	MILL HYDRAULICS?	>>
67	MHRL, I1;	<<	MILL HYDRAULIC ROLL LOAD	>>
68	MSOF, I1;	<<	MILL SET OPENING FEED	>>
69	MSOD, I1;	<<	MILL SET OPENING DELIVERY	>>
70	MARL, I1;	<<	MILL AVERAGE ROLL LIFT	>>
71	MWOF, I1;	<<	MILL WORK OPENING FEED	>>
72	MWOD, I1;	<<	MILL WORK OPENING DELIVERY	>>
73	MTDIA, I1;	<<	MILL TOP ROLL DIAMETER	>>
74	MHRMX, I1;	<<	MILL MAXIMUM LIFT OF TOP ROLL	>>
75	MTPT, I1;	<<	MILL TRASH PLATE OPENING TOE	>>
76	MTPH, I1;	<<	MILL TRASH PLATE OPENING HEEL	>>
77	MOTP, I1;	<<	MILL TOP ROLL GROOVES PITCH	>>
78	MOTD, I1;	<<	MILL TOP ROLL GROOVES DEPTH	>>
79	MOTA, I1;	<<	MILL TOP ROLL GROOVES ANGLE	>>
80	MOFP, I1;	<<	MILL FEED ROLL GROOVES PITCH	>>
81	MOFD, I1;	<<	MILL FEED ROLL GROOVES DEPTH	>>
82	MOFA, I1;	<<	MILL FEED ROLL GROOVES ANGLE	>>
83	MODP, I1;	<<	MILL DELIVERY ROLL GROOVES PITCH	>>
84	MODD, I1;	<<	MILL DELIVERY ROLL GROOVES DEPTH	>>
85	MODA, I1;	<<	MILL DELIVERY ROLL GROOVES ANGLE	>>
86	MJDP, I1;	<<	MILL DEL JUICE ROLL GROOVES PITCH	>>
87	MJDD, I1;	<<	MILL DEL JUICE ROLL GROOVES DEPTH	>>
88	MJDW, I1;	<<	MILL DEL JUICE ROLL GROOVES WIDTH	>>
89	MJFP, I1;	<<	MILL FEED JUICE ROLL GROOVES PITCH	>>
90	MJFD, I1;	<<	MILL FEED JUICE ROLL GROOVES DEPTH	>>
91	MJFW, I1;	<<	MILL FEED JUICE ROLL GROOVES WIDTH	>>
92	MFRATE, I1;	<<	MILL FIBRE RATE USED FOR THESE SETTINGS	>>
93	MTSPD, I1;	<<	MILL TURBINE SPEED	>>
94	MTPWR, I1;	<<	MILL TURBINE SPEED	>>
95	MCA, I1;	<<	MILL CHUTE DIMENSION A	>>
96	MCB, I1;	<<	MILL CHUTE DIMENSION B	>>
97	MCC, I1;	<<	MILL CHUTE DIMENSION C	>>
98	MCD, I1;	<<	MILL CHUTE DIMENSION D	>>
99	MPA, I1;	<<	PRESSURE FEEDER DIMENSION A	>>
100	MPB, I1;	<<	PRESSURE FEEDER DIMENSION B	>>

* &PL80A(PLANT1) * 8:18 PM WED., 6 MAY , 1981 * 3*

101	MPC,I1;	<<	PRESSURE FEEDER DIMENSION C	>>
102	MPD,I1;	<<	PRESSURE FEEDER DIMENSION D	>>
103	MPE,I1;	<<	PRESSURE FEEDER DIMENSION E	>>
104	MPF,I1;	<<	PRESSURE FEEDER DIMENSION F	>>
105	MPWO,I1;	<<	PRESSURE FEEDER WORK OPENING	>>
106	MPGR,I1;	<<	PRESSURE FEEDER TO MILL GEAR RATIO	>>
107	MPDR,X6;	<<	PRESSURE FEEDER DRIVE TYPE	>>
108	MAA,I1;	<<	MILL APRON FEEDER DIMENSION A	>>
109	MAB,I1;	<<	MILL APRON FEEDER DIMENSION B	>>
110	MAC,I1;	<<	MILL APRON FEEDER DIMENSION C	>>
111	MAD,I1;	<<	MILL APRON FEEDER DIMENSION D	>>
112	MAE,I1;	<<	MILL APRON FEEDER DIMENSION E	>>
113	MOA,I1;	<<	MILL OVER-FEED ROLL DIMENSION A	>>
114	MOB,I1;	<<	MILL OVER-FEED ROLL DIMENSION B	>>
115	MOC,I1;	<<	MILL OVER-FEED ROLL DIMENSION C	>>
116	MOD,I1;	<<	MILL OVER-FEED ROLL DIMENSION D	>>
117	MUA,I1;	<<	MILL UNDERFEED ROLL DIMENSION A	>>
118	MUB,I1;	<<	MILL UNDERFEED ROLL DIMENSION B	>>
119	MUC,I1;	<<	MILL UNDERFEED ROLL DIMENSION C	>>
120	MUD,I1;	<<	MILL UNDERFEED ROLL DIMENSION D	>>
121	MUE,I1;	<<	MILL UNDERFEED ROLL DIMENSION E	>>
122	MUROLL,X4;	<<	MILL UNDERFEED ROLL TYPE	>>
123	MCLF,I1;	<<	MILL CLOSED CHUTE DIMENSION F	>>
124	MCLG,I1;	<<	MILL CLOSED CHUTE DIMENSION G	>>
125	MCLH,I1;	<<	MILL CLOSED CHUTE DIMENSION H	>>
126	MCLI,I1;	<<	MILL CLOSED CHUTE DIMENSION I	>>
127	MHJ,I1;	<<	MILL HINGED PLATE DIMENSION J	>>
128	MHK,I1;	<<	MILL HINGED PLATE DIMENSION K	>>
129	MHL,I1;	<<	MILL HINGED PLATE DIMENSION L	>>
130	MHM,I1;	<<	MILL HINGED PLATE DIMENSION M	>>
131	PFOUP,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES PITCH	>>
132	PFOUD,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES DEPTH	>>
133	PFOUA,I1;	<<	PRESSURE FEEDER UPPER ROLL GROOVES ANGLE	>>
134	PFJUP,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES PITCH	>>
135	PFJUD,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES DEPTH	>>
136	PFJUW,I1;	<<	PRESSURE FEEDER UPPER ROLL JUICE GVES WIDTH	>>
137	PFOLP,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES PITCH	>>
138	PFOLO,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES DEPTH	>>
139	PFOLA,I1;	<<	PRESSURE FEEDER LOWER ROLL GROOVES ANGLE	>>
140	PFJLP,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES PITCH	>>
141	PFJLD,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES DEPTH	>>
142	PFJLW,I1;	<<	PRESSURE FEEDER LOWER ROLL JUICE GVES WIDTH	>>
143	DMAKE,X12;	<<	DIFFUSER MAKE	>>
144	DWID,I1;	<<	DIFFUSER WIDTH	>>
145	DLEN,I1;	<<	DIFFUSER LENGTH	>>
146	DSPD,I1;	<<	DIFFUSER CARRIER SPEED	>>
147	DPWR,I1;	<<	DIFFUSER DRIVE POWER	>>
148	DPOSN,X24;	<<	DIFFUSER POSITION IN TRAIN	>>
149	JTYPE,X16;	<<	JUICE SCREEN TYPE	>>
150	JS#,I1;	<<	NUMBER OF SCREENS	>>

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151 JLEN, I1; << SCREEN LENGTH >>
152 JWID, I1; << SCREEN WIDTH >>
153 JSAPER, I1; << SCREEN OPENING >>
154 HTVOL, I1; << HOLDING TANK VOLUME >>
155 FTDIA, I1; << FLASH TANK DIAMETER >>
156 FTHGT, I1; << FLASH TANK HEIGHT >>
157 JH#, I1; << JUICE HEATER - NUMBER >>
158 JHUSE, X16; << JUICE HEATER - MATERIAL HEATED >>
159 JHAREA, I1; << JUICE HEATER - AREA >>
160 JHHT, X16; << JUICE HEATER HEATING MEDIUM >>
161 JHPASS, I1; << JUICE HEATER NO OF PASSES >>
162 JHTUBE, I1; << JUICE HEATER NO. OF TUBES PER PASS >>
163 JHLEN, I1; << JUICE HEATER TUBE LENGTH >>
164 JHDIA, I1; << JUICE HEATER TUBE DIAMETER >>
165 JHMATL, X10; << JUICE HEATER TUBE MATERIAL >>
166 JTTHCK, I1; << JUICE HEATER TUBE THICKNESS >>
167 CLPOS, X12; << CLARIFIER POSITION >>
168 CLTYPE, X12; << CLARIFIER TYPE >>
169 CLTRAY, I1; << CLARIFIER NUMBER OF TRAYS >>
170 CLDIA, I1; << CLARIFIER DIAMETER >>
171 CLAREA, I1; << CLARIFIER AREA >>
172 CLVOL, I1; << CLARIFIER VOLUME >>
173 FTYPE, X16; << FILTER TYPE >>
174 FIL#, I1; << FILTER NUMBER >>
175 FAREA, I1; << FILTER AREA >>
176 SPTYPE, X12; << BAGASSE SEPARATOR TYPE >>
177 SPAREA, I1; << BAGASSE SEPARATOR AREA >>
178 SPOP, I1; << BAGASSE SEPARATOR SCREEN OPENING >>
179 SPWDTH, I1; << BAGASSE SEPARATOR SCREEN WIDTH >>
180 SPHGT, I1; << BAGASSE SEPARATOR SCREEN HEIGHT >>
181 SPPWR, I1; << BAGASSE SEPARATOR DRIVE POWER >>
182 EVAP#, I1; << EVAPORATOR NUMBER IN SET >>
183 EVDIA, I1; << EVAPORATOR DIAMETER >>
184 EVSURF, I1; << EVAPORATOR HEATING SURFACE >>
185 EVLEN, I1; << EVAP TUBE LENGTH >>
186 EVMATL, X10; << EVAP MATERIAL HEATED >>
187 EVOD, I1; << EVAP TUBE O.D. >>
188 EVTH, I1; << EVAP TUBE THICKNESS >>
189 EVCDIA, I1; << EVAP CONDENSER DIAMETER >>
190 EVCHGT, I1; << EVAP CONDENSER HEIGHT >>
191 EVBLD, X12; << BLEED TO >>
192 SETS:
193 << >>
194 << FACTORY NAMES >>
195 << >>
196 NAME: NAMES: 25, M;
197 ENTRY: FACT#(13),
198 NAME:
199 CAPACITY: 35;
200 << >>

* &PL80A(PLANT1) * 8:44 PM WED., 6 MAY , 1981 * 5*

201 << MILL NUMBERS - AUTOMATIC MASTER >>
202 << >>
203 NAME: NUMBS: 25, A;
204 ENTRY: MILL#(3);
205 CAPACITY: 6;
206 << >>
207 << TRAIN NUMBER - AUTOMATIC MASTER >>
208 << >>
209 NAME: TRAINS: 25, A;
210 ENTRY: TRAIN#(8);
211 CAPACITY: 2;
212 << >>
213 << EVAPORATOR NUMBER - AUTOMATIC MASTER >>
214 << >>
215 NAME: EVAPS: 25, A;
216 ENTRY: ENTRY#(1);
217 CAPACITY: 7;
218 << >>
219 << ITEM ENTRY - AUTOMATIC MASTER >>
220 << >>
221 NAME: ENTRYs: 25, A;
222 ENTRY: ENTRY#(9);
223 CAPACITY: 10;
224 << >>
225 << >>
226 <<----- DETAIL DATA SETS ----->>
227 << >>
228 << >>
229 << TRANSPORT INFORMATION >>
230 << >>
231 NAME: TRANS: 25, D;
232 ENTRY: FACT#(NAMES),
233 ENTRY#(ENTRYs),
234 LOCOS,
235 TYPE,
236 ENG,
237 POWER,
238 MASS,
239 GAUGE,
240 TRUCK,
241 TRUCK#,
242 CAPAC,
243 TGAUGE,
244 TRAML,
245 GAUGEL,
246 CROPP,
247 CROPG,
248 CROPR;
249 CAPACITY: 175;

* &PL80A(PLANT1) * 8:50 PM WED., 6 MAY , 1981 * 6*

251 << >>
252 << CARRIER DATA >>
253 << >>
254 NAME: CARR: 25, D:
255 ENTRY: FACT#(NAMES),
256 TRAIN#(TRAINS),
257 ENTRY#(ENTRYS),
258 CPOS,
259 CTYPE,
260 CLEN,
261 CWID,
262 CINCL,
263 CSPD,
264 CDVE,
265 CPWR,
266 CFEED,
267 CREM,
268
269 CAPACITY: 105;
270 << >>
271 << KNIVES DATA >>
272 << >>
273 NAME: KNIVES: 25, D:
274 ENTRY: FACT#(NAMES),
275 TRAIN#(TRAINS),
276 LTYPE,
277 LBL#,
278 LCLR,
279 LSPD,
280 LDVE,
281 LPWR,
282 KTYPE,
283 KBL#,
284 KCLR,
285 KSPD,
286 KDVE,
287 KPWR;
288
289 CAPACITY: 105;
290 << >>
291 << SHREDDER DATA >>
292 << >>
293 NAME: SHRED: 25, D:
294 ENTRY: FACT#(NAMES),
295 TRAIN#(TRAINS),
296 ENTRY#(ENTRYS),
297 K2TYPE,
298 K2BL#,
299 K2CLR,

* &PL80A(PLANT1) * 8:56 PM WED., 6 MAY , 1981 * 7*

301 K2SPD,
302 K2DVE,
303 K2PWR,
304 STYPE,
305 SDIA,
306 SLEN,
307 SCLEAR,
308 SSPD,
309 SHAM#,
310 SDVE,
311 SSTMP,
312 SMASS,
313 SPWR,
314 CAPACITY: 70;
315 << >>
316 << MILL DATA - DETAIL DATA SET >>
317 << >>
318 NAME: MILLS: 25, D:
319 ENTRY: FACT#(NAMES),
320 TRAIN#(TRAINS),
321 MILL#(NUMBS),
322 MDIA,
323 MLEN,
324 MSPD,
325 MHR,
326 MHRL,
327 MSOF,
328 MSOD,
329 MARL,
330 MWOF,
331 MWOD,
332 MTDIA,
333 MHRMX,
334 MTPT,
335 MTPH,
336 MOTP,
337 MOTD,
338 MOTA,
339 MOFP,
340 MOFD,
341 MOFA,
342 MODP,
343 MODD,
344 MODA,
345 MJDP,
346 MJDD,
347 MJDW,
348 MJFP,
349 MJFD,
350 MJFW,

* &PL80A(PLANT1) * 9:01 PM WED., 6 MAY , 1981 * 8*

351 MFRATE,
352 MTSPD,
353 MTPWR,
354 CAPACITY: 175;
355 << >>
356 << MILL FEEDING DEVICES >>
357 << >>
358 NAME: FEEDS: 25, D;
359 ENTRY:
360 FACT#(NAMES),
361 TRAIN#(TRAINS),
362 MILL#(NUMBS),
363 MCA,
364 MCB,
365 MCC,
366 MCD,
367 MPA,
368 MPB,
369 MPC,
370 MPD,
371 MPE,
372 MPF,
373 MPWO,
374 MPGR,
375 MPDR,
376 MAA ,
377 MAB ,
378 MAC ,
379 MAD ,
380 MAE ,
381 MOA ,
382 MOB ,
383 MOC ,
384 MOD ,
385 MUA ,
386 MUB ,
387 MUC ,
388 MUD ,
389 MUE ,
390 MUROLL,
391 MCLF,
392 MCLG,
393 MCLH,
394 MCLI,
395 MHJ ,
396 MHK ,
397 MHL ,
398 MHM ;
399 CAPACITY: 175;
400 << >>

* &PL80A(PLANT1) * 9:05 PM WED., 6 MAY , 1981 * 9*

401 << PRESSURE FEEDER GROOVING >>
402 << >>
403 NAME: PRESS: 25, D;
404 ENTRY: FACT#(NAMES),
405 TRAIN#(TRAINS),
406 MILL#(NUMBS),
407 PFOUP,
408 PFOUD,
409 PFOUA,
410 PFJUP,
411 PFJUD,
412 PFJUW,
413 PFOLP,
414 PFOLD,
415 PFOLA,
416 PFJLP,
417 PFJLD,
418 PFJLW,
419
420 CAPACITY: 175;
421 << >>
422 << DIFFUSER DATA >>
423 << >>
424 NAME: DIFFUS: 25, D;
425 ENTRY: FACT#(NAMES),
426 TRAIN#(TRAINS),
427 ENTRY#(ENTRYS),
428 DMAKE,
429 DWID,
430 DLEN,
431 DSPD,
432 DPWR,
433 DPOSN;
434
435 CAPACITY: 35;
436 << >>
437 << JUICE SCREENS >>
438 << >>
439 NAME: SCREEN: 25, D;
440 ENTRY: FACT#(NAMES),
441 ENTRY#(ENTRYS),
442 JTYPE,
443 JS#,
444 JLEN,
445 JWID,
446 JSAPER,
447 HTVOL,
448 FTDIA,
449 FTHGT;

* &PL80A(PLANT1) * 9:11 PM WED., 6 MAY , 1981 *10*

451 CAPACITY: 100;
452 << >>
453 << JUICE HEATER DATA >>
454 << >>
455 NAME: HEATER: 25, D;
456 ENTRY: FACT#(NAMES),
457 ENTRY#(ENTRYS),
458 JH#,
459 JHUSE,
460 JHAREA,
461 JHHT,
462 JHPASS,
463 JHTUBE,
464 JHLEN,
465 JHDIA,
466 JHMATL,
467 JTTHCK;
468
469 CAPACITY: 150;
470 << >>
471 << CLARIFIER DATA >>
472 << >>
473 NAME: CLARIF: 25, D;
474 ENTRY: FACT#(NAMES),
475 ENTRY#(ENTRYS),
476 CLPOS,
477 CLTYPE,
478 CLTRAY,
479 CLDIA,
480 CLAREA,
481 CLVOL,
482
483 << >>
484 << FILTERS >>
485 << >>
486 FTTYPE,
487 FIL#,
488 FAREA;
489 CAPACITY: 140;
490 << >>
491 << BAGASSE SEPARATOR DATA >>
492 << >>
493 NAME: SEPAR: 25, D;
494 ENTRY: FACT#(NAMES),
495 ENTRY#(ENTRYS),
496 SPTYPE,
497 SPAREA,
498 SPPOP,
499 SPWDTH,
500

* &PL80A(PLANT1) * 9:16 PM WED., 6 MAY , 1981 *11*

501 SPHGT,
502 SPPWR;
503 CAPACITY; 105;
504 << >>
505 << EVAPORATING PLANT >>
506 << >>
507 NAME; EVAP# 25, D;
508 ENTRY; FACT#(NAMES),
510 TRAIN#(TRAINS),
511 EVAP#(EVAPS),
512 ENTRY#(ENTRYS),
513 EVDIA,
514 EVSURF,
515 EVLEN,
516 EVMATL,
517 EVOD,
518 EVTH,
519 EVCDIA,
520 EVCHGT,
521 EVBLD;
522 CAPACITY; 600;
523 END.

* &PL80B(PLANT1) * 7:01 PM WED., 6 MAY , 1981 * 1*

1 \$CONTROL: FIELD, LIST, ERRORS=10, ROOT, SET, TABLE;

2 BEGIN DATA BASE: PL80B, GD: 25;

3 LEVELS;

4 ITEMS:

5	FACT#, I1;	<<	FACTORY NUMBER	>>
6	NAME, X16;	<<	FACTORY NAME	>>
7	ENTRY#, I1;	<<	ENTRY NUMBER	>>
8	GDE, X2;	<<	PAN GRADE - HG OR LG	>>
9	PTYPE, X18;	<<	PAN TYPE	>>
10	P#, I1;	<<	PAN REF #	>>
11	PMATL, X12;	<<	PAN MATERIAL	>>
12	PDIA, I1;	<<	PAN DIAMETER	>>
13	PVOL, I1;	<<	PAN VOLUME	>>
14	PSURF, I1;	<<	PAN SURFACE AREA	>>
15	PSTSP, I1;	<<	PAN STIRRER SPEED	>>
16	PRAT, I1;	<<	PAN SURFACE/VOLUME RATIO	>>
17	PCDIA, I1;	<<	PAN CONDENSER DIAMETER	>>
18	PCHGT, I1;	<<	PAN CONDENSER LENGTH	>>
19	SYRUPV, I1;	<<	VOLUME OF SYRUP STORAGE TANKS	>>
20	MOLVA, I1;	<<	VOLUME OF A MOLASSES STORAGE TANKS	>>
21	MOLVB, I1;	<<	VOLUME OF B MOLASSES STORAGE TANKS	>>
22	MAGV, I1;	<<	VOLUME OF MAGMA STORAGE TANKS	>>
23	MH#, I1;	<<	NO. OF MASSECUISTE RE-HEATERS	>>
24	MHAREA, I1;	<<	AREA OF RE-HEATERS	>>
25	MHTYPE, X16;	<<	RE-HEATER TYPE	>>
26	RHDIA, I1;	<<	RESISTANCE HEATER DIAMETER	>>
27	RHVLT, I1;	<<	RESISTANCE HEATER VOLTAGE	>>
28	RHAMPA, I1;	<<	RESISTANCE HEATER CURRENT	>>
29	VP#, I1;	<<	VACUUM PUMP NUMBER	>>
30	VMAKE, X16;	<<	VACUUM PUMP MAKE	>>
31	VCYL#, X8;	<<	VACUUM PUMP NO. OF CYLINDERS	>>
32	VBORE, I1;	<<	VACUUM PUMP CYLINDER BORE	>>
33	VLEN, I1;	<<	VACUUM PUMP STROKE	>>
34	VDISPL, I1;	<<	VACUUM PUMP DISPLACEMENT	>>
35	VTYPE, X8;	<<	VACUUM PUMP TYPE	>>
36	VSPD, I1;	<<	VACUUM PUMP SPEED	>>
37	VPWR, I1;	<<	VACUUM PUMP POWER	>>
38	VUSE, X36;	<<	VACUUM PUMP USE	>>
39	CSMAKE, X20;	<<	CRYSTALLIZER MAKE	>>
40	CSGDE, X4;	<<	CRYSTALLIZER GRADE MATERIAL	>>
41	CS#, I1;	<<	CRYSTALLIZER NUMBER	>>
42	CSVOL, I1;	<<	CRYSTALLIZER VOLUME	>>
43	CSTYPE, X14;	<<	CRYSTALLIZER TYPE	>>
44	CSAREA, I1;	<<	CRYSTALLIZER AREA	>>
45	CSMODE, X10;	<<	CRYSTALLIZER MODE	>>
46	FHMAKE, X12;	<<	HIGH GRADE FUGAL MAKE	>>
47	FH#, I1;	<<	HIGH GRADE FUGAL NUMBER	>>
48	FHMASS, X4;	<<	HIGH GRADE FUGAL MASSECUISTE	>>
49	FHSPD, I1;	<<	HIGH GRADE FUGAL SPEED	>>
50	FHDIA, I1;	<<	HIGH GRADE FUGAL DIAMETER	>>

* &PL79A(PLANT1) * 1:54 PM FRI., 29 MAY , 1981 * 7*

301 K2PWR,
302 STYPE,
303 SDIA,
304 SLEN,
305 SCLEAR,
306 SSPD,
307 SMASS,
308 SDVE,
309 SSTMP,
310 SSTMT,
311 SPWR;
312 CAPACITY: 70;
313 << >>
314 << MILL DATA - DETAIL DATA SET >>
315 << >>
316 NAME: MILLS: 19.D;
317 ENTRY: FACT#(NAMES),
318 TRAIN#(TRAINS),
319 MILL#(NUMBS),
320 MDIA ,
321 MLEN ,
322 MSPD ,
323 MHR ,
324 MHRL ,
325 MSOF ,
326 MSOD ,
327 MARL ,
328 MWOF ,
329 MWOD ,
330 MRAT ,
331 MHRMX,
332 MTPT ,
333 MTPH ,
334 MOTP ,
335 MOTD ,
336 MOTA ,
337 MOFP ,
338 MOFD ,
339 MOFA ,
340 MODP ,
341 MODD ,
342 MODA ,
343 MJTP ,
344 MJTD ,
345 MJTW ,
346 MJFP ,
347 MJFD ,
348 MJFW ,
349 MFRATE;
350 CAPACITY: 175;

* &PL79A(PLANT1) * 3:19 PM WED., 29 APR., 1981 * 6*

251 << >>
252 NAME: CARR: 19, D;
253 ENTRY:
254 FACT#(NAMES),
255 TRAIN#(TRAINS),
256 ENTRY#(ENTRYS),
257 CPOS,
258 CTYPE,
259 CLEN,
260 CWID,
261 CINCL,
262 CSPD,
263 CDVE,
264 CPWR,
265 CFEED,
266 CREM,
267 CAPACITY: 105;
268 << >>
269 << KNIVES DATA >>
270 << >>
271 NAME: KNIVES: 19, D;
272 ENTRY:
273 FACT#(NAMES),
274 TRAIN#(TRAINS),
275 LTYPE,
276 LBL#,
277 LCLR,
278 LSPD,
279 LDVE,
280 LPWR,
281 KTYPE,
282 KBL#,
283 KCLR,
284 KSPD,
285 KDVE,
286 KPWR,
287 CAPACITY: 105;
288 << >>
289 << SHREDDER DATA >>
290 << >>
291 NAME: SHRED: 19, D;
292 ENTRY:
293 FACT#(NAMES),
294 TRAIN#(TRAINS),
295 ENTRY#(ENTRYS),
296 K2TYPE,
297 K2BL#,
298 K2CLR,
299 K2SPD,
300 K2DVE,

* &PL80B(PLANT1) * 7:12 PM WED., 6 MAY , 1981 * 2*

51	FHDEP , I1;	<<	HIGH GRADE FUGAL DEPTH	>>
52	FHAREA, I1;	<<	HIGH GRADE FUGAL AREA	>>
53	FHDVE , X2;	<<	HIGH GRADE FUGAL DRIVE	>>
54	FHPWR , I1;	<<	HIGH GRADE FUGAL DRIVE POWER	>>
55	FLMAKE, X16;	<<	LOW GRADE FUGAL MAKE	>>
56	FLMODE, X12;	<<	LOW GRADE FUGAL TYPE	>>
57	FL# , I1;	<<	LOW GRADE FUGAL NUMBER	>>
58	FLSPD, I1;	<<	LOW GRADE FUGAL SPEED	>>
59	FLDIA, I1;	<<	LOW GRADE FUGAL DIAMETER	>>
60	FLDEP, I1;	<<	LOW GRADE FUGAL DEPTH	>>
61	FLBMAX, I1;	<<	LOW GRADE FUGAL BASKET MAXIMUM	>>
62	FLBMIN, I1;	<<	LOW GRADE FUGAL BASKET MINIMUM	>>
63	FLBANG, I1;	<<	LOW GRADE FUGAL BASKET ANGLE	>>
64	FLBVA , I1;	<<	LOW GRADE FUGAL SCREEN AREA VERTICAL	>>
65	FLBIA , I1;	<<	LOW GRADE FUGAL SCREEN AREA INCLINED	>>
66	FLPWR , I1;	<<	LOW GRADE FUGAL DRIVE POWER	>>
67	DTYPE, X16;	<<	SUGAR DRYER TYPE	>>
68	DLEN, I1;	<<	SUGAR DRYER LENGTH	>>
69	DDIA, I1;	<<	SUGAR DRYER DIAMETER	>>
70	DSPD, I1;	<<	SUGAR DRYER ROTATIONAL SPEED	>>
71	DPWR, I1;	<<	SUGAR DRYER DRIVE POWER	>>
72	DFAN, X4;	<<	SUGAR DRYER FAN INSTALLED?	>>
73	DHTR, X4;	<<	SUGAR DRYER HEATER INSTALLED?	>>
74	DRAC, X4;	<<	SUGAR DRYER AIR-CONDITIONING?	>>
75	SB#, I1;	<<	SUGAR BIN NUMBER	>>
76	SBCAP, I1;	<<	SUGAR BIN CAPACITY	>>
77	SBTOT, I1;	<<	SUGAR BIN TOTAL CAPACITY	>>
78	BOMAKE, X16;	<<	BOILER MAKE	>>
79	BO#, I1;	<<	BOILER NUMBER	>>
80	BOPRES, I1;	<<	BOILER PRESSURE	>>
81	BOMCR , I1;	<<	BOILER MCR	>>
82	BOSHT , I1;	<<	BOILER NOMINAL SUPERHEAT	>>
83	BOBA , I1;	<<	BOILER AREA BOILER TUBES	>>
84	BOFA , I1;	<<	BOILER AREA FURNACE	>>
85	BOSA , I1;	<<	BOILER AREA SUPERHEATER	>>
86	BOAA , I1;	<<	BOILER AREA AIRHEATER	>>
87	BOEA , I1;	<<	BOILER AREA ECONOMISER	>>
88	BOGTE, X24;	<<	BOILER GRATE TYPE	>>
89	BOGA , I1;	<<	BOILER GRATE AREA	>>
90	BOWW , X4;	<<	BOILER WATERWALLS?	>>
91	BOSPR , X4;	<<	BOILER SPREADER	>>
92	BOICO , X4;	<<	BOILER COAL FEEDERS?	>>
93	BOIOB , X4;	<<	BOILER OIL BURNERS?	>>
94	BOIFD , X4;	<<	BOILER FORCED DRAUGHT?	>>
95	BOIARR, X18;	<<	BOILER SOOT ARRESTOR	>>
96	BOISTD, I1;	<<	BOILER STACK DIAMETER	>>
97	BOISTH, I1;	<<	BOILER STACK HEIGHT	>>
98	BGBIN, X12;	<<	BAGASSE BIN TYPE	>>
99	BGCAP, I1;	<<	BAGASSE BIN CAPACITY	>>
100	BGPOS, X8;	<<	BAGASSE BIN POSITION IN CIRCUIT	>>

* &PL80B(PLANT1) * 7:24 PM WED., 6 MAY , 1981 * 3*

101 CTTYP,X18; << COOLING TOWER TYPE >>
102 CTCELL,I1; << COOLING TOWER NUMBER OF CELLS >>
103 CTCAP,I1; << COOLING TOWER CAPACITY >>
104 CTPWR,I1; << COOLING TOWER FAN POWER >>
105 EPRTG,I1; << RATING STEAM GENERATOR SETS >>
106 EPIC,I1; << RATING I.C. GENERATOR SETS >>
107 EPMR,I1; << RATING MOTORS >>
108 EPMLD,I1; << MAXIMUM LOAD >>
109 EPDMD,I1; << MAXIMUM DEMAND >>
110 EPIRD,I1; << MAXIMUM IRRIGATION DEMAND >>
111 EPEXP,I1; << EXPORT POWER >>
112 EPSUR,I1; << SURPLUS POWER >>
113 GSMAKE,X14; << GENERATOR SET MAKE >>
114 GS#,I1; << GENERATOR SET NUMBER >>
115 GSRTG,I1; << GENERATOR SET RATING >>
116 GSVOL,I1; << GENERATOR SET VOLTAGE >>
117 GSPM,X14; << GENERATOR SET PRIME MOVER >>
118 GSSPD,I1; << GENERATOR SET PRIME MOVER SPEED >>
119 GSPPR,I1; << GENERATOR SET PRIME MOVER PRESSURE >>
120 GSSH,I1; << GENERATOR SET PRIME MOVER SUPERHEAT >>
121 GSEX,I1; << GENERATOR SET PRIME MOVER EXHAUST >>
122 SETS:
123 << >>
124 << FACTORY NAMES >>
125 << >>
126 NAME: NAME2: 25,M;
127 ENTRY: FACT#(10),
128 NAME:
129 CAPACITY: 35;
130 << >>
131 << ITEM ENTRY - AUTOMATIC MASTER >>
132 << >>
133 NAME: ENTRY2: 25,A;
134 ENTRY: ENTRY#(10);
135 CAPACITY: 15;
136 << >>
137 << PAN GRADE - AUTOMATIC MASTER >>
138 << >>
139 NAME: GRADE: 25,A;
140 ENTRY: GDE(1);
141 CAPACITY: 2;
142 << >>
143 <<----->>
144 <<----- DETAIL DATA SETS ----->>
145 <<----->>
146 << >>
147 << PANSTAGE DATA >>
148 << >>
149 NAME: PANS: 25,D;
150 ENTRY:

* &PL80B(PLANT1) * 7:35 PM WED., 6 MAY , 1981 * 4*

151 FACT#(NAME2),
152 ENTRY#(ENTRY2),
153 GDE(GRADE),
154 PTYPE,
155 P#,
156 PMATL,
157 PDIA,
158 PVOL,
159 PSURF,
160 PSTSP,
161 PRAT,
162 PCDIA,
163 PCHGT;
164 CAPACITY: 700;
165 << >>
166 << PAN STOCK TANKS AND REHEATERS >>
167 << >>
168 NAME: STOCK: 25, D;
169 ENTRY:
170 FACT#(NAME2),
171 ENTRY#(ENTRY2),
172 << >>
173 << STOCK TANKS >>
174 << >>
175 SYRUPV,
176 MOLVA,
177 MOLVB,
178 MAGV.
179 << >>
180 << REHEATERS >>
181 << >>
182 MH#,
183 MHAREA,
184 MHTYPE,
185 RHDIA,
186 RHVLT,
187 RHAMP;
188 CAPACITY: 70;
189 << >>
190 << VACUUM PUMPS >>
191 << >>
192 NAME: PUMPS: 25, D;
193 ENTRY:
194 FACT#(NAME2),
195 ENTRY#(ENTRY2),
196 VP#,
197 VMAKE,
198 VCYL#,
199 VBORE,
200 VLEN ,

* &PL80B(PLANT1) * 7:39 PM WED., 6 MAY 1981 * 5*

201 VDISPL,
202 VTYPE,
203 VSPD ,
204 VPWR ,
205 VUSE ;
206 CAPACITY: 350;
207 << >>
208 << CRYSTALLIZER DATA >>
209 << >>
210 NAME: CRYST: 25, D;
211 ENTRY: FACT#(NAME2),
212 ENTRY#(ENTRY2),
213 CSMAKE,
214 CSGDE,
215 CS#,
216 CSVOL,
217 CSTYPE,
218 CSAREA,
219 CSMODE;
220
221 CAPACITY: 350; >>
222 << >>
223 << HIGH GRADE FUGALS >>
224 << >>
225 NAME: HGFUG: 25, D;
226 ENTRY: FACT#(NAME2),
227 ENTRY#(ENTRY2),
228 FHMAKE,
229 FH#,
230 FHMASS,
231 FHSPD ,
232 FHDEP ,
233 FHDEP ,
234 FHAREA,
235 FHDEP ,
236 FHDEP ,
237 FHDEP ;
238 CAPACITY: 140; >>
239 << >>
240 << LOW GRADE FUGALS >>
241 << >>
242 NAME: LGFUG: 25, D;
243 ENTRY: FACT#(NAME2),
244 ENTRY#(ENTRY2),
245 FLMAKE,
246 FLMODE,
247 FL# ,
248 FLSPD,
249 FLDIA,
250

* &PL80B(PLANT1) * 7:45 PM WED., 6 MAY , 1981 * 6*

251 FLDEP,
252 FLBMAX,
253 FLBMIN,
254 FLBANG,
255 FLBVA ,
256 FLBIA ,
257 FLPWR ;
258 CAPACITY; 140;
259 << >>
260 << SUGAR DRYERS AND STORAGE >>
261 << >>
262 NAME; DRYER; 25, D;
263 ENTRY;
264 FACT#(NAME2),
265 ENTRY#(ENTRY2),
266 << >>
267 << DRYERS >>
268 << >>
269 DTYPY,
270 DLEN,
271 DDIA,
272 DSPD,
273 DPWR,
274 DFAN,
275 DHTR,
276 DRAC,
277 << >>
278 << SUGAR STORAGE >>
279 << >>
280 SB#,
281 SBCAP,
282 SBTOT;
283 CAPACITY; 70;
284 << >>
285 << STEAM GENERATION PLANT >>
286 << >>
287 NAME; BOILER; 25, D;
288 ENTRY;
289 FACT#(NAME2),
290 ENTRY#(ENTRY2),
291 BOMAKE,
292 BO#,
293 BOPRES,
294 BOMCR ,
295 BOSHT ,
296 BOBA ,
297 BOFA ,
298 BOSA ,
299 BOAA ,
300 BOEA ,

* &PL80B(PLANT1) * 7:50 PM WED., 6 MAY , 1981 * 7*

301 BOGTE,
302 BOGA ,
303 BOWW ,
304 BOICO ,
305 BOI0B ,
306 BOIFD ,
307 BOSPR ,
308 BOIARR,
309 BOISTD,
310 BOISTH;
311 CAPACITY: 140;
312 << >>
313 << BAGASSE STORAGE AND COOLING TOWERS >>
314 << >>
315 NAME: BINS: 25, D;
316 ENTRY:
317 FACT#(NAME2),
318 ENTRY#(ENTRY2),
319 BGBIN,
320 BGCAP,
321 BGPOS,
322 CTTYP,
323 CTCELL,
324 CTCAP ,
325 CTPWR ;
326 CAPACITY: 105;
327 << >>
328 << ELECTRICAL POWER PLANT >>
329 << >>
330 NAME: ELECT: 25, D;
331 ENTRY:
332 FACT#(NAME2),
333 ENTRY#(ENTRY2),
334 EPRTG ,
335 EPIC ,
336 EPMR ,
337 EPMLD ,
338 EPDMO ,
339 EPIRD ,
340 EPEXP ,
341 EPSUR ,
342 GSMAKE,
343 GS# ,
344 GSRTG ,
345 GSVOL ,
346 GSPM ,
347 GSSPD,
348 GSPPR ,
349 GSSH ,
350 GSEX ;

* &PL80B(PLANT1) * 7:55 PM WED., 6 MAY , 1981 * 8*

351 CAPACITY: 140;
352 END.

APPENDIX C: 'DBDS' OUTPUT.

* &PDEN7 (PLANT1) * 8:44 PM TUE., 28 APR., 1981 * 1*

1 FTN
2 PROGRAM PDEN7
3 C
4 C
5 C +++ WRITTEN - GDD - 9 JUL 1980 +++
6 C +++ LAST MODIFIED 9 JUL 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== PRESS =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(16)
15 C \$, IDSET(3), IVALU(15)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C VARIABLE LIST
20 C DATA LIST/15,1,3,4,125,126,127,128,129,130,131,132,133,134,135,
21 C \$ 136/
22 C LEVEL
23 C DATA ILEVL/2H ,2H ,2H /
24 C DATA SET NAME - 'PRESS'
25 C DATA IDSET/2HPR,2HES,2HS /
26 C
27 C DATA IBAK/4010B/
28 C
29 C*****
30 C
31 C
32 C
33 C*****
34 C
35 C
36 C OPEN DATA-BASE
37 C
38 C
39 C
40 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
41 C
42 C IMODE=3
43 C CALL DBOPNC(IBASE, ILEVL, IMODE, ISTAT)
44 C
45 C TEST FOR ERROR ON OPEN
46 C
47 C IF(ISTAT(1).EQ.0) GOTO 100
48 C ERROR
49 C .WRITE(1,1000) ISTAT(1)
50 1000 FORMAT(//"+ PDEN7 ++ ERROR",15," ON DATA-BASE OPEN")

* &PDEN7(PLANT1) * 8:50 PM TUE., 28 APR., 1981 * 2*

```
51      GOTO 9999
52      C
53      C
54      C*****
55      C
56      C
57      C          ENTRY MODE
58      C
59      C
60      C      GET FACTORY NUMBER
61      C
62      100 DO 101 K=1,15
63      101 IVALU(K) = 0
64      C
65      WRITE(1,1100)
66      1100 FORMAT(//"FACTORY NUMBER?      ")
67      IFACT=0
68      READ(1,*) IFACT
69      C
70      C      TEST FOR END OF ENTRY MODE
71      C
72      IF( IFACT.EQ.0 ) GOTO 9999
73      C
74      C
75      C
76      C      GET DATA FOR DETAIL DATA SET
77      C
78      C      MILL FEEDER DATA
79      C
80      120 IVALU(1)=IFACT
81      C
82      WRITE(1,1125)
83      1125 FORMAT(" TRAIN #      ")
84      READ(1,4000) IVALU(2)
85      4000 FORMAT(20A2)
86      C
87      WRITE(1,1150)
88      1150 FORMAT(" MILL #      ")
89      READ(1,*) IVALU(3)
90      C
91      C
92      WRITE(1,3000)
93      READ(1,*) IVALU(4)
94      C
95      WRITE(1,3010)
96      READ(1,*) IVALU(5)
97      C
98      WRITE(1,3020)
99      READ(1,*) IVALU(6)
100     C
```

* &PDEN7(PLANT1) * 8:56 PM TUE., 28 APR., 1981 * 3*

```
101      WRITE(1,3060)
102      READ(1,*) IVALU(10)
103 C
104      WRITE(1,3070)
105      READ(1,*) IVALU(11)
106 C
107      WRITE(1,3080)
108      READ(1,*) IVALU(12)
109 C
110      WRITE(1,3090)
111      READ(1,*) IVALU(7)
112 C
113      WRITE(1,3040)
114      READ(1,*) IVALU(8)
115 C
116      WRITE(1,3050)
117      READ(1,*) DUM1
118      IVALU(9) = INT (10.*DUM1)
119 C
120      WRITE(1,3090)
121      READ(1,*) IVALU(13)
122 C
123      WRITE(1,3100)
124      READ(1,*) IVALU(14)
125 C
126      WRITE(1,3110)
127      READ(1,*) DUM1
128      IVALU(15) = INT (10.*DUM1)
129 C
130 C -----
131 C
132 3000 FORMAT (" PRESSURE FEEDER UPPER ROLL GROOVES PITCH      _" )
133 3010 FORMAT (" PRESSURE FEEDER UPPER ROLL GROOVES DEPTH      _" )
134 3020 FORMAT (" PRESSURE FEEDER UPPER ROLL GROOVES ANGLE      _" )
135 3030 FORMAT (" PRESSURE FEEDER UPPER ROLL JUICE GVES PITCH      _" )
136 3040 FORMAT (" PRESSURE FEEDER UPPER ROLL JUICE GVES DEPTH      _" )
137 3050 FORMAT (" PRESSURE FEEDER UPPER ROLL JUICE GVES WIDTH      _" )
138 3060 FORMAT (" PRESSURE FEEDER LOWER ROLL GROOVES PITCH      _" )
139 3070 FORMAT (" PRESSURE FEEDER LOWER ROLL GROOVES DEPTH      _" )
140 3080 FORMAT (" PRESSURE FEEDER LOWER ROLL GROOVES ANGLE      _" )
141 3090 FORMAT (" PRESSURE FEEDER LOWER ROLL JUICE GVES PITCH      _" )
142 3100 FORMAT (" PRESSURE FEEDER LOWER ROLL JUICE GVES DEPTH      _" )
143 3110 FORMAT (" PRESSURE FEEDER LOWER ROLL JUICE GVES WIDTH      _" )
144 C
145 C -----
146 C
147 C
148 C   PUT DATA IN DATA-BASE
149 C
150      IMODE=1
```

* &PDEN7(PLANT1) * 9:03 PM TUE., 28 APR., 1981 * 4*

```
151      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
152 C
153 C   TEST FOR ERROR IN PUT
154 C
155     IF( ISTAT(1).EQ.0 ) GOTO 100
156 C
157 C   ERROR
158 C
159     WRITE(1,1600) ISTAT(1),IDSET
160 1600 FORMAT(//"+ PDEN7 ++ ERROR",I5," ON PUT IN SET '",3A2,"")
161 C
162 C   GET NEXT ENTRY
163 C
164     GOTO 100
165 C
166 C
167 C*****=====
168 C
169 C
170 C   TERMINATE
171 C   -----
172 C
173 C
174 9999 CALL DBUNL (ISTAT)
175     IMODE=0
176 C
177 C   CLOSE DATA-BASE
178 C
179     IMODE=1
180     CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
181 C
182     WRITE(1,1700)
183 1700 FORMAT(///"+ PDEN7 STOP ++///)
184 C
185 C
186     END
187     END$
```

* &PDEN8(PLANT1) * 9:08 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDEN8
3 C
4 C
5 C      +++  WRITTEN - GDD - 9 JUL 1980    +++
6 C      +++  LAST MODIFIED   9 JUL 1980    +++
7 C
8 C      PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C      PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C      ===== DIFFUS =====
12 C
13 C
14 C      DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(10)
15 C      $           ,IDSET(3),IVALU(25)
16 C
17 C      DATA-BASE
18 C      DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C      VARIABLE LIST
20 C      DATA LIST/9,1,3,5,137,138,139,140,141,142/
21 C      LEVEL
22 C      DATA ILEVL/2H ,2H ,2H /
23 C      DATA SET NAME - 'DIFFUS'
24 C      DATA IDSET/2HDI,2HFF,2HUS/
25 C
26 C      DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C      OPEN DATA-BASE
36 C      -----
37 C
38 C
39 C      OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
40 C
41 C      IMODE=3
42 C      CALL DBOPNC( IBASE,ILEVL,IMODE,ISTAT )
43 C
44 C      TEST FOR ERROR ON OPEN
45 C
46 C      IF( ISTAT(1).EQ.0 ) GOTO 100
47 C      ERROR
48 C      WRITE(1,1000) ISTAT(1)
49 C      1000 FORMAT(//"+ PDEN8 ++ ERROR",I5," ON DATA-BASE OPEN")
50 C      GOTO 9999
```

* &PDEN8(PLANT1) * 9:14 PM TUE., 28 APR., 1981 * 2*

51 C
52 C
53 ****
54 C
55 C
56 C ENTRY MODE
57 C -----
58 C
59 C GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,25
62 101 IVALU(K) = 0
63 C
64 WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER? <-->
66 IFACT=0
67 READ(1,*) IFACT
68 C
69 C TEST FOR END OF ENTRY MODE
70 C
71 IF(IFACT.EQ.0) GOTO 9999
72 C
73 C-----
74 C
75 C GET DATA FOR DETAIL DATA SET
76 C
77 C MILL FEEDER DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81 WRITE(1,1125)
82 1125 FORMAT(" TRAIN # <-->
83 READ(1,4000) IVALU(2)
84 4000 FORMAT(20A2)
85 C
86 WRITE(1,1150)
87 1150 FORMAT(" ENTRY # <-->
88 READ(1,*) IVALU(3)
89 C
90 C
91 WRITE(1,3000) (IBAK,K=1,6)
92 READ(1,4000) (IVALU(K),K=4,9)
93 C
94 WRITE(1,3010)
95 READ(1,*) IVALU(10)
96 C
97 WRITE(1,3020)
98 READ(1,*) IVALU(11)
99 C
100 WRITE(1,3030)

* &PDEN8(PLANT1) * 9:20 PM TUE., 28 APR., 1981 * 3*

```
101      READ(1,*) IVALU(12)
102 C
103      WRITE(1,3040)
104      READ(1,*) IVALU(13)
105 C
106      WRITE(1,3050) (IBAK,K=1,12)
107      READ(1,4000) (IVALU(K),K=14,25)
108 C
109 C -----
110 C
111 3000 FORMAT (" DIFFUSER MAKE           ****",6A2,"_")
112 3010 FORMAT (" DIFFUSER WIDTH          _")
113 3020 FORMAT (" DIFFUSER LENGTH          _")
114 3030 FORMAT (" DIFFUSER CARRIER SPEED    _")
115 3040 FORMAT (" DIFFUSER DRIVE POWER      _")
116 3050 FORMAT (" DIFFUSER POSITION IN TRAIN ****",
117      $      12A2,"_")
118 C
119 C
120 C -----
121 C
122 C      PUT DATA IN DATA-BASE
123 C
124      IMODE=1
125      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, IVALU)
126 C
127 C      TEST FOR ERROR IN PUT
128 C
129      IF( ISTAT(1).EQ.0 ) GOTO 100
130 C
131 C      ERROR
132 C
133      WRITE(1,1600) ISTAT(1),IDSET
134 1600 FORMAT(//"+ PDEN8 ++ ERROR",I5," ON PUT IN SET "",3A2,"")
135 C
136 C      GET NEXT ENTRY
137 C
138      GOTO 100
139 C
140 C
141 ****
142 C
143 C
144 C      TERMINATE
145 C -----
146 C
147 C
148 9999 CALL DBUNL (ISTAT)
149      IMODE=0
150 C
```

* &PDEN8(PLANT1) * 9:27 PM TUE., 28 APR., 1981 * 4*

151 C CLOSE DATA-BASE
152 C
153 IMODE=1
154 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
155 C
156 WRITE(1,1700)
157 1700 FORMAT(////"+ PDEN8 STOP ++"///)
158 C
159 C
160 END
161 END\$

* &PDEN9(PLANT1) * 9:28 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDEN9
3 C
4 C
5 C      +++  WRITTEN - GDD - 9 JUL 1980    +++
6 C      +++  LAST MODIFIED   9 JUL 1980    +++
7 C
8 C  PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C  PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C  ===== SCREEN =====
12 C
13 C
14 C  DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(12)
15 C      $           ,IDSET(3),IVALU(17)
16 C
17 C  DATA-BASE
18 C      DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C  VARIABLE LIST
20 C      DATA LIST/10,1,5,143,144,145,146,147,148,149,150/
21 C  LEVEL
22 C      DATA ILEVl/2H ,2H ,2H /
23 C      DATA SET NAME - 'SCREEN'
24 C      DATA IDSET/2HSC,2HRE,2HEN/
25 C
26 C      DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C      OPEN DATA-BASE
36 C  -----
37 C
38 C
39 C  OPEN DATA-BASE  (EXCLUSIVE READ/WRITE)
40 C
41 C      IMODE=3
42 C      CALL DBOPNC( IBASE,ILEVL,IMODE,ISTAT )
43 C
44 C  TEST FOR ERROR ON OPEN
45 C
46 C      IF( ISTAT(1).EQ.0 ) GOTO 100
47 C  ERROR
48 C      WRITE(1,1000) ISTAT(1)
49 C 1000 FORMAT(//"+ PDEN9 ++ ERROR",I5," ON DATA-BASE OPEN")
50 C      GOTO 9999
```

* &PDEN9(PLANT1) * 9:34 PM TUE., 28 APR., 1981 * 2*

```
51 C
52 C
53 C*****
54 C
55 C
56 C          ENTRY MODE
57 C
58 C
59 C      GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,17
62 101 IVALU(K) = 0
63 C
64      WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER?      ->
66      IFACT=0
67      READ(1,*) IFACT
68 C
69 C      TEST FOR END OF ENTRY MODE
70 C
71      IF( IFACT.EQ.0 ) GOTO 9999
72 C
73 C
74 C
75 C      GET DATA FOR DETAIL DATA SET
76 C
77 C      SCREEN DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81 C
82      WRITE(1,1150)
83 1150 FORMAT(" ENTRY #      ->
84      READ(1,*) IVALU(2)
85 C
86 C
87      WRITE(1,3000) (IBAK,K=1,8)
88      READ(1,4000) (IVALU(K),K=3,10)
89 4000 FORMAT(20A2)
90 C
91      WRITE(1,3010)
92      READ(1,*) IVALU(11)
93 C
94      WRITE(1,3020)
95      READ(1,*) IVALU(12)
96 C
97      WRITE(1,3030)
98      READ(1,*) IVALU(13)
99 C
100     WRITE(1,3040)
```

* &PDEN9(PLANT1) * 9:40 PM TUE., 28 APR., 1981 * 3*

```
101      READ(1,*) DUM1
102      IVALU(14) = INT (10.*DUM1)
103 C
104      WRITE(1,3050)
105      READ(1,*) IVALU(15)
106 C
107      WRITE(1,3060)
108      READ(1,*) IVALU(16)
109 C
110      WRITE(1,3070)
111      READ(1,*) IVALU(17)
112 C
113 C -----
114 C
115 3000 FORMAT (" JUICE SCREEN TYPE      *****",8A2,"_")
116 3010 FORMAT (" NUMBER OF SCREENS      _" )
117 3020 FORMAT (" SCREEN LENGTH      _" )
118 3030 FORMAT (" SCREEN WIDTH      _" )
119 3040 FORMAT (" SCREEN OPENING      _" )
120 3050 FORMAT (" HOLDING TANK VOLUME      _" )
121 3060 FORMAT (" FLASH TANK DIAMETER      _" )
122 3070 FORMAT (" FLASH TANK HEIGHT      _" )
123 C
124 C
125 C -----
126 C
127 C   PUT DATA IN DATA-BASE
128 C
129      IMODE=1
130      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
131 C
132 C   TEST FOR ERROR IN PUT
133 C
134      IF( ISTAT(1).EQ.0 ) GOTO 100
135 C
136 C   ERROR
137 C
138      WRITE(1,1600) ISTAT(1), IDSET
139 1600 FORMAT(//"+ PDEN9 ++ ERROR",I5," ON PUT IN SET '",3A2,"'")
140 C
141 C   GET NEXT ENTRY
142 C
143      GOTO 100
144 C
145 C
146 C*****
147 C
148 C
149 C   TERMINATE
150 C -----
```

* &PDEN9(PLANT1) * 9:46 PM TUE., 28 APR., 1981 * 4*

151 C
152 C
153 9999 CALL DBUNL (ISTAT)
154 IMODE=0
155 C
156 C CLOSE DATA-BASE
157 C
158 IMODE=1
159 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
160 C
161 WRITE(1,1700)
162 1700 FORMAT(////"+ PDEN9 STOP ++"////)
163 C
164 C
165 END
166 END\$

* &PDN10(PLANT1) * 9:48 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN10
3 C
4 C
5 C     +++ WRITTEN - GDD - 9 JUL 1980 +++
6 C     +++ LAST MODIFIED 9 JUL 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== HEATER =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(13)
15 C      $ , IDSET(3), IVALU(30)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2H:G,2HD:,2H9 /
19 C VARIABLE LIST
20 C DATA LIST/12,1,5,151,152,153,154,155,156,157,158,159,160/
21 C      LEVEL
22 C DATA ILEVL/2H ,2H ,2H /
23 C      DATA SET NAME - 'HEATER'
24 C DATA IDSET/2HHE,2HAT,2HER/
25 C
26 C DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C      OPEN DATA-BASE
36 C -----
37 C
38 C
39 C      OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
40 C
41 C      IMODE=3
42 C      CALL DBOPEN( IBASE, ILEVL, IMODE, ISTAT )
43 C
44 C      TEST FOR ERROR ON OPEN
45 C
46 C      IF( ISTAT(1).EQ.0 ) GOTO 100
47 C      ERROR
48 C      WRITE(1,1000) ISTAT(1)
49 C 1000 FORMAT(//"+ PDN10 ++ ERROR",15," ON DATA-BASE OPEN")
50 C      GOTO 9999
```

* &PDN10(PLANT1) * 9:54 PM TUE., 28 APR., 1981 * 2*

51 C
52 C
53 ****
54 C
55 C
56 C ENTRY MODE
57 C -----
58 C
59 C GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,30
62 101 IVALU(K) = 0
63 C
64 WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER? <-->
66 IFACT=0
67 READ(1,*) IFACT
68 C
69 C TEST FOR END OF ENTRY MODE
70 C
71 IF(IFACT.EQ.0) GOTO 9999
72 C
73 C-----
74 C
75 C GET DATA FOR DETAIL DATA SET
76 C
77 C HEATER DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81 C
82 WRITE(1,1150)
83 1150 FORMAT(" ENTRY # <-->
84 READ(1,*) IVALU(2)
85 C
86 C
87 WRITE(1,3000)
88 READ(1,*) IVALU(3)
89 C
90 WRITE(1,3010) (IBAK,K=1,8)
91 READ(1,4000) (IVALU(K),K=4,11)
92 4000 FORMAT(20A2)
93 C
94 WRITE(1,3020)
95 READ(1,*) IVALU(12)
96 C
97 WRITE(1,3030) (IBAK,K=1,8)
98 READ(1,4000) (IVALU(K),K=13,20)
99 C
100 WRITE(1,3040)

* &PDN10(PLANT1) * 9:59 PM TUE., 28 APR., 1981 * 3*

```
101      READ(1,*) IVALU(21)
102 C
103      WRITE(1,3050)
104      READ(1,*) IVALU(22)
105 C
106      WRITE(1,3060)
107      READ(1,*) IVALU(23)
108 C
109      WRITE(1,3070)
110      READ(1,*) IVALU(24)
111 C
112      WRITE(1,3080) (IBAK,K=1,5)
113      READ(1,4000) (IVALU(K),K=25,29)
114 C
115      WRITE(1,3090)
116      READ(1,*) DUM1
117      IVALU(30) = INT (10.*DUM1)
118 C
119 C -----
120 C
121 3000 FORMAT (" JUICE HEATER NUMBER           _")
122 3010 FORMAT (" JUICE HEATER - MATERIAL HEATED *****,8A2,
123 $      "_")
124 3020 FORMAT (" JUICE HEATER - AREA             _")
125 3030 FORMAT (" JUICE HEATER HEATING MEDIUM   *****,8A2,
126 $      "_")
127 3040 FORMAT (" JUICE HEATER NO OF PASSES        _")
128 3050 FORMAT (" JUICE HEATER NO. OF TUBES PER PASS _")
129 3060 FORMAT (" JUICE HEATER TUBE LENGTH         _")
130 3070 FORMAT (" JUICE HEATER TUBE DIAMETER       _")
131 3080 FORMAT (" JUICE HEATER TUBE MATERIAL      *****,5A2,"_")
132 3090 FORMAT (" JUICE HEATER TUBE THICKNESS     _")
133 C
134 C
135 C -----
136 C
137 C PUT DATA IN DATA-BASE
138 C
139      IMODE=1
140      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
141 C
142 C TEST FOR ERROR IN PUT
143 C
144      IF( ISTAT(1).EQ.0 ) GOTO 100
145 C
146 C ERROR
147 C
148      WRITE(1,1600) ISTAT(1),IDSET
149 1600 FORMAT(//"+ PDN10 ++ ERROR",I5," ON PUT IN SET "",3A2,"")
150 C
```

* &PDN10(PLANT1) *10:07 PM TUE., 28 APR., 1981 * 4*

151 C GET NEXT ENTRY
152 C
153 GOTO 100
154 C
155 C
156 C*****
157 C
158 C
159 C TERMINATE
160 C -----
161 C
162 C
163 9999 CALL DBUNL (ISTAT)
164 IMODE=0
165 C
166 C CLOSE DATA-BASE
167 C
168 IMODE=1
169 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
170 C
171 WRITE(1,1700)
172 1700 FORMAT(////"+ PDN10 STOP ++"////)
173 C
174 C
175 END
176 END\$

* &PDN11(PLANT1) *10:10 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN11,
3 C
4 C
5 C     +++ WRITTEN - GDD - 9 JUL 1980 +++
6 C     +++ LAST MODIFIED 9 JUL 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== CLARIF =====
12 C
13 C
14 C DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(12)
15 C $ ,IDSET(3),IVALU(28)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C VARIABLE LIST
20 C DATA LIST/11,1,5,161,162,163,164,165,166,167,168,169/
21 C LEVEL
22 C DATA ILEVL/2H ,2H ,2H /
23 C DATA SET NAME - 'CLARIF'
24 C DATA IDSET/2HCL,2HAR,2HIF/
25 C
26 C DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C OPEN DATA-BASE
36 C -----
37 C
38 C
39 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
40 C
41 C IMODE=3
42 C CALL DBOPEN( IBASE,ILEVL,IMODE,ISTAT )
43 C
44 C TEST FOR ERROR ON OPEN
45 C
46 C IF( ISTAT(1).EQ.0 ) GOTO 100
47 C ERROR
48 C WRITE(1,1000) ISTAT(1)
49 C 1000 FORMAT(//"+ PDN11 ++ ERROR",I5," ON DATA-BASE OPEN")
50 C GOTO 9999
```

* &PDN11(PLANT1) *10:16 PM TUE., 28 APR., 1981 * 2*

```
51 C
52 C
53 C*****
54 C
55 C
56 C      ENTRY MODE
57 C -----
58 C
59 C      GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,28
62 101 IVALU(K) = 0
63 C
64      WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER?      ")
66      IFACT=0
67      READ(1,*) IFACT
68 C
69 C      TEST FOR END OF ENTRY MODE
70 C
71      IF( IFACT.EQ.0 ) GOTO 9999
72 C
73 C -----
74 C
75 C      GET DATA FOR DETAIL DATA SET
76 C
77 C      CLARIFIER DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81 C
82      WRITE(1,1150)
83 1150 FORMAT(" ENTRY #      ")
84      READ(1,*) IVALU(2)
85 C
86 C
87      WRITE(1,3000) (IBAK,K=1,6)
88      READ(1,4000) (IVALU(K),K=3,8)
89 4000 FORMAT(20A2)
90 C
91      WRITE(1,3010) (IBAK,K=1,6)
92      READ(1,4000) (IVALU(K),K=9,14)
93 C
94      WRITE(1,3020)
95      READ(1,*) IVALU(15)
96 C
97      WRITE(1,3030)
98      READ(1,*) IVALU(16)
99 C
100     WRITE(1,3040)
```

* &PDN11 (PLANT1) *10:22 PM TUE., 28 APR. 1981 * 3*

```
101      READ(1,*) IVALU(17)
102 C
103      WRITE(1,3050)
104      READ(1,*) IVALU(18)
105 C
106 C
107      WRITE(1,3060) (IBAK,K=1,8)
108      READ(1,4000) (IVALU(K),K=19,26)
109 C
110      WRITE(1,3070)
111      READ(1,*) IVALU(27)
112 C
113      WRITE(1,3080)
114      READ(1,*) IVALU(28)
115 C
116 C -----
117 C
118 3000 FORMAT(" CLARIFIER POSITION *****",6A2,"_")
119 3010 FORMAT(" CLARIFIER TYPE *****",6A2,"_")
120 3020 FORMAT(" CLARIFIER NUMBER OF TRAYS _")
121 3030 FORMAT(" CLARIFIER DIAMETER _")
122 3040 FORMAT(" CLARIFIER AREA _")
123 3050 FORMAT(" CLARIFIER VOLUME _")
124 3060 FORMAT(" FILTER TYPE *****",8A2,"_")
125 3070 FORMAT(" FILTER NUMBER _")
126 3080 FORMAT(" FILTER AREA _")
127 C
128 C -----
129 C
130 C
131 C PUT DATA IN DATA-BASE
132 C
133      IMODE=1
134      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
135 C
136 C TEST FOR ERROR IN PUT
137 C
138      IF( ISTAT(1).EQ.0 ) GOTO 100
139 C
140 C     ERROR
141 C
142      WRITE(1,1600) ISTAT(1),IDSET
143 1600 FORMAT(//"+ PDN11 ++ ERROR",15," ON PUT IN SET ",3A2,"")
144 C
145 C     GET NEXT ENTRY
146 C
147      GOTO 100
148 C
149 C
150 C*****
```

* &PDN11(PLANT1) *10:28 PM TUE., 28 APR., 1981 * 4*

151 C
152 C
153 C TERMINATE
154 C -----
155 C
156 C
157 9999 CALL DBUNL (ISTAT)
158 IMODE=0
159 C
160 C CLOSE DATA-BASE
161 C
162 IMODE=1
163 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
164 C
165 WRITE(1,1700)
166 1700 FORMAT(////"+ PDN11 STOP ++"////)
167 C
168 C
169 END
170 END\$

* &PDN12(PLANT1) *10:31 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDN12
3 C
4 C
5 C      +++  WRITTEN ~ GDD - 9 JUL 1980  +++
6 C      +++  LAST MODIFIED  9 JUL 1980  +++
7 C
8 C  PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C  PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C  ====== SEPAR ======
12 C
13 C
14 C  DIMENSION IBASE(7), ILEV1(3), ISTAT(10), LIST(9)
15 C      $      , IDSET(3), IVALU(13)
16 C
17 C  DATA-BASE
18 C  DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C  VARIABLE LIST
20 C  DATA LIST/8,1,5,170,171,172,173,174,175/
21 C  LEVEL
22 C  DATA ILEV1/2H ,2H ,2H /
23 C  DATA SET NAME - 'SEPAR'
24 C  DATA IDSET/2HSE,2HPA,2HR /
25 C
26 C  DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C      OPEN DATA-BASE
36 C  -----
37 C
38 C
39 C  OPEN DATA-BASE  (EXCLUSIVE READ/WRITE)
40 C
41 C  IMODE=3
42 C  CALL DBOPEN( IBASE, ILEV1, IMODE, ISTAT )
43 C
44 C  TEST FOR ERROR ON OPEN
45 C
46 C  IF( ISTAT(1).EQ.0 ) GOTO 100
47 C  ERROR
48 C  WRITE(1,1000) ISTAT(1)
49 C 1000 FORMAT(//"+ PDN12 ++ ERROR",15," ON DATA-BASE OPEN")
50 C  GOTO 9999
```

* &PDN12(PLANT1) *10:37 PM TUE., 28 APR., 1981 * 2*

```
51 C
52 C
53 ****
54 C
55 C
56 C           ENTRY MODE
57 C -----
58 C
59 C   GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,13
62 101 IVALU(K) = 0
63 C
64      WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER?          ")
66      IFACT=0
67      READ(1,*) IFACT
68 C
69 C   TEST FOR END OF ENTRY MODE
70 C
71      IF( IFACT.EQ.0 ) GOTO 9999
72 C
73 C -----
74 C
75 C   GET DATA FOR DETAIL DATA SET
76 C
77 C   BAGASSE SEPARATOR DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81 C
82      WRITE(1,1150)
83 1150 FORMAT(" ENTRY #          ")
84      READ(1,*) IVALU(2)
85 C
86 C
87      WRITE(1,3000) (IBAK,K=1,6)
88      READ(1,4000) (IVALU(K),K=3,8)
89 4000 FORMAT(20A2)
90 C
91      WRITE(1,3010)
92      READ(1,*) DUM1
93      IVALU(9) = INT (10.*DUM1)
94 C
95      WRITE(1,3020)
96      READ(1,*) IVALU(10)
97 C
98      WRITE(1,3030)
99      READ(1,*) IVALU(11)
100 C
```

* &PDN12(PLANT1) *10:42 PM TUE., 28 APR. , 1981 * 3*

```
101      WRITE(1,3040)
102      READ(1,*) IVALU(12)
103 C
104      WRITE(1,3050)
105      READ(1,*) IVALU(13)
106 C
107 C
108 C -----
109 C
110 3000 FORMAT (" BAGASSE SEPARATOR TYPE      *****",6A2,"")
111 3010 FORMAT (" BAGASSE SEPARATOR AREA          ")
112 3020 FORMAT (" BAGASSE SEPARATOR SCREEN OPENING   ")
113 3030 FORMAT (" BAGASSE SEPARATOR SCREEN WIDTH     ")
114 3040 FORMAT (" BAGASSE SEPARATOR SCREEN HEIGHT    ")
115 3050 FORMAT (" BAGASSE SEPARATOR DRIVE POWER   ")
116 C
117 C
118 C -----
119 C
120 C PUT DATA IN DATA-BASE
121 C
122 IMODE=1
123 CALL DBPUTC(IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
124 C
125 C TEST FOR ERROR IN PUT
126 C
127 IF( ISTAT(1).EQ.0 ) GOTO 100
128 C
129 C ERROR
130 C
131      WRITE(1,1600) ISTAT(1),IDSET
132 1600 FORMAT(//"+ PDN12 ++ ERROR",I5," ON PUT IN SET "",3A2,"")
133 C
134 C GET NEXT ENTRY
135 C
136 GOTO 100
137 C
138 C
139 ****
140 C
141 C
142 C TERMINATE
143 C -----
144 C
145 C
146 9999 CALL DBUNL (ISTAT)
147 IMODE=0
148 C
149 C CLOSE DATA-BASE
150 C
```

* &PDN12(PLANT1) *10:48 PM TUE., 28 APR., 1981 * 4*

```
151      IMODE=1
152      CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
153 C
154      WRITE(1,1700)
155 1700  FORMAT(////"+ PDN12 STOP ++"///)
156 C
157 C
158      END
159      END$
```

* &PDN13(PLANT1) *10:49 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDN13
3 C
4 C
5 C      +++  WRITTEN - GDD - 9 JUL 1980  +++
6 C      +++  LAST MODIFIED 10 JUL 1980  +++
7 C
8 C  PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C  PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C  ===== EVAP =====
12 C
13 C
14 C  DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(14)
15 C  $           ,IDSET(3),IVALU(22)
16 C
17 C  DATA-BASE
18 C  DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD:,2H9 /
19 C  VARIABLE LIST
20 C  DATA LIST/13,1,3,176,5,177,178,179,180,181,182,183,184,185/
21 C  LEVEL
22 C  DATA ILEVL/2H ,2H ,2H /
23 C  DATA SET NAME - 'EVAP'
24 C  DATA IDSET/2HEV,2HAP,2H /
25 C
26 C  DATA IBAK/4010B/
27 C
28 C*****
29 C
30 C
31 C
32 C*****
33 C
34 C
35 C  OPEN DATA-BASE
36 C  -----
37 C
38 C
39 C  OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
40 C
41 C  IMODE=3
42 C  CALL DBOPEN( IBASE,ILEVL,IMODE,ISTAT )
43 C
44 C  TEST FOR ERROR ON OPEN
45 C
46 C  IF( ISTAT(1).EQ.0 ) GOTO 100
47 C  ERROR
48 C  WRITE(1,1000) ISTAT(1)
49 C  1000 FORMAT(//"+ PDN13 ++ ERROR",I5," ON DATA-BASE OPEN")
50 C  GOTO 9999
```

* &PDN13(PLANT1) *10:56 PM TUE., 28 APR., 1981 * 2*

```
51 C
52 C
53 ****
54 C
55 C
56 C           ENTRY MODE
57 C   -----
58 C
59 C   GET FACTORY NUMBER
60 C
61 100 DO 101 K=1,22
62 101 IVALU(K) = 0
63 C
64     WRITE(1,1100)
65 1100 FORMAT(//"FACTORY NUMBER?      ")
66     IFACT=0
67     READ(1,*) IFACT
68 C
69 C   TEST FOR END OF ENTRY MODE
70 C
71     IF( IFACT.EQ.0 ) GOTO 9999
72 C
73 C   -----
74 C
75 C   GET DATA FOR DETAIL DATA SET
76 C
77 C   EVAPORATOR DATA
78 C
79 120 IVALU(1)=IFACT
80 C
81     WRITE(1,1125)
82 1125 FORMAT(" TRAIN #      ")
83     READ(1,4000) IVALU(2)
84 4000 FORMAT(20A2)
85 C
86     WRITE(1,1140)
87 1140 FORMAT(" EVAPORATOR #      ")
88     READ(1,*) IVALU(3)
89 C
90     WRITE(1,1150)
91 1150 FORMAT(" ENTRY #      ")
92     READ(1,*) IVALU(4)
93 C
94 C
95     WRITE(1,3000)
96     READ(1,*) IVALU(5)
97 C
98     WRITE(1,3010)
99     READ(1,*) IVALU(6)
100 C
```

* &PDN13(PLANT1) *11:01 PM TUE., 28 APR., 1981 * 3*

```
101      WRITE(1,3020)
102      READ(1,*) IVALU(7)
103 C
104      WRITE(1,3030) (IBAK,K=1,5)
105      READ(1,4000) (IVALU(K),K=8,12)
106 C
107      WRITE(1,3040)
108      READ(1,*) IVALU(13)
109 C
110      WRITE(1,3050)
111      READ(1,*) IVALU(14)
112 C
113      WRITE(1,3060)
114      READ(1,*) IVALU(15)
115 C
116      WRITE(1,3070)
117      READ(1,*) IVALU(16)
118 C
119      WRITE(1,3080) (IBAK,K=1,6)
120      READ(1,4000) (IVALU(K),K=17,22)
121 C
122 C -----
123 C
124 3000 FORMAT (" EVAPORATOR DIAMETER           ",")
125 3010 FORMAT (" EVAPORATOR HEATING SURFACE        ",")
126 3020 FORMAT (" EVAP TUBE LENGTH                  ",")
127 3030 FORMAT (" EVAP TUBE MATERIAL                *****",5A2,"")
128 3040 FORMAT (" EVAP TUBE O.D.                   ",")
129 3050 FORMAT (" EVAP TUBE THICKNESS               ",")
130 3060 FORMAT (" EVAP CONDENSER DIAMETER          ",")
131 3070 FORMAT (" EVAP CONDENSER HEIGHT             ",")
132 3080 FORMAT (" EVAP BLEED TO                  *****",6A2,"")
133 C
134 C
135 C -----
136 C
137 C PUT DATA IN DATA-BASE
138 C
139 IMODE=1
140 CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
141 C
142 C TEST FOR ERROR IN PUT
143 C
144 IF( ISTAT(1).EQ.0 ) GOTO 100
145 C
146 C ERROR
147 C
148      WRITE(1,1600) ISTAT(1),IDSET
149 1600 FORMAT(//"+ PDN13 ++ ERROR",I5," ON PUT IN SET ",3A2,"")
```

* &PDN13(PLANT1) *11:08 PM TUE. 28 APR. 1981 * 4*

151 C GET NEXT ENTRY
152 C
153 GOTO 100
154 C
155 C
156 C*****
157 C
158 C
159 C TERMINATE
160 C -----
161 C
162 C
163 9999 CALL DBUNL (ISTAT)
164 IMODE=0
165 C
166 C CLOSE DATA-BASE
167 C
168 IMODE=1
169 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
170 C
171 WRITE(1,1700)
172 1700 FORMAT(////"+ PDN13 STOP ++"////)
173 C
174 C
175 END
176 END\$

* &PDN20(PLANT1) *11:12 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN20
3 C
4 C
5 C     +++ WRITTEN - GDD - 16 JUL 1980 +++
6 C     +++ LAST MODIFIED 16 JUL 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== PANS =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVEL(3), ISTAT(10), LIST(15)
15 C      $ , IDSET(3), IVALU(26)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/13,1,3,4,5,6,7,8,9,10,11,12,13,14/
26 C LEVEL
27 C DATA ILEVEL/2H ,2H ,2H /
28 C DATA SET NAME ~ 'PANS'
29 C DATA IDSET/2HPA,2HNS,2H /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C          OPEN DATA-BASE
39 C -----
40 C
41 C
42 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C IMODE=3
45 C CALL DBOPEN( IBASE, ILEVEL, IMODE, ISTAT )
46 C
47 C TEST FOR ERROR ON OPEN
48 C
49 C IF( ISTAT(1).EQ.0 ) GOTO 100
50 C ERROR
```

* &PDN20(PLANT1) *11:17 PM TUE., 28 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+ PDN20 ++ ERROR",I5," ON DATA-BASE OPEN")
53 GOTO 9999
54 C
55 C
56 ****
57 C
58 C
59 C          ENTRY MODE
60 C
61 C
62 C          GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,26
65 101 IVALU(I) = 0
66 C
67      WRITE(1,1100)
68 1100 FORMAT(//"FACTORY NUMBER?           __>
69          IFACT=0
70          READ(1,*) IFACT
71 C
72 C          TEST FOR END OF ENTRY MODE
73 C
74 IF( IFACT.EQ.0 ) GOTO 9999
75 C
76 C
77 C
78 C          GET DATA FOR DETAIL DATA SET
79 C
80 C          PANSTAGE DATA
81 C
82 120 IVALU(1)=IFACT
83 C
84 C
85      WRITE(1,1150)
86 1150 FORMAT(" ENTRY #           __>
87          READ(1,*) IVALU(2)
88 C
89      WRITE(1,1160) IBAK
90 1160 FORMAT(" GRADE OF PAN ? **",A2,"__")
91          READ(1,4000) IVALU(3)
92 4000 FORMAT(20A2)
93 C
94      WRITE(1,3010)
95          READ(1,*) IVALU(13)
96 C
97      WRITE(1,3000) (IBAK,K=1,9)
98          READ(1,4000) (IVALU(K),K=4,12)
99 C
100     WRITE(1,3020) (IBAK,K=1,6)
```

* &PDN20(PLANT1) *11:22 PM TUE., 28 APR., 1981 * 3*

```
101      READ(1,4000) (IVALU(K),K=14,19)
102 C
103      WRITE(1,3030)
104      READ(1,*) IVALU(20)
105 C
106      WRITE(1,3040)
107      READ(1,*) DUM
108      IVALU(21) = INT (10.*DUM)
109 C
110      WRITE(1,3050)
111      READ(1,*) IVALU(22)
112 C
113      WRITE(1,3060)
114      READ(1,*) IVALU(23)
115 C
116      WRITE(1,3070)
117      READ(1,*) DUM
118      IVALU(24) = INT (10.*DUM)
119 C
120      WRITE(1,3080)
121      READ(1,*) IVALU(25)
122 C
123      WRITE(1,3090)
124      READ(1,*) IVALU(26)
125 C
126 C -----
127 C
128 3000 FORMAT(" PAN TYPE      *****",9A2,"_")
129 3010 FORMAT(" PAN REF #      _")
130 3020 FORMAT(" PAN MATERIAL   *****",6A2,"_")
131 3030 FORMAT(" PAN DIAMETER     _")
132 3040 FORMAT(" PAN VOLUME       _")
133 3050 FORMAT(" PAN SURFACE AREA _")
134 3060 FORMAT(" PAN STIRRER SPEED _")
135 3070 FORMAT(" PAN SURFACE/VOLUME RATIO _")
136 3080 FORMAT(" PAN CONDENSER DIAMETER _")
137 3090 FORMAT(" PAN CONDENSER LENGTH _")
138 C
139 C
140 C -----
141 C
142 C    PUT DATA IN DATA-BASE
143 C
144      IMODE=1
145      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
146 C
147 C    TEST FOR ERROR IN PUT
148 C
149      IF( ISTAT(1).EQ.0 ) GOTO 100
150 C
```

* &PDN20(PLANT1) *11:30 PM TUE., 28 APR., 1981 * 4*

```
151 C   ERROR
152 C
153     WRITE(1,1600) ISTAT(1),IDSET
154 1600 FORMAT(//"+ PDN20 ++ ERROR",I5," ON PUT IN SET '",3A2,"'")
155 C
156 C   GET NEXT ENTRY
157 C
158     GOTO 100
159 C
160 C
161 C*****=====
162 C
163 C
164 C   TERMINATE
165 C   -----
166 C
167 C
168 9999 CALL DBUNL (ISTAT)
169     IMODE=0
170 C
171 C   CLOSE DATA-BASE
172 C
173     IMODE=1
174     CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
175 C
176     WRITE(1,1700)
177 1700 FORMAT(////"+ PDN20 STOP ++///)
178 C
179 C
180     END
181     END$
```

* PL79A(PLANT1) * 3:42 PM WED., 29 APR., 1981 * 1*

1 HEWLETT-PACKARD IMAGE/1000 DATA BASE DEFINITION PROCESSOR

2

3

4

5 \$CONTROL,NOLIST,FIELD,ERRORS=10,ROOT,SET,TABLE,

6

7

8	SET NAME	TYPE	# ITEMS	# PATHS	DATA	MEDIA	CAPAC	CARTRIDGE
10	NAMES	M	002	13	0009	0083	0000000035	00019
11	NUMBS	A	001	03	0001	0023	0000000006	00019
12	TRAINs	A	001	08	0001	0053	0000000002	00019
13	EVAPS	A	001	01	0001	0011	0000000007	00019
14	ENTRYs	A	001	09	0001	0059	0000000010	00019
15	TRANS	D	017	02	0030	0011	0000000175	00019
16	CARR	D	013	03	0063	0015	0000000105	00019
17	KNIVES	D	014	02	0030	0011	0000000105	00019
18	SHRED	D	019	03	0036	0015	0000000070	00019
19	MILLS	D	033	03	0034	0015	0000000175	00019
20	FEEDS	D	039	03	0042	0015	0000000175	00019
21	PRESS	D	015	03	0015	0015	0000000175	00019
22	DIFFUS	D	009	03	0025	0015	0000000035	00019
23	SCREEN	D	010	02	0017	0011	0000000100	00019
24	HEATER	D	012	02	0030	0011	0000000150	00019
25	CLARIF	D	011	02	0028	0011	0000000140	00019
26	SEPAR	D	008	02	0013	0011	0000000105	00019
27	EVAP	D	013	04	0022	0019	0000000600	00019
28								

29

30

31	SET NAME	SET NO	ITEM NAME	ITEM NO	TYPE	START WD	END WD	PATH?	SORT ITEM
32	NAMES	01	FACT#	001	I	0001	0001	YES	
33			NAME	002	X	0002	0009		
34	NUMBS	02	MILL#	004	I	0001	0001	YES	
35	TRAINs	03	TRAIN#	003	X	0001	0001	YES	
36	EVAPS	04	ENTRY#	005	I	0001	0001	YES	
37	ENTRYs	05	ENTRY#	005	I	0001	0001	YES	
38	TRANS	06	FACT#	001	I	0001	0001	YES	
39			ENTRY#	005	I	0002	0002	YES	
40			LOCOS	006	I	0003	0003		
41			TYPE	007	X	0004	0007		
42			ENG	008	X	0008	0011		

43

44

45

46

47

48

49

50

* PL79A(PLANT1) * 3:51 PM WED., 29 APR., 1981 * 2*

51			POWER	009	I	0012	0012	
52			MASS	010	I	0013	0013	
53			GAUGE	011	I	0014	0014	
54			TRUCK	012	X	0015	0022	
55			TRUCK#	013	I	0023	0023	
56			CAPAC	014	I	0024	0024	
57			TGAUGE	015	I	0025	0025	
58			TRAML	016	I	0026	0026	
59			GAUGEL	017	I	0027	0027	
60			CROPP	018	I	0028	0028	
61			CROPG	019	I	0029	0029	
62			CROPR	020	I	0030	0030	
63								
64	CARR	07	FACT#	001	I	0001	0001	YES
65			TRAIN#	003	X	0002	0002	YES
66			ENTRY#	005	I	0003	0003	YES
67			CPOS	021	X	0004	0011	
68			CTYPE	022	X	0012	0027	
69			CLEN	023	I	0028	0028	
70			CWID	024	I	0029	0029	
71			CINCL	025	I	0030	0030	
72			CSPD	026	I	0031	0031	
73			CDVE	027	X	0032	0039	
74			CPWR	028	I	0040	0040	
75			CFEED	029	X	0041	0048	
76			CREM	030	X	0049	0063	
77								
78	KNIVES	08	FACT#	001	I	0001	0001	YES
79			TRAIN#	003	X	0002	0002	YES
80			LTYPE	031	X	0003	0007	
81			LBL#	032	I	0008	0008	
82			LCLR	033	I	0009	0009	
83			LSPD	034	I	0010	0010	
84			LDVE	035	X	0011	0015	
85			LPWR	036	I	0016	0016	
86			KTYPE	037	X	0017	0021	
87			KBL#	038	I	0022	0022	
88			KCLR	039	I	0023	0023	
89			KSPD	040	I	0024	0024	
90			KDVE	041	X	0025	0029	
91			KPWR	042	I	0030	0030	
92								
93	SHRED	09	FACT#	001	I	0001	0001	YES
94			TRAIN#	003	X	0002	0002	YES
95			ENTRY#	005	I	0003	0003	YES
96			K2TYPE	043	X	0004	0008	
97			K2BL#	044	I	0009	0009	
98			K2CLR	045	I	0010	0010	
99			K2SPD	046	I	0011	0011	
100			K2DVE	047	X	0012	0016	

* 'PL79A(PLANT1) * 4:00 PM WED., 29 APR., 1981 * 3*

101		K2PWR	048	I	0017	0017		
102		STYPE	049	X	0018	0023		
103		SDIA	050	I	0024	0024		
104		SLEN	051	I	0025	0025		
105		SCLEAR	052	I	0026	0026		
106		SSPD	053	I	0027	0027		
107		SMASS	054	I	0028	0028		
108		SDVE	055	X	0029	0033		
109		SSTMP	056	I	0034	0034		
110		SSTMT	057	I	0035	0035		
111		SPWR	058	I	0036	0036		
112								
113	MILLS	10	FACT#	001	I	0001	0001	YES
114			TRAIN#	003	X	0002	0002	YES
115			MILL#	004	I	0003	0003	YES
116			MDIA	059	I	0004	0004	
117			MLEN	060	I	0005	0005	
118			MSPD	061	I	0006	0006	
119			MHR	062	X	0007	0008	
120			MHRL	063	I	0009	0009	
121			MSOF	064	I	0010	0010	
122			MSOD	065	I	0011	0011	
123			MARL	066	I	0012	0012	
124			MWOF	067	I	0013	0013	
125			MWOD	068	I	0014	0014	
126			MRAT	069	I	0015	0015	
127			MHRMX	070	I	0016	0016	
128			MTPT	071	I	0017	0017	
129			MTPH	072	I	0018	0018	
130			MOTP	073	I	0019	0019	
131			MOTD	074	I	0020	0020	
132			MOTA	075	I	0021	0021	
133			MOFP	076	I	0022	0022	
134			MOFD	077	I	0023	0023	
135			MOFA	078	I	0024	0024	
136			MODP	079	I	0025	0025	
137			MODD	080	I	0026	0026	
138			MODA	081	I	0027	0027	
139			MJTP	082	I	0028	0028	
140			MJTD	083	I	0029	0029	
141			MJTW	084	I	0030	0030	
142			MJFP	085	I	0031	0031	
143			MJFD	086	I	0032	0032	
144			MJFW	087	I	0033	0033	
145			MFRATE	088	I	0034	0034	
146								
147	FEEDS	11	FACT#	001	I	0001	0001	YES
148			TRAIN#	003	X	0002	0002	YES
149			MILL#	004	I	0003	0003	YES
150			MCA	089	I	0004	0004	

* 'PL79A(PLANT1) * 4:10 PM WED., 29 APR., 1981 * 4*

151		MCB	090	I	0005	0005	
152		MCC	091	I	0006	0006	
153		MCD	092	I	0007	0007	
154		MPA	093	I	0008	0008	
155		MPB	094	I	0009	0009	
156		MPC	095	I	0010	0010	
157		MPD	096	I	0011	0011	
158		MPE	097	I	0012	0012	
159		MPF	098	I	0013	0013	
160		MPWO	099	I	0014	0014	
161		MPGR	100	I	0015	0015	
162		MPDR	101	X	0016	0018	
163		MAA	102	I	0019	0019	
164		MAB	103	I	0020	0020	
165		MAC	104	I	0021	0021	
166		MAD	105	I	0022	0022	
167		MAE	106	I	0023	0023	
168		MOA	107	I	0024	0024	
169		MOB	108	I	0025	0025	
170		MOC	109	I	0026	0026	
171		MOD	110	I	0027	0027	
172		MUA	111	I	0028	0028	
173		MUB	112	I	0029	0029	
174		MUC	113	I	0030	0030	
175		MUD	114	I	0031	0031	
176		MUE	115	I	0032	0032	
177		MUROLL	116	X	0033	0034	
178		MCLF	117	I	0035	0035	
179		MCLG	118	I	0036	0036	
180		MCLH	119	I	0037	0037	
181		MCLI	120	I	0038	0038	
182		MHJ	121	I	0039	0039	
183		MHK	122	I	0040	0040	
184		MHL	123	I	0041	0041	
185		MHM	124	I	0042	0042	
186							
187	PRESS	12	FACT#	001	I	0001	0001 YES
188			TRAIN#	003	X	0002	0002 YES
189			MILL#	004	I	0003	0003 YES
190			PFOUP	125	I	0004	0004
191			PFOUD	126	I	0005	0005
192			PFOUA	127	I	0006	0006
193			PFJUP	128	I	0007	0007
194			PFJUD	129	I	0008	0008
195			PFJUW	130	I	0009	0009
196			PFOLP	131	I	0010	0010
197			PFOLD	132	I	0011	0011
198			PFOLA	133	I	0012	0012
199			PFJLP	134	I	0013	0013
200			PFJLD	135	I	0014	0014

* 'PL79A(PLANT1) * 2:31 PM FRI., 29 MAY , 1981 * 5*

201			PFJLW	136	I	0015	0015	
202								
203	DIFFUS	13	FACT#	001	I	0001	0001	YES
204			TRAIN#	003	X	0002	0002	YES
205			ENTRY#	005	I	0003	0003	YES
206			DMAKE	137	X	0004	0009	
207			DWID	138	I	0010	0010	
208			DLEN	139	I	0011	0011	
209			DSPD	140	I	0012	0012	
210			DPWR	141	I	0013	0013	
211			DPOSN	142	X	0014	0025	
212								
213	SCREEN	14	FACT#	001	I	0001	0001	YES
214			ENTRY#	005	I	0002	0002	YES
215			JTYPE	143	X	0003	0010	
216			JS#	144	I	0011	0011	
217			JLEN	145	I	0012	0012	
218			JWID	146	I	0013	0013	
219			JSAPER	147	I	0014	0014	
220			HTVOL	148	I	0015	0015	
221			FTDIA	149	I	0016	0016	
222			FTHGT	150	I	0017	0017	
223								
224	HEATER	15	FACT#	001	I	0001	0001	YES
225			ENTRY#	005	I	0002	0002	YES
226			JH#	151	I	0003	0003	
227			JHUSE	152	X	0004	0011	
228			JHAREA	153	I	0012	0012	
229			JHHT	154	X	0013	0020	
230			JHPASS	155	I	0021	0021	
231			JHTUBE	156	I	0022	0022	
232			JHLEN	157	I	0023	0023	
233			JHDIA	158	I	0024	0024	
234			JHMATL	159	X	0025	0029	
235			JTTHCK	160	I	0030	0030	
236								
237	CLARIF	16	FACT#	001	I	0001	0001	YES
238			ENTRY#	005	I	0002	0002	YES
239			CLPOS	161	X	0003	0008	
240			CLTYPE	162	X	0009	0014	
241			CLTRAY	163	I	0015	0015	
242			CLDIA	164	I	0016	0016	
243			CLAREA	165	I	0017	0017	
244			CLVOL	166	I	0018	0018	
245			FTYPE	167	X	0019	0026	
246			FIL#	168	I	0027	0027	
247			FAREA	169	I	0028	0028	
248								
249	SEPAR	17	FACT#	001	I	0001	0001	YES
250			ENTRY#	005	I	0002	0002	YES

* 'PL79A(PLANT1) * 2:40 PM FRI., 29 MAY 1981 * 6*

251		SPTYPE	170	X	0003	0008		
252		SPAREA	171	I	0009	0009		
253		SPPOP	172	I	0010	0010		
254		SPWDTH	173	I	0011	0011		
255		SPHGT	174	I	0012	0012		
256		SPPWR	175	I	0013	0013		
257								
258	EVAP	18	FACT#	001	I	0001	0001	YES
259			TRAIN#	003	X	0002	0002	YES
260			EVAP#	176	I	0003	0003	YES
261			ENTRY#	005	I	0004	0004	YES
262			EVDIR	177	I	0005	0005	
263			EVSURF	178	I	0006	0006	
264			EVLEN	179	I	0007	0007	
265			EVMATL	180	X	0008	0012	
266			EVOD	181	I	0013	0013	
267			EVTH	182	I	0014	0014	
268			EVCDIA	183	I	0015	0015	
269			EVCHGT	184	I	0016	0016	
270			EVBLD	185	X	0017	0022	
271								
272								

273 NUMBER OF ERROR MESSAGES: 0000

274 NUMBER OF ITEMS: 185

275 NUMBER OF SETS: 18

276 ROOT FILE: 02187 WORDS, 00020 BLOCKS

277

278 CARTRIDGE NUMBER

NUMBER BLOCKS REQUIRED

279 00019

0000000743

280 DATA SET FILES CREATED.

281 ROOT FILE CREATED.

282 END DATA BASE DEFINITION

* 'PL79B(PLANT1) * 9:28 PM WED., 6 MAY, 1981 * 2*

51	STOCK	05	FACT#	001	I	0001	0001	YES
52			ENTRY#	003	I	0002	0002	YES
53			SYRUPV	015	I	0003	0003	
54			MOLVA	016	I	0004	0004	
55			MOLVB	017	I	0005	0005	
56			MAGY	018	I	0006	0006	
57			MH#	019	I	0007	0007	
58			MHAREA	020	I	0008	0008	
59			MHTYPE	021	X	0009	0016	
60			RHDIA	022	I	0017	0017	
61			RHVLT	023	I	0018	0018	
62			RHAMP	024	I	0019	0019	
63								
64	PUMPS	06	FACT#	001	I	0001	0001	YES
65			ENTRY#	003	I	0002	0002	YES
66			VP#	025	I	0003	0003	
67			VMAKE	026	X	0004	0011	
68			VCYL#	027	X	0012	0015	
69			VBORE	028	I	0016	0016	
70			VLEN	029	I	0017	0017	
71			VDISPL	030	I	0018	0018	
72			VTYPE	031	X	0019	0022	
73			VSPD	032	I	0023	0023	
74			VPWR	033	I	0024	0024	
75			VUSE	034	X	0025	0042	
76								
77	CRYST	07	FACT#	001	I	0001	0001	YES
78			ENTRY#	003	I	0002	0002	YES
79			CSMAKE	035	X	0003	0012	
80			CSGDE	036	X	0013	0014	
81			CS#	037	I	0015	0015	
82			CSVOL	038	I	0016	0016	
83			CSTYPE	039	X	0017	0023	
84			CSAREA	040	I	0024	0024	
85			CSMODE	041	X	0025	0029	
86								
87	HGFUG	08	FACT#	001	I	0001	0001	YES
88			ENTRY#	003	I	0002	0002	YES
89			FHMAKE	042	X	0003	0008	
90			FH#	043	I	0009	0009	
91			FHMASS	044	X	0010	0011	
92			FHSPD	045	I	0012	0012	
93			FHDIA	046	I	0013	0013	
94			FHDEP	047	I	0014	0014	
95			FHAREA	048	I	0015	0015	
96			FHDVE	049	X	0016	0016	
97			FHPWR	050	I	0017	0017	
98								
99	LGFUG	09	FACT#	001	I	0001	0001	YES
100			ENTRY#	003	I	0002	0002	YES

* PL79B(PLANT1) * 9:18 PM WED., 6 MAY , 1981 * 1*

1 HEWLETT-PACKARD IMAGE/1000 DATA BASE DEFINITION PROCESSOR
2
3
4

5 \$CONTROL, FIELD, NOLIST, ERRORS=10, ROOT, SET, TABLE;
6
7

8	SET NAME	TYPE	# ITEMS	# PATHS	DATA	MEDIA	CAPAC	CARTRIDGE
11	NAME2	M	002	10	0009	0065	0000000035	00019
12	ENTRY2	A	001	10	0001	0065	0000000010	00019
13	GRADE	A	001	01	0001	0011	0000000002	00019
14	PANS	D	013	03	0026	0015	0000000700	00019
15	STOCK	D	012	02	0019	0011	0000000070	00019
16	PUMPS	D	012	02	0042	0011	0000000350	00019
17	CRYST	D	009	02	0029	0011	0000000350	00019
18	HGFUG	D	011	02	0017	0011	0000000140	00019
19	LGFUG	D	014	02	0026	0011	0000000140	00019
20	DRYER	D	013	02	0023	0011	0000000070	00019
21	BOILER	D	022	02	0053	0011	0000000140	00019
22	BINS	D	009	02	0025	0011	0000000105	00019
23	ELECT	D	019	02	0031	0011	0000000140	00019

24
25
26 SET NAME SET NO ITEM NAME ITEM NO TYPE START WD END WD PATH? SORT ITEM
27
28
29

30	NAME2	01	FACT# NAME	001 002	I X	0001 0002	0001 0009	YES
33	ENTRY2	02	ENTRY#	003	I	0001	0001	YES
35	GRADE	03	GDE	004	X	0001	0001	YES
37	PANS	04	FACT# ENTRY# GDE PTYPE P# PMATL PDIA PVOL PSURF PSTSP PRAT PCDIA PCHGT	001 003 004 005 006 007 008 009 010 011 012 013 014	I I X X I X I I I I I I	0001 0002 0003 0004 0013 0014 0020 0021 0022 0023 0024 0025 0026	0001 0002 0003 0012 0013 0019 0020 0021 0022 0023 0024 0025 0026	YES YES YES YES YES YES YES YES YES YES YES YES YES

* &PDEN6(PLANT1) * 8:41 PM TUE., 28 APR., 1981 * 6*

```
251      WRITE(1,1600) ISTAT(1),IDSET
252 1600  FORMAT(//"+ PDEN6 ++ ERROR",I5," ON PUT IN SET '',3A2,"")
253 C
254 C   GET NEXT ENTRY
255 C
256      GOTO 100
257 C
258 C
259 C***** ****
260 C
261 C
262 C   TERMINATE
263 C   -----
264 C
265 C
266 9999 CALL DBUNL (ISTAT)
267     IMODE=0
268 C
269 C   CLOSE DATA-BASE
270 C
271     IMODE=1
272     CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
273 C
274     WRITE(1,1700)
275 1700  FORMAT(////"+ PDEN6 STOP ++////)
276 C
277 C
278     END
279     END$
```

* &PDEN6(PLANT1) * 8:24 PM TUE., 28 APR., 1981 * 5*

```
201 3000 FORMAT( " MILL CHUTE DIMENSION A      _" )
202 3010 FORMAT( " MILL CHUTE DIMENSION B      _" )
203 3020 FORMAT( " MILL CHUTE DIMENSION C      _" )
204 3030 FORMAT( " MILL CHUTE DIMENSION D      _" )
205 3040 FORMAT( " PRESSURE FEEDER DIMENSION A      _" )
206 3050 FORMAT( " PRESSURE FEEDER DIMENSION B      _" )
207 3060 FORMAT( " PRESSURE FEEDER DIMENSION C      _" )
208 3070 FORMAT( " PRESSURE FEEDER DIMENSION D      _" )
209 3080 FORMAT( " PRESSURE FEEDER DIMENSION E      _" )
210 3090 FORMAT( " PRESSURE FEEDER DIMENSION F      _" )
211 3100 FORMAT( " PRESSURE FEEDER WORK OPENING     _" )
212 3110 FORMAT( " PRESSURE FEEDER TO MILL GEAR RATIO   _" )
213 3120 FORMAT( " PRESSURE FEEDER DRIVE TYPE      _" )
214 3130 FORMAT( " MILL APRON FEEDER DIMENSION A      _" )
215 3140 FORMAT( " MILL APRON FEEDER DIMENSION B      _" )
216 3150 FORMAT( " MILL APRON FEEDER DIMENSION C      _" )
217 3160 FORMAT( " MILL APRON FEEDER DIMENSION D      _" )
218 3170 FORMAT( " MILL APRON FEEDER DIMENSION E      _" )
219 3180 FORMAT( /" MILL OVER-FEED ROLL DIMENSION A      _" )
220 3190 FORMAT( /" MILL OVER-FEED ROLL DIMENSION B      _" )
221 3200 FORMAT( /" MILL OVER-FEED ROLL DIMENSION C      _" )
222 3210 FORMAT( /" MILL OVER-FEED ROLL DIMENSION D      _" )
223 3220 FORMAT( /" MILL UNDERFEED ROLL DIMENSION A      _" )
224 3230 FORMAT( /" MILL UNDERFEED ROLL DIMENSION B      _" )
225 3240 FORMAT( /" MILL UNDERFEED ROLL DIMENSION C      _" )
226 3250 FORMAT( /" MILL UNDERFEED ROLL DIMENSION D      _" )
227 3260 FORMAT( /" MILL UNDERFEED ROLL DIMENSION E      _" )
228 3270 FORMAT( /" MILL UNDERFEED ROLL TYPE      ****",2A2,"_")
229 3280 FORMAT( /" MILL CLOSED CHUTE DIMENSION F      _" )
230 3290 FORMAT( /" MILL CLOSED CHUTE DIMENSION G      _" )
231 3300 FORMAT( /" MILL CLOSED CHUTE DIMENSION H      _" )
232 3310 FORMAT( /" MILL CLOSED CHUTE DIMENSION I      _" )
233 3320 FORMAT( /" MILL HINGED PLATE DIMENSION J      _" )
234 3330 FORMAT( /" MILL HINGED PLATE DIMENSION K      _" )
235 3340 FORMAT( /" MILL HINGED PLATE DIMENSION L      _" )
236 3350 FORMAT( /" MILL HINGED PLATE DIMENSION M      _" )
237 C
238 C-----
239 C
240 C PUT DATA IN DATA-BASE
241 C
242 IMODE=1
243 CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
244 C
245 C TEST FOR ERROR IN PUT
246 C
247 IF( ISTAT(1).EQ.0 ) GOTO 100
248 C
249 C ERROR
250 C
```

* &PDEN6(PLANT1) * 8:19 PM TUE., 28 APR., 1981 * 4*

```
151      WRITE(1,3200)
152      READ(1,*) IVALU(26)
153 C
154      WRITE(1,3210)
155      READ(1,*) IVALU(27)
156 C
157      WRITE(1,3220)
158      READ(1,*) IVALU(28)
159 C
160      WRITE(1,3230)
161      READ(1,*) IVALU(29)
162 C
163      WRITE(1,3240)
164      READ(1,*) IVALU(30)
165 C
166      WRITE(1,3250)
167      READ(1,*) IVALU(31)
168 C
169      WRITE(1,3260)
170      READ(1,*) IVALU(32)
171 C
172      WRITE(1,3270) (IBAK,K=1,2)
173      READ(1,4000) IVALU(33),IVALU(34)
174 C
175      WRITE(1,3280)
176      READ(1,*) IVALU(35)
177 C
178      WRITE(1,3290)
179      READ(1,*) IVALU(36)
180 C
181      WRITE(1,3300)
182      READ(1,*) IVALU(37)
183 C
184      WRITE(1,3310)
185      READ(1,*) IVALU(38)
186 C
187      WRITE(1,3320)
188      READ(1,*) IVALU(39)
189 C
190      WRITE(1,3330)
191      READ(1,*) IVALU(40)
192 C
193      WRITE(1,3340)
194      READ(1,*) IVALU(41)
195 C
196      WRITE(1,3350)
197      READ(1,*) IVALU(42)
198 C
199 C -----
200 C
```

* &PDEN6(PLANT1) * 8:14 PM TUE., 28 APR., 1981 * 3*

```
101      WRITE(1,3030)
102      READ(1,*) IVALU(7)
103 C
104      WRITE(1,3040)
105      READ(1,*) IVALU(8)
106 C
107      WRITE(1,3050)
108      READ(1,*) IVALU(9)
109 C
110      WRITE(1,3060)
111      READ(1,*) IVALU(10)
112 C
113      WRITE(1,3070)
114      READ(1,*) IVALU(11)
115 C
116      WRITE(1,3080)
117      READ(1,*) IVALU(12)
118 C
119      WRITE(1,3090)
120      READ(1,*) IVALU(13)
121 C
122      WRITE(1,3100)
123      READ(1,*) IVALU(14)
124 C
125      IVALU(15) = 0
126      IVALU(16) = 2H
127      IVALU(17) = 2H
128      IVALU(18) = 2H
129 C
130      WRITE(1,3130)
131      READ(1,*) IVALU(19)
132 C
133      WRITE(1,3140)
134      READ(1,*) IVALU(20)
135 C
136      WRITE(1,3150)
137      READ(1,*) IVALU(21)
138 C
139      WRITE(1,3160)
140      READ(1,*) IVALU(22)
141 C
142      WRITE(1,3170)
143      READ(1,*) IVALU(23)
144 C
145      WRITE(1,3180)
146      READ(1,*) IVALU(24)
147 C
148      WRITE(1,3190)
149      READ(1,*) IVALU(25)
150 C
```

* &PDEN6(PLANT1) * 8:09 PM TUE., 28 APR., 1981 * 2*

```
51      GOTO 9999
52      C
53      C
54      ****
55      C
56      C
57      C          ENTRY MODE
58      C
59      C
60      C          GET FACTORY NUMBER
61      C
62      100  DO 101 K=1,42
63      101  IVALU(K) = 0
64      C
65      WRITE(1,1100)
66      1100 FORMAT(//"FACTORY NUMBER?      >
67      IFACT=0
68      READ(1,*) IFACT
69      C
70      C          TEST FOR END OF ENTRY MODE
71      C
72      IF( IFACT.EQ.0 ) GOTO 9999
73      C
74      C
75      C
76      C          GET DATA FOR DETAIL DATA SET
77      C
78      C          MILL FEEDER DATA
79      C
80      120  IVALU(1)=IFACT
81      C
82      WRITE(1,1125)
83      1125 FORMAT(" TRAIN #      >
84      READ(1,4000) IVALU(2)
85      4000 FORMAT(20A2)
86      C
87      WRITE(1,1150)
88      1150 FORMAT(" ENTRY #      >
89      READ(1,*) IVALU(3)
90      C
91      C
92      WRITE(1,3000)
93      READ(1,*) IVALU(4)
94      C
95      WRITE(1,3010)
96      READ(1,*) IVALU(5)
97      C
98      WRITE(1,3020)
99      READ(1,*) IVALU(6)
100     C
```

* &PDEN6(PLANT1) * 8:02 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDEN6
3 C
4 C
5 C      +++  WRITTEN - GDD - 9 JUL 1990  +++
6 C      +++  LAST MODIFIED 9 JUL 1990  +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== FEEDS =====
12 C
13 C
14 C      DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(40)
15 C      $      ,IDSET(3), IVALU(42)
16 C
17 C      DATA-BASE
18 C      DATA IBASE/2H ,2HPL,2HAN,2HT1,2H G,2HD ,2H9 /
19 C VARIABLE LIST
20 C      DATA LIST/39,1,3,4,89,90,91,92,93,94,95,96,97,98,99,100,101,102,
21 C      $      103,104,105,106,107,108,109,110,111,112,113,114,115,116,
22 C      $      117,118,119,120,121,122,123,124/
23 C      LEVEL
24 C      DATA ILEVL/2H ,2H ,2H /
25 C      DATA SET NAME - 'FEEDS'
26 C      DATA IDSET/2HFE,2HED,2HS /
27 C
28 C      DATA IBAK/4010B/
29 C
30 C*****
31 C
32 C
33 C*****
34 C
35 C
36 C      OPEN DATA-BASE
37 C -----
38 C
39 C
40 C      OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
41 C
42 C      IMODE=3
43 C      CALL DBOPN( IBASE, ILEVL, IMODE, ISTAT )
44 C
45 C      TEST FOR ERROR ON OPEN
46 C
47 C      IF( ISTAT(1).EQ.0 ) GOTO 100
48 C      ERROR
49 C      WRITE(1,1000) ISTAT(1)
50 C      1000 FORMAT(//"+ PDEN6 ++ ERROR",I5," ON DATA-BASE OPEN")
```

* &PDENS(PLANT1) * 3:35 PM FRI., 29 MAY, 1981 * 6*

```
251      IMODE=1
252      CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
253 C
254      WRITE(1,1700)
255 1700  FORMAT(////"+ PDENS STOP ++"///)
256 C
257 C
258      END
259      END$
```

* &PDENS (PLANT1) * 3:25 PM FRI., 29 MAY , 1981 * 5*

```
201 3140 FORMAT( " MILL FEED JUICE ROLL GROOVES DEPTH      _" )
202 3150 FORMAT( " MILL FEED JUICE ROLL GROOVES WIDTH      _" )
203 3160 FORMAT( " MILL DELIVERY JUICE ROLL GROOVES PITCH    _" )
204 3170 FORMAT( " MILL DELIVERY JUICE ROLL GROOVES DEPTH      _" )
205 3180 FORMAT( " MILL DELIVERY JUICE ROLL GROOVES WIDTH      _" )
206 3190 FORMAT(/" MILL SET OPENING FEED                  _" )
207 3200 FORMAT( " MILL SET OPENING DELIVERY                 _" )
208 3210 FORMAT( " MILL WORK OPENING FEED                  _" )
209 3220 FORMAT( " MILL WORK OPENING DELIVERY                 _" )
210 3230 FORMAT( " MILL TRASH PLATE OPENING TOE                _" )
211 3240 FORMAT( " MILL TRASH PLATE OPENING HEEL                _" )
212 3250 FORMAT( " MILL HYDRAULICS?                      ****",2A2,"_" )
213 3260 FORMAT( " MILL HYDRAULIC ROLL LOAD                 _" )
214 3270 FORMAT( " MILL AVERAGE ROLL LIFT                  _" )
215 3280 FORMAT( " MILL MAXIMUM LIFT OF TOP ROLL                _" )
216 3290 FORMAT( " MILL FIBRE RATE USED FOR THESE SETTINGS     _" )
217 C
218 C-----
219 C
220 C   PUT DATA IN DATA-BASE
221 C
222   IMODE=1
223   CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
224 C
225 C   TEST FOR ERROR IN PUT
226 C
227   IF( ISTAT(1).EQ.0 ) GOTO 100
228 C
229 C   ERROR
230 C
231   WRITE(1,1600) ISTAT(1),IDSET
232 1600 FORMAT(//"+ PDENS ++ ERROR",I5," ON PUT IN SET '",3A2,"'")
233 C
234 C   GET NEXT ENTRY
235 C
236   GOTO 100
237 C
238 C
239 C*****TERMINATE*****
240 C
241 C
242 C   TERMINATE
243 C-----
244 C
245 C
246 9999 CALL DBUNL (ISTAT)
247   IMODE=0
248 C
249 C   CLOSE DATA-BASE
250 C
```

* &PDENS(PLANT1) * 3:18 PM FRI., 29 MAY , 1981 * 4*

```
151      READ(1,*),IVALU(23)
152 C
153      WRITE(1,3200)
154      READ(1,*),IVALU(24)
155 C
156      WRITE(1,3210)
157      READ(1,*),DUM1
158      IVALU(25)=INT(10.*DUM1)
159 C
160      WRITE(1,3220)
161      READ(1,*),IVALU(26)
162 C
163      WRITE(1,3230)
164      READ(1,*),IVALU(27)
165 C
166      WRITE(1,3240)
167      READ(1,*),IVALU(28)
168 C
169      WRITE(1,3250),(IBAK,K=1,2)
170      READ(1,4000),IVALU(29),IVALU(30)
171 C
172      WRITE(1,3260)
173      READ(1,*),IVALU(31)
174 C
175      WRITE(1,3270)
176      READ(1,*),IVALU(32)
177 C
178      WRITE(1,3280)
179      READ(1,*),IVALU(33)
180 C
181      WRITE(1,3290)
182      READ(1,*),DUM1
183      IVALU(34)=INT(10.*DUM1)
184 C
185 C -----
186 C
187 3000 FORMAT("MILL NOMINAL DIAMETER OF ROLLS",1")
188 3010 FORMAT("MILL NOMINAL LENGTH OF ROLLS",1")
189 3020 FORMAT("MILL TOP ROLL NOMINAL DIAMETER",1")
190 3030 FORMAT("MILL PERIPHERAL SPEED OF TOP ROLL",1")
191 3040 FORMAT("MILL TOP ROLL GROOVES PITCH",1")
192 3050 FORMAT("MILL TOP ROLL GROOVES DEPTH",1")
193 3060 FORMAT("MILL TOP ROLL GROOVES ANGLE",1")
194 3070 FORMAT("MILL FEED ROLL GROOVES PITCH",1")
195 3080 FORMAT("MILL FEED ROLL GROOVES DEPTH",1")
196 3090 FORMAT("MILL FEED ROLL GROOVES ANGLE",1")
197 3100 FORMAT("MILL DELIVERY ROLL GROOVES PITCH",1")
198 3110 FORMAT("MILL DELIVERY ROLL GROOVES DEPTH",1")
199 3120 FORMAT("MILL DELIVERY ROLL GROOVES ANGLE",1")
200 3130 FORMAT("MILL FEED JUICE ROLL GROOVES PITCH",1")
```

* &PDENS(PLANT1) * 3:13 PM FRI., 29 MAY, 1981 * 3*

```
101 C
102      WRITE(1,3040)
103      READ(1,*) IVALU(8)
104 C
105      WRITE(1,3050)
106      READ(1,*) IVALU(9)
107 C
108      WRITE(1,3060)
109      READ(1,*) IVALU(10)
110 C
111      WRITE(1,3070)
112      READ(1,*) IVALU(11)
113 C
114      WRITE(1,3080)
115      READ(1,*) IVALU(12)
116 C
117      WRITE(1,3090)
118      READ(1,*) IVALU(13)
119 C
120      WRITE(1,3100)
121      READ(1,*) IVALU(14)
122 C
123      WRITE(1,3110)
124      READ(1,*) IVALU(15)
125 C
126      WRITE(1,3120)
127      READ(1,*) IVALU(16)
128 C
129      WRITE(1,3130)
130      READ(1,*) IVALU(17)
131 C
132      WRITE(1,3140)
133      READ(1,*) IVALU(18)
134 C
135      WRITE(1,3150)
136      READ(1,*) DUM1
137 C      SCALE
138      IVALU(19) = INT ( 10.*DUM1 )
139 C
140      WRITE(1,3160)
141      READ(1,*) IVALU(20)
142 C
143      WRITE(1,3170)
144      READ(1,*) IVALU(21)
145 C
146      WRITE(1,3180)
147      READ(1,*) DUM1
148      IVALU(22) = INT ( 10.*DUM1 )
149 C
150      WRITE(1,3190)
```

* &PDENS (PLANT1) * 3:08 PM FRI., 29 MAY, 1981 * 2*

```
51 C
52 ****
53 C
54 C
55 C           ENTRY MODE
56 C
57 C
58 C   GET FACTORY NUMBER
59 C
60 100 DO 101 K=1,34
61 101 IVALU(K)=0
62 C
63 WRITE(1,1100)
64 1100 FORMAT(//"FACTORY NUMBER?      ")
65 IFACT=0
66 READ(1,*) IFACT
67 C
68 C   TEST FOR END OF ENTRY MODE
69 C
70 IF( IFACT.EQ.0 ) GOTO 9999
71 C
72 C
73 C
74 C   GET DATA FOR DETAIL DATA SET
75 C
76 C   MILL DATA
77 C
78 120 IVALU(1)=IFACT
79 C
80 WRITE(1,1125)
81 1125 FORMAT(" TRAIN #      ")
82 READ(1,4000) IVALU(2)
83 4000 FORMAT(20A2)
84 C
85 WRITE(1,1150)
86 1150 FORMAT(" MILL #      ")
87 READ(1,*) IVALU(3)
88 C
89 C
90 WRITE(1,3000)
91 READ(1,*) IVALU(4)
92 C
93 WRITE(1,3010)
94 READ(1,*) IVALU(5)
95 C
96 WRITE(1,3020)
97 READ(1,*) IVALU(6)
98 C
99 WRITE(1,3030)
100 READ(1,*) IVALU(7)
```

* &PDENS(PLANT1) * 3:02 PM FRI., 29 MAY , 1981 * 1*

1 FTN
2 PROGRAM PDENS
3 C
4 C
5 C +++ WRITTEN - GDD - 9 JUL 1980 +++
6 C +++ LAST MODIFIED 9 JUL 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== MILLS =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVEL(3), ISTAT(10), LIST(34)
15 C \$, IDSET(3), IVALU(34)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2HG,2HD,2H9 /
19 C VARIABLE LIST
20 C DATA LIST/33,1,3,4,59,60,69,61,73,74,75,76,77,78,79,80,81,85,
21 C \$ 86,87,82,83,84,64,65,67,68,71,72,62,63,66,70,88/
22 C LEVEL
23 C DATA ILEVEL/2H ,2H ,2H /
24 C DATA SET NAME - 'MILLS'
25 C DATA IDSET/2HMI,2HLL,2HS /
26 C
27 C DATA IBAK/4010B/
28 C
29 C ****
30 C
31 C ****
32 C
33 C
34 C OPEN DATA-BASE
35 C -----
36 C
37 C
38 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
39 C
40 C IMODE=3
41 C CALL DBOPN(IBASE,ILEVL,IMODE,ISTAT)
42 C
43 C TEST FOR ERROR ON OPEN
44 C
45 C IF(ISTAT(1).EQ.0) GOTO 100
46 C ERROR
47 C WRITE(1,1000) ISTAT(1)
48 1000 FORMAT(//"+ PDENS ++ ERROR",15," ON DATA-BASE OPEN")
49 C GOTO 9999
50 C

* &PDEN4(PLANT1) * 1:52 PM FRI., 29 MAY , 1981 * 5*

201 END
202 END\$

* &PDEN4(PLANT1) * 1:44 PM FRI., 29 MAY , 1981 * 4*

```
151 3080 FORMAT (" SHREDDER LENGTH      _")
152 3090 FORMAT (" SHREDDER TIP CLEARANCE _")
153 3100 FORMAT (" SHREDDER SPEED      _")
154 3110 FORMAT (" SHREDDER HAMMER NUMBER _")
155 3120 FORMAT (" SHREDDER HAMMER MASS  _")
156 3130 FORMAT (" SHREDDER DRIVE      *****,5A2,"_")
157 3140 FORMAT (" SHREDDER STEAM PRESSURE _")
158 3150 FORMAT (" SHREDDER STEAM TEMPERATURE _")
159 3160 FORMAT (" SHREDDER POWER      _")
160 C
161 C-----
162 C
163 C  PUT DATA IN DATA-BASE
164 C
165   IMODE=1
166   CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
167 C
168 C  TEST FOR ERROR IN PUT
169 C
170   IF( ISTAT(1).EQ.0 ) GOTO 100
171 C
172 C  ERROR
173 C
174   WRITE(1,1600) ISTAT(1), IDSET
175 1600 FORMAT(//"+ PDEN4 ++ ERROR",I5," ON PUT IN SET '",3A2,"'")
176 C
177 C  GET NEXT ENTRY
178 C
179   GOTO 100
180 C
181 C
182 C*****
183 C
184 C
185 C  TERMINATE
186 C -----
187 C
188 C
189 9999 CALL DBUNL (ISTAT)
190   IMODE=0
191 C
192 C  CLOSE DATA-BASE
193 C
194   IMODE=1
195   CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
196 C
197   WRITE(1,1700)
198 1700 FORMAT(////"+ PDEN4 STOP ++///)
199 C
200 C
```

* &PDEN4(PLANT1) * 1:39 PM FRI., 29 MAY , 1981 * 3*

```
101 C
102      WRITE(1,3040) (IBAK,K=1,5)
103      READ(1,4000) (IVALU(K),K=12,16)
104 C
105      WRITE(1,3050)
106      READ(1,*) IVALU(17)
107 C
108      WRITE(1,3060) (IBAK,K=1,6)
109      READ(1,4000) (IVALU(K),K=18,23)
110 C
111      WRITE(1,3070)
112      READ(1,*) IVALU(24)
113 C
114      WRITE(1,3080)
115      READ(1,*) IVALU(25)
116 C
117      WRITE(1,3090)
118      READ(1,*) IVALU(26)
119 C
120      WRITE(1,3100)
121      READ(1,*) IVALU(27)
122 C
123      WRITE(1,3110)
124      READ(1,*) IVALU(28)
125 C
126      WRITE(1,3120)
127      READ(1,*) IVALU(29)
128 C
129      WRITE(1,3130) (IBAK,K=1,5)
130      READ(1,4000) (IVALU(K),K=30,34)
131 C
132      WRITE(1,3160)
133      READ(1,*) IVALU(37)
134 C
135 C      WRITE(1,3140)
136 C      READ(1,*) IVALU(35)
137 C
138 C      WRITE(1,3150)
139 C      READ(1,*) IVALU(36)
140 C
141 C -----
142 C
143 3000 FORMAT (" SECOND KNIVES TYPE      *****",5A2,"_")
144 3010 FORMAT (" SECOND KNIVES BLADE NUMBER   _")
145 3020 FORMAT (" SECOND KNIVES CLEARANCE    _")
146 3030 FORMAT (" SECOND KNIVES SPEED        _")
147 3040 FORMAT (" SECOND KNIVES DRIVE       *****",5A2,"_")
148 3050 FORMAT (" SECOND KNIVES POWER        _")
149 3060 FORMAT (" SHREDDER TYPE          *****",6A2,"_")
150 3070 FORMAT (" SHREDDER DIAMETER        _")
```

* &PDEN4(PLANT1) * 1:33 PM FRI., 29 MAY , 1981 * 2*

51 C
52 ****
53 C
54 C
55 C ENTRY MODE
56 C -----
57 C
58 C GET FACTORY NUMBER
59 C
60 100 DO 101 K=1,37
61 101 IVALU(K) = 0
62 C
63 WRITE(1,1100)
64 1100 FORMAT(// "FACTORY NUMBER? ")
65 IFACT=0
66 READ(1,*) IFACT
67 C
68 C TEST FOR END OF ENTRY MODE
69 C
70 IF(IFACT.EQ.0) GOTO 9999
71 C
72 C-----
73 C
74 C GET DATA FOR DETAIL DATA SET
75 C
76 C SHREDDER DATA
77 C
78 120 IVALU(1)=IFACT
79 C
80 WRITE(1,1125)
81 1125 FORMAT(" TRAIN # ")
82 READ(1,4000) IVALU(2)
83 4000 FORMAT(20A2)
84 C
85 WRITE(1,1150)
86 1150 FORMAT(" ENTRY # ")
87 READ(1,*) IVALU(3)
88 C
89 C
90 WRITE(1,3000) (IBAK,K=1,5)
91 READ(1,4000) (IVALU(K),K=4,8)
92 C
93 WRITE(1,3010)
94 READ(1,*) IVALU(9)
95 C
96 WRITE(1,3020)
97 READ(1,*) IVALU(10)
98 C
99 WRITE(1,3030)
100 READ(1,*) IVALU(11)

* &PDEN4(PLANT1) * 1:27 PM FRI., 29 MAY , 1981 * 1*

1 FTN
2 PROGRAM PDEN4
3 C
4 C
5 C +++ WRITTEN - GDD - 8 JUL 1980 ++++
6 C +++ LAST MODIFIED 8 JUL 1980 ++++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== SHRED =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVEL(3), ISTAT(10), LIST(21)
15 C \$, IDSET(3), IBUF(100), IVALU(37)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD,2H9 /
19 C VARIABLE LIST
20 C DATA LIST/19,1,3,5,43,44,45,46,47,48,49,50,51,52,53,54,55,56,
21 C \$ 57,58/
22 C LEVEL
23 C DATA ILEVEL/2H ,2H ,2H /
24 C DATA SET NAME - 'SHRED'
25 C DATA IDSET/2HSH,2HRE,2HD /
26 C
27 C DATA IBAK/4010B/
28 C
29 C*****
30 C
31 C*****
32 C
33 C
34 C OPEN DATA-BASE
35 C
36 C
37 C
38 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
39 C
40 C IMODE=3
41 C CALL DBOPN(IBASE, ILEVEL, IMODE, ISTAT)
42 C
43 C TEST FOR ERROR ON OPEN
44 C
45 C IF(ISTAT(1).EQ.0) GOTO 100
46 C ERROR
47 C WRITE(1,1000) ISTAT(1)
48 1000 FORMAT(//"+ PDEN4 ++ ERROR", 15, " ON DATA-BASE OPEN")
49 GOTO 9999
50 C

* &PDEN3(PLANT1) * 1:23 PM FRI., 29 MAY , 1981 * 4*

```
151 C
152      WRITE(1,1600) ISTAT(1),IDSET
153 1600 FORMAT(//"+ PDEN3 ++ ERROR",I5," ON PUT IN SET '",3A2,"")
154 C
155 C   GET NEXT ENTRY
156 C
157      GOTO 100
158 C
159 C
160 C*****=====
161 C
162 C
163 C   TERMINATE
164 C   -----
165 C
166 C
167 9999 CALL DBUNL (ISTAT)
168      IMODE=0
169 C
170 C   CLOSE DATA-BASE
171 C
172      IMODE=1
173      CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
174 C
175      WRITE(1,1700)
176 1700 FORMAT(////"+ PDEN3 STOP ++"///)
177 C
178 C
179      END
180      END$
```

* &PDEN3(PLANT1) * 1:16 PM FRI., 29 MAY , 1981 * 3*

```
101 C SCALE
102     IVALU(16) = INT (10.*DUM1)
103 C
104     WRITE(1,3060) (IBAK,K=1,5)
105     READ(1,4000) (IVALU(K),K=17,21)
106 C
107     WRITE(1,3070)
108     READ(1,*) IVALU(22)
109 C
110     WRITE(1,3080)
111     READ(1,*) IVALU(23)
112 C
113     WRITE(1,3090)
114     READ(1,*) IVALU(24)
115 C
116     WRITE(1,3100)
117     READ(1,4000) (IVALU(K),K=25,29)
118 C
119     WRITE(1,3110)
120     READ(1,*) DUM1
121 C SCALE
122     IVALU(30) = INT (10.*DUM1)
123 C
124 C -----
125 C
126 3000 FORMAT (" LEVELLER TYPE      *****",5A2,"_")
127 3010 FORMAT (" NO. OF BLADES      _")
128 3020 FORMAT (" LEVELLER CLEARANCE    _")
129 3030 FORMAT (" LEVELLER SPEED        _")
130 3040 FORMAT (" DRIVE TYPE          *****",5A2,"_")
131 3050 FORMAT (" LEVELLER POWER        _")
132 3060 FORMAT (" KNIFE TYPE          *****",5A2,"_")
133 3070 FORMAT (" BLADE NUMBER        _")
134 3080 FORMAT (" CLEARANCE           _")
135 3090 FORMAT (" KNIVES SPEED         _")
136 3100 FORMAT (" KNIVES DRIVE         _")
137 3110 FORMAT (" KNIVES POWER         _")
138 C
139 C -----
140 C
141 C PUT DATA IN DATA-BASE
142 C
143     IMODE=1
144     CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
145 C
146 C TEST FOR ERROR IN PUT
147 C
148     IF( ISTAT(1).EQ.0 ) GOTO 100
149 C
150 C ERROR
```

* &PDEN3(PLANT1) * 1:11 PM FRI., 29 MAY , 1981 * 2*

51 C
52 C
53 C ENTRY MODE
54 C
55 C
56 C GET FACTORY NUMBER
57 C
58 100 DO 101 K=1,31
59 101 IVALU(K) = 0
60 C
61 WRITE(1,1100)
62 1100 FORMAT(//"FACTORY NUMBER? <-->
63 IFACT=0
64 READ(1,*) IFACT
65 C
66 C TEST FOR END OF ENTRY MODE
67 C
68 IF(IFACT.EQ.0) GOTO 9999
69 C
70 C-----
71 C
72 C GET DATA FOR DETAIL DATA SET
73 C
74 C KNIVES DATA
75 C
76 120 IVALU(1)=IFACT
77 C
78 WRITE(1,1125)
79 1125 FORMAT(" TRAIN # <-->
80 READ(1,4000) IVALU(2)
81 4000 FORMAT(20A2)
82 C
83 C
84 WRITE(1,3000) (IBAK,K=1,5)
85 READ(1,4000) (IVALU(K),K=3,7)
86 C
87 WRITE(1,3010)
88 READ(1,*) IVALU(8)
89 C
90 WRITE(1,3020)
91 READ(1,*) IVALU(9)
92 C
93 WRITE(1,3030)
94 READ(1,*) IVALU(10)
95 C
96 WRITE(1,3040) (IBAK,K=1,5)
97 READ(1,4000) (IVALU(K),K=11,15)
98 C
99 WRITE(1,3050)
100 READ(1,*) DUM1

* &PDEN3(PLANT1) * 1:05 PM FRI., 29 MAY , 1981 * 1*

```
1 FTN
2      PROGRAM PDEN3
3 C
4 C
5 C      +++  WRITTEN - GDD -  8 JUL 1980  +++
6 C      +++  LAST MODIFIED   8 JUL 1980  +++
7 C
8 C  PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C  PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C
12 C
13      DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(16)
14      $           ,IDSET(3),IBUF(100),IVALU(31)
15 C
16 C      DATA-BASE
17      DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD,2H9 /
18 C  VARIABLE LIST
19      DATA LIST/14,1,3,31,32,33,34,35,36,37,38,39,40,41,42/
20 C  LEVEL
21      DATA ILEVL/2H ,2H ,2H /
22 C      DATA SET NAME - 'KNIVES'
23      DATA IDSET/2HKN,2HIV,2HES/
24 C
25      DATA IBAK/04010B/
26 C
27 ****
28 C
29 ****
30 C
31 C
32 C      OPEN DATA-BASE
33 C
34 C
35 C
36 C  OPEN DATA-BASE  (EXCLUSIVE READ/WRITE)
37 C
38      IMODE=3
39      CALL DBOPEN( IBASE,ILEVL,IMODE,ISTAT )
40 C
41 C  TEST FOR ERROR ON OPEN
42 C
43      IF( ISTAT(1).EQ.0 ) GOTO 100
44 C  ERROR
45      WRITE(1,1000) ISTAT(1)
46 1000 FORMAT(//"+ PDEN3 ++ ERROR",I5," ON DATA-BASE OPEN")
47      GOTO 9999
48 C
49 C
50 ****
```

* &PDEN2(PLANT1) * 1:02 PM FRI., 29 MAY , 1981 * 4*

151 C
152 C ERROR
153 C
154 WRITE(1,1600) ISTAT(1),IDSET
155 1600 FORMAT(//"+ PDEN2 ++ "ERROR",15," ON PUT IN SET '",3A2,"")
156 C
157 C GET NEXT ENTRY
158 C
159 GOTO 100
160 C
161 C
162 C*****
163 C
164 C
165 C TERMINATE
166 C -----
167 C
168 C
169 9999 CALL DBUNL (ISTAT)
170 IMODE=0
171 C
172 C CLOSE DATA-BASE
173 C
174 IMODE=1
175 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
176 C
177 WRITE(1,1700)
178 1700 FORMAT(////"+ PDEN2 STOP ++"////)
179 C
180 C
181 END
182 END\$

* &PDEN2(PLANT1) *12:54 PM FRI., 29 MAY , 1981 * 3*

```
101 C SCALE
102     IVALU(28) = INT (10.*DUM1)
103 C
104     WRITE(1,3030)
105     READ(1,*) DUM1
106 C SCALE
107     IVALU(29) = INT (1000.*DUM1)
108 C
109     WRITE(1,3040)
110     READ(1,*) IVALU(30)
111 C
112     WRITE(1,3050)
113     READ(1,*) IVALU(31)
114 C
115     WRITE(1,3060) (IBAK,K=1,8)
116     READ(1,4000) (IVALU(K),K=32,39)
117 C
118     WRITE(1,3070)
119     READ(1,*) IVALU(40)
120 C
121 C
122     WRITE(1,3080) (IBAK,K=1,8)
123     READ(1,4000) (IVALU(K),K=41,48)
124 C
125     WRITE(1,3090) (IBAK,K=1,15)
126     READ(1,4000) (IVALU(K),K=49,63)
127 C
128 C -----
129 3000 FORMAT (" CARRIER POSITION *****",8A2,"_")
130 3010 FORMAT (" CARRIER TYPE ",32(1H*),16A2,"_")
131 3020 FORMAT (" CARRIER LENGTH      _")
132 3030 FORMAT (" CARRIER WIDTH      _")
133 3040 FORMAT (" CARRIER INCLINATION _")
134 3050 FORMAT (" CARRIER SPEED      _")
135 3060 FORMAT (" CARRIER DRIVE ",16(1H*),8A2,"_")
136 3070 FORMAT (" CARRIER POWER      _")
137 3080 FORMAT (" CARRIER FED FROM ",16(1H*),8A2,"_")
138 3090 FORMAT (" REMARKS ",30(1H*),15A2,"_")
139 C
140 C
141 C -----
142 C
143 C PUT DATA IN DATA-BASE
144 C
145     IMODE=1
146     CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
147 C
148 C TEST FOR ERROR IN PUT
149 C
150     IF( ISTAT(1).EQ.0 ) GOTO 100
```

* &PDEN2(PLANT1) *12:49 PM FRI., 29 MAY , 1981 * 2*

51 C
52 C
53 C*****
54 C
55 C
56 C ENTRY MODE
57 C -----
58 C
59 C GET YEAR
60 C
61 C GET FACTORY NUMBER
62 C
63 100 DO 101 K=1,63
64 101 IVALU(K) = 0
65 C
66 WRITE(1,1100)
67 1100 FORMAT(//"FACTORY NUMBER? <-->
68 IFACT=0
69 READ(1,*) IFACT
70 C
71 C TEST FOR END OF ENTRY MODE
72 C
73 IF(IFACT.EQ.0) GOTO 9999
74 C
75 C-----
76 C
77 C GET DATA FOR DETAIL DATA SET
78 C
79 C CARRIER DATA
80 C
81 120 IVALU(1)=IFACT
82 C
83 WRITE(1,1125)
84 1125 FORMAT(" TRAIN # <-->
85 READ(1,4000) IVALU(2)
86 4000 FORMAT(20A2)
87 C
88 WRITE(1,1150)
89 1150 FORMAT(" ENTRY # <-->
90 READ(1,*) IVALU(3)
91 C
92 C
93 WRITE(1,3000) (IBAK,K=1,8)
94 READ(1,4000) (IVALU(K),K=4,11)
95 C
96 WRITE(1,3010) (IBAK,K=1,16)
97 READ(1,4000) (IVALU(K),K=12,27)
98 C
99 WRITE(1,3020)
100 READ(1,*) DUM1

* &PDEN2(PLANT1) *12:42 PM FRI., 29 MAY, 1981 * 1*

1 FTN
2 PROGRAM PDEN2(3,20), GDD JUL 80
3 C
4 C
5 C +++ WRITTEN - GDD - 8 JUL 1980 +++++
6 C +++ LAST MODIFIED 8 JUL 1980 +++++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C
12 C
13 C DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(14)
14 \$, IDSET(3), IBUF(100), IVALU(69)
15 C
16 C DATA-BASE
17 C DATA IBASE/2H ,2HPL,2HAN,2HT1,2H,G,2HD,2H9 /
18 C
19 C BACKSPACE
20 C
21 C DATA IBAK/4010B/
22 C VARIABLE LIST
23 C DATA LIST/13, 1, 3, 5, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30/
24 C LEVEL
25 C DATA ILEVL/2H ,2H ,2H /
26 C DATA SET NAME - 'CARR'
27 C DATA IDSET/2HCA,2HRR,2H /
28 C CONTROL VARIABLES
29 C
30 C*****
31 C
32 C*****
33 C
34 C
35 C OPEN DATA-BASE
36 C
37 C
38 C
39 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
40 C
41 IMODE=3
42 CALL DBOPEN(IBASE, ILEVL, IMODE, ISTAT)
43 C
44 C TEST FOR ERROR ON OPEN
45 C
46 IF(ISTAT(1).EQ.0) GOTO 100
47 C ERROR
48 WRITE(1,1000) ISTAT(1)
49 1000 FORMAT(//"+ PDEN2 ++ ERROR",15," ON DATA-BASE OPEN")
50 GOTO 9999

* &PDEN1 (PLANT1) *12:34 PM FRI., 29 MAY , 1981 * 4*

```
151 3070 FORMAT (" TRUCK NUMBER           ")  
152 3080 FORMAT (" TRUCK CAPACITY        ")  
153 3090 FORMAT (" TRUCK GAUGE          ")  
154 3100 FORMAT (" LENGTH OF TRAMLINE   ")  
155 3110 FORMAT (" GAUGE OF LINE         ")  
156 3120 FORMAT (" PERCENTAGE OF CROP ON PRIVATE LINE ")  
157 3130 FORMAT (" PERCENTAGE OF CROP ON GOVT. LINE    ")  
158 3140 FORMAT (" PERCENTAGE OF CROP ON ROAD      ")  
159 C  
160 C-----  
161 C  
162 C  PUT DATA IN DATA-BASE  
163 C  
164     IMODE=1  
165     CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)  
166 C  
167 C  TEST FOR ERROR IN PUT  
168 C  
169     IF( ISTAT(1).EQ.0 ) GOTO 100  
170 C  
171 C  ERROR  
172 C  
173     WRITE(1,1600) ISTAT(1),IDSET  
174 1600 FORMAT(//"+ PDEN1 ++ ERROR",I5," ON PUT IN SET '",3A2,"")  
175 C  
176 C  GET NEXT ENTRY  
177 C  
178     GOTO 100  
179 C  
180 C  
181 C*****  
182 C  
183 C  
184 C  TERMINATE  
185 C-----  
186 C  
187 C  
188 9999 CALL DBUNL (ISTAT)  
189     IMODE=0  
190 C  
191 C  CLOSE DATA-BASE  
192 C  
193     IMODE=1  
194     CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )  
195 C  
196     WRITE(1,1700)  
* 197 1700 FORMAT(///"+ PDEN1 STOP ++///)  
198 C  
199 C  
200 END
```

* &PDEN1 (PLANT1) *12:29 PM FRI., 29 MAY , 1981 * 3*

```
101 C SCALE
102     IVALU(13)= INT(DUM1*10.)
103 C
104     WRITE(1,3050)
105     READ(1,*) IVALU(14)
106 C
107     WRITE(1,3070)
108     READ(1,*) IVALU(23)
109 C
110     WRITE(1,3060) (IBAK,K=1,8)
111     READ(1,4000) (IVALU(K),K=15,22)
112 C
113     WRITE(1,3080)
114     READ(1,*) DUM1
115 C SCALE
116     IVALU(24) = INT(DUM1*10.)
117 C
118     WRITE(1,3090)
119     READ(1,*) IVALU(25)
120 C
121     WRITE(1,3100)
122     READ(1,*) IVALU(26)
123 C
124     WRITE(1,3110)
125     READ(1,*) IVALU(27)
126 C
127     WRITE(1,3120)
128     READ(1,*) DUM1
129 C SCALE
130     IVALU(28) = INT(DUM1*10.)
131 C
132     WRITE(1,3130)
133     READ(1,*) DUM1
134 C SCALE
135     IVALU(29) = INT (DUM1*10.)
136 C
137     WRITE(1,3140)
138     READ(1,*) DUM1
139 C SCALE
140     IVALU(30) = INT (DUM1*10.)
141 C
142 C -----
143 C
144 3000 FORMAT (" NO. OF LOCOMOTIVES      ")
145 3010 FORMAT (" LOCOMOTIVE TYPE      ",4A2,"_")
146 3020 FORMAT (" ENGINE TYPE      ",4A2,"_")
147 3030 FORMAT (" ENGINE POWER      ")
148 3040 FORMAT (" LOCOMOTIVE MASS      ")
149 3050 FORMAT (" LOCOMOTIVE GAUGE      ")
150 3060 FORMAT (" TRUCK TYPE      ",8A2,"_")
```

* &PDEN1 (PLANT1) *12:24 PM FRI., 29 MAY , 1981 * 2*

```
51 C*****  
52 C  
53 C  
54 C           ENTRY MODE  
55 C-----  
56 C  
57 C   GET YEAR  
58 C  
59 C   GET FACTORY NUMBER  
60 C  
61 100 DO 101 K=1,34  
62 101 IVALU(K) = 0  
63 C  
64     WRITE(1,1100)  
65 1100 FORMAT(//"FACTORY NUMBER?",17X, "__")  
66     IFACT=0  
67     READ(1,*) IFACT  
68 C  
69 C   TEST FOR END OF ENTRY MODE  
70 C  
71     IF( IFACT.EQ.0 ) GOTO 9999  
72 C  
73 C-----  
74 C  
75 C   GET DATA FOR DETAIL DATA SET  
76 C  
77 C   TRANSPORT DATA  
78 C  
79 120 IVALU(1)=IFACT  
80 C  
81     WRITE(1,1150)  
82 1150 FORMAT(" ENTRY # __")  
83     READ(1,*) IVALU(2)  
84 C  
85 C  
86     WRITE(1,3010) (IBAK,K=1,4)  
87     READ(1,4000) (IVALU(K),K=4,7)  
88 4000 FORMAT (10A2)  
89 C  
90     WRITE(1,3000)  
91     READ(1,*) IVALU(3)  
92 C  
93     WRITE(1,3020) (IBAK,K=1,4)  
94     READ(1,4000) (IVALU(K),K=8,11)  
95 C  
96     WRITE(1,3030)  
97     READ(1,*) IVALU(12)  
98 C  
99     WRITE(1,3040)  
100    READ(1,*) DUM1
```

* &PDEN1 (PLANT1) *12:18 PM FRI., 29 MAY , 1981 * 1*

```
1 FTN
2      PROGRAM PDEN1
3 C
4 C
5 C      +++  WRITTEN - GDD - 7 JUL 1980    ****
6 C      +++  LAST MODIFIED   7 JUL 1980    ****
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C  PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C
12 C
13      DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(18)
14      $           ,IDSET(3),IBUF(100),IVALU(30)
15 C
16 C      DATA-BASE
17      DATA IBASE/2H ,2HPL,2HAN,2HT1,2H G,2HD ,2H9 /
18      DATA IBAK/4010B/
19 C  VARIABLE LIST
20      DATA LIST/17,1,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20/
21 C      LEVEL
22      DATA ILEVL/2H ,2H ,2H /
23 C      DATA SET NAMES
24      DATA IDSET/2HTR,2HAN,2HS /
25 C      CONTROL VARIABLES
26      DATA IANS/2HNO/,IBL/2H /
27 C
28 ****
29 C
30 ****
31 C
32 C
33 C      OPEN DATA-BASE
34 C      -----
35 C
36 C
37 C  OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
38 C
39      IMODE=3
40      CALL DBOPN( IBASE,ILEVL,IMODE,ISTAT )
41 C
42 C  TEST FOR ERROR ON OPEN
43 C
44      IF( ISTAT(1).EQ.0 ) GOTO 100
45 C  ERROR
46      WRITE(1,1000) ISTAT(1)
47 1000 FORMAT(//"+ PDEN1 ++ ERROR",15," ON DATA-BASE OPEN")
48      GOTO 9999
49 C
50 C
```

APPENDIX D: DATA ENTRY PROGRAMS.

* PL80B (PLANT1) * 2:17 PM WED. 29 APR. 1981 * 4*

151
152 BINS 12 FACT# 001 I 0001 0001 YES
153 ENTRY# 003 I 0002 0002 YES
154 BGBIN 094 X 0003 0008
155 BGCAP 095 I 0009 0009
156 BGPOS 096 X 0010 0013
157 CTTYP 097 X 0014 0022
158 CTCELL 098 I 0023 0023
159 CTCAP 099 I 0024 0024
160 CTPWR 100 I 0025 0025
161
162 ELECT 13 FACT# 001 I 0001 0001 YES
163 ENTRY# 003 I 0002 0002 YES
164 EPRTG 101 I 0003 0003
165 EPIC 102 I 0004 0004
166 EPMR 103 I 0005 0005
167 EPMILD 104 I 0006 0006
168 EPDMOD 105 I 0007 0007
169 EPIRD 106 I 0008 0008
170 EPEXP 107 I 0009 0009
171 EPSUR 108 I 0010 0010
172 GSMAKE 109 X 0011 0017
173 GS# 110 I 0018 0018
174 GSRTG 111 I 0019 0019
175 GSVOL 112 I 0020 0020
176 GSPM 113 X 0021 0027
177 GSSPD 114 I 0028 0028
178 GSPPR 115 I 0029 0029
179 GSSH 116 I 0030 0030
180 GSEX 117 I 0031 0031
181
182
183 NUMBER OF ERROR MESSAGES: 0000
184 NUMBER OF ITEMS: 117
185 NUMBER OF SETS: 13
186 ROOT FILE: 01438 WORDS, 00014 BLOCKS
187
188 CARTRIDGE NUMBER NUMBER BLOCKS REQUIRED
189 00025 0000000765
190 DATA SET FILES CREATED.
191 ROOT FILE CREATED.
192 END DATA BASE DEFINITION

* PL80B(PLANT1) * 2:08 PM WED., 29 APR., 1981 * 3*

101			ENTRY#	003	I	0002	0002	YES
102			FLMAKE	051	X	0003	0010	
103			FLMODE	052	X	0011	0016	
104			FL#	053	I	0017	0017	
105			FLSPD	054	I	0018	0018	
106			FLDIA	055	I	0019	0019	
107			FLDEP	056	I	0020	0020	
108			FLBMAX	057	I	0021	0021	
109			FLBMIN	058	I	0022	0022	
110			FLBANG	059	I	0023	0023	
111			FLBVA	060	I	0024	0024	
112			FLBIA	061	I	0025	0025	
113			FLPWR	062	I	0026	0026	
114								
115	DRYER	10	FACT#	001	I	0001	0001	YES
116			ENTRY#	003	I	0002	0002	YES
117			DTYPE	063	X	0003	0010	
118			DLEN	064	I	0011	0011	
119			DDIA	065	I	0012	0012	
120			DSPD	066	I	0013	0013	
121			DPWR	067	I	0014	0014	
122			DFAN	068	X	0015	0016	
123			DHTR	069	X	0017	0018	
124			DRAC	070	X	0019	0020	
125			SB#	071	I	0021	0021	
126			SBCAP	072	I	0022	0022	
127			SBTOT	073	I	0023	0023	
128								
129	BOILER	11	FACT#	001	I	0001	0001	YES
130			ENTRY#	003	I	0002	0002	YES
131			BOMAKE	074	X	0003	0010	
132			BO#	075	I	0011	0011	
133			BOPRES	076	I	0012	0012	
134			BOMCR	077	I	0013	0013	
135			BOSHT	078	I	0014	0014	
136			BOBA	079	I	0015	0015	
137			BOFA	080	I	0016	0016	
138			BOSA	081	I	0017	0017	
139			BOAA	082	I	0018	0018	
140			BOEA	083	I	0019	0019	
141			BOGTE	084	X	0020	0031	
142			BOGA	085	I	0032	0032	
143			BOWW	086	X	0033	0034	
144			BOICO	088	X	0035	0036	
145			BOI0B	089	X	0037	0038	
146			BOIFD	090	X	0039	0040	
147			BOSPR	087	X	0041	0042	
148			BOIARR	091	X	0043	0051	
149			BOISTD	092	I	0052	0052	
150			BOISTH	093	I	0053	0053	

* PL80B(PLANT1) * 1:58 PM WED., 29 APR., 1981 * 2*

51								
52	STOCK	05	FACT#	001	I	0001	0001	YES
53			ENTRY#	003	I	0002	0002	YES
54			SYRUPV	015	I	0003	0003	
55			MOLVA	016	I	0004	0004	
56			MOLVB	017	I	0005	0005	
57			MAGV	018	I	0006	0006	
58			MH#	019	I	0007	0007	
59			MHAREA	020	I	0008	0008	
60			MHTYPE	021	X	0009	0016	
61			RHDIA	022	I	0017	0017	
62			RHVLT	023	I	0018	0018	
63			RHAMP	024	I	0019	0019	
64								
65	PUMPS	06	FACT#	001	I	0001	0001	YES
66			ENTRY#	003	I	0002	0002	YES
67			VP#	025	I	0003	0003	
68			VMAKE	026	X	0004	0011	
69			VCYL#	027	X	0012	0015	
70			VBORE	028	I	0016	0016	
71			VLEN	029	I	0017	0017	
72			VDISPL	030	I	0018	0018	
73			VTYPE	031	X	0019	0022	
74			VSPD	032	I	0023	0023	
75			VPWR	033	I	0024	0024	
76			VUSE	034	X	0025	0042	
77								
78	CRYST	07	FACT#	001	I	0001	0001	YES
79			ENTRY#	003	I	0002	0002	YES
80			CSMAKE	035	X	0003	0012	
81			CSGDE	036	X	0013	0014	
82			CS#	037	I	0015	0015	
83			CSVOL	038	I	0016	0016	
84			CSTYPE	039	X	0017	0023	
85			CSAREA	040	I	0024	0024	
86			CSMODE	041	X	0025	0029	
87								
88	HGFUG	08	FACT#	001	I	0001	0001	YES
89			ENTRY#	003	I	0002	0002	YES
90			FHMAKE	042	X	0003	0008	
91			FH#	043	I	0009	0009	
92			FHMASS	044	X	0010	0011	
93			FHSPD	045	I	0012	0012	
94			FHDIA	046	I	0013	0013	
95			FHDEP	047	I	0014	0014	
96			FHAREA	048	I	0015	0015	
97			FHDVE	049	X	0016	0016	
98			FHPWR	050	I	0017	0017	
99								
100	LGFUG	09	FACT#	001	I	0001	0001	YES

* PL80B(PLANT1) * 1:49 PM WED., 29 APR., 1981 * 1*

1 HEWLETT-PACKARD IMAGE/1000 DATA BASE DEFINITION PROCESSOR

5 \$CONTROL, FIELD, NOLIST, ERRORS=10, ROOT, SET, TABLE;

9	SET NAME	TYPE	# ITEMS	# PATHS	DATA	MEDIA	CAPAC	CARTRIDGE
10								
11								
12	NAME2	M	002	10	0009	0065	0000000035	00025
13	ENTRY2	A	001	10	0001	0065	0000000015	00025
14	GRADE	A	001	01	0001	0011	0000000002	00025
15	PANS	D	013	03	0026	0015	0000000700	00025
16	STOCK	D	012	02	0019	0011	0000000070	00025
17	PUMPS	D	012	02	0042	0011	0000000350	00025
18	CRYST	D	009	02	0029	0011	0000000350	00025
19	HGFUG	D	011	02	0017	0011	0000000140	00025
20	LGFUG	D	014	02	0026	0011	0000000140	00025
21	DRYER	D	013	02	0023	0011	0000000070	00025
22	BOILER	D	022	02	0053	0011	0000000140	00025
23	BINS	D	009	02	0025	0011	0000000105	00025
24	ELECT	D	019	02	0031	0011	0000000140	00025
25								
26								

27	SET NAME	SET NO	ITEM NAME	ITEM NO	TYPE	START WD	END WD	PATH?	SORT ITEM
28									
29									
30									
31	NAME2	01	FACT#	001	I	0001	0001	YES	
32			NAME	002	X	0002	0009		
33									
34	ENTRY2	02	ENTRY#	003	I	0001	0001	YES	
35									
36	GRADE	03	GDE	004	X	0001	0001	YES	
37									
38	PANS	04	FACT#	001	I	0001	0001	YES	
39			ENTRY#	003	I	0002	0002	YES	
40			GDE	004	X	0003	0003	YES	
41			PTYPE	005	X	0004	0012		
42			P#	006	I	0013	0013		
43			PMATL	007	X	0014	0019		
44			PDIA	008	I	0020	0020		
45			PVOL	009	I	0021	0021		
46			PSURF	010	I	0022	0022		
47			PSTSP	011	I	0023	0023		
48			PRAT	012	I	0024	0024		
49			PCDIA	013	I	0025	0025		
50			PCHGT	014	I	0026	0026		

* 'PL80A(PLANT1) * 9:51 AM WED., 29 APR., 1981 * 6*

251
252 SEPAR 17 FACT# 001 I 0001 0001 YES
253 ENTRY# 005 I 0002 0002 YES
254 SPTYPE 172 X 0003 0008
255 SPAREA 173 I 0009 0009
256 SPOP 174 I 0010 0010
257 SPWDTH 175 I 0011 0011
258 SPHGT 176 I 0012 0012
259 SPPWR 177 I 0013 0013
260
261 EVAP 18 FACT# 001 I 0001 0001 YES
262 TRAIN# 003 X 0002 0002 YES
263 EVAP# 178 I 0003 0003 YES
264 ENTRY# 005 I 0004 0004 YES
265 EVDIA 179 I 0005 0005
266 EVSURF 180 I 0006 0006
267 EVLEN 181 I 0007 0007
268 EVMATL 182 X 0008 0012
269 EVOD 183 I 0013 0013
270 EVTH 184 I 0014 0014
271 EVCDIA 185 I 0015 0015
272 EVCHGT 186 I 0016 0016
273 EVBLD 187 X 0017 0022

274
275

276 NUMBER OF ERROR MESSAGES: 0000
277 NUMBER OF ITEMS: 187
278 NUMBER OF SETS: 18
279 ROOT FILE: 02204 WORDS, 00020 BLOCKS

280
281 CARTRIDGE NUMBER NUMBER BLOCKS REQUIRED
282 00025 000000746
283 DATA SET FILES CREATED.
284 ROOT FILE CREATED.
285 END DATA BASE DEFINITION

* 'PL80A(PLANT1) * 9:42 AM WED., 29 APR., 1981 * 5*

201			PFOLA	135	I	0012	0012	
202			PFJLP	136	I	0013	0013	
203			PFJLD	137	I	0014	0014	
204			PFJLW	138	I	0015	0015	
205								
206	DIFFUS	13	FACT#	001	I	0001	0001	YES
207			TRAIN#	003	X	0002	0002	YES
208			ENTRY#	005	I	0003	0003	YES
209			DMAKE	139	X	0004	0009	
210			DWID	140	I	0010	0010	
211			DLEN	141	I	0011	0011	
212			DSPD	142	I	0012	0012	
213			DPWR	143	I	0013	0013	
214			DPOSN	144	X	0014	0025	
215								
216	SCREEN	14	FACT#	001	I	0001	0001	YES
217			ENTRY#	005	I	0002	0002	YES
218			JTYPE	145	X	0003	0010	
219			JS#	146	I	0011	0011	
220			JLEN	147	I	0012	0012	
221			JWID	148	I	0013	0013	
222			JSAPER	149	I	0014	0014	
223			HTVOL	150	I	0015	0015	
224			FTDIA	151	I	0016	0016	
225			FTHGT	152	I	0017	0017	
226								
227	HEATER	15	FACT#	001	I	0001	0001	YES
228			ENTRY#	005	I	0002	0002	YES
229			JH#	153	I	0003	0003	
230			JHUSE	154	X	0004	0011	
231			JHAREA	155	I	0012	0012	
232			JHHT	156	X	0013	0020	
233			JHPASS	157	I	0021	0021	
234			JHTUBE	158	I	0022	0022	
235			JHLEN	159	I	0023	0023	
236			JHDIA	160	I	0024	0024	
237			JHMATL	161	X	0025	0029	
238			JTTHCK	162	I	0030	0030	
239								
240	CLARIF	16	FACT#	001	I	0001	0001	YES
241			ENTRY#	005	I	0002	0002	YES
242			CLPOS	163	X	0003	0008	
243			CLTYPE	164	X	0009	0014	
244			CLTRAY	165	I	0015	0015	
245			CLDIA	166	I	0016	0016	
246			CLAREA	167	I	0017	0017	
247			CLVOL	168	I	0018	0018	
248			FTYPE	169	X	0019	0026	
249			FIL#	170	I	0027	0027	
250			FAREA	171	I	0028	0028	

* PL80A(PLANT1) * 9:32 AM WED., 29 APR., 1981 * 4*

151		TRAIN#	003	X	0002	0002	YES	
152		MILL#	004	I	0003	0003	YES	
153		MCA	091	I	0004	0004		
154		MCB	092	I	0005	0005		
155		MCC	093	I	0006	0006		
156		MCD	094	I	0007	0007		
157		MPA	095	I	0008	0008		
158		MPB	096	I	0009	0009		
159		MPC	097	I	0010	0010		
160		MPD	098	I	0011	0011		
161		MPE	099	I	0012	0012		
162		MPF	100	I	0013	0013		
163		MPWO	101	I	0014	0014		
164		MPGR	102	I	0015	0015		
165		MPDR	103	X	0016	0018		
166		MAA	104	I	0019	0019		
167		MAB	105	I	0020	0020		
168		MAC	106	I	0021	0021		
169		MAD	107	I	0022	0022		
170		MAE	108	I	0023	0023		
171		MOA	109	I	0024	0024		
172		MOB	110	I	0025	0025		
173		MOC	111	I	0026	0026		
174		MOD	112	I	0027	0027		
175		MUA	113	I	0028	0028		
176		MUB	114	I	0029	0029		
177		MUC	115	I	0030	0030		
178		MUD	116	I	0031	0031		
179		MUE	117	I	0032	0032		
180		MUROLL	118	X	0033	0034		
181		MCLF	119	I	0035	0035		
182		MCLG	120	I	0036	0036		
183		MCLH	121	I	0037	0037		
184		MCLI	122	I	0038	0038		
185		MHJ	123	I	0039	0039		
186		MHK	124	I	0040	0040		
187		MHL	125	I	0041	0041		
188		MHM	126	I	0042	0042		
189								
190	PRESS	12	FACT#	001	I	0001	0001	YES
191			TRAIN#	003	X	0002	0002	YES
192			MILL#	004	I	0003	0003	YES
193			PFOUP	127	I	0004	0004	
194			PFOUD	128	I	0005	0005	
195			PFOUA	129	I	0006	0006	
196			PFJUP	130	I	0007	0007	
197			PFJUD	131	I	0008	0008	
198			PFJUW	132	I	0009	0009	
199			PFOLP	133	I	0010	0010	
200			PFOLD	134	I	0011	0011	

* PL80A(PLANT1) * 9:22 AM WED., 29 APR., 1981 * 3*

101		K2DVE	047	X	0012	0016	
102		K2PWR	048	I	0017	0017	
103		STYPE	049	X	0018	0023	
104		SDIA	050	I	0024	0024	
105		SLEN	051	I	0025	0025	
106		SCLEAR	052	I	0026	0026	
107		SSPD	053	I	0027	0027	
108		SHAM#	054	I	0028	0028	
109		SDVE	055	X	0029	0033	
110		SSTMP	056	I	0034	0034	
111		SMASS	057	I	0035	0035	
112		SPWR	058	I	0036	0036	
113							
114	MILLS	10	FACT#	001	I	0001	0001 YES
115			TRAIN#	003	X	0002	0002 YES
116			MILL#	004	I	0003	0003 YES
117			MDIA	059	I	0004	0004
118			MLEN	060	I	0005	0005
119			MSPD	061	I	0006	0006
120			MHR	062	X	0007	0008
121			MHRL	063	I	0009	0009
122			MSOF	064	I	0010	0010
123			MSOD	065	I	0011	0011
124			MARL	066	I	0012	0012
125			MWOF	067	I	0013	0013
126			MWOD	068	I	0014	0014
127			MTDIA	069	I	0015	0015
128			MHRMX	070	I	0016	0016
129			MTPT	071	I	0017	0017
130			MTPH	072	I	0018	0018
131			MOTP	073	I	0019	0019
132			MOTD	074	I	0020	0020
133			MOTA	075	I	0021	0021
134			MOFP	076	I	0022	0022
135			MOFD	077	I	0023	0023
136			MOFA	078	I	0024	0024
137			MODP	079	I	0025	0025
138			MODD	080	I	0026	0026
139			MODA	081	I	0027	0027
140			MJDP	082	I	0028	0028
141			MJDD	083	I	0029	0029
142			MJDW	084	I	0030	0030
143			MJFP	085	I	0031	0031
144			MJFD	086	I	0032	0032
145			MJFW	087	I	0033	0033
146			MFRATE	088	I	0034	0034
147			MTSPD	089	I	0035	0035
148			MTPWR	090	I	0036	0036
149							
150	FEEDS	11	FACT#	001	I	0001	0001 YES

* PL80A(PLANT1) * 9:14 AM WED., 29 APR., 1981 * 2*

51		ENG	008	X	0008	0011	
52		POWER	009	I	0012	0012	
53		MASS	010	I	0013	0013	
54		GAUGE	011	I	0014	0014	
55		TRUCK	012	X	0015	0022	
56		TRUCK#	013	I	0023	0023	
57		CAPAC	014	I	0024	0024	
58		TGAUGE	015	I	0025	0025	
59		TRAML	016	I	0026	0026	
60		GAUGEL	017	I	0027	0027	
61		CROPP	018	I	0028	0028	
62		CROPG	019	I	0029	0029	
63		CROPR	020	I	0030	0030	
64							
65	CARR	07	FACT#	001	I	0001	0001 YES
66			TRAIN#	003	X	0002	0002 YES
67			ENTRY#	005	I	0003	0003 YES
68			CPOS	021	X	0004	0011
69			CTYPE	022	X	0012	0027
70			CLEN	023	I	0028	0028
71			CWID	024	I	0029	0029
72			CINCL	025	I	0030	0030
73			CSPD	026	I	0031	0031
74			CDVE	027	X	0032	0039
75			CPWR	028	I	0040	0040
76			CFEED	029	X	0041	0048
77			CREM	030	X	0049	0063
78							
79	KNIVES	08	FACT#	001	I	0001	0001 YES
80			TRAIN#	003	X	0002	0002 YES
81			LTYPE	031	X	0003	0007
82			LBL#	032	I	0008	0008
83			LCLR	033	I	0009	0009
84			LSPD	034	I	0010	0010
85			LDVE	035	X	0011	0015
86			LPWR	036	I	0016	0016
87			KTYPE	037	X	0017	0021
88			KBL#	038	I	0022	0022
89			KCLR	039	I	0023	0023
90			KSPD	040	I	0024	0024
91			KDVE	041	X	0025	0029
92			KPWR	042	I	0030	0030
93							
94	SHRED	09	FACT#	001	I	0001	0001 YES
95			TRAIN#	003	X	0002	0002 YES
96			ENTRY#	005	I	0003	0003 YES
97			K2TYPE	043	X	0004	0008
98			K2BL#	044	I	0009	0009
99			K2CLR	045	I	0010	0010
100			K2SPD	046	I	0011	0011

* PL80A (PLANT1) * 9:03 AM WED., 29 APR., 1981 * 1*

1 HEWLETT-PACKARD IMAGE/1000 DATA BASE DEFINITION PROCESSOR

2

3

4

5 \$CONTROL;NOLIST,FIELD,ERRORS=10,ROOT,SET,TABLE;

6

7

8

9	SET NAME	TYPE	# ITEMS	# PATHS	DATA	MEDIA	CAPAC	CARTRIDGE
10								
11								
12	NAMES	M	002	13	0009	0083	0000000035	00025
13	NUMBS	A	001	03	0001	0023	0000000006	00025
14	TRAINS	A	001	08	0001	0053	0000000002	00025
15	EVAPS	A	001	01	0001	0011	0000000007	00025
16	ENTRYS	A	001	09	0001	0059	0000000010	00025
17	TRANS	D	017	02	0030	0011	0000000175	00025
18	CARR	D	013	03	0063	0015	0000000105	00025
19	KNIVES	D	014	02	0030	0011	0000000105	00025
20	SHRED	D	019	03	0036	0015	0000000070	00025
21	MILLS	D	035	03	0036	0015	0000000175	00025
22	FEEDS	D	039	03	0042	0015	0000000175	00025
23	PRESS	D	015	03	0015	0015	0000000175	00025
24	DIFFUS	D	009	03	0025	0015	0000000035	00025
25	SCREEN	D	010	02	0017	0011	0000000100	00025
26	HEATER	D	012	02	0030	0011	0000000150	00025
27	CLARIF	D	011	02	0028	0011	0000000140	00025
28	SEPAR	D	008	02	0013	0011	0000000105	00025
29	EVAP	D	013	04	0022	0019	0000000600	00025
30								
31								

32	SET NAME	SET NO	ITEM NAME	ITEM NO	TYPE	START WD	END WD	PATH?	SORT ITEM
33									
34									
35									
36	NAMES	01	FACT#	001	I	0001	0001	YES	
37			NAME	002	X	0002	0009		
38									
39	NUMBS	02	MILL#	004	I	0001	0001	YES	
40									
41	TRAINS	03	TRAIN#	003	X	0001	0001	YES	
42									
43	EVAPS	04	ENTRY#	005	I	0001	0001	YES	
44									
45	ENTRYS	05	ENTRY#	005	I	0001	0001	YES	
46									
47	TRANS	06	FACT#	001	I	0001	0001	YES	
48			ENTRY#	005	I	0002	0002	YES	
49			LOCOS	006	I	0003	0003		
50			TYPE	007	X	0004	0007		

* PL79B(PLANT1) * 9:47 PM WED., 6 MAY 1981 * 4*

151	BINS	12	FACT#	001	I	0001	0001	YES
152			ENTRY#	003	I	0002	0002	YES
153			BGBIN	094	X	0003	0008	
154			BGCAP	095	I	0009	0009	
155			BGPOS	096	X	0010	0013	
156			CTTYP	097	X	0014	0022	
157			CTCELL	098	I	0023	0023	
158			CTCAP	099	I	0024	0024	
159			CTPWR	100	I	0025	0025	
160								
161	ELECT	13	FACT#	001	I	0001	0001	YES
162			ENTRY#	003	I	0002	0002	YES
163			EPRTG	101	I	0003	0003	
164			EPIC	102	I	0004	0004	
165			EPMR	103	I	0005	0005	
166			EPMLD	104	I	0006	0006	
167			EPDMD	105	I	0007	0007	
168			EPIRD	106	I	0008	0008	
169			EPEXP	107	I	0009	0009	
170			EPSUR	108	I	0010	0010	
171			GSMAKE	109	X	0011	0017	
172			GS#	110	I	0018	0018	
173			GSRTG	111	I	0019	0019	
174			GSVOL	112	I	0020	0020	
175			GSPM	113	X	0021	0027	
176			GSSPD	114	I	0028	0028	
177			GSPR	115	I	0029	0029	
178			GSSH	116	I	0030	0030	
179			GSEX	117	I	0031	0031	
180								
181								
182	NUMBER OF ERROR MESSAGES:	0000						
183	NUMBER OF ITEMS:	117						
184	NUMBER OF SETS:	13						
185	ROOT FILE:	01438 WORDS, 00014 BLOCKS						
186								
187	CARTRIDGE NUMBER						NUMBER BLOCKS REQUIRED	
188		00019					0000000763	
189	DATA SET FILES CREATED.							
190	ROOT FILE CREATED.							
191	END DATA BASE DEFINITION							

* PL79B(PLANT1) * 9:37 PM WED., 6 MAY , 1981 * 3*

101		FLMAKE	051	X	0003	0010	
102		FLMODE	052	X	0011	0016	
103		FL#	053	I	0017	0017	
104		FLSPD	054	I	0018	0018	
105		FLDIA	055	I	0019	0019	
106		FLDEP	056	I	0020	0020	
107		FLBMAX	057	I	0021	0021	
108		FLBMIN	058	I	0022	0022	
109		FLBANG	059	I	0023	0023	
110		FLBVA	060	I	0024	0024	
111		FLBIA	061	I	0025	0025	
112		FLPWR	062	I	0026	0026	
113							
114	DRYER	10	FACT#	001	I	0001	0001 YES
115			ENTRY#	003	I	0002	0002 YES
116			DTYPE	063	X	0003	0010
117			DLEN	064	I	0011	0011
118			DDIA	065	I	0012	0012
119			DSPD	066	I	0013	0013
120			DPWR	067	I	0014	0014
121			DFAN	068	X	0015	0016
122			DHTR	069	X	0017	0018
123			DRAC	070	X	0019	0020
124			SB#	071	I	0021	0021
125			SBCAP	072	I	0022	0022
126			SBTOT	073	I	0023	0023
127							
128	BOILER	11	FACT#	001	I	0001	0001 YES
129			ENTRY#	003	I	0002	0002 YES
130			BOMAKE	074	X	0003	0010
131			BO#	075	I	0011	0011
132			BOPRES	076	I	0012	0012
133			BOMCR	077	I	0013	0013
134			BOSHT	078	I	0014	0014
135			BOBA	079	I	0015	0015
136			BOFA	080	I	0016	0016
137			BOSA	081	I	0017	0017
138			BOAA	082	I	0018	0018
139			BOEA	083	I	0019	0019
140			BOGTE	084	X	0020	0031
141			BOGA	085	I	0032	0032
142			BOWW	086	X	0033	0034
143			BOSPR	087	X	0035	0036
144			BOI0B	088	X	0037	0038
145			BOIFD	090	X	0039	0040
146			BOICO	089	X	0041	0042
147			BOIARR	091	X	0043	0051
148			BOISTD	092	I	0052	0052
149			BOISTH	093	I	0053	0053
150							

* &PDN21 (PLANT1) *11:33 PM TUE., 28 APR., 1981 * 1*

1 FTN
2 PROGRAM PDN21
3 C
4 C
5 C +++ WRITTEN - GDD - 16 JUL 1980 ++++
6 C +++ LAST MODIFIED 16 JUL 1980 ++++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== STOCK =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVEL(3), ISTAT(10), LIST(13)
15 C \$, IDSET(3), IVALU(19)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H:G,2HD:,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/12,1,3,15,16,17,18,19,20,21,22,23,24/
26 C LEVEL
27 C DATA ILEVEL/2H ,2H ,2H /
28 C DATA SET NAME - 'STOCK'
29 C DATA IDSET/2HST,2HOC,2HK /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C OPEN DATA-BASE
39 C
40 C
41 C
42 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C IMODE=3
45 C CALL DBOPN(IBASE, ILEVEL, IMODE, ISTAT).
46 C
47 C TEST FOR ERROR ON OPEN
48 C
49 C IF(ISTAT(1).EQ.0) GOTO 100
50 C ERROR

* &PDN21(PLANT1) *11:39 PM TUE., 28 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+ PDN21 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****C*****C*****C*****C*****C*****C*****C*****C*****C
57 C
58 C
59 C          ENTRY MODE
60 C
61 C
62 C      GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,19
65 101 IVALU(I) = 0
66 C
67      WRITE(1,1100)
68 1100 FORMAT(//"FACTORY NUMBER?           >
69      IFACT=0
70      READ(1,*) IFACT
71 C
72 C      TEST FOR END OF ENTRY MODE
73 C
74      IF( IFACT.EQ.0 ) GOTO 9999
75 C
76 C
77 C
78 C      GET DATA FOR DETAIL DATA SET
79 C
80 C      STOCK TANKS & MASSECUIITE REHEATER DATA
81 C
82 120  IVALU(1)=IFACT
83 C
84 C
85      WRITE(1,1150)
86 1150 FORMAT(" ENTRY #           >
87      READ(1,*) IVALU(2)
88 C
89 C
90      WRITE(1,3000)
91      READ(1,*) IVALU(3)
92 C
93      WRITE(1,3010)
94      READ(1,*) IVALU(4)
95 C
96      WRITE(1,3020)
97      READ(1,*) IVALU(5)
98 C
99      WRITE(1,3030)
100     READ(1,*) IVALU(6)
```

* &PDN21 (PLANT1) *11:44 PM TUE., 28 APR., 1981 * 3*

```
101 C
102      WRITE(1,3040)
103      READ(1,*) IVALU(7)
104 C
105      WRITE(1,3050)
106      DUM=0.0
107      READ(1,*) DUM
108      IVALU(8) = INT (10.*DUM)
109 C
110      WRITE(1,3060) (IBAK,K=1,8)
111      READ(1,4000) (IVALU(K),K=9,16)
112 4000 FORMAT(20A2)
113 C
114      WRITE(1,3070)
115      READ(1,*) IVALU(17)
116 C
117      WRITE(1,3080)
118      READ(1,*) IVALU(18)
119 C
120      WRITE(1,3090)
121      READ(1,*) IVALU(19)
122 C
123 C -----
124 C
125 3000 FORMAT(" VOLUME OF SYRUP STORAGE TANKS      _")
126 3010 FORMAT(" VOLUME OF A MOLASSES STORAGE TANKS    _")
127 3020 FORMAT(" VOLUME OF B MOLASSES STORAGE TANKS    _")
128 3030 FORMAT(" VOLUME OF MAGMA STORAGE TANKS      _")
129 3040 FORMAT(" NO. OF MASSECUISTE RE-HEATERS      _")
130 3050 FORMAT(" AREA OF RE-HEATERS      _")
131 3060 FORMAT(" RE-HEATER TYPE *****",BA2,"_")
132 3070 FORMAT(" RESISTANCE HEATER DIAMETER      _")
133 3080 FORMAT(" RESISTANCE HEATER VOLTAGE      _")
134 3090 FORMAT(" RESISTANCE HEATER CURRENT      _")
135 C
136 C
137 C -----
138 C
139 C PUT DATA IN DATA-BASE
140 C
141      IMODE=1
142      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
143 C
144 C TEST FOR ERROR IN PUT
145 C
146      IF( ISTAT(1).EQ.0 ) GOTO 100
147 C
148 C ERROR
149 C
150      WRITE(1,1600) ISTAT(1), IDSET
```

* &PDN21(PLANT1) *11:51 PM TUE., 28 APR., 1981 * 4*

```
151 1600 FORMAT(//"+ PDN21 ++ ERROR",IS," ON PUT IN SET '",3A2,"'")  
152 C  
153 C GET NEXT ENTRY  
154 C  
155 GOTO 100  
156 C  
157 C  
158 C*****  
159 C  
160 C  
161 C TERMINATE  
162 C -----  
163 C  
164 C  
165 9999 CALL DBUNL (ISTAT)  
166 IMODE=0  
167 C  
168 C CLOSE DATA-BASE  
169 C  
170 IMODE=1  
171 CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )  
172 C  
173 WRITE(1,1700)  
174 1700 FORMAT(////"+ PDN21 STOP ++"////)  
175 C  
176 C  
177 END  
178 END$
```

* &PDN22(PLANT1) *11:55 PM TUE., 28 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDN22
3 C
4 C
5 C      +++ WRITTEN - GDD - 1 SEP 1980 ****
6 C      +++ LAST MODIFIED 1 SEP 1980 ****
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== PUMPS =====
12 C
13 C
14 C DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(13)
15 C $ ,IDSET(3),IVALU(42)
16 C
17 C      DATA-BASE
18 C      DATA IBASE/2H ,2HPL,2HAN,2HT2,2H G,2HD ,2H9 /
19 C
20 C      BACKSPACE
21 C
22 C      DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C      DATA LIST/12,1,3,25,26,27,28,29,30,31,32,33,34/
26 C      LEVEL
27 C      DATA ILEV/L2H ,2H ,2H /'
28 C      DATA SET NAME - 'PUMPS'
29 C      DATA IDSET/2HPU,2HMP,2HS /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C      OPEN DATA-BASE
39 C -----
40 C
41 C
42 C      OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C      IMODE=3
45 C      CALL DBOPEN( IBASE,ILEVL,IMODE,ISTAT )
46 C
47 C      TEST FOR ERROR ON OPEN
48 C
49 C      IF( ISTAT(1).EQ.0 ) GOTO 100
50 C      ERROR
```

* &PDN22(PLANT1) *12:01 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000  FORMAT(//"+ PDN22 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****=====
57 C
58 C
59 C          ENTRY MODE
60 C  -----
61 C
62 C          GET FACTORY NUMBER
63 C
64 100  DO 101 I=1,42
65 101  IVALU(I) = 0
66 C
67      WRITE(1,1100)
68 1100  FORMAT(//"FACTORY NUMBER?      ")
69      IFACT=0
70      READ(1,*) IFACT
71 C
72 C          TEST FOR END OF ENTRY MODE
73 C
74      IF( IFACT.EQ.0 ) GOTO 9999
75 C
76 C  -----
77 C
78 C          GET DATA FOR DETAIL DATA SET
79 C
80 C          PUMP DATA
81 C
82 120  IVALU(1)=IFACT
83 C
84 C
85      WRITE(1,1150)
86 1150  FORMAT(" ENTRY #      ")
87      READ(1,*) IVALU(2)
88 C
89 C
90      WRITE(1,3000)
91      READ(1,*) IVALU(3)
92 C
93      WRITE(1,3010) (IBAK,K=4,11)
94      READ(1,4000) (IVALU(K),K=4,11)
95 4000  FORMAT(20A2)
96 C
97      WRITE(1,3020) (IBAK,K=12,15)
98      READ(1,4000) (IVALU(K),K=12,15)
99 C
100     WRITE(1,3030)
```

* &PDN22(PLANT1) *12:06 AM WED., 29 APR., 1981 * 3*

```
101      READ(1,*) IVALU(16)
102 C
103      WRITE(1,3040)
104      READ(1,*) IVALU(17)
105 C
106      WRITE(1,3050)
107      READ(1,*) IVALU(18)
108 C
109      WRITE(1,3060) (IBAK,K=19,22)
110      READ(1,4000) (IVALU(K),K=19,22)
111 C
112      WRITE(1,3070)
113      READ(1,*) IVALU(23)
114 C
115      WRITE(1,3080)
116      READ(1,*) IVALU(24)
117 C
118      WRITE(1,3090) (IBAK,K=25,42)
119      READ(1,4000) (IVALU(K),K=25,42)
120 C
121 C -----
122 C
123 3000 FORMAT(" VACUUM PUMP REFERENCE NUMBER           ")
124 3010 FORMAT(" TYPE           *****",8A2,"_")
125 3020 FORMAT(" NO OF CYLINDERS           *****",4A2,"_")
126 3030 FORMAT(" BORE           _")
127 3040 FORMAT(" LENGTH OF STROKE           _")
128 3050 FORMAT(" DISPLACEMENT           _")
129 3060 FORMAT(" ROTARY, SINGLE OR DOUBLE ACTING *****",4A2,"_")
130 3070 FORMAT(" REV/MIN OR STROKES/MIN           _")
131 3080 FORMAT(" DRIVE KW           _")
132 3090 FORMAT(" CONNECTED TO WHAT VESSEL? ",18("**"),18A2, " ")
133 C
134 C -----
135 C
136 C
137 C PUT DATA IN DATA-BASE
138 C
139 IMODE=1
140 CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
141 C
142 C TEST FOR ERROR IN PUT
143 C
144 IF( ISTAT(1).EQ.0 ) GOTO 100
145 C
146 C ERROR
147 C
148      WRITE(1,1600) ISTAT(1),IDSET
149 1600 FORMAT(//"+ PDN22 ++ ERROR",IS," ON PUT IN SET '",3A2,"' ")
150 C
```

* &PDN22(PLANT1) *12:13 AM WED., 29 APR., 1981 * 4*

151 C GET NEXT ENTRY
152 C
153 GOTO 100
154 C
155 C
156 C*****
157 C
158 C
159 C TERMINATE
160 C -----
161 C
162 C
163 9999 CALL DBUNL (ISTAT)
164 IMODE=0
165 C
166 C CLOSE DATA-BASE
167 C
168 IMODE=1
169 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
170 C
171 WRITE(1,1700)
172 1700 FORMAT(////"+ PDN22 STOP ++"////)
173 C
174 C
175 END
176 END\$

* &PDN23(PLANT1) *12:17 AM WED., 29 APR., 1981 * 1*

```
1 FTN
2      PROGRAM PDN23
3 C
4 C
5 C      +++ WRITTEN - GDD - 1 SEP 1980 +++
6 C      +++ LAST MODIFIED 1 SEP 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== CRYST =====
12 C
13 C
14 C      DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(10)
15 C      $           ,IDSET(3),IVALU(29)
16 C
17 C      DATA-BASE
18 C      DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD:,2H9 /
19 C
20 C      BACKSPACE
21 C
22 C      DATA IBAK/04010B/
23 C
24 C      VARIABLE LIST
25 C      DATA LIST/9,1,3,35,36,37,38,39,40,41/
26 C      LEVEL
27 C      DATA ILEVL/2H ,2H ,2H /
28 C      DATA SET NAME - 'CRYST'
29 C      DATA IDSET/2HCR,2HYS,2HT /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C      OPEN DATA-BASE
39 C      -----
40 C
41 C
42 C      OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C      IMODE=3
45 C      CALL DBOPNC IBASE,ILEVL,IMODE,ISTAT )
46 C
47 C      TEST FOR ERROR ON OPEN
48 C
49 C      IF( ISTAT(1).EQ.0 ) GOTO 100
50 C      ERROR
```

* &PDN23(PLANT1) *12:22 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000  FORMAT(//"+ PDN23 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****=====
57 C
58 C
59 C      ENTRY MODE
60 C
61 C
62 C      GET FACTORY NUMBER.
63 C
64 100  DO 101 I=1,29
65 101  IVALU(I) = 0
66 C
67      WRITE(1,1100)
68 1100  FORMAT(//>"FACTORY NUMBER?          ")  
         IFACT=0
69      READ(1,*) IFACT
70 C
71 C      TEST FOR END OF ENTRY MODE
72 C
73 C
74      IF( IFACT.EQ.0 ) GOTO 9999
75 C
76 C-----  
77 C
78 C      GET DATA FOR DETAIL DATA SET
79 C
80 C      CRYSTALLIZER DATA
81 C
82 120  IVALU(1)=IFACT
83 C
84 C
85      WRITE(1,1150)
86 1150  FORMAT(" ENTRY #          ")  
         READ(1,*) IVALU(2)
87 C
88 C      WRITE(1,3000) (IBAK,K=3,12)
89      READ(1,4000) (IVALU(K),K=3,12)
90 C      4000  FORMAT(20A2)
91 C
92 C      WRITE(1,3010) (IBAK,K=13,14)
93      READ(1,4000) IVALU(13),IVALU(14)
94 C
95 C      WRITE(1,3020)
96      READ(1,*) IVALU(15)
97 C
98 C
99 C
100     WRITE(1,3030)
```

* &PDN23(PLANT1) *12:28 AM WED., 29 APR., 1981 * 3*

```
101      READ(1,*) IVALU(16)
102 C
103      WRITE(1,3040) (IBAK,K=17,23)
104      READ(1,4000) (IVALU(K),K=17,23)
105 C
106      WRITE(1,3050)
107      READ(1,*) IVALU(24)
108 C
109      WRITE(1,3060) (IBAK,K=25,29)
110      READ(1,4000) (IVALU(K),K=25,29)
111 C
112 C -----
113 C
114 3000 FORMAT(" CRYSTALLIZER TYPE      ****",10A2,"_")
115 3010 FORMAT(" GRADE OF MASSECUIITE      ****",2A2,"_")
116 3020 FORMAT(" NUMBER IN GROUP      _")
117 3030 FORMAT(" TOTAL VOLUME      _")
118 3040 FORMAT(" ROTATING OR RECIPROCATING ****",7A2,"_")
119 3050 FORMAT(" TOTAL AREA FOR EACH GROUP      _")
120 3060 FORMAT(" BATCH OR CONTINUOUS      ****",5A2,"_")
121 C
122 C -----
123 C
124 C PUT DATA IN DATA-BASE
125 C
126      IMODE=1
127      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
128 C
129 C TEST FOR ERROR IN PUT
130 C
131      IF( ISTAT(1).EQ.0 ) GOTO 100
132 C
133 C ERROR
134 C
135      WRITE(1,1600) ISTAT(1), IDSET
136 1600 FORMAT(//"+ PDN23 ++ ERROR",15," ON PUT IN SET ",3A2,"")
137 C
138 C GET NEXT ENTRY
139 C
140      GOTO 100
141 C
142 C
143 ****
144 C
145 C
146 C      TERMINATE
147 C -----
148 C
149 C
150      9999 CALL DBUNL (ISTAT)
```

* &PDN23(PLANT1) *12:34 AM WED., 29 APR., 1981 * 4*

```
151      IMODE=0
152 C
153 C CLOSE DATA-BASE
154 C
155      IMODE=1
156      CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
157 C
158      WRITE(1, 1700)
159 1700 FORMAT(////"+ PDN23 STOP ++"///)
160 C
161 C
162      END
163      END$
```

* &PDN24 (PLANT1) *12:37 AM WED., 29 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN24
3 C
4 C
5 C     +++ WRITTEN - GDD - 2 SEP 1980 +++
6 C     +++ LAST MODIFIED 2 SEP 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== HGFUG =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(12)
15 C           $ , IDSET(3), IVALU(17)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD:,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/11,1,3,42,43,44,45,46,47,48,49,50/
26 C LEVEL
27 C DATA ILEVL/2H ,2H ,2H /
28 C DATA SET NAME - 'HGFUG'
29 C DATA IDSET/2HHG,2HFU,2HG /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C OPEN DATA-BASE
39 C -----
40 C
41 C
42 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C IMODE=3
45 C CALL DBOPN( IBASE, ILEVL, IMODE, ISTAT )
46 C
47 C TEST FOR ERROR ON OPEN
48 C
49 C IF( ISTAT(1).EQ.0 ) GOTO 100
50 C ERROR
```

* &PDN24(PLANT1) *12:42 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+ PDN24 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****C*****C*****C*****C*****C*****C*****C*****C*****C*****C
57 C
58 C
59 C          ENTRY MODE
60 C          -----
61 C
62 C      GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,17
65 101 IVALU(I) = 0
66 C
67      WRITE(1,1099)
68 1099 FORMAT(// " HIGH GRADE FUGAL DATA"/
69      =      " -----")
70 C
71      WRITE(1,1100)
72 1100 FORMAT(// "FACTORY NUMBER?           ")
73      IFACT=0
74      READ(1,*) IFACT
75 C
76 C      TEST FOR END OF ENTRY MODE
77 C
78      IF( IFACT.EQ.0 ) GOTO 9999
79 C
80 C-----
81 C
82 C      GET DATA FOR DETAIL DATA SET
83 C
84 C      HIGH GRADE FUGAL DATA
85 C
86 120  IVALU(1)=IFACT
87 C
88 C
89      WRITE(1,1150)
90 1150 FORMAT(" ENTRY #           ")
91      READ(1,*) IVALU(2)
92 C
93 C
94 C
95      WRITE(1,3000) (IBAK,K=3,8)
96      READ(1,4000) (IVALU(K),K=3,8)
97 4000 FORMAT(20A2)
98 C
99      WRITE(1,3010)
100     READ(1,*) IVALU(9)
```

* &PDN24 (PLANT1) *12:48 AM WED., 29 APR., 1981 * 3*

```
101 C
102      WRITE(1,3020) (IBAK,K=10,11)
103      READ(1,4000) (IVALU(K),K=10,11)
104 C
105      WRITE(1,3030)
106      READ(1,*) IVALU(12)
107 C
108      WRITE(1,3040)
109      READ(1,*) IVALU(13)
110 C
111      WRITE(1,3050)
112      READ(1,*) IVALU(15)
113 C
114      WRITE(1,3060)
115      READ(1,*) DUM
116      IVALU(15) = INT (10.*DUM)
117 C
118      WRITE(1,3070) IBAK
119      READ(1,4000) IVALU(16)
120 C
121      WRITE(1,3080)
122      READ(1,*) IVALU(17)
123 C
124 C
125 C -----
126 C -----
127 3000 FORMAT(" FUGAL TYPE           *****",6A2,"_")
128 3010 FORMAT(" NUMBER IN GROUP          _")
129 3020 FORMAT(" GRADE OF MASSECUITE TREATED   ****",2A2,"_")
130 3030 FORMAT(" RPM                         _")
131 3040 FORMAT(" DIAMETER                     _")
132 3050 FORMAT(" DEPTH                        _")
133 3060 FORMAT(" TOTAL SCREEN AREA            _")
134 3070 FORMAT(" TRANSMISSION A.C OR D.C DRIVE **",A2,"_")
135 3080 FORMAT(" KW FOR THE GROUP             _")
136 C
137 C
138 C -----
139 C
140 C      PUT DATA IN DATA-BASE
141 C
142      IMODE=1
143      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
144 C
145 C      TEST FOR ERROR IN PUT
146 C
147      IF( ISTAT(1).EQ.0 ) GOTO 100
148 C
149 C      ERROR
150 C
```

* &PDN24(PLANT1) *12:54 AM WED., 29 APR., 1981 * 4*

```
151      WRITE(1,1600) ISTAT(1),IDSET
152 1600 FORMAT(//"+ PDN24 ++ "ERROR",I5," ON PUT IN SET '",3A2,"")
153 C
154 C   GET NEXT ENTRY
155 C
156      GOTO 100
157 C
158 C
159 C*****
160 C
161 C   *
162 C   TERMINATE
163 C
164 C
165 C
166 9999 CALL DBUNL (ISTAT)
167      IMODE=0
168 C*
169 C   CLOSE DATA-BASE
170 C
171      IMODE=1
172      CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
173 C
174      WRITE(1,1700)
175 1700 FORMAT(///"+ PDN24 STOP ++///)
176 C
177 C
178      END
179      END$
```

* &PDN25 (PLANT1) *12:58 AM WED., 29 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN25
3 C
4 C
5 C     +++ WRITTEN - GDD - 2 SEP 1980 +++
6 C     +++ MODIFIED - GDD - 2 SEP 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== LGFUG =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVL(3), ISTAT(10), LIST(15)
15 C      , IDSET(3), IVALU(26)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H:G,2HD:,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/14,1,3,51,52,53,54,55,56,57,58,59,60,61,62/
26 C LEVEL
27 C DATA ILEVL/2H ,2H ,2H /
28 C DATA SET NAME - 'LGFUG'
29 C DATA IDSET/2HLG,2HFU,2HG /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C OPEN DATA-BASE
39 C -----
40 C
41 C
42 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C IMODE=3
45 C CALL DBOPNC( IBASE, ILEVL, IMODE, ISTAT )
46 C
47 C TEST FOR ERROR ON OPEN
48 C
49 C IF( ISTAT(1).EQ.0 ) GOTO 100
50 C ERROR
```

* &PDN25(PLANT1) * 1:04 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+ PDN25 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****=====
57 C
58 C
59 C      ENTRY MODE
60 C
61 C
62 C      GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,26
65 101 IVALU(I) = 0
66 C
67      WRITE(1,1099)
68 1099 FORMAT(// " LOW GRADE FUGAL DATA"/
69      =      " -----")
70 C
71      WRITE(1,1100)
72 1100 FORMAT(// "FACTORY NUMBER?      ") -->
73      IFACT=0
74      READ(1,*) IFACT
75 C
76 C      TEST FOR END OF ENTRY MODE
77 C
78      IF( IFACT.EQ.0 ) GOTO 9999
79 C
80 C
81 C
82 C      GET DATA FOR DETAIL DATA SET
83 C
84 C      HIGH GRADE FUGAL DATA
85 C
86 120  IVALU(1)=IFACT
87 C
88 C
89      WRITE(1,1150)
90 1150 FORMAT(" ENTRY #      ")
91      READ(1,*) IVALU(2)
92 C
93 C
94 C
95      WRITE(1,3000) (IBAK,K=3,10)
96      READ(1,4000) (IVALU(K),K=3,10)
97 4000 FORMAT(20A2)
98 C
99      WRITE(1,3010) (IBAK,K=11,16)
100     READ(1,4000) (IVALU(K),K=11,16)
```

* &PDN25(PLANT1) * 1:09 AM WED., 29 APR., 1981 * 3*

101 C
102 WRITE(1,3020)
103 READ(1,*) IVALU(17)
104 C
105 WRITE(1,3030)
106 READ(1,*) IVALU(18)
107 C
108 WRITE(1,3040)
109 READ(1,*) IVALU(19)
110 C
111 WRITE(1,3050)
112 READ(1,*) IVALU(20)
113 C
114 WRITE(1,3060)
115 READ(1,*) IVALU(21)
116 C
117 WRITE(1,3070)
118 READ(1,*) IVALU(22)
119 C
120 WRITE(1,3080)
121 READ(1,*) IVALU(23)
122 C
123 WRITE(1,3090)
124 READ(1,*) DUM
125 IVALU(24) = INT(10*DUM)
126 C
127 WRITE(1,3100)
128 READ(1,*) DUM
129 IVALU(25) = INT(10*DUM)
130 C
131 WRITE(1,3110)
132 READ(1,*) IVALU(26)
133 C
134 C
135 C
136 3000 FORMAT(" FUGAL TYPE", 8A2, "_")
137 3010 FORMAT(" BATCH OR CONTINUOUS", 6A2, "_")
138 3020 FORMAT(" NUMBER IN GROUP", _)
139 3030 FORMAT(" RPM", _)
140 3040 FORMAT(" DIAMETER", _)
141 3050 FORMAT(" DEPTH", _)
142 3060 FORMAT(" MAX DIA BASKET", _)
143 3070 FORMAT(" MIN DIA BASKET", _)
144 3080 FORMAT(" BASKET ANGLE", _)
145 3090 FORMAT(" VERTICAL SCREEN AREA", _)
146 3100 FORMAT(" INCLINED SCREEN AREA", _)
147 3110 FORMAT(" KW FOR THE GROUP", _)
148 C
149 C
150 C

* &PDN25(PLANT1) * 1:16 AM WED., 29 APR., 1981 * 4*

```
151 C
152 C   PUT DATA IN DATA-BASE
153 C
154     IMODE=1
155     CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
156 C
157 C   TEST FOR ERROR IN PUT
158 C
159     IF( ISTAT(1).EQ.0 ) GOTO 100
160 C
161 C   ERROR
162 C
163     WRITE(1,1600) ISTAT(1),IDSET
164 1600 FORMAT(//"+ PDN25 ++ ERROR",I5," ON PUT IN SET '",3A2,"")
165 C
166 C   GET NEXT ENTRY
167 C
168     GOTO 100
169 C
170 C
171 C*****TERMINATE*****
172 C
173 C
174 C   TERMINATE
175 C   -----
176 C
177 C
178 9999 CALL DBUNL (ISTAT)
179     IMODE=0
180 C
181 C   CLOSE DATA-BASE
182 C
183     IMODE=1
184     CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
185 C
186     WRITE(1,1700)
187 1700 FORMAT(////"+ PDN25 STOP ++////)
188 C
189 C
190     END
191     END$
```

* &PDN26<PLANT1> * 1:21 AM WED., 29 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN26
3 C
4 C
5 C     +++ WRITTEN - GDD - 2 SEP 1980 +++
6 C     +++ MODIFIED - GDD - 2 SEP 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== DRYER =====
12 C
13 C
14 C DIMENSION IBASE(7), ILEVEL(3), ISTAT(10), LIST(14)
15 C           $ , IDSET(3), IVALU(23)
16 C
17 C          DATA-BASE
18 C          DATA IBASE/2H ,2HPL,2HAN,2HT2,2H:G,2HD:,2H9 /
19 C
20 C          BACKSPACE
21 C
22 C          DATA IBAK/04010B/
23 C
24 C          VARIABLE LIST
25 C          DATA LIST/13,1,3,63,64,65,66,67,68,69,70,71,72,73/
26 C          LEVEL
27 C          DATA ILEVEL/2H ,2H ,2H /
28 C          DATA SET NAME - 'DRYER'
29 C          DATA IDSET/2HDR,2HYE,2HR /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C          OPEN DATA-BASE
39 C          -----
40 C
41 C
42 C          OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C          IMODE=3
45 C          CALL DBOPN( IBASE, ILEVEL, IMODE, ISTAT )
46 C
47 C          TEST FOR ERROR ON OPEN
48 C
49 C          IF( ISTAT(1).EQ.0 ) GOTO 100
50 C          ERROR
```

* &PDN26(PLANT1) * 1:27 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+, PDN26 ++ ERROR", I5, " ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 C*****=====
57 C
58 C
59 C          ENTRY MODE
60 C -----
61 C
62 C  GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,23
65 101 IVALU(I) = 0
66 C
67      WRITE(1,1099)
68 1099 FORMAT(// " DRYER DATA" /
69      =         " -----")
70 C
71      WRITE(1,1100)
72 1100 FORMAT(// "FACTORY NUMBER?           ")>
73      IFACT=0
74      READ(1,*) IFACT
75 C
76 C  TEST FOR END OF ENTRY MODE
77 C
78      IF( IFACT.EQ.0 ) GOTO 9999
79 C
80 C -----
81 C
82 C  GET DATA FOR DETAIL DATA SET
83 C
84 C  HIGH GRADE FUGAL DATA
85 C
86 120  IVALU(1)=IFACT
87 C
88 C
89      WRITE(1,1150)
90 1150 FORMAT(" ENTRY #           ")
91      READ(1,*) IVALU(2)
92 C
93 C
94 C
95      WRITE(1,3000) (IBAK,K=3,10)
96      READ(1,4000) (IVALU(K),K=3,10)
97 4000 FORMAT(20A2)
98 C
99      WRITE(1,3010)
100     READ(1,*) IVALU(11)
```

* &PDN26(PLANT1) * 1:32 AM WED., 29 APR., 1981 * 3*

```
101 C
102      WRITE(1,3020)
103      READ(1,*) IVALU(12)
104 C
105      WRITE(1,3030)
106      READ(1,*) DUM
107      IVALU(13) = INT (10*DUM)
108 C
109      WRITE(1,3040)
110      READ(1,*) IVALU(14)
111 C
112      WRITE(1,3050) (IBAK,K=1,2)
113      READ(1,4000) IVALU(15),IVALU(16)
114 C
115      WRITE(1,3060) (IBAK,K=1,2)
116      READ(1,4000) IVALU(17),IVALU(18)
117 C
118      WRITE(1,3070) (IBAK,K=1,2)
119      READ(1,4000) IVALU(19),IVALU(20)
120 C
121      WRITE(1,3080)
122      READ(1,*) IVALU(21)
123 C
124      WRITE(1,3090)
125      READ(1,*) IVALU(22)
126 C
127      WRITE(1,3100)
128      READ(1,*) IVALU(23)
129 C -----
130 C
131 3000 FORMAT(" DRYER TYPE      *****",8A2,"")
132 3010 FORMAT(" DRUM LENGTH      ")
133 3020 FORMAT(" DRUM DIAMETER      ")
134 3030 FORMAT(" RPM           ")
135 3040 FORMAT(" kW           ")
136 3050 FORMAT(" IS FAN INSTALLED   ****",2A2,"")
137 3060 FORMAT(" IS AIR HEATER INSTALLED   ****",2A2,"")
138 3070 FORMAT(" IS AIR CONDIT INSTALLED   ****",2A2,"")
139 3080 FORMAT(" SUGAR STORAGE - NO OF BINS   ")
140 3090 FORMAT(" CAPACITY OF EACH BIN   ")
141 3100 FORMAT(" TOTAL MILL STORAGE CAPACITY   ")
142 C
143 C -----
144 C
145 C
146 C PUT DATA IN DATA-BASE
147 C
148 IMODE=1
149 CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
150 C
```

* &PDN26(PLANT1) * 1:39 AM WED., 29 APR., 1981 * 4*

```
151 C TEST FOR ERROR IN PUT
152 C
153 IF( ISTAT(1).EQ.0 ) GOTO 100
154 C
155 C ERROR
156 C
157 WRITE(1,1600) ISTAT(1),IDSET
158 1600 FORMAT(//"+ PDN26 ++ ERROR",I5," ON PUT IN SET '",3A2,"")
159 C
160 C GET NEXT ENTRY
161 C
162 GOTO 100
163 C
164 C
165 ****
166 C
167 C
168 C TERMINATE
169 C -----
170 C
171 C
172 9999 CALL DBUNL (ISTAT)
173 IMODE=0
174 C
175 C CLOSE DATA-BASE
176 C
177 IMODE=1
178 CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
179 C
180 WRITE(1,1700)
181 1700 FORMAT(////"+ PDN26 STOP ++////)
182 C
183 C
184 END
185 END$
```

* &PDN27(PLANT1) * 1:43 AM WED., 29 APR., 1981 * 1*

1 FTN
2 PROGRAM PDN27
3 C
4 C
5 C +++ WRITTEN - GDD - 2 SEP 1980 ++++
6 C +++ MODIFIED - GDD - 2 SEP 1980 ++++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== BOILER =====
12 C
13 C
14 DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(23)
15 \$,IDSET(3),IVALU(53)
16 C
17 C DATA-BASE
18 DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD:,2H9 /
19 C
20 C BACKSPACE
21 C
22 DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 DATA LIST/22,1,3,74,75,76,77,78,79,80,81,82,83,84,85
26 = ,86,87,88,89,90,91,92,93/
27 C LEVEL
28 DATA ILEV/L2H ,2H ,2H /
29 C DATA SET NAME ~ 'BOILER'
30 DATA IDSET/2HBO,2HIL,2HER/
31 C
32 *****
33 C
34 C
35 C
36 *****
37 C
38 C
39 C OPEN DATA-BASE
40 C -----
41 C
42 C
43 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
44 C
45 IMODE=3
46 CALL DBOPNC(IBASE,ILEVL,IMODE,ISTAT)
47 C
48 C TEST FOR ERROR ON OPEN
49 C
50 C IF(ISTAT(1).EQ.0) GOTO 100

* &PDN27<PLANT1> * 1:49 AM WED., 29 APR., 1981 * 2*

```
51 C   ERROR
52     WRITE(1,1000) ISTAT(1)
53 1000 FORMAT(//"+ PDN27 ++ ERROR",I5," ON DATA-BASE OPEN")
54     GOTO 9999
55 C
56 C
57 ****
58 C
59 C
60 C           ENTRY MODE
61 C   -----
62 C
63 C   GET FACTORY NUMBER
64 C
65 100 DO 101 I=1,53
66 101 IVALU(I) = 0
67 C
68     WRITE(1,1099)
69 1099 FORMAT(//>" BOILER DATA"/
70     =         " -----")
71 C
72     WRITE(1,1100)
73 1100 FORMAT(//>"FACTORY NUMBER?      ")_
74     IFACT=0
75     READ(1,*) IFACT
76 C
77 C   TEST FOR END OF ENTRY MODE
78 C
79     IF( IFACT.EQ.0 ) GOTO 9999
80 C
81 C   -----
82 C
83 C   GET DATA FOR DETAIL DATA SET
84 C
85 C   BOILER DATA
86 C
87 120 IVALU(1)=IFACT
88 C
89 C
90     WRITE(1,1150)
91 1150 FORMAT(" ENTRY #      ")
92     READ(1,*) IVALU(2)
93 C
94 C
95 C
96     WRITE(1,3000) (IBAK,K=3,10)
97     READ(1,4000) (IVALU(K),K=3,10)
98 4000 FORMAT(20A2)
99 C
100    WRITE(1,3010)
```

* &PDN27 (PLANT1) * 1:54 AM WED., 29 APR., 1981 * 3*

```
101      READ(1,*) IVALU(11)
102 C
103      WRITE(1,3020)
104      READ(1,*) IVALU(12)
105 C
106      WRITE(1,3030)
107      READ(1,*) DUM
108      IVALU(13)=INT((DUM+5)/10)
109 C
110      WRITE(1,3040)
111      READ(1,*) IVALU(14)
112 C
113      WRITE(1,3050)
114      READ(1,*) IVALU(15)
115 C
116      WRITE(1,3060)
117      READ(1,*) IVALU(16)
118 C
119      WRITE(1,3070)
120      READ(1,*) IVALU(17)
121 C
122      WRITE(1,3080)
123      READ(1,*) IVALU(18)
124 C
125      WRITE(1,3090)
126      READ(1,*) IVALU(19)
127 C
128      WRITE(1,3100) (IBAK,K=20,31)
129      READ(1,4000) (IVALU(K),K=20,31)
130 C
131      WRITE(1,3110)
132      READ(1,*) IVALU(32)
133 C
134      WRITE(1,3120) IBAK,IBAK
135      READ(1,4000) (IVALU(K),K=33,34)
136 C
137      WRITE(1,3130) IBAK,IBAK
138      READ(1,4000) IVALU(35),IVALU(36)
139 C
140      WRITE(1,3145) IBAK,IBAK,IBAK
141 3145 FORMAT(" SPREADER OR STOKER      *****",3A2,"_")
142      READ(1,4000) IRUBB
143 C
144      WRITE(1,3140) IBAK,IBAK
145      READ(1,4000) IVALU(37),IVALU(38)
146 C
147      WRITE(1,3150) IBAK,IBAK
148      READ(1,4000) IVALU(39),IVALU(40)
149 C
150      IVALU(41)=2H
```

* &PDN27(PLANT1) * 2:00 AM WED., 29 APR., 1981 * 4*

```
151      IVALU(42)=2H
152 C
153      WRITE(1,3160) (IBAK,K=43,51)
154      READ(1,4000) (IVALU(K),K=43,51)
155 C
156      WRITE(1,3170)
157      READ(1,*) IVALU(52)
158 C
159      WRITE(1,3180)
160      READ(1,*) DUM
161      IVALU(53) = INT(10*DUM)
162 C
163 C
164 C
165 3000 FORMAT(" TYPE OR MAKER *****",8A2,"_")
166 3010 FORMAT(" NO OF SIMLIAR UNITS IN GROUP _")
167 3020 FORMAT(" ALLOWABLE WORKING PRESSURE _")
168 3030 FORMAT(" M.C.R _")
169 3040 FORMAT(" NOMINAL SUPERHEAT _")
170 3050 FORMAT(" BOILER BANK AREA _")
171 3060 FORMAT(" FURNACE WATER WALLS _")
172 3070 FORMAT(" SUPERHEATER AREA _")
173 3080 FORMAT(" AIR HEATER AREA _")
174 3090 FORMAT(" ECONOMISER AREA _")
175 3100 FORMAT(" TYPE OF GRATE *****",12A2,"_")
176 3110 FORMAT(" GRATE AREA PER UNIT _")
177 3120 FORMAT(" WATER WALLS ****",2A2"_")
178 3130 FORMAT(" DUMPING OR MOVING GRATE ****",2A2"_")
179 3140 FORMAT(" OIL BURNERS ****",2A2"_")
180 3150 FORMAT(" FORCED DRAUGHT ****",2A2"_")
181 3160 FORMAT(" SOOT ARRESTORS TYPE *****",9A2"_")
182 3170 FORMAT(" STACK DIAMETER _")
183 3180 FORMAT(" STACK HEIGHT _")
184 C
185 C
186 C
187 C
188 C PUT DATA IN DATA-BASE
189 C
190      IMODE=1
191      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, IVALU)
192 C
193 C TEST FOR ERROR IN PUT
194 C
195      IF( ISTAT(1).EQ.0 ) GOTO 100
196 C
197 C   ERROR
198 C
199      WRITE(1,1600) ISTAT(1),IDSET
200 1600 FORMAT(//"+ PDN27 ++ ERROR",I5," ON PUT IN SET ",3A2,"")
```

* &PDN27(PLANT1) * 2:09 AM WED., 29 APR., 1981 * 5*

```
201 C
202 C GET NEXT ENTRY
203 C
204 GOTO 100
205 C
206 C
207 ****
208 C
209 C
210 C TERMINATE
211 C -----
212 C
213 C
214 9999 CALL DBUNL (ISTAT)
215 IMODE=0
216 C
217 C CLOSE DATA-BASE
218 C
219 IMODE=1
220 CALL DBCLS( IBASE, IDSET, IMODE, ISTAT )
221 C
222 WRITE(1,1700)
223 1700 FORMAT(////"+ PDN27 STOP ++"///)
224 C
225 C
226 END
227 END$
```

* &PDN28(PLANT1) * 2:12 AM WED., 29 APR., 1981 * 1*

1 FTN
2 PROGRAM PDN28
3 C
4 C
5 C +++ WRITTEN - GDD - 2 SEP 1980 +
6 C +++ MODIFIED - GDD - 2 SEP 1980 +
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== BINS =====
12 C
13 C
14 C DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(10)
15 C \$,IDSET(3),IVALU(25)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/ 9,1,3,94,95,96,97,98,99,100/
26 C LEVEL
27 C DATA ILEV/L2H ,2H ,2H /
28 C DATA SET NAME - 'BINS'
29 C DATA IDSET/2HBI,2HNS,2H /
30 C
31 C*****
32 C
33 C
34 C
35 C*****
36 C
37 C
38 C OPEN DATA-BASE
39 C
40 C
41 C
42 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
43 C
44 C IMODE=3
45 C CALL DBOPEN(IBASE,ILEVL,IMODE,ISTAT)
46 C
47 C TEST FOR ERROR ON OPEN
48 C
49 C IF(ISTAT(1).EQ.0) GOTO 100
50 C ERROR

* &PDN28(PLANT1) * 2:18 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1000) ISTAT(1)
52 1000 FORMAT(//"+ PDN28 ++ ERROR",I5," ON DATA-BASE OPEN")
53      GOTO 9999
54 C
55 C
56 ****
57 C
58 C
59 C          ENTRY MODE
60 C
61 C
62 C          GET FACTORY NUMBER
63 C
64 100 DO 101 I=1,25
65 101 IVALU(I)= 0
66 C
67      WRITE(1,1099)
68 1099 FORMAT(// " BACASSE STORAGE"/
69      =           " -----")
70 C
71      WRITE(1,1100)
72 1100 FORMAT(// "FACTORY NUMBER?           ")
73      IFACT=0
74      READ(1,*) IFACT
75 C
76 C          TEST FOR END OF ENTRY MODE
77 C
78      IF( IFACT.EQ.0,) GOTO 9999
79 C
80 C
81 C
82 C          GET DATA FOR DETAIL DATA SET
83 C
84 C          BINS DATA
85 C
86 120  IVALU(1)=IFACT
87 C
88 C
89      WRITE(1,1150)
90 1150 FORMAT(" ENTRY #           ")
91      READ(1,*) IVALU(2)
92 C
93 C
94 C
95      WRITE(1,3000) (IBAK,K=3,8)
96      READ(1,4000) (IVALU(K),K=3,8)
97 4000 FORMAT(20A2)
98 C
99      WRITE(1,3010)
100     READ(1,*) IVALU(9)
```

* &PDN28(PLANT1) * 2:23 AM WED., 29 APR., 1981 * 3*

```
101 C
102      WRITE(1,3020) (IBAK,K=10,13)
103      READ(1,4000) (IVALU(K),K=10,13)
104 C
105      WRITE(1,3030) (IBAK,K=14,22)
106      READ(1,4000) (IVALU(K),K=14,22)
107 C
108      WRITE(1,3040)
109      READ(1,*) IVALU(23)
110 C
111      WRITE(1,3050)
112      READ(1,*) IVALU(24)
113 C
114      WRITE(1,3060)
115      READ(1,*) IVALU(25)
116 C
117 C
118 C -----
119 C
120 3000 FORMAT(" BAGASSE BIN TYPE      *****",6A2,"")
121 3010 FORMAT(" TONNES           _")
122 3020 FORMAT(" POSITIONIN CIRCUIT   *****",4A2,"")
123 3030 FORMAT(" COOLING TOWER MAKE *****",9A2,"")
124 3040 FORMAT(" NUMBER OF CELLS      _")
125 3050 FORMAT(" WATER CAPACITY      _")
126 3060 FORMAT(" FAN POWER          _")
127 C
128 C
129 C -----
130 C
131 C PUT DATA IN DATA-BASE
132 C
133      IMODE=1
134      CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
135 C
136 C TEST FOR ERROR IN PUT
137 C
138      IF( ISTAT(1).EQ.0 ) GOTO 100
139 C
140 C ERROR
141 C
142      WRITE(1,1600) ISTAT(1),IDSET
143 1600 FORMAT(//"+ PDN28 ++ ERROR",I5," ON PUT IN SET '",3A2,"")
144 C
145 C GET NEXT ENTRY
146 C
147      GOTO 100
148 C
149 C
150 C*****
```

* &PDN28(PLANT1) * 2:30 AM WED., 29 APR., 1981 * 4*

151 C
152 C
153 C TERMINATE
154 C -----
155 C
156 C
157 9999 CALL DBUNL (ISTAT)
158 IMODE=0
159 C
160 C CLOSE DATA-BASE
161 C
162 IMODE=1
163 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
164 C
165 WRITE(1,1700)
166 1700 FORMAT(////"+ PDN28 STOP ++"////)
167 C
168 C
169 END
170 END\$

* &PDN29 (PLANT1) * 2:32 AM WED., 29 APR., 1981 * 1*

```
1 FTN
2 PROGRAM PDN29
3 C
4 C
5 C     +++ WRITTEN - GDD - 2 SEP 1980 +++
6 C     +++ MODIFIED - GDD - 2 SEP 1980 +++
7 C
8 C PLANT DATA DATA ENTRY PROGRAMME
9 C
10 C PROGRAM FOR ENTERING DATA IN DETAIL DATA SET
11 C ===== ELECT =====
12 C
13 C
14 C DIMENSION IBASE(7),ILEVL(3),ISTAT(10),LIST(20)
15 C $ ,IDSET(3),IVALU(31)
16 C
17 C DATA-BASE
18 C DATA IBASE/2H ,2HPL,2HAN,2HT2,2H,G,2HD,2H9 /
19 C
20 C BACKSPACE
21 C
22 C DATA IBAK/04010B/
23 C
24 C VARIABLE LIST
25 C DATA LIST/19,1,3,101,102,103,104,105,106,107,108,109,
26 C = 110,111,112,113,114,115,116,117/
27 C LEVEL
28 C DATA ILEVL/2H ,2H ,2H /
29 C DATA SET NAME - 'ELECT'
30 C DATA IDSET/2HEL,2HEC,2HT /
31 C
32 C*****
33 C
34 C
35 C
36 C*****
37 C
38 C
39 C OPEN DATA-BASE
40 C -----
41 C
42 C
43 C OPEN DATA-BASE (EXCLUSIVE READ/WRITE)
44 C
45 C IMODE=3
46 C CALL DBOPN( IBASE,ILEVL,IMODE,ISTAT )
47 C
48 C TEST FOR ERROR ON OPEN
49 C
50 C IF( ISTAT(1).EQ.0 ) GOTO 100
```

* &PDN29(PLANT1) * 2:39 AM WED., 29 APR., 1981 * 2*

```
51 C ERROR
52      WRITE(1,1000) ISTAT(1)
53 1000 FORMAT(//"+ PDN29 ++ ERROR",I5," ON DATA-BASE OPEN")
54      GOTO 9999
55 C
56 C
57 ****
58 C
59 C
60 C          ENTRY MODE
61 C
62 C
63 C          GET FACTORY NUMBER
64 C
65 100 DO 101 I=1,31
66 101 IVALU(I) = 0
67 C
68      WRITE(1,1099)
69 1099 FORMAT(// " ELECTRIC POWER "
70      =           " -----")
71 C
72      WRITE(1,1100)
73 1100 FORMAT(// "FACTORY NUMBER?      ")
74      IFACT=0
75      READ(1,*) IFACT
76 C
77 C          TEST FOR END OF ENTRY MODE
78 C
79      IF( IFACT.EQ.0 ) GOTO 9999
80 C
81 C
82 C
83 C          GET DATA FOR DETAIL DATA SET
84 C
85 C          ELECTRICAL DATA
86 C
87 120  IVALU(1)=IFACT
88 C
89 C
90      WRITE(1,1150)
91 1150 FORMAT(" ENTRY #      ")
92      READ(1,*) IVALU(2)
93 C
94 C
95 C
96      WRITE(1,3000)
97      READ(1,*) IVALU(3)
98 C
99      WRITE(1,3010)
100     READ(1,*) IVALU(4)
```

* &PDN29 (PLANT1) * 2:43 AM WED., 29 APR., 1981 * 3*

```
101 C
102     WRITE(1,3020)
103     READ(1,*) IVALU(5)
104 C
105     WRITE(1,3030)
106     READ(1,*) IVALU(5)
107 C
108     WRITE(1,3040)
109     READ(1,*) IVALU(7)
110 C
111     WRITE(1,3050)
112     READ(1,*) IVALU(8)
113 C
114     WRITE(1,3060)
115     READ(1,*) IVALU(9)
116 C
117     WRITE(1,3070)
118     READ(1,*) IVALU(10)
119 C
120     WRITE(1,3080) (IBAK,K=11,17)
121     READ(1,4000) (IVALU(K),K=11,17)
122 4000 FORMAT(20A2)
123 C
124     WRITE(1,3090)
125     READ(1,*) IVALU(18)
126 C
127     WRITE(1,3100)
128     READ(1,*) IVALU(19)
129 C
130     WRITE(1,3110)
131     READ(1,*) IVALU(20)
132 C
133     WRITE(1,3120) (IBAK,K=21,27)
134     READ(1,4000) (IVALU(K),K=21,27)
135 C
136     WRITE(1,3130)
137     READ(1,*) IVALU(28)
138 C
139     WRITE(1,3140)
140     READ(1,*) IVALU(29)
141 C
142     WRITE(1,3150)
143     READ(1,*) IVALU(30)
144 C
145     WRITE(1,3160)
146     READ(1,*) IVALU(31)
147 C
148 C -----
149 C
150 3000 FORMAT(" TOTAL RATING OF SETS")
```

* &PDN29(PLANT1) * 2:49 AM WED., 29 APR., 1981 * 4*

```
151 3010 FORMAT(" TOTAL RATING OF INT COMB SETS      _")
152 3020 FORMAT(" TOTAL NAMEPLATE RATING OF MOTORS      _")
153 3030 FORMAT(" MAXIMUM LOAD ON FACTORY GEN PLANT      _")
154 3040 FORMAT(" MAXIMUM POWER DEMAND      _")
155 3050 FORMAT(" MAX POWER DEMAND OF IRRIGATION      _")
156 3060 FORMAT(" ARE YOU EXPORTING      _")
157 3070 FORMAT(" MAXIMUM SURPLUS EXPORTED      _")
158 3080 FORMAT("//" DETAILS OF GENERATING PLANT "/")
159      =      " MAKER OF PRIME MOVER *****",7A2,"_")
160 3090 FORMAT(" NUMBER IN GROUP      _")
161 3100 FORMAT(" RATING PER UNIT      _")
162 3110 FORMAT(" VOLTS      _")
163 3120 FORMAT(" PRIME MOVER *****",7A2,"_")
164 3130 FORMAT(" SPEED OF PRIME MOVER      _")
165 3140 FORMAT(" kPa BEFORE STOP VALVE      _")
166 3150 FORMAT(" S.H. C BEFORE STOP VALVE      _")
167 3160 FORMAT(" EXHAUST kPa      _")
168 C
169 C
170 C-----
171 C
172 C   PUT DATA IN DATA-BASE
173 C
174     IMODE=1
175     CALL DBPUT( IBASE, IDSET, IMODE, ISTAT, LIST, IVALU)
176 C
177 C   TEST FOR ERROR IN PUT
178 C
179     IF( ISTAT(1).EQ.0 ) GOTO 100
180 C
181 C   ERROR
182 C
183     WRITE(1,1600) ISTAT(1), IDSET
184 1600 FORMAT("//++ PDN29 ++ ERROR",I5," ON PUT IN SET "",3A2,"")
185 C
186 C   GET NEXT ENTRY
187 C
188     GOTO 100
189 C
190 C
191 ****
192 C
193 C
194 C   TERMINATE
195 C-----
196 C
197 C
198 9999 CALL DBUNL (ISTAT)
199     IMODE=0
200 C
```

* &PDN29(PLANT1) * 2:57 AM WED., 29 APR., 1981 * 5*

201 C CLOSE DATA-BASE
202 C
203 IMODE=1
204 CALL DBCLS(IBASE, IDSET, IMODE, ISTAT)
205 C
206 WRITE(1,1700)
207 1700 FORMAT(////"+ PDN29 STOP ++"////)
208 C
209 C
210 END
211 END\$

APPENDIX E: REPORTING PROCEDURES.

* \$PGE1 <PLANT1> *10:51 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " TRANSPORT FLEET ", 33;
4 H2, " FACTORY ", 18;
5 H2, " LOCOMOTIVES ", 55;
6 H2, " CANE TRUCKS ", 93;
7 H2, " FACTORY ", 125;
8 H3, " NO ", 15;
9 H3, " NO OF ", 24;
10 H3, " TYPE ", 31;
11 H3, " ENGINE ", 42;
12 H3, " POWER ", 50;
13 H3, " MASS ", 58;
14 H3, " GAUGE ", 65;
15 H3, " CONSTRUCTION ", 85;
16 H3, " NUMBER ", 97;
17 H3, " CAPACITY ", 107;
18 H3, " GAUGE ", 115;
19 H3, " NO ", 122;
20 H4, " UNITS ", 24;
21 H4, " kW ", 48;
22 H4, " tonne ", 59;
23 H4, " mm ", 64;
24 H4, " tonne ", 105;
25 H4, " mm ", 113, SPACE A1;
26 E1, " ZZZZZZ";
27 E2, " ZZZZZ.Z";
28 E3, " ZZZZ9";
29 S1, ENTRY#;
30 S2, FACT#;
31 G2, " ", 10, SPACE B1;
32 D, FACT#, 15, E3;
33 D, LOCOS, 22, E1;
34 D, TYPE, 33;
35 D, ENG , 44;
36 D, POWER, 50, E1;
37 D, MASS , 58, E2;
38 D, GAUGE, 64, E1;
39 D, TRUCK, 90;
40 D, TRUCK#, 96, E1;
41 D, CAPAC, 104, E2;
42 D, TGAUGE, 114, E1;
43 D, FACT#, 122, E1;
44 END;

* \$PGE2 (PLANT1) *10:55 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "CROP DELIVERY", 40;
4 H2, "FACTORY", 46;
5 H2, "TRAMLINE", 58;
6 H2, "CROP DELIVERY, X", 86;
7 H2, "FACTORY", 103;
8 H3, "NO", 43;
9 H3, "LENGTH", 54;
10 H3, "GAUGE", 60;
11 H3, "PRIVATE", 70;
12 H3, "GOVT.", 79;
13 H3, "ROAD", 89;
14 H3, "NO", 100;
15 H4, "km", 52;
16 H4, "mm", 58;
17 H4, "TRAM", 68;
18 H4, "RAILWAY", 80;
19 H4, "TRANSPORT", 91, SPACE A2;
20 E1, "ZZZZZZ";
21 E2, "ZZZZZ.Z";
22 E3, "ZZZZ9";
23 S1, ENTRY#;
24 S2, FACT#;
25 D, FACT#, 43, E3;
26 D, TRAML, 52, E1;
27 D, GAUGEL, 59, E1;
28 D, CROPP, 68, E2;
29 D, CROPG, 79, E2;
30 D, CROPR, 89, E2;
31 D, FACT#, 100, E1;
32 END;

* \$PGE3 <PLANT1> *10:59 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "CARRIERS", 29;
4 H2, "FACTORY", 24;
5 H2, "POSITION", 35;
6 H2, "TYPE", 51;
7 H2, "LENGTH", 81;
8 H2, "WIDTH", 89;
9 H2, "MAXIMUM", 98;
10 H2, "AV.", 104;
11 H2, "FACTORY", 116;
12 H3, "NO", 21;
13 H4, "metre", 81;
14 H4, "mm", 88;
15 H3, "INCLIN", 97;
16 H4, "deg", 96;
17 H3, "SPEED", 105;
18 H3, "NO", 113;
19 H4, "mm/e", 104, SPACE A1;
20 E1, "ZZZZZZ";
21 E2, "ZZZZZ.Z";
22 E3, "ZZZZ9";
23 S1, ENTRY#;
24 S2, TRAIN#;
25 S3, FACT#;
26 G2, " ", 10, SPACE B1;
27 D, FACT#, 21, E3;
28 D, CPOS, 41;
29 D, CTYPE, 74;
30 D, CLEN, 81, E2;
31 D, CWID, 86, E1;
32 D, CINCL, 95, E1;
33 D, CSPD, 104, E1;
34 D, FACT#, 113, E1;
35 END;

* \$PGE4 (PLANT1) *11:03 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "CARRIERS - Continued", 35;
4 H2, "FACTORY", 27;
5 H2, "TYPE OF", 39;
6 H2, "POWER", 52;
7 H2, "CANE FED BY", 65;
8 H2, "REMARKS", 88;
9 H2, "FACTORY", 116;
10 H3, "NO", 24;
11 H3, "DRIVE", 38;
12 H3, "kW", 50;
13 H3, "NO", 113, SPACE A1;
14 E1, "ZZZZZZ";
15 E2, "ZZZZ9";
16 S1, ENTRY#;
17 S2, TRAIN#;
18 S3, FACT#;
19 G2, " ", 10, SPACE B1;
20 D, FACT#, 23, E2;
21 D, CDVE, 44;
22 D, CPWR, 50, E1;
23 D, CFEED, 70;
24 D, CREM, 103;
25 D, FACT#, 113, E1;
26 END;

* \$PGE5 (PLANT1) *11:06 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, "PREPARATION EQUIPMENT", 37;
3 H2, "FACTORY", 13;
4 H2, "LEVELLER", 39;
5 H2, "FIRST KNIVES", 95;
6 H2, "FACTORY", 129;
7 H3, "NO", 10;
8 H3, "TYPE", 19;
9 H3, "NO OF", 29;
10 H3, "CLEAR", 36;
11 H3, "SPEED", 42;
12 H3, "DRIVE", 51;
13 H3, "POWER", 62;
14 H3, "TYPE", 74;
15 H3, "NO OF", 86;
16 H3, "CLEAR", 93;
17 H3, "SPEED", 99;
18 H3, "DRIVE", 107;
19 H3, "POWER", 119;
20 H3, "NO", 126;
21 H4, "BLADES", 30;
22 H4, "mm", 35;
23 H4, "rpm", 41;
24 H4, "kW", 61;
25 H4, "BLADES", 87;
26 H4, "mm", 92;
27 H4, "rpm", 98;
28 H4, "kW", 117, SPACE A1;
29 E1, "ZZZZZZ";
30 E2, "ZZZZZ.Z";
31 E3, "ZZZZ9";
32 S1, TRAIN#;
33 S2, FACT#;
34 G2, " ", 10, SPACE B1;
35 D, FACT#, 10, E3;
36 D, LTYPE, 23;
37 D, LBL#, 28, E1;
38 D, LCLR, 34, E1;
39 D, LSPD, 39, E1;
40 D, LDVE, 55;
41 D, LPWR, 61, E2;
42 D, KTYPE, 80;
43 D, KBL#, 86, E1;
44 D, KCLR, 92, E1;
45 D, KSPD, 98, E1;
46 D, KDVE, 111;
47 D, KPWR, 118, E2;
48 D, FACT#, 126, E1;
49 END;

* \$PGE6 (PLANT1) *11:11 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "PREPARATION EQUIPMENT - Continued", 43;
4 H2, "FACTORY", 8;
5 H2, "SECOND KNIVES SET", 46;
6 H2, "SHREDDER", 96;
7 H3, "NO", 5;
8 H3, "TYPE", 14;
9 H3, "NO OF", 24;
10 H3, "CLEAR", 31;
11 H3, "SPEED", 37;
12 H3, "DRIVE", 46;
13 H3, "POWER", 58;
14 H3, "TYPE", 67;
15 H3, "DIA", 76;
16 H3, "LENGTH", 85;
17 H3, "CLEAR", 91;
18 H3, "SPEED", 97;
19 H3, "HAMMERS", 110;
20 H3, "DRIVE", 120;
21 H3, "POWER", 131;
22 H4, "NUMBER", 105;
23 H4, "MASS, KG", 113;
24 H4, "BLADES", 25;
25 H4, "mm", 30;
26 H4, "rpm", 36;
27 H4, "kW", 56;
28 H4, "mm", 76;
29 H4, "mm", 83;
30 H4, "mm", 90;
31 H4, "rpm", 96;
32 H4, "kW", 129, SPACE A1;
33 E1, "ZZZZZZ";
34 E2, "ZZZZZ.Z";
35 E3, "ZZZZ9";
36 S1, ENTRY#;
37 S2, TRAIN#;
38 S3, FACT#;
39 D, FACT#, 5, E3;
40 D, K2TYPE, 18;
41 D, K2BL#, 23, E1;
42 D, K2CLR, 29, E1;
43 D, K2SPD, 35, E1;
44 D, K2DVE, 50;
45 D, K2PWR, 56, E1;
46 D, STYPE, 72;
47 D, SDIA, 77, E1;
48 D, SLEN, 84, E1;
49 D, SCLEAR, 90, E1;
50 D, SSPD, 96, E1;

* \$PGE6 (PLANT1) *11:17 AM WED., 29 APR., 1981 * 2*

51 D, SHAM#, 103, E1;
52 D, SMASS, 110, E2;
53 D, SDVE, 123;
54 D, SPWR, 130, E1;
55 END;

* \$PGE7 (PLANT1) *11:17 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " No. # MILL ", 32;
4 H2, " FACTORY ", 8;
5 H2, " NOMINAL ", 17;
6 H2, " DIA ", 24;
7 H2, " PER'L ", 31;
8 H2, " ORDINARY GROOVES ", 78;
9 H2, " JUICE GROOVES ", 117;
10 H3, " NO ", 5;
11 H3, " DIA ", 12;
12 H3, " LEN ", 18;
13 H3, " TOP ", 24;
14 H3, " SPEED ", 31;
15 H3, " TOP ", 42;
16 H3, " FEED ", 63;
17 H3, " FEED ", 105;
18 H3, " DELIVERY ", 85;
19 H3, " DELIVERY ", 123;
20 H4, " PITCH DEPTH ANGLE ", 50;
21 H4, " PITCH DEPTH ANGLE ", 71;
22 H4, " PITCH DEPTH ANGLE ", 90;
23 H4, " PITCH DEPTH WIDTH ", 110;
24 H4, " PITCH DEPTH WIDTH ", 130;
25 H5, " mm mm mm mm/e ", 30;
26 H5, " mm mm deg ", 49;
27 H5, " mm mm deg ", 70;
28 H5, " mm mm deg ", 89;
29 H5, " mm mm mm ", 108;
30 H5, " mm mm mm ", 128, SPACE A1;
31 E1, " ZZZZZZ ";
32 E2, " ZZZZZZ.Z ";
33 E3, " ZZZZ9 ";
34 S1, MILL#;
35 S2, TRAIN#;
36 S3, FACT#;
37 D, FACT#, 5, E3;
38 D, MDIA , 12, E1;
39 D, MLEN , 18, E1;
40 D, MTDIA, 24, E1;
41 D, MSPD , 30, E1;
42 D, MOTP , 36, E1;
43 D, MOTD , 42, E1;
44 D, MOTA , 48, E1;
45 D, MOFP , 57, E1;
46 D, MOFD , 63, E1;
47 D, MOFA , 69, E1;
48 D, MODP , 76, E1;
49 D, MODD , 82, E1;
50 D, MODA , 88, E1;

* \$PGE7 (PLANT1) *11:24 AM WED., 29 APR., 1981 * 2*

51 D,MJFP ,96,E1;
52 D,MJFD ,102,E1;
53 D,MJFW ,109,E2;
54 D,MJDP ,116,E1;
55 D,MJDD ,122,E1;
56 D,MJDW ,129,E2;
57 END;

* \$PGE8 (PLANT1) *11:25 AM WED., 29 APR., 1981 * 1*

- 1 REPORT;
- 2 H1, " \$\$ ", 2;
- 3 H1, "No. # MILL", 32;
- 4 H2, "FACTORY", 14;
- 5 H2, "NOMINAL", 23;
- 6 H2, "SET", 35;
- 7 H2, "WORK", 52;
- 8 H2, "TRASH", 67;
- 9 H2, "HYDRAULIC ROLL", 92;
- 10 H2, "FIBRE", 106;
- 11 H2, "DRIVE", 118;
- 12 H2, "FACTORY", 129;
- 13 H3, "NO", 11;
- 14 H4, "DIA", 18;
- 15 H4, "LEN", 24;
- 16 H3, "OPENINGS", 38;
- 17 H3, "OPENINGS", 54;
- 18 H3, "PLATE", 67;
- 19 H4, "ROLL", 78;
- 20 H4, "LOAD", 83;
- 21 H3, "WO", 90;
- 22 H3, "MAX", 97;
- 23 H3, "RATE", 105;
- 24 H3, "SPEED", 113;
- 25 H3, "POWER", 121;
- 26 H3, "NO", 126;
- 27 H4, "FEED", 33;
- 28 H4, "DEL", 39;
- 29 H4, "FEED", 49;
- 30 H4, "DEL", 55;
- 31 H4, "TOE", 63;
- 32 H4, "HEEL", 69;
- 33 H4, "INCR", 91;
- 34 H4, "INCR", 97;
- 35 H5, "mm", 17;
- 36 H5, "mm", 24;
- 37 H5, "mm", 33;
- 38 H5, "mm", 38;
- 39 H5, "mm", 48;
- 40 H5, "mm", 54;
- 41 H5, "mm", 63;
- 42 H5, "mm", 68;
- 43 H5, "kN", 82;
- 44 H5, "mm", 90;
- 45 H5, "mm", 96;
- 46 H5, "t/h", 105;
- 47 H5, "rpm", 112;
- 48 H5, "kW", 120, SPACE A1;
- 49 E1, "ZZZZZZ";
- 50 E2, "ZZZZZ. Z";

* \$PGE8 (PLANT1) *11:30 AM WED., 29 APR., 1981 * 2*

51 E3, "ZZZZZ-";
52 E4, "ZZZZ9";
53 S1, MILL#;
54 S2, TRAIN#;
55 S3, FACT#;
56 D, FACT#, 11, E4;
57 D, MDIA , 18, E1;
58 D, MLEN, 24, E1;
59 D, MSOF , 32, E3;
60 D, MSOD , 39, E3;
61 D, MWOF , 48, E2;
62 D, MWOD , 54, E1;
63 D, MTPT , 63, E1;
64 D, MTPH , 69, E1;
65 D, MHR , 78;
66 D, MHRL , 83, E1;
67 D, MARL , 90, E1;
68 D, MHRMX , 97, E1;
69 D, MFRATE, 105, E2;
70 D, MTSPD , 112, E1;
71 D, MTPWR , 120, E1;
72 D, FACT#, 126, E4;
73 END;

* \$PGE9 (PLANT1) *11:33 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " No. # MILL FEEDING DEVICES ", 38;
4 H2, " FACTORY ", 18;
5 H2, " CHUTE ", 28;
6 H2, " PRESSURE FEEDER ", 67;
7 H2, " APRON FEEDER ", 104;
8 H2, " FACTORY ", 125;
9 H3, " NO ", 15;
10 H3, " A ", 23;
11 H3, " B ", 28;
12 H3, " C ", 34;
13 H3, " D ", 40;
14 H3, " A ", 46;
15 H3, " B ", 53;
16 H3, " C ", 59;
17 H3, " D ", 65;
18 H3, " E ", 71;
19 H3, " F ", 77;
20 H3, " WO ", 84;
21 H3, " A ", 89;
22 H3, " B ", 96;
23 H3, " C ", 101;
24 H3, " D ", 107;
25 H3, " E ", 113;
26 H3, " NO ", 122;
27 H4, " mm ", 24;
28 H4, " mm ", 29;
29 H4, " deg ", 35;
30 H4, " mm ", 41;
31 H4, " mm ", 47;
32 H4, " deg ", 54;
33 H4, " mm ", 60;
34 H4, " mm ", 66;
35 H4, " mm ", 72;
36 H4, " mm/e ", 79;
37 H4, " mm ", 84;
38 H4, " mm ", 90;
39 H4, " deg ", 96;
40 H4, " mm ", 102;
41 H4, " mm ", 108;
42 H4, " mm/e ", 115, SPACE A1;
43 E1, " ZZZZZZ";
44 E2, " ZZZZ9";
45 E3, " ZZZZ-";
46 S1, MILL#;
47 S2, TRAIN#;
48 S3, FACT#;
49 D, FACT#, 15, E2;
50 D, MCA , 23, E1;

* \$PGE9 <PLANT1> *11:38 AM WED., 29 APR., 1981 * 2*

51 D, MCB ,29,E1;
52 D, MCC ,35,E1;
53 D, MCD ,42,E3;
54 D, MPA ,48,E1;
55 D, MPB ,54,E1;
56 D, MPC ,60,E1;
57 D, MPD ,66,E1;
58 D, MPE ,72,E1;
59 D, MPF ,78,E1;
60 D, MPWO ,84,E1;
61 D, MAA ,90,E1;
62 D, MAB ,96,E1;
63 D, MAC ,102,E1;
64 D, MAD ,108,E1;
65 D, MAE ,114,E1;
66 D, FACT#,122,E1;
67 END;

* \$PGE10(PLANT1) *11:40 AM WED., 29 APR., 1981 * 1*

- 1 REPORT;
- 2 H1, " \$\$ ", 2;
- 3 H1, "No. # MILL FEEDING DEVICES", 38;
- 4 H2, "FACTORY", 13;
- 5 H2, "OVERFEED ROLL", 31;
- 6 H2, "UNDERFEED ROLL", 61;
- 7 H2, "CLOSED CHUTE", 90;
- 8 H2, "HINGED PLATE", 114;
- 9 H2, "FACTORY", 130;
- 10 H3, "NO", 10;
- 11 H3, "A", 17;
- 12 H3, "B", 23;
- 13 H3, "C", 29;
- 14 H3, "D", 35;
- 15 H3, "A", 41;
- 16 H3, "B", 46;
- 17 H3, "C", 53;
- 18 H3, "D", 60;
- 19 H3, "E", 65;
- 20 H3, "ROLL", 72;
- 21 H3, "F", 77;
- 22 H3, "G", 83;
- 23 H3, "H", 89;
- 24 H3, "I", 94;
- 25 H3, "J", 102;
- 26 H3, "K", 107;
- 27 H3, "L", 113;
- 28 H3, "M", 119;
- 29 H3, "NO", 127;
- 30 H4, "mm", 18;
- 31 H4, "mm", 24;
- 32 H4, "mm/e", 30;
- 33 H4, "mm", 36;
- 34 H4, "mm", 42;
- 35 H4, "mm", 47;
- 36 H4, "mm/e", 55;
- 37 H4, "mm", 61;
- 38 H4, "mm", 66;
- 39 H4, "mm", 78;
- 40 H4, "mm", 83;
- 41 H4, "mm", 89;
- 42 H4, "mm", 95;
- 43 H4, "mm", 102;
- 44 H4, "mm", 108;
- 45 H4, "mm", 114;
- 46 H4, "mm", 119, SPACE A1;
- 47 E1, "ZZZZZZ";
- 48 E2, "ZZZZ9";
- 49 S1, MILL#;
- 50 S2, TRAIN#;

* \$PGE10(PLANT1) *11:45 AM WED., 29 APR., 1981 * 2*

51 S3,FACT#;
52 D,FACT#,10,E2;
53 D,MOA ,18,E1;
54 D,MOB ,24,E1;
55 D,MOC ,29,E1;
56 D,MOD ,36,E1;
57 D,MUA ,42,E1;
58 D,MUB ,48,E1;
59 D,MUC ,54,E1;
60 D,MUD ,60,E1;
61 D,MUE ,66,E1;
62 D,MUROLL,72;
63 D,MCLF ,78,E1;
64 D,MCLG ,84,E1;
65 D,MCLH ,89,E1;
66 D,MCLI ,96,E1;
67 D,MHJ ,102,E1;
68 D,MHK ,108,E1;
69 D,MHL ,114,E1;
70 D,MHM ,120,E1;
71 D,FACT#,127,E1;
72 END;

* \$PGE11(PLANT1) *11:47 AM WED., 29 APR., 1981 * 1*

- 1 REPORT;
- 2 H1, " \$\$ ", 2;
- 3 H1, "No. # MILL PRESSURE FEEDER GROOVING", 39;
- 4 H2, "FACTORY", 25;
- 5 H2, "ORDINARY GROOVES", 55;
- 6 H2, "JUICE GROOVES", 92;
- 7 H2, "FACTORY", 117;
- 8 H3, "NO", 22;
- 9 H3, "UPPER ROLLER", 43;
- 10 H3, "LOWER ROLLER", 62;
- 11 H3, "UPPER ROLLER", 81;
- 12 H3, "LOWER ROLLER", 102;
- 13 H3, "NO", 114;
- 14 H4, "PITCH", 33;
- 15 H4, "PITCH", 52;
- 16 H4, "PITCH", 71;
- 17 H4, "PITCH", 93;
- 18 H4, "DEPTH", 39;
- 19 H4, "DEPTH", 58;
- 20 H4, "DEPTH", 78;
- 21 H4, "DEPTH", 100;
- 22 H4, "ANGLE", 45;
- 23 H4, "ANGLE", 64;
- 24 H4, "WIDTH", 85;
- 25 H4, "WIDTH", 107;
- 26 H5, "mm", 32;
- 27 H5, "mm", 38;
- 28 H5, "mm", 51;
- 29 H5, "mm", 57;
- 30 H5, "mm", 70;
- 31 H5, "mm", 76;
- 32 H5, "mm", 83;
- 33 H5, "mm", 91;
- 34 H5, "mm", 97;
- 35 H5, "mm", 106;
- 36 H5, "deg", 43;
- 37 H5, "deg", 63, SPACE A1;
- 38 E1, "ZZZZZZ";
- 39 E2, "ZZZZZ.Z";
- 40 E3, "ZZZZ9";
- 41 S1, MILL#;
- 42 S2, TRAIN#;
- 43 S3, FACT#;
- 44 D, FACT#, 21, E3;
- 45 D, PFOUP , 32, E1;
- 46 D, PFOUD , 38, E1;
- 47 D, PFOUA , 44, E1;
- 48 D, PFOLP , 51, E1;
- 49 D, PFOLD , 57, E1;
- 50 D, PFOLA , 63, E1;

* \$PGE11(PLANT1) *11:53 AM WED., 29 APR., 1981 * 2*

51 D,PFJUP ,70,E1;
52 D,PFJUD ,76,E1;
53 D,PFJUW ,84,E2;
54 D,PFJLP ,92,E1;
55 D,PFJLD ,98,E1;
56 D,PFJLW ,106,E2;
57 D,FACT# ,113,E3;
58 END;

* \$PGE12(PLANT1) *11:55 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"DIFFUSERS",31;
4 H2,"FACTORY",35;
5 H2,"MAKE",42;
6 H2,"WIDTH",56;
7 H2,"LENGTH",64;
8 H2,"SPEED",71;
9 H2,"POWER",78;
10 H2,"POSITION IN TRAIN",98;
11 H3,"NO",32;
12 H3,"mm",54;
13 H3,"metre",64;
14 H3,"mm/e",71;
15 H3,"kW",76,SPACE A1;
16 E1,"ZZZZZZ";
17 E2,"ZZZZ9";
18 S1,ENTRY#;
19 S2,FACT#;
20 G2," ",10,SPACE B1;
21 D,FACT#,32,E2;
22 D,TRAIN#,34;
23 D,DMAKE,59;
24 D,DWID,56,E1;
25 D,DLEN,62,E1;
26 D,DSPD ,69,E1;
27 D,DPWR,76,E1;
28 D,DPOSN,104;
29 END;

* \$PGE13(PLANT1) *11:58 AM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " JUICE SCREENS, etc ", 34;
4 H2, " FACTORY ", 28;
5 H2, " JUICE SCREENS ", 59;
6 H2, " HOLDING ", 81;
7 H2, " FLASH TANK ", 95;
8 H2, " FACTORY ", 106;
9 H3, " NO ", 25;
10 H3, " TYPE ", 36;
11 H4, " NO ", 50;
12 H3, " SCREEN ", 58;
13 H3, " SIZE ", 63;
14 H3, " SCREEN ", 73;
15 H3, " TANK ", 79;
16 H3, " DIA ", 88;
17 H3, " HEIGHT ", 96;
18 H3, " NO ", 103;
19 H4, " LENGTH ", 58;
20 H4, " WIDTH ", 64;
21 H4, " OPENING ", 73;
22 H4, " VOLUME ", 81;
23 H5, " mm ", 56;
24 H5, " mm ", 63;
25 H5, " mm ", 70;
26 H5, " cu m ", 80;
27 H5, " mm ", 88;
28 H5, " mm ", 94, SPACE A1;
29 E1, " ZZZZZZ";
30 E2, " ZZZZ9.9";
31 E3, " ZZZZ9";
32 S1, ENTRY#;
33 S2, FACT#;
34 G2, " ", 10, SPACE B1;
35 D, FACT#, 25, E3;
36 D, JTYPE, 46;
37 D, JS#, 50, E3;
38 D, JLEN, 58, E1;
39 D, JWID, 64, E1;
40 D, JSAPER, 71, E2;
41 D, HTVOL, 79, E1;
42 D, FTDIA, 89, E1;
43 D, FTHGT, 95, E1;
44 D, FACT#, 103, E3;
45 END;

* \$PGE14(PLANT1) *12:03 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " JUICE HEATERS ", 33;
4 H2, " FACTORY ", 17;
5 H2, " JUICE HEATERS ", 57;
6 H2, " TUBES ", 89;
7 H2, " FACTORY ", 126;
8 H3, " NO ", 14;
9 H3, " NO ", 21;
10 H3, " MATERIAL HEATED ", 39;
11 H3, " AREA ", 48;
12 H3, " HOW HEATED ", 61;
13 H3, " NO OF ", 75;
14 H3, " PER ", 80;
15 H3, " LENGTH ", 88;
16 H3, " DIAM ", 94;
17 H3, " MATERIAL ", 104;
18 H3, " THICKNESS ", 116;
19 H3, " NO ", 123;
20 H4, " eq m ", 48;
21 H4, " PASSES ", 76;
22 H4, " PASS ", 81;
23 H4, " mm ", 86;
24 H4, " mm ", 93;
25 H4, " mm ", 113, SPACE A1;
26 E1, " ZZZZZZ ";
27 E2, " ZZZZZ.Z ";
28 E3, " ZZZZ9 ";
29 S1, ENTRY#;
30 S2, FACT#;
31 G2, " ", 10, SPACE B1;
32 D, FACT#, 14, E3;
33 D, JH# , 21, E1;
34 D, JHUSE, 41;
35 D, JHAREA, 47, E1;
36 D, JHHT . 67;
37 D, JHPASS, 74, E3;
38 D, JHTUBE, 80, E3;
39 D, JHLEN, 87, E1;
40 D, JHDIA, 93, E1;
41 D, JHMATL, 106;
42 D, JTTHCK, 113, E2;
43 D, FACT#, 123, E3;
44 END;

* \$PGE15(PLANT1) *12:08 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"CLARIFICATION PLANT",36;
4 H2,"FACTORY",18;
5 H2,"CLARIFIERS",40;
6 H2,"MUD FILTERS",106;
7 H2,"FACTORY",124;
8 H3,"NO",15;
9 H3,"NO OF",56;
10 H3,"DIAM",63;
11 H3,"TRAY",73;
12 H3,"TOTAL",79;
13 H3,"TOTAL",114;
14 H3,"NO",121;
15 H4,"POSITION",28;
16 H4,"TRAYS",56;
17 H4,"AREA",73;
18 H4,"VOLUME",80;
19 H4,"TYPE",89;
20 H4,"NO",106;
21 H4,"AREA",113;
22 H5,"mm",62;
23 H5,"sq m",73;
24 H5,"cu m",79;
25 H5,"sq m",113,SPACE A1;
26 E1,"ZZZZZZ";
27 E2,"ZZZZ9";
28 S1,ENTRY#;
29 S2,FACT#;
30 G2," ",10,SPACE B1;
31 D,FACT#,15,E2;
32 D,CLPOS,32;
33 D,CLTYPE,48;
34 D,CLTRAY,54,E1;
35 D,CLDIA,63,E1;
36 D,CLAREA,72,E1;
37 D,CLVOL,78,E1;
38 D,FTYPE,100;
39 D,FIL#,106,E1;
40 D,FAREA,112,E1;
41 D,FACT#,121,E2;
42 END;

* \$PGE16(PLANT1) *12:13 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"BAGASSE SEPARATORS",35;
4 H2,"FACTORY",50;
5 H2,"TYPE",55;
6 H2,"SCREEN",70;
7 H2,"SCREEN",78;
8 H2,"WIDTH",84;
9 H2,"HEIGHT",91;
10 H2,"FAN",97;
11 H2,"FACTORY",108;
12 H3,"NO",47;
13 H3,"AREA",69;
14 H3,"OPENING",78;
15 H3,"POWER",98;
16 H3,"NO",105;
17 H4,"sq m",69;
18 H4,"mm",76;
19 H4,"mm",83;
20 H4,"mm",89;
21 H4,"kW",96,SPACE A1;
22 E1,"ZZZZZZ";
23 E2,"ZZZZZ.9";
24 E3,"ZZZZ9";
25 S1,ENTRY#;
26 S2,FACT#;
27 G2," ",10,SPACE B1;
28 D,FACT#,47,E3;
29 D,SPTYPE,62;
30 D,SPAREA,69,E2;
31 D,SPPOP ,76,E1;
32 D,SPWDTH,84,E1;
33 D,SPHGT,90,E1;
34 D,SPPWR,96,E1;
35 D,FACT#,105,E3;
36 END;

* \$PGE17 (PLANT1) *12:17 PM WED., 29 APR., 1981 * 1*

- 1 REPORT;
- 2 H1, " \$\$ ", 2;
- 3 H1, "EVAPORATING PLANT", 35;
- 4 H2, "FACTORY", 20;
- 5 H2, "EFFECT", 27;
- 6 H2, "DIA OF", 35;
- 7 H2, "HEATING", 43;
- 8 H2, "TUBES", 78;
- 9 H2, "CONDENSER", 95;
- 10 H2, "VAPOUR", 110;
- 11 H2, "FACTORY", 123;
- 12 H3, "NO", 17;
- 13 H3, "NO", 25;
- 14 H3, "VESSEL", 35;
- 15 H3, "SURFACE", 43;
- 16 H3, "LENGTH", 54;
- 17 H3, "MATERIAL", 65;
- 18 H3, "O. D.", 75;
- 19 H3, "THICKNESS", 85;
- 20 H3, "DIA", 89;
- 21 H3, "HEIGHT", 97;
- 22 H3, "BLEED", 109;
- 23 H3, "NO", 120;
- 24 H4, "mm", 33;
- 25 H4, "eq m", 41;
- 26 H4, "mm", 52;
- 27 H4, "mm", 74;
- 28 H4, "mm", 81;
- 29 H4, "mm", 89;
- 30 H4, "mm", 95;
- 31 H4, "TO", 107, SPACE A1;
- 32 E1, "ZZZZZZ";
- 33 E2, "ZZZZ.ZZ";
- 34 E3, "ZZZZ9";
- 35 S1, ENTRY#;
- 36 S2, EVAP#;
- 37 S3, TRAIN#;
- 38 S4, FACT#;
- 39 G3, " ", 10, SPACE B1;
- 40 D, FACT#, 17, E3;
- 41 D, EVAP#, 25, E3;
- 42 D, EVDIA, 35, E1;
- 43 D, EVSURF, 41, E1;
- 44 D, EVLEN , 53, E1;
- 45 D, EVMATL, 67;
- 46 D, EVOD, 74, E1;
- 47 D, EVTH, 82, E2;
- 48 D, EVCDIA, 90, E1;
- 49 D, EVCHGT, 97, E1;
- 50 D, EVBLD, 113;

* \$PGE17(PLANT1) *12:21 PM WED., 29 APR., 1981 * 2*

51 D,FACT#,120,E3;
52 END;

* \$PGE20(PLANT1) *12:23 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " VACUUM PANS ", 30;
4 H2, " FACTORY ", 23;
5 H2, " VACUUM PAN ", 54;
6 H2, " CONDENSER ", 98;
7 H2, " FACTORY ", 111;
8 H3, " NO ", 20;
9 H3, " TYPE ", 28;
10 H3, " REF NO ", 49;
11 H3, " MATERIAL ", 59;
12 H3, " DIAM ", 66;
13 H3, " VOLUME ", 74;
14 H3, " HEATING ", 82;
15 H3, " HS / ", 97;
16 H3, " DIA ", 92;
17 H3, " HEIGHT ", 100;
18 H3, " NO ", 108;
19 H4, " SURFACE ", 82;
20 H4, " VOL ", 87;
21 H4, " OF BODY ", 101;
22 H5, " mm ", 65;
23 H5, " cu m ", 73;
24 H5, " eq m ", 80;
25 H5, " 1/m ", 87;
26 H5, " mm ", 92;
27 H5, " mm ", 98, SPACE A1;
28 E1, " ZZZZZZ";
29 E2, " ZZZZZ.Z";
30 E3, " ZZZZ9";
31 S1, P#;
32 S2, GDE;
33 S3, FACT#;
34 G3, " ", 10, SPACE B1;
35 D, FACT#, 20, E3;
36 D, PTYPE, 41;
37 D, P#, 47, E1;
38 D, PMATL, 61;
39 D, PDIA, 66, E3;
40 D, PVOL, 73, E2;
41 D, PSURF, 80, E1;
42 D, PRAT, 87, E2;
43 D, PCDIA, 93, E1;
44 D, PCHGT, 99, E1;
45 D, FACT#, 108, E3;
46 END;

* \$PGE21(PLANT1) *12:28 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " PAN STOCK TANKS and MASSECUISTE REHEATERS ", 40;
4 H2, " FACTORY ", 30;
5 H2, " PAN STOCK TANKS ", 50;
6 H2, " MASSECUISTE HEATERS ", 93;
7 H2, " FACTORY ", 121;
8 H3, " NO ", 27;
9 H3, " SYRUP ", 35;
10 H3, " A MOL ", 41;
11 H3, " B MOL ", 47;
12 H3, " MAGMA ", 54;
13 H3, " WATER HEATED ", 76;
14 H3, " RESISTANCE HEATED ", 110;
15 H3, " NO ", 118;
16 H4, " NO ", 64;
17 H4, " AREA ", 72;
18 H4, " TYPE ", 79;
19 H4, " DIAM ", 96;
20 H4, " VOLTAGE ", 104;
21 H4, " CURRENT ", 112;
22 H5, " cu m ", 35;
23 H5, " cu m ", 41;
24 H5, " cu m ", 47;
25 H5, " cu m ", 54;
26 H5, " eq m ", 72;
27 H5, " mm ", 95;
28 H5, " volte ", 103;
29 H5, " amps ", 110, SPACE A1;
30 E1, " ZZZZZZ ";
31 E2, " ZZZZZ.Z ";
32 E3, " ZZZZ9 ";
33 S1, ENTRY#;
34 S2, FACT#;
35 G2, " ", 10, SPACE B1;
36 D, FACT#, 27, E3;
37 D, SYRUPV, 34, E1;
38 D, MOLVA , 40, E1;
39 D, MOLVB , 46, E1;
40 D, MAGV , 52, E1;
41 D, MH#, 64, E1;
42 D, MHAREA, 71, E2;
43 D, MHTYPE, 91;
44 D, RHDIA, 97, E1;
45 D, RHVLT, 103, E1;
46 D, RHAMP, 109, E1;
47 D, FACT#, 118, E3;
48 END;

* \$PGE22(PLANT1) *12:34 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " VACUUM PUMPS ", 30;
4 H2, " FACTORY ", 8;
5 H2, " NO ", 12;
6 H2, " MAKE ", 24;
7 H2, " NO OF CYL ", 41;
8 H2, " BORE ", 48;
9 H2, " STROKE ", 55;
10 H2, " DISPL ", 61;
11 H2, " TYPE ", 67;
12 H2, " SPEED ", 77;
13 H2, " POWER ", 83;
14 H2, " CONNECTED TO ", 96;
15 H2, " FACTORY ", 128;
16 H3, " NO ", 5;
17 H3, " OFF ", 13;
18 H3, " mm ", 47;
19 H3, " mm ", 53;
20 H3, " L/s ", 60;
21 H3, " rpm ", 76;
22 H3, " kW ", 82;
23 H3, " NO ", 125, SPACE A1;
24 E1, " ZZZZZZ ",
25 E2, " ZZZZ9 ",
26 S1, ENTRY#;
27 S2, FACT#;
28 G2, " ", 10, SPACE B1;
29 D, FACT#, 5, E2;
30 D, VP#, 12, E1;
31 D, VMAKE, 32;
32 D, VCYL#, 42, EZ;
33 D, VBORE, 48, E1;
34 D, VLEN, 54, E1;
35 D, VDISPL, 60, E1;
36 D, VTTYPE, 70;
37 D, VSPD, 76, E1;
38 D, VPWR, 82, E1;
39 D, VUSE, 120;
40 D, FACT#, 125, E2;
41 END;

* \$PGE23(PLANT1) *12:37 PM WED., 29 APR., 1981 * 1*

- 1 REPORT;
- 2 H1, " \$\$ ", 2;
- 3 H1, "CRYSTALLIZERS", 32;
- 4 H2, "FACTORY", 28;
- 5 H2, "CRYSTALLIZER", 42;
- 6 H2, "MAKE", 47;
- 7 H2, "GRADE", 54;
- 8 H2, "NO", 60;
- 9 H2, "TOTAL", 68;
- 10 H2, "WATER COOLED SURFACE", 90;
- 11 H2, "OPERATING", 102;
- 12 H2, "FACTORY", 114;
- 13 H3, "NO", 25;
- 14 H3, "OF", 53;
- 15 H3, "IN", 60;
- 16 H3, "VOL", 67;
- 17 H3, "AREA FOR", 91;
- 18 H3, "MODE", 100;
- 19 H3, "NO", 111;
- 20 H4, "MASSE", 54;
- 21 H4, "GROUP", 62;
- 22 H4, "cu m", 67;
- 23 H4, "TYPE", 76;
- 24 H4, "EACH GROUP", 92;
- 25 H5, "eq m", 89, SPACE A1;
- 26 E1, "ZZZZZZ";
- 27 E2, "ZZZZ9";
- 28 S1, ENTRY#;
- 29 S2, FACT#;
- 30 G2, " ", 10, SPACE B1;
- 31 D, FACT#, 52, E2;
- 32 D, CSMAKE, 50;
- 33 D, CSGDE, 54;
- 34 D, CS#, 60, E1;
- 35 D, CSVOL, 66, E1;
- 36 D, CSTYPE, 84;
- 37 D, CSAREA, 90, E1;
- 38 D, CSMODE, 104;
- 39 D, FACT#, 111, E2;
- 40 END;

* \$PGE24(PLANT1) *12:42 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"HIGH GRADE CENTRIFUGALS",35;
4 H2,"FACTORY",40;
5 H2,"TYPE OR MAKE",53;
6 H2,"NO",57;
7 H2,"MASSE",64;
8 H2,"SPEED",70;
9 H2,"DIAM",76;
10 H2,"DEPTH",82;
11 H2,"TOTAL",90;
12 H2,"DRIVE",96;
13 H2,"TOTAL",103;
14 H2,"FACTORY",113;
15 H3,"NO",37;
16 H3,"OFF",58;
17 H3,"GRADE",64;
18 H3,"SCREEN",90;
19 H3,"POWER",103;
20 H3,"NO",110;
21 H4,"AREA",89;
22 H5,"rpm",69;
23 H5,"mm",75;
24 H5,"mm",81;
25 H5,"eq m",90;
26 H5,"kW",101,SPACE A1;
27 E1,"ZZZZZ";
28 E2,"ZZZZ9.9";
29 E3,"ZZZZ9";
30 S1,ENTRY#;
31 S2,FACT#;
32 G2," ",10,SPACE B1;
33 D,FACT#,37,E3;
34 D,FHMAKE,52;
35 D,FH#,57,E3;
36 D,FHMASS,64;
37 D,FHSPD,70,E1;
38 D,FHDIA,76,E1;
39 D,FHDEP,82,E1;
40 D,FHAREA,89,E2;
41 D,FHDOVE,95;
42 D,FHPWR,102,E1;
43 D,FACT#,110,E3;
44 END;

* \$PGE25(PLANT1) *12:47 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, "\$\$", 2;
3 H1, "LOW GRADE CENTRIFUGALS", 35;
4 H2, "FACTORY", 24;
5 H2, "MAKE", 32;
6 H2, "TYPE", 48;
7 H2, "NO", 61;
8 H3, "SPEED", 69;
9 H2, "BASKET", 81;
10 H2, "SCREEN", 98;
11 H2, "POWER", 108;
12 H2, "FACTORY", 118;
13 H3, "NO", 21;
14 H3, "IN", 61;
15 H3, "MAX", 74;
16 H3, "MIN", 79;
17 H3, "HALF", 86;
18 H4, "ANGLE", 87;
19 H3, "AREA", 97;
20 H3, "FOR", 107;
21 H3, "NO", 115;
22 H4, "GROUP", 63;
23 H4, "DIA", 74;
24 H4, "DIA", 79;
25 H4, "VERT", 93;
26 H4, "INCL", 101;
27 H4, "GROUP", 108;
28 H5, "rpm", 68;
29 H5, "mm", 73;
30 H5, "mm", 79;
31 H5, "deg", 86;
32 H5, "eq m", 93;
33 H5, "eq m", 101;
34 H5, "kW", 107, SPACE A1;
35 E1, "ZZZZZZ";
36 E2, "ZZZZ9.9";
37 E3, "ZZZZ9";
38 S1, ENTRY#;
39 S2, FACT#;
40 G2, " ", 10, SPACE B1;
41 D, FACT#, 21, E3;
42 D, FLMODE, 43;
43 D, FLMODE, 56;
44 D, FL#, 61, E3;
45 D, FLSPD, 68, E1;
46 D, FLBMAX, 74, E1;
47 D, FLBMIN, 81, E1;
48 D, FLBANG, 86, E1;
49 D, FLBVA, 93, E2;
50 D, FLBIA, 100, E2;

* \$PGE25(PLANT1) *12:52 PM WED., 29 APR., 1981 * 2*

51 D,FLPWR,107,E1;
52 D,FACT#,115,E3;
53 END;

* \$PGE26(PLANT1) *12:53 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$", 2;
3 H1, "SUGAR DRYERS and SUGAR STORAGE", 38;
4 H2, "FACTORY", 28;
5 H2, "DRYER TYPE", 39;
6 H2, "DRUM SIZE", 58;
7 H2, "DRUM", 65;
8 H2, "DRIVE", 72;
9 H2, "FAN", 76;
10 H2, "AIR", 82;
11 H2, "AIR", 88;
12 H2, "BIN STORAGE", 107;
13 H2, "FACTORY", 124;
14 H3, "NO", 25;
15 H3, "LENGTH", 53;
16 H3, "DIAM", 58;
17 H3, "SPEED", 66;
18 H3, "POWER", 72;
19 H3, "HEATER", 83;
20 H3, "CONDN", 89;
21 H3, "NO OF", 98;
22 H3, "CAPACITY", 107;
23 H3, "TOTAL", 114;
24 H3, "NO", 121;
25 H4, "BINS", 97;
26 H4, "PER BIN", 106;
27 H4, "tonne", 114, SPACE A1;
28 E1, "ZZZZZZ";
29 E2, "ZZZZZ.Z";
30 E3, "ZZZZ9";
31 S1, ENTRY#;
32 S2, FACT#;
33 G2, " ", 10, SPACE B1;
34 D, FACT#, 25, E3;
35 D, DTYP, 46;
36 D, DLEN, 52, E1;
37 D, DDIA, 58, E1;
38 D, DSPD, 65, E2;
39 D, DPWR, 71, E1;
40 D, DFAN, 77;
41 D, DHTR, 83;
42 D, DRAC, 89;
43 D, SB#, 96, E1;
44 D, SBCAP, 105, E1;
45 D, SBTOT, 114, E1;
46 D, FACT#, 121, E3;
47 END;

* \$PGE27(PLANT1) *12:59 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "STEAM GENERATING PLANT", 35;
4 H2, "FACTORY", 24;
5 H2, "BOILER MAKE", 37;
6 H2, "NO OF", 48;
7 H2, "PRESS", 55;
8 H2, "MCR", 59;
9 H2, "S/HEAT", 68;
10 H2, "HEATING SURFACE PER UNIT, sq m", 103;
11 H2, "FACTORY", 118;
12 H3, "NO", 21;
13 H3, "SIMILAR", 49;
14 H3, "kPa", 54;
15 H3, "kg/h", 60;
16 H3, "C", 66;
17 H3, "BOILER", 75;
18 H3, "WATER", 81;
19 H3, "SUPER", 88;
20 H3, "AIR", 95;
21 H3, "ECONOMIZER", 108;
22 H3, "NO", 115;
23 H4, "UNITS", 48;
24 H4, "gauge", 55;
25 H4, "BANK", 74;
26 H4, "WALLS", 81;
27 H4, "HEATER", 89;
28 H4, "HEATER", 97, SPACE A1;
29 E1, "ZZZZZZ";
30 E2, "ZZZZZ0";
31 E3, "ZZZZ9";
32 S1, ENTRY#;
33 S2, FACT#;
34 G2, " ", 10, SPACE B1;
35 D, FACT#, 21, E3;
36 D, BOMAKE, 42;
37 D, BO#, 47, E3;
38 D, BOPRES, 54, E1;
39 D, BOMCR, 61, E2;
40 D, BOSHT, 66, E3;
41 D, BOBA, 74, E1;
42 D, BOFA, 80, E1;
43 D, BOSA, 87, E1;
44 D, BOAA, 96, E1;
45 D, BOEA, 105, E1;
46 D, FACT#, 115, E3;
47 END;

* \$PGE28(PLANT1) * 1:04 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, "STEAM GENERATING PLANT", 35;
4 H2, "FACTORY", 11;
5 H2, "TYPE OF GRATE", 27;
6 H2, "GRATE", 45;
7 H2, "IS BOILER EQUIPPED WITH", 79;
8 H2, "FACTORY", 132;
9 H3, "NO", 8;
10 H3, "AREA", 44;
11 H3, "WATER", 51;
12 H3, "SPREADER", 62;
13 H3, "COAL", 69;
14 H3, "OIL", 77;
15 H3, "FORCED", 86;
16 H3, "SOOT ARRESTOR", 103;
17 H3, "STACK", 118;
18 H3, "NO", 129;
19 H4, "eq m", 44;
20 H4, "WALLS", 51;
21 H4, "STOKER", 61;
22 H4, "FIRING", 70;
23 H4, "BURNER", 79;
24 H4, "DRAUGHT", 87;
25 H4, "TYPE", 98;
26 H4, "DIAM", 114;
27 H4, "HEIGHT", 122;
28 H5, "mm", 113;
29 H5, "metre", 122, SPACE A1;
30 E1, "ZZZZZZ";
31 E2, "ZZZZZ.Z";
32 E3, "ZZZZ9";
33 S1, ENTRY#;
34 S2, FACT#;
35 G2, " ", 10, SPACE B1;
36 D, FACT#, 8, E3;
37 D, BOGTE, 37;
38 D, BOGA, 43, E3;
39 D, BOWW, 51;
40 D, BOSPR, 59;
41 D, BOICO, 69;
42 D, BOIOP, 77;
43 D, BOIFD, 85;
44 D, BOIARR, 108;
45 D, BOISTD, 114, E1;
46 D, BOISTH, 121, E2;
47 D, FACT#, 129, E3;
48 END;

* \$PGE29(PLANT1) * 1:10 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"BAGASSE STORAGE and COOLING TOWERS",40;
4 H2,"FACTORY",24;
5 H2,"TYPE OF BIN",37;
6 H2,"CAPACITY",46;
7 H2,"POSITION",55;
8 H2,"TYPE OF TOWER",71;
9 H2,"NO OF",84;
10 H2,"FLOW",90;
11 H2,"FAN",97;
12 H2,"FACTORY",109;
13 H3,"NO",21;
14 H3,"IN",51;
15 H3,"CELLS",84;
16 H3,"RATE",90;
17 H3,"POWER",98;
18 H3,"NO",106;
19 H4,"tonne",45;
20 H4,"CIRCUIT",54;
21 H4,"L/e",89;
22 H4,"kW",96,SPACE A1;
23 E1,"ZZZZZZ";
24 E2,"ZZZZ9";
25 S1,ENTRY#;
26 S2,FACT#;
27 G2," ",10,SPACE B1;
28 D,FACT#,21,E2;
29 D,BGBIN,38;
30 D,BGCAP,44,E1;
31 D,BGPOS,55;
32 D,CTTYP,76;
33 D,CTCELL,82,E1;
34 D,CTCAP,90,E1;
35 D,CTPWR,96,E1;
36 D,FACT#,106,E2;
37 END;

* \$PGE30(PLANT1) * 1:14 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1,"\$\$",2;
3 H1,"ELECTRICAL LOAD",34;
4 H2,"FACTORY",45;
5 H2,"TOTAL",53;
6 H2,"LOAD",77;
7 H2,"FACTORY",107;
8 H3,"NO",42;
9 H3,"RATING",54;
10 H3,"CONNECTED",66;
11 H3,"MAX",72;
12 H3,"FACTORY",82;
13 H3,"MAX",87;
14 H3,"MAX",95;
15 H3,"NO",104;
16 H4,"STEAM",50;
17 H4,"IC",55;
18 H4,"LOAD",63;
19 H4,"GENER",73;
20 H4,"DEMAND",81;
21 H4,"IRRIG",88;
22 H4,"SURPLUS",97;
23 H5,"kW",48;
24 H5,"kW",55;
25 H5,"kW",62;
26 H5,"kW",71;
27 H5,"kW",79;
28 H5,"kW",87;
29 H5,"kW",94,SPACE A2;
30 E1,"ZZZZZ";
31 E2,"ZZZZ9";
32 S1,ENTRY#;
33 S2,FACT#;
34 D,FACT#,42,E2;
35 D,EPRTG,50,E1;
36 D,EPIC,56,E1;
37 D,EPMLD,63,E1;
38 D,EPMR,72,E1;
39 D,EPDMO,80,E1;
40 D,EPIRD,87,E1;
41 D,EP SUR,95,E1;
42 D,FACT#,104,E2;
43 END;

* \$PGE31<PLANT1> * 1:19 PM WED., 29 APR., 1981 * 1*

1 REPORT;
2 H1, " \$\$ ", 2;
3 H1, " ELECTRICAL POWER PLANT ", 35;
4 H2, " FACTORY ", 22;
5 H2, " MAKE OF PRIME ", 37;
6 H2, " NO OF ", 45;
7 H2, " RATING ", 52;
8 H2, " NOM ", 57;
9 H2, " PRIME MOVER ", 71;
10 H2, " SPEED ", 81;
11 H2, " INLET STEAM ", 96;
12 H2, " EXHAUST STEAM ", 111;
13 H2, " FACTORY ", 121;
14 H3, " NO ", 19;
15 H3, " MOVER ", 32;
16 H3, " SETS ", 44;
17 H3, " PER ", 50;
18 H3, " VOLTS ", 58;
19 H3, " TYPE ", 68;
20 H3, " PRESSURE ", 90;
21 H3, " S/HEAT ", 97;
22 H3, " PRESSURE ", 108;
23 H3, " NO ", 118;
24 H4, " SET ", 50;
25 H4, " rpm ", 80;
26 H4, " kPa ", 88;
27 H4, " deg C ", 96;
28 H4, " kPa ", 106, SPACE A1;
29 E1, " ZZZZZZ";
30 E2, " ZZZZ9";
31 S1, ENTRY#;
32 S2, FACT#;
33 G2, " ", 10, SPACE B1;
34 D, FACT#, 19, E2;
35 D, GSMAKE, 38;
36 D, GS#, 43, E2;
37 D, GSRTG, 50, E1;
38 D, GSVOL, 57, E1;
39 D, GSPM, 74;
40 D, GSPPD, 81, E1;
41 D, GSPPR, 89, E1;
42 D, GSSTH, 95, E1;
43 D, GSEX, 105, E1;
44 D, FACT#, 118, E2;
45 END;

APPENDIX F: PROCEDURES FOR REPORT.

* Q1 (PLANT1) * 1:24 PM WED., 29 APR., 1981 * 1*

1 DATA-BASE=PL80A:GD;
2 ;
3 B;
4 XEQ=PROCF;
5 EXIT;

* PROCF <PLANT1> * 1:25 PM WED., 29 APR., 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND NAMES.FACT# INE "0" END;
4 LIST=6;
5 REPORT NAME=$PGE0;
6 LIST=1;
7 FIND TRANS.FACT# INE "0" END;
8 LIST=6;
9 REPORT NAME=$PGE1;
10 LIST=1;
11 FIND TRANS.FACT# INE "0" AND TRANS.TRAML INE "0" END;
12 LIST=6;
13 REPORT NAME=$PGE2;
14 LIST=1;
15 FIND CARR.FACT# INE "0" END;
16 LIST=6;
17 REPORT NAME=$PGE3;
18 REPORT NAME=$PGE4;
19 LIST=1;
20 FIND KNIVES.FACT# INE "0" END;
21 LIST=6;
22 REPORT NAME=$PGE5;
23 LIST=1;
24 FIND SHRED.FACT# INE "0" END;
25 LIST=6;
26 REPORT NAME=$PGE6;
27 LIST=1;
28 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "1" END;
29 LIST=6;
30 REPORT NAME=$PGE7;
31 REPORT NAME=$PGE8;
32 LIST=1;
33 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "2" END;
34 LIST=6;
35 REPORT NAME=$PGE7;
36 REPORT NAME=$PGE8;
37 LIST=1;
38 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "3" END;
39 LIST=6;
40 REPORT NAME=$PGE7;
41 REPORT NAME=$PGE8;
42 LIST=1;
43 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "4" END;
44 LIST=6;
45 REPORT NAME=$PGE7;
46 REPORT NAME=$PGE8;
47 LIST=1;
48 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "5" END;
49 LIST=6;
50 REPORT NAME=$PGE7;
```

* PROCF (PLANT1) * 1:31 PM WED., 29 APR., 1981 * 2*

51 REPORT NAME=\$PGE8;
52 LIST=1;
53 FIND MILLS.FACT# INE "0" AND MILLS.MILL# IE "6" END;
54 LIST=6;
55 REPORT NAME=\$PGE7;
56 REPORT NAME=\$PGE8;
57 LIST=1;
58 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "1" END;
59 LIST=6;
60 REPORT NAME=\$PGE9;
61 REPORT NAME=\$PGE10;
62 LIST=1;
63 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "2" END;
64 LIST=6;
65 REPORT NAME=\$PGE9;
66 REPORT NAME=\$PGE10;
67 LIST=1;
68 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "3" END;
69 LIST=6;
70 REPORT NAME=\$PGE9;
71 REPORT NAME=\$PGE10;
72 LIST=1;
73 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "4" END;
74 LIST=6;
75 REPORT NAME=\$PGE9;
76 REPORT NAME=\$PGE10;
77 LIST=1;
78 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "5" END;
79 LIST=6;
80 REPORT NAME=\$PGE9;
81 REPORT NAME=\$PGE10;
82 LIST=1;
83 FIND FEEDS.FACT# INE "0" AND FEEDS.MILL# IE "6" END;
84 LIST=6;
85 REPORT NAME=\$PGE9;
86 REPORT NAME=\$PGE10;
87 LIST=1;
88 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "1" END;
89 LIST=6;
90 REPORT NAME=\$PGE11;
91 LIST=1;
92 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "2" END;
93 LIST=6;
94 REPORT NAME=\$PGE11;
95 LIST=1;
96 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "3" END;
97 LIST=6;
98 REPORT NAME=\$PGE11;
99 LIST=1;
100 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "4" END;

* PROCF (PLANT1) * 1:38 PM WED., 29 APR., 1981 * 3*

101 LIST=6;
102 REPORT NAME=\$PGE11;
103 LIST=1;
104 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "5" END;
105 LIST=6;
106 REPORT NAME=\$PGE11;
107 LIST=1;
108 FIND PRESS.FACT# INE "0" AND PRESS.MILL# IE "6" END;
109 LIST=6;
110 REPORT NAME=\$PGE11;
111 LIST=1;
112 FIND DIFFUS.FACT# INE "0" END;
113 LIST=6;
114 REPORT NAME=\$PGE12;
115 LIST=1;
116 FIND SCREEN.FACT# INE "0" END;
117 LIST=6;
118 REPORT NAME=\$PGE13;
119 LIST=1;
120 FIND HEATER.FACT# INE "0" END;
121 LIST=6;
122 REPORT NAME=\$PGE14;
123 LIST=1;
124 FIND CLARIF.FACT# INE "0" END;
125 LIST=6;
126 REPORT NAME=\$PGE15;
127 LIST=1;
128 FIND SEPAR.FACT# INE "0" END;
129 LIST=6;
130 REPORT NAME=\$PGE16;
131 LIST=1;
132 FIND EVAP.FACT# INE "0" END;
133 LIST=6;
134 REPORT NAME=\$PGE17;
135 LIST=1;

* Q2 * (PLANT1) * 1:43 PM WED., 29 APR., 1981 * 1*

1 DATA-BASE=PL80B:GD;
2 ;
3 8;
4 XEQ=PROCF2;
5 EXIT;

* PROCF2(PLANT1) * 2:45 PM FRI., 29 MAY, 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND PANS.FACT# INE "0" END;
4 LIST=6;
5 REPORT NAME=$PGE20;
6 LIST=1;
7 FIND STOCK.FACT# INE "0" END;
8 LIST=6;
9 REPORT NAME=$PGE21;
10 LIST=1;
11 FIND PUMPS.FACT# INE "0" END;
12 LIST=6;
13 REPORT NAME=$PGE22;
14 LIST=1;
15 FIND CRYST.FACT# INE "0" END;
16 LIST=6;
17 REPORT NAME=$PGE23;
18 LIST=1;
19 FIND HGFUG.FACT# INE "0" END;
20 LIST=6;
21 REPORT NAME=$PGE24;
22 LIST=1;
23 FIND LGFUG.FACT# INE "0" END;
24 LIST=6;
25 REPORT NAME=$PGE25;
26 LIST=1;
27 FIND DRYER.FACT# INE "0" END;
28 LIST=6;
29 REPORT NAME=$PGE26;
30 LIST=1;
31 FIND BOILER.FACT# INE "0" END;
32 LIST=6;
33 REPORT NAME=$PGE27;
34 REPORT NAME=$PGE28;
35 LIST=1;
36 FIND BINS.FACT# INE "0" END;
37 LIST=6;
38 REPORT NAME=$PGE29;
39 LIST=1;
40 FIND ELECT.FACT# INE "0" END;
41 LIST=6;
42 REPORT NAME=$PGE31;
43 LIST=1;
44 FIND ELECT.FACT# INE "0" AND ELECT.EPRTG INE "0" END;
45 LIST=6;
46 REPORT NAME=$PGE30;
47 LIST=1;
```

APPENDIX G: SOURCE CODE FOR 'PDLST'.

* &PDLST(PLANT1) * 8:50 AM WED., 29 APR., 1981 * 1*

1 FTN
2 PROGRAM PDLST
3 C
4 C PROGRAM TO PRINT PLANT DATA REPORT ON 9872 PLOTTER.
5 C WRITTEN: GDD 1981-03-04
6 C MODIFIED: GDD 1981-04-10
7 C
8 INTEGER NAMF(3), IDCB(144), IDCBI(144), IGCB(192), IBUF(66)
9 \$,IBUFI(25), IBUFP(33)
10 LOGICAL LARGE
11 EQUIVALENCE(IBUFP(2),NAMF(1)),(IBUFP(6),ICR)
12 C
13 C GET RUN STRING & PARSE FOR FILE NAME .
14 C IF FILE NAME NOT PASSED TO PROGRAM GET FROM VDU.
15 C
16 ILEN=25
17 CALL GETST(IBUFI,ILEN,ILOG)
18 ICON=2*ILOG
19 CALL PARSE(IBUFI,ICON,IBUFP)
20 IF(NAMF(1).NE.0) GOTO 52
21 50 WRITE(1,1000)
22 1000 FORMAT("FILE? _")
23 CALL CLEAR(NAMF,3)
24 READ(1,2000) NAMF
25 2000 FORMAT(3A2)
26 IF(NAMF.EQ.2H) GOTO 999
27 WRITE(1,1010)
28 1010 FORMAT("CARTRIDGE NO? _")
29 ICR=0
30 READ(1,*) ICR
31 C
32 C SET LOGICAL UNIT NUMBER AND ID FOR PLOTTER
33 C
34 52 LU=12
35 ID=1
36 C INITIALIZE
37 CALL PLOTR(IGCB, ID, 1, LU)
38 CALL PEN(IGCB, 1)
39 CALL LIMIT(IGCB, 0., 500., 0., 325.)
40 C SET CHARACTER SIZE
41 SIZE=1.50
42 AR=0.325
43 SLOPE=0.0
44 CALL CSIZE(IGCB, SIZE, AR, SLOPE, 0)
45 CALL MOVE(IGCB, 76.0, 98.0)
46 C
47 C GET ASCII FROM FILE
48 C
49 CALL OPEN(IDCBI, IERR, NAMF, IOPTN, ISECU, ICR)
50 IF(IERR.GE.0) GOTO 55

* &PDLST(PLANT1) * 8:56 AM WED., 29 APR., 1981 * 2*

```
51      WRITE(1,1020) IERR, NAMF
52 1020  FORMAT(" ERROR ",I5," ON OPEN - FILE "3A2)
53      GOTO 50
54      55 CALL CLEAR(IBUF,66)
55      CALL READF(IDCB, IERR, IBUF, 66, LEN)
56      IF(IERR.GE.0) GOTO 60
57      WRITE(1,1030) IERR, NAMF
58 1030  FORMAT(" ERROR ",I5," ON READ - FILE "3A2)
59      GOTO 999
60 60  IF(LEN.EQ.-1) GOTO 999
61 C
62 C  TEST FOR LARGE CHARACTERS - ' $$' AS FIRST AND SECOND CHARACTERS
63 C
64      LARGE=.FALSE.
65      IF(IBUF(1).NE.2H$$) GOTO 58
66      LARGE=.TRUE.
67      IBUF(1)=2H
68      CALL CSIZE(IGCB, 2, 15, 0, 7, 0, 0, 0)
69      CALL GFONT(IGCB, 6HFONT3 , 0, 0, IDCB1)
70 C
71 C  TEST FOR FORM FEED - ' $$' AS THIRD AND FOURTH CHARACTERS.
72 C
73 58  IF(IBUF(2).NE.2H$$) GOTO 64
74      IBUF(2)=2H
75      CALL MOVE(IGCB, 76, 0, 0, 0)
76      WRITE(12,1040)
77 1040  FORMAT("AH")
78      CALL MOVE(IGCB, 76, 0, 98, 0)
79 C
80 C  SEARCH FOR LAST NON-BLANK
81 C
82 64  DO 61 KS=66,2,-1
83      IF(IBUF(KS).NE.2H ) GOTO 62
84 61  CONTINUE
85 62  KS2=KS*2
86      CALL GTEXT(IGCB, IBUF, 1, KS2, IDCB1)
87      IF(.NOT. LARGE) GOTO 55
88      CALL GFONT(IGCB, 0, 0, 0, IDCB1)
89      CALL CSIZE(IGCB, SIZE, AR, SLOPE, 0)
90      CALL MOVEI(IGCB, 0, 0, -1.75)
91      GO TO 55
92 C
93 C  TERMINATE
94 C
95 999 CALL CLOSE(IDCB)
96      CALL PEN(IGCB, 0)
97      CALL PLOTR(IGCB, ID, 0)
98      END
99      END$
```

APPENDIX H: SOURCE CODE FOR 'TEXT1'.

* &TEXT1 (DC0025) * 3:37 PM FRI., 29 MAY , 1981 * 1*

1 FTN4X
2 PROGRAM TEXT1
3
4
5
6
7
8 C
9 C PROGRAM TO LIST ASCII TEXT ON THE 9872 PLOTTER.
10 C WRITTEN : GDD 1981-04-13
11 C MODIFIED: GDD 1981-04-13
12 C
13 C ASCII is written using the hardware character set in 9872 unless
14 C first 2 characters in the line are \$\$. In this case FONT3
15 C character set of GRAPHICS-1000 is used. Characters in this
16 C mode are also larger than the normal.
17 C To generate a formfeed the third and fourth characters of the
18 C line should be \$\$.
19 C
20 C \$\$\$\$ 1 (A4 sheet fed and large character written)
21 C \$\$ INTRO (written on next line with large characters)
22 C This program (hardware character set)
23 C
24
25
26
27
28
29
30 INTEGER NAMF(3), IDCB(144), IDCBI(144), IGBT(192), IBUF(66)
31 \$,IBUFI(25), IBUFP(33)
32 LOGICAL LARGE
33 EQUIVALENCE(IBUFP(2), NAMF(1)), (IBUFP(6), ICR)
34 C
35 C GET RUN STRING & PARSE FOR FILE NAME.
36 C IF FILE NAME NOT PASSED TO PROGRAM GET FROM VDU.
37 C
38 ILEN=25
39 CALL GETST(IBUFI, ILEN, ILOG)
40 ICON=2*ILOG
41 CALL PARSE(IBUFI, ICON, IBUFP)
42 IF (NAMF(1).NE.0) GOTO 52
43 50 WRITE(1,1000)
44 1000 FORMAT("FILE? _")
45 CALL CLEAR(NAMF,3)
46 READ(1,2000) NAMF
47 2000 FORMAT(3A2)
48 IF (NAMF.EQ.2H) GOTO 999
49 WRITE(1,1010)
50 1010 FORMAT("CARTRIDGE NO? _")

* &TEXT1 (DC0025) * 3:44 PM FRI., 29 MAY, 1981 * 2*

51 ICR=0
52 READ(1,*) ICR
53 C
54 C SET LOGICAL UNIT NUMBER AND ID FOR PLOTTER
55 C
56 52 LU=12
57 ID=1
58 C INITIALIZE
59 CALL PLOTR(IGCB, ID, 1, LU)
60 CALL PEN(IGCB, 1)
61 CALL LIMIT(IGCB, 20., 520.0, 0., 325.)
62 C SET CHARACTER SIZE
63 SIZE=2.0
64 AR=0.40
65 SLOPE=0.0
66 CALL CSIZE(IGCB, SIZE, AR, SLOPE, 0)
67 CALL MOVE(IGCB, 76.0, 98.0)
68 C
69 C GET ASCII FROM FILE
70 C
71 CALL OPEN(IDCB, IERR, NAME, IOPTN, ISECU, ICR)
72 IF(IERR.GE.0) GOTO 55
73 WRITE(1,1020) IERR, NAME
74 1020 FORMAT(" ERROR ",I5," ON OPEN - FILE "3A2)
75 GOTO 50
76 55 CALL CLEAR(IBUF,66)
77 CALL READF(IDCB, IERR, IBUF, 66, LEN)
78 IF(IERR.GE.0) GOTO 60
79 WRITE(1,1030) IERR, NAME
80 1030 FORMAT(" ERROR ",I5," ON READ - FILE "3A2)
81 GOTO 999
82 60 IF(LEN.EQ.-1) GOTO 999
83 C
84 C TEST FOR LARGE CHARACTERS - ' \$\$' AS FIRST AND SECOND CHARACTERS
85 C
86 LARGE=.FALSE.
87 IF(IBUF(1).NE.2H\$\$) GOTO 58
88 LARGE=.TRUE.
89 IBUF(1)=2H
90 CALL CSIZE(IGCB, 2.00, 0.7, 0.0, 0)
91 CALL GFONT(IGCB, 6HFONT3 ,0, 0, IDCBI)
92 C
93 C TEST FOR FORM FEED - ' \$\$' AS THIRD AND FOURTH CHARACTERS.
94 C
95 58 IF(IBUF(2).NE.2H\$\$) GOTO 64
96 IBUF(2)=2H
97 CALL MOVE(IGCB, 76.0, 0)
98 WRITE(12,1040)
99 1040 FORMAT("AH")
100 CALL MOVE(IGCB, 76.0, 98.0)

* &TEXT1 (DC0025) * 3:51 PM FRI., 29 MAY , 1981 * 3*

```
101 C
102 C SEARCH FOR LAST NON-BLANK
103 C
104 64 DO 61 KS=66,2,-1
105 IF(IBUF(KS).NE.2H ) GOTO 62
106 61 CONTINUE
107 62 KS2=KS*2
108 CALL GTEXT(IGCB,IBUF,1,KS2,IDCB1)
109 IF(.NOT. LARGE) GOTO 55
110     CALL GFONT(IGCB,0,0,0,IDCB1)
111     CALL CSIZE(IGCB,SIZE,AR,SLOPE,0)
112     CALL MOVEI(IGCB,0,0,-1.)
113     GO TO 55
114 C
115 C TERMINATE
116 C
117 999 CALL CLOSE(IDCB)
118     CALL PEN(IGCB,0)
119     CALL PLOTR(IGCB,1D,0)
120 END
121 END$
```

APPENDIX I: PROCEDURES FOR FORMS.

* PD80RP (PLANT1) * 9:53 PM WED. , 6 MAY , 1981 * 1*

1 DATA-BASE=PLANT1: GD;
2 ;
3 8;
4 XEQ=PD8001;
5 DATA-BASE=PLANT2: GD;
6 ;
7 8;
8 XEQ=PD8A01;
9 DATA-BASE=PLANT1: GD;
10 ;
11 8;
12 XEQ=PD8002;
13 DATA-BASE=PLANT2: GD;
14 ;
15 8;
16 XEQ=PD8A02;
17 DATA-BASE=PLANT1: GD;
18 ;
19 8;
20 XEQ=PD8003;
21 DATA-BASE=PLANT2: GD;
22 ;
23 8;
24 XEQ=PD8A03;
25 DATA-BASE=PLANT1: GD;
26 ;
27 8;
28 XEQ=PD8004;
29 DATA-BASE=PLANT2: GD;
30 ;
31 8;
32 XEQ=PD8A04;
33 DATA-BASE=PLANT1: GD;
34 ;
35 8;
36 XEQ=PD8005;
37 DATA-BASE=PLANT2: GD;
38 ;
39 8;
40 XEQ=PD8A05;
41 DATA-BASE=PLANT1: GD;
42 ;
43 8;
44 XEQ=PD8006;
45 DATA-BASE=PLANT2: GD;
46 ;
47 8;
48 XEQ=PD8A06;
49 DATA-BASE=PLANT1: GD;
50 ;

* PD80RP (PLANT1) * 9:58 PM WED., 6 MAY 1981 * 2*

51 8;
52 XEQ=PD8007;
53 DATA-BASE=PLANT2: GD;
54 ;
55 8;
56 XEQ=PD8A07;
57 DATA-BASE=PLANT1: GD;
58 ;
59 8;
60 XEQ=PD8008;
61 DATA-BASE=PLANT2: GD;
62 ;
63 8;
64 XEQ=PD8A08;
65 DATA-BASE=PLANT1: GD;
66 ;
67 8;
68 XEQ=PD8009;
69 DATA-BASE=PLANT2: GD;
70 ;
71 8;
72 XEQ=PD8A09;
73 DATA-BASE=PLANT1: GD;
74 ;
75 8;
76 XEQ=PD8010;
77 DATA-BASE=PLANT2: GD;
78 ;
79 8;
80 XEQ=PD8A10;
81 DATA-BASE=PLANT1: GD;
82 ;
83 8;
84 XEQ=PD8011;
85 DATA-BASE=PLANT2: GD;
86 ;
87 8;
88 XEQ=PD8A11;
89 DATA-BASE=PLANT1: GD;
90 ;
91 8;
92 XEQ=PD8012;
93 DATA-BASE=PLANT2: GD;
94 ;
95 8;
96 XEQ=PD8A12;
97 DATA-BASE=PLANT1: GD;
98 ;
99 8;
100 XEQ=PD8013;

* PD80RP (PLANT1) *10:02 PM WED., 6 MAY , 1981 * 3*

101 DATA-BASE=PLANT2: GD;
102 ;
103 8;
104 XEQ=PD8A13;
105 DATA-BASE=PLANT1: GD;
106 ;
107 8;
108 XEQ=PD8014;
109 DATA-BASE=PLANT2: GD;
110 ;
111 8;
112 XEQ=PD8A14;
113 DATA-BASE=PLANT1: GD;
114 ;
115 8;
116 XEQ=PD8015;
117 DATA-BASE=PLANT2: GD;
118 ;
119 8;
120 XEQ=PD8A15;
121 DATA-BASE=PLANT1: GD;
122 ;
123 8;
124 XEQ=PD8016;
125 DATA-BASE=PLANT2: GD;
126 ;
127 8;
128 XEQ=PD8A16;
129 DATA-BASE=PLANT1: GD;
130 ;
131 8;
132 XEQ=PD8017;
133 DATA-BASE=PLANT2: GD;
134 ;
135 8;
136 XEQ=PD8A17;
137 DATA-BASE=PLANT1: GD;
138 ;
139 8;
140 XEQ=PD8018;
141 DATA-BASE=PLANT2: GD;
142 ;
143 8;
144 XEQ=PD8A18;
145 DATA-BASE=PLANT1: GD;
146 ;
147 8;
148 XEQ=PD8019;
149 DATA-BASE=PLANT2: GD;
150 ;

* PD80RP (PLANT1) *10:06 PM WED., 6 MAY, 1981 * 4*

151 8;
152 XEQ=PD8A19;
153 DATA-BASE=PLANT1: GD;
154 ;
155 8;
156 XEQ=PD8020;
157 DATA-BASE=PLANT2: GD;
158 ;
159 8;
160 XEQ=PD8A20;
161 DATA-BASE=PLANT1: GD;
162 ;
163 8;
164 XEQ=PD8021;
165 DATA-BASE=PLANT2: GD;
166 ;
167 8;
168 XEQ=PD8A21;
169 DATA-BASE=PLANT1: GD;
170 ;
171 8;
172 XEQ=PD8022;
173 DATA-BASE=PLANT2: GD;
174 ;
175 8;
176 XEQ=PD8A22;
177 DATA-BASE=PLANT1: GD;
178 ;
179 8;
180 XEQ=PD8023;
181 DATA-BASE=PLANT2: GD;
182 ;
183 8;
184 XEQ=PD8A23;
185 DATA-BASE=PLANT1: GD;
186 ;
187 8;
188 XEQ=PD8024;
189 DATA-BASE=PLANT2: GD;
190 ;
191 8;
192 XEQ=PD8A24;
193 DATA-BASE=PLANT1: GD;
194 ;
195 8;
196 XEQ=PD8025;
197 DATA-BASE=PLANT2: GD;
198 ;
199 8;
200 XEQ=PD8A25;

* PD80RP (PLANT1) *10:11 PM WED., 6 MAY, 1981 * 5*

201 DATA-BASE=PLANT1: GD;
202 ;
203 8;
204 XEQ=PD8026;
205 DATA-BASE=PLANT2: GD;
206 ;
207 8;
208 XEQ=PD8A26;
209 DATA-BASE=PLANT1: GD;
210 ;
211 8;
212 XEQ=PD8027;
213 DATA-BASE=PLANT2: GD;
214 ;
215 8;
216 XEQ=PD8A27;
217 DATA-BASE=PLANT1: GD;
218 ;
219 8;
220 XEQ=PD8028;
221 DATA-BASE=PLANT2: GD;
222 ;
223 8;
224 XEQ=PD8A28;
225 DATA-BASE=PLANT1: GD;
226 ;
227 8;
228 XEQ=PD8029;
229 DATA-BASE=PLANT2: GD;
230 ;
231 8;
232 XEQ=PD8A29;
233 DATA-BASE=PLANT1: GD;
234 ;
235 8;
236 XEQ=PD8030;
237 DATA-BASE=PLANT2: GD;
238 ;
239 8;
240 XEQ=PD8A30;
241 EXIT;

* PD8001 (PLANT1) *10: 15 PM WED., 6 MAY , 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND NAMES. FACT# IE "1" END;
4 LIST=6;
5 REPORT NAME=#PGE0;
6 LIST=1;
7 FIND TRANS. FACT# IE "1" END;
8 LIST=6;
9 REPORT NAME=#PGE1;
10 LIST=1;
11 FIND TRANS. FACT# IE "1" AND TRANS. TRAML INE "0" END;
12 LIST=6;
13 REPORT NAME=#PGE2;
14 LIST=1;
15 FIND CARR. FACT# IE "1" END;
16 LIST=6;
17 REPORT NAME=#PGE3;
18 REPORT NAME=#PGE4;
19 LIST=1;
20 FIND KNIVES. FACT# IE "1" END;
21 LIST=6;
22 REPORT NAME=#PGE5;
23 LIST=1;
24 FIND SHRED. FACT# IE "1" END;
25 LIST=6;
26 REPORT NAME=#PGE6;
27 LIST=1;
28 FIND MILLS. FACT# IE "1" END;
29 LIST=6;
30 REPORT NAME=#PGE7;
31 REPORT NAME=#PGE8;
32 LIST=1;
33 FIND FEEDS. FACT# IE "1" END;
34 LIST=6;
35 REPORT NAME=#PGE9;
36 REPORT NAME=#PGE10;
37 LIST=1;
38 FIND PRESS. FACT# IE "1" END;
39 LIST=6;
40 REPORT NAME=#PGE11;
41 LIST=1;
42 FIND SCREEN. FACT# IE "1" END;
43 LIST=6;
44 REPORT NAME=#PGE13;
45 LIST=1;
46 FIND HEATER. FACT# IE "1" END;
47 LIST=6;
48 REPORT NAME=#PGE14;
49 LIST=1;
50 FIND CLARIF. FACT# IE "1" END;
```

* PD8001 (PLANT1) *10:20 PM WED., 6 MAY , 1981 * 2*

51 LIST=6;
52 REPORT NAME=#PGE15;
53 LIST=1;
54 FIND SEPAR.FACT# IE "1" END;
55 LIST=6;
56 REPORT NAME=#PGE16;
57 LIST=1;
58 FIND EVAP.FACT# IE "1" END;
59 LIST=6;
60 REPORT NAME=#PGE17;
61 LIST=1;

* PD8A01 (PLANT1) *10:21 PM WED., 6 MAY , 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND PANS.FACT# IE "1" END;
4 LIST=6;
5 REPORT NAME=#PGE20;
6 LIST=1;
7 FIND STOCK.FACT# IE "1" END;
8 LIST=6;
9 REPORT NAME=#PGE21;
10 LIST=1;
11 FIND PUMPS.FACT# IE "1" END;
12 LIST=6;
13 REPORT NAME=#PGE22;
14 LIST=1;
15 FIND CRYST.FACT# IE "1" END;
16 LIST=6;
17 REPORT NAME=#PGE23;
18 LIST=1;
19 FIND HGFUG.FACT# IE "1" END;
20 LIST=6;
21 REPORT NAME=#PGE24;
22 LIST=1;
23 FIND LGFUG.FACT# IE "1" END;
24 LIST=6;
25 REPORT NAME=#PGE25;
26 LIST=1;
27 FIND DRYER.FACT# IE "1" END;
28 LIST=6;
29 REPORT NAME=#PGE26;
30 LIST=1;
31 FIND BOILER.FACT# IE "1" END;
32 LIST=6;
33 REPORT NAME=#PGE27;
34 REPORT NAME=#PGE28;
35 LIST=1;
36 FIND BINS.FACT# IE "1" END;
37 LIST=6;
38 REPORT NAME=#PGE29;
39 LIST=1;
40 FIND ELECT.FACT# IE "1" END;
41 LIST=6;
42 REPORT NAME=#PGE31;
43 LIST=1;
44 FIND ELECT.FACT# IE "1" AND ELECT.EPRTG INE "0" END;
45 LIST=6;
46 REPORT NAME=#PGE30;
47 LIST=1;
```

* PD8A01 (PLANT1) *10:28 PM WED., 6 MAY , 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND PANS.FACT# IE "1" END;
4 LIST=6;
5 REPORT NAME=#PGE20;
6 LIST=1;
7 FIND STOCK.FACT# IE "1" END;
8 LIST=6;
9 REPORT NAME=#PGE21;
10 LIST=1;
11 FIND PUMPS.FACT# IE "1" END;
12 LIST=6;
13 REPORT NAME=#PGE22;
14 LIST=1;
15 FIND CRYST.FACT# IE "1" END;
16 LIST=6;
17 REPORT NAME=#PGE23;
18 LIST=1;
19 FIND HGFUG.FACT# IE "1" END;
20 LIST=6;
21 REPORT NAME=#PGE24;
22 LIST=1;
23 FIND LGFUG.FACT# IE "1" END;
24 LIST=6;
25 REPORT NAME=#PGE25;
26 LIST=1;
27 FIND DRYER.FACT# IE "1" END;
28 LIST=6;
29 REPORT NAME=#PGE26;
30 LIST=1;
31 FIND BOILER.FACT# IE "1" END;
32 LIST=6;
33 REPORT NAME=#PGE27;
34 REPORT NAME=#PGE28;
35 LIST=1;
36 FIND BINS.FACT# IE "1" END;
37 LIST=6;
38 REPORT NAME=#PGE29;
39 LIST=1;
40 FIND ELECT.FACT# IE "1" END;
41 LIST=6;
42 REPORT NAME=#PGE31;
43 LIST=1;
44 FIND ELECT.FACT# IE "1" AND ELECT.EPRTG INE "0" END;
45 LIST=6;
46 REPORT NAME=#PGE30;
47 LIST=1;
```

* PD8030(PLANT1) * 8:37 AM THU., 7 MAY , 1981 * 1*

```
1 SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND NAMES.FACT# IE "30" END;
4 LIST=6;
5 REPORT NAME=#PGE0;
6 LIST=1;
7 FIND TRANS.FACT# IE "30" END;
8 LIST=6;
9 REPORT NAME=#PGE1;
10 LIST=1;
11 FIND TRANS.FACT# IE "30" AND TRANS.TRAML INE "0" END;
12 LIST=6;
13 REPORT NAME=#PGE2;
14 LIST=1;
15 FIND CARR.FACT# IE "30" END;
16 LIST=6;
17 REPORT NAME=#PGE3;
18 REPORT NAME=#PGE4;
19 LIST=1;
20 FIND KNIVES.FACT# IE "30" END;
21 LIST=6;
22 REPORT NAME=#PGE5;
23 LIST=1;
24 FIND SHRED.FACT# IE "30" END;
25 LIST=6;
26 REPORT NAME=#PGE6;
27 LIST=1;
28 FIND MILLS.FACT# IE "30" END;
29 LIST=6;
30 REPORT NAME=#PGE7;
31 REPORT NAME=#PGE8;
32 LIST=1;
33 FIND FEEDS.FACT# IE "30" END;
34 LIST=6;
35 REPORT NAME=#PGE9;
36 REPORT NAME=#PGE10;
37 LIST=1;
38 FIND PRESS.FACT# IE "30" END;
39 LIST=6;
40 REPORT NAME=#PGE11;
41 LIST=1;
42 FIND SCREEN.FACT# IE "30" END;
43 LIST=6;
44 REPORT NAME=#PGE13;
45 LIST=1;
46 FIND HEATER.FACT# IE "30" END;
47 LIST=6;
48 REPORT NAME=#PGE14;
49 LIST=1;
50 FIND CLARIF.FACT# IE "30" END;
```

* PD8030(PLANT1) * 8:42 AM THU, 7 MAY , 1981 * 2*

51 LIST=6;
52 REPORT NAME=#PGE15;
53 LIST=1;
54 FIND SEPAR.FACT# IE "30" END;
55 LIST=6;
56 REPORT NAME=#PGE16;
57 LIST=1;
58 FIND EVAP.FACT# IE "30" END;
59 LIST=6;
60 REPORT NAME=#PGE17;
61 LIST=1;

* PD8A30(PLANT1) *10:34 PM WED., 6 MAY , 1981 * 1*

```
1. SELECT-FILE=SELFIL;
2 LIST=1;
3 FIND PANS.FACT# IE "30" END;
4 LIST=6;
5 REPORT NAME=#PGE20;
6 LIST=1;
7 FIND STOCK.FACT# IE "30" END;
8 LIST=6;
9 REPORT NAME=#PGE21;
10 LIST=1;
11 FIND PUMPS.FACT# IE "30" END;
12 LIST=6;
13 REPORT NAME=#PGE22;
14 LIST=1;
15 FIND CRYST.FACT# IE "30" END;
16 LIST=6;
17 REPORT NAME=#PGE23;
18 LIST=1;
19 FIND HGFUG.FACT# IE "30" END;
20 LIST=6;
21 REPORT NAME=#PGE24;
22 LIST=1;
23 FIND LGFUG.FACT# IE "30" END;
24 LIST=6;
25 REPORT NAME=#PGE25;
26 LIST=1;
27 FIND DRYER.FACT# IE "30" END;
28 LIST=6;
29 REPORT NAME=#PGE26;
30 LIST=1;
31 FIND BOILER.FACT# IE "30" END;
32 LIST=6;
33 REPORT NAME=#PGE27;
34 REPORT NAME=#PGE28;
35 LIST=1;
36 FIND BINS.FACT# IE "30" END;
37 LIST=6;
38 REPORT NAME=#PGE29;
39 LIST=1;
40 FIND ELECT.FACT# IE "30" END;
41 LIST=6;
42 REPORT NAME=#PGE31;
43 LIST=1;
44 FIND ELECT.FACT# IE "30" AND ELECT.EPRTG INE "0" END;
45 LIST=6;
46 REPORT NAME=#PGE30;
47 LIST=1;
```

APPENDIX J: TITLE PAGES.

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2 \$\$

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46 \$\$\$\$

1

47 \$\$ KEY TO MILL NUMBERS

48

49

50

No.

FACTORY

* PDHEAD (DC0025) *11:30 AM FRI., 29 MAY, 1981 * 2*

51							
52	1	..	..	..	..	..	MOSSMAN
53	2	..	..	..	..	..	HAMBLEDON
54	3	..	..	..	..	..	MULGRAVE
55	4	..	..	..	..	..	BABINDA
56	5	..	..	..	..	..	GOONDI
57	6	..	..	..	..	..	MOURILYAN
58	7	..	..	..	..	..	SOUTH JOHNSTONE
59	8	..	..	..	..	..	TULLY
60	9	..	..	..	..	..	VICTORIA
61	10	..	..	..	..	..	MACKNADE
62	11	..	..	..	..	..	INVICTA
63	12	..	..	..	..	..	PIONEER
64	13	..	..	..	..	..	KALAMIA
65	14	..	..	..	..	..	INKERMAN
66	15	..	..	..	..	..	PROSERPINE
67	16	..	..	..	..	..	FARLEIGH
68	17	..	..	..	..	..	RACECOURSE
69	18	..	..	..	..	..	PLEYSTOWE
70	19	..	..	..	..	..	MARIAN
71	20	..	..	..	..	..	CATTLE CREEK
72	21	..	..	..	..	..	NORTH ETON
73	22	..	..	..	..	..	PLANE CREEK
74	23	..	..	..	..	..	FAIRYMEAD
75	24	..	..	..	..	..	QUNABA
76	25	..	..	..	..	..	MILLAQUIN
77	26	..	..	..	..	..	BINGERA
78	27	..	..	..	..	..	ISIS
79	28	..	..	..	..	..	MARYBOROUGH
80	29	..	..	..	..	..	MORETON
81	30	..	..	..	..	..	ROCKY POINT

APPENDIX K: PROCEDURE FOR SUMMARY.

* ANNREP(PLANT1) *10:43 AM FRI., 29 MAY , 1981 * 1*

1 DATA-BASE=PL80A; GD; 8;
2 SELECT-FILE=SELFIL;
3 FIND TRANS.FACT# INE "0" END;
4 LIST=6;
5 REPORT;
6 H1, " ", 10;
7 H2, "FACTORY", 10;
8 H2, "LOCOMOTIVES", 25;
9 H2, "CANE TRUCK#", 40;
10 H2, "TRAM LINE, km", 57, SPACE A1;
11 S1,FACT#;
12 G1,FACT#, 8, EZ;
13 T1,LOCOS, 20, EZ, ADD;
14 T1,TRUCK#, 35, EZ, ADD;
15 T1,TRAML, 50, EZ, ADD;
16 TF,"STATE", 6, SPACE B1;
17 TF,LOCOS, 20, EZ, ADD;
18 TF,TRUCK#, 35, EZ, ADD;
19 TF,TRAML, 50, EZ, ADD;
20 END;
21 LIST=1;
22 FIND MILLS.FACT# INE "0" END;
23 LIST=6;
24 REPORT;
25 H1, " ", 10;
26 H2, "FACTORY", 10;
27 H2, "NO OF MILLS", 25, SPACE A1;
28 S1,FACT#;
29 G1,FACT#, 8, EZ;
30 T1,FACT#, 20, EZ, COUNT;
31 TF,"STATE", 6, SPACE B1;
32 TF,FACT#, 20, EZ, COUNT;
33 END;
34 LIST=1;
35 FIND HEATER.FACT# INE "0" END;
36 LIST=6;
37 REPORT;
38 H1, " ", 10;
39 H2, "FACTORY", 10;
40 H2, "NO OF HEATERS", 27, SPACE A1;
41 S1,FACT#;
42 G1,FACT#, 8, EZ;
43 T1,JH#, 20, EZ, ADD;
44 TF,"STATE", 6, SPACE B1;
45 TF,JH#, 20, EZ, ADD;
46 END;
47 LIST=1;
48 FIND EVAP.FACT# INE "0" END;
49 LIST=6;
50 REPORT;

* ANNREP(PLANT1) *10:49 AM FRI., 29 MAY , 1981 * 2*

51 H1, " ", 10;
52 H2, "FACTORY", 10;
53 H2, "NO OF EVAPORATORS", 30, SPACE A1;
54 S1,FACT#;
55 G1,FACT#, 8, EZ;
56 T1,FACT#, 20, EZ, COUNT;
57 TF, "STATE", 6, SPACE B1;
58 TF,FACT#, 20, EZ, COUNT;
59 END;
60 DATA-BASE=PL80B; GD;; 8;
61 LIST=1;
62 FIND PANS.FACT# INE "0" AND PANS.GDE IE "HG" END;
63 LIST=6;
64 REPORT;
65 H1, " ", 10;
66 H2, "FACTORY", 10;
67 H2, "NO OF H. G. PANS", 30, SPACE A1;
68 S1,FACT#;
69 G1,FACT#, 8, EZ;
70 T1,FACT#, 20, EZ, COUNT;
71 TF, "STATE", 6, SPACE B1;
72 TF,FACT#, 20, EZ, COUNT;
73 END;
74 LIST=1;
75 FIND PANS.FACT# INE "0" AND PANS.GDE IE "LG" END;
76 LIST=6;
77 REPORT;
78 H1, " ", 10;
79 H2, "FACTORY", 10;
80 H2, "NO OF L. G. PANS", 30, SPACE A1;
81 S1,FACT#;
82 G1,FACT#, 8, EZ;
83 T1,FACT#, 20, EZ, COUNT;
84 TF, "STATE", 6, SPACE B1;
85 TF,FACT#, 20, EZ, COUNT;
86 END;
87 LIST=1;
88 FIND CRYST.FACT# INE "0" END;
89 LIST=6;
90 REPORT;
91 H1, " ", 10;
92 H2, "FACTORY", 10;
93 H2, "NO OF CRYSTALLIZERS", 33, SPACE A1;
94 S1,FACT#;
95 G1,FACT#, 8, EZ;
96 T1,CS#, 20, EZ, ADD;
97 TF, "STATE", 6, SPACE B1;
98 TF,CS#, 20, EZ, ADD;
99 END;
100 LIST=1;

* ANNREP(PLANT1) *10:55 AM FRI., 29 MAY , 1981 * 3*

101 FIND HGFUG.FACT# INE "0" END;
102 LIST=6;
103 REPORT;
104 H1, " ", 10;
105 H2, "FACTORY", 10;
106 H2, "NO OF H. G. FUGALS", 30, SPACE A1;
107 S1, FACT#;
108 G1, FACT#, 8, EZ;
109 T1, FH#, 20, EZ, ADD;
110 TF, "STATE", 6, SPACE B1;
111 TF, FH#, 20, EZ, ADD;
112 END;
113 LIST=1;
114 FIND LGFUG.FACT# INE "0" AND LGFUG.FLMODE IE "CONTINUOUS" END;
115 LIST=6;
116 REPORT;
117 H1, " ", 10;
118 H2, "FACTORY", 10;
119 H2, "NO OF CONTINUOUS L. G. FUGALS", 40, SPACE A1;
120 S1, FACT#;
121 G1, FACT#, 8, EZ;
122 T1, FL#, 20, EZ, ADD;
123 TF, "STATE", 6, SPACE B1;
124 TF, FL#, 20, EZ, ADD;
125 END;
126 LIST=1;
127 FIND LGFUG.FACT# INE "0" AND LGFUG.FLMODE IE "BATCH" END;
128 LIST=6;
129 REPORT;
130 H1, " ", 10;
131 H2, "FACTORY", 10;
132 H2, "NO OF BATCH L. G. FUGALS", 35, SPACE A1;
133 S1, FACT#;
134 G1, FACT#, 8, EZ;
135 T1, FL#, 20, EZ, ADD;
136 TF, "STATE", 6, SPACE B1;
137 TF, FL#, 20, EZ, ADD;
138 END;
139 LIST=1;
140 FIND BOILER.FACT# INE "0" END;
141 LIST=6;
142 REPORT;
143 H1, " ", 10;
144 H2, "FACTORY", 10;
145 H2, "NO OF BOILERS", 26, SPACE A1;
146 S1, FACT#;
147 G1, FACT#, 8, EZ;
148 T1, BO#, 20, EZ, ADD;
149 TF, "STATE", 6, SPACE B1;
150 TF, BO#, 20, EZ, ADD;

* ANNREP(PLANT1) *11:00 AM FRI., 29 MAY , 1981 * 4*

151 END;
152 LIST=1;
153 FIND ELECT.GS# INE "0" END;
154 LIST=6;
155 REPORT;
156 H1," ",10;
157 H2,"FACTORY",10;
158 H2,"NO OF GENERATING SETS",32,SPACE A1;
159 S1,FACT#;
160 G1,FACT#,8,EZ;
161 T1,GS#,20,EZ,ADD;
162 TF,"STATE",6,SPACE B1;
163 TF,GS#,20,EZ,ADD;
164 END;
165 EXIT;

