**PC Underground Forecaster**

**Proposed Upgrades**

**Database Changes**

* Update to Office 2007
* CASE

CAL\_ID Default calendar to be used by a unit if there is no entry in the rates table for a

section or unit.

NUM\_WEEKS

PERIOD

QUALITY\_DB

Add RESULTS Name of a results table with quality (calculated from QUALITY\_DB) to be

added to db.

Add TIMESTAMP Date when forecast last run for this case.

Notes: a ‘RESULTS’ table in the current db is always generated with no quality (timing only).

If NUM\_WEEKS & PERIOD are left blank: calculate quality from current timing using

QUALITY\_DB and write into table specified in RESULTS.

If QUALITY\_DB & RESULTS are left blank: do timing only (overwrite ‘RESULTS’ table).

* CALENDAR

CAL\_NO

MON\_DATE

MON thru SUN Three records per week one for each shift (Midnight, Day, Afternoon) in a day, can include an ‘H” for holiday.

COMMENTS

Notes: this will ensure that any timing will never be more than a shift late. There will also be a program for easily generating calendars.

* GEOMETRY

SECT

TYPE Confined to the following:

for LWs LWA,B,C or D plus \*

for mains CMM plus \*

for development CMD plus \*

for advance CMA plus \*

for retreat CMR plus \*

where \* is any number of alphanumeric characters (user defined).

INIT\_STN

X\_COORD

Y\_COORD

AZIMUTH

LENGTH

WIDTH

RECOV

LINEAR\_FACTOR

* GEOMETRY\_EXCEPTIONS

SECT (allow wildcards)

START\_STN

END\_STN

LINEAR\_FACTOR

RECOV

* SEQUENCE

SECT

START

END

UNIT Starting unit: if blank use unit from primary dependency.

Add UNIT2 Can be blank (used for supersections: see unit handling in exceptions below).

BEGIN

REF1

STN1

D1

REF2

STN2

D2

DIRTY\_FLAG

ORDERING

COMMENT new memo field

Note: for D1 and D2 allow ability to specify as ‘Calendar’ days as well as scheduled days. Also allow the ability to specify as days.x where x is 0 thru 3 for no. of shifts.

* SHUTDOWNS

ID

UNIT

START\_DATE If blank default to start of forecast.

END\_DATE If blank default to end of forecast.

* RATES

UNIT CM1 thru CMx, or LW1 thru LWx.

Add SECT From GEOMETRY, allow wildcards.

TYPE From GEOMETRY, allow wildcards.

FT\_P\_MS

TNS\_PMS

TNS\_FT

~~MS\_P\_DAY~~

Add AVAILABILITY % of scheduled shift actually spent mining.

Add CAL\_NO Calendar to be used for unit (if blank then default calendar would be used).

Add START\_DATE Unit cannot be used before this date (can be blank for start of forecast).

Add END\_DATE Unit cannot be used after this date (can be blank for end of forecast).

COAL

MAX\_TPMS

MAX\_FTPMS

Note: the same unit can appear with any combination of section and/or type.

* EXCEPTIONS

Components:

AFFECTED\_UNIT CM1 thru CMx, or LW1 thru LWx.

AFFECTED\_SECT From GEOMETRY, allow wildcards.

AFFECTED\_TYPE From GEOMETRY, allow wildcards.

REF\_UNIT CM1 thru CMx, or LW1 thru LWx.

REF\_SECT From GEOMETRY, allow wildcards.

REF\_TYPE From GEOMETRY, allow wildcards.

Notes:

SECT/TYPE - must specify one or the other but not both.

UNIT + SECT/TYPE – if both are specified then the unit must be in section or type for exception to take effect.

The AFFECTED component must be specified.

If the REF component is not specified then it will be the same as AFFECTED.

Rules:

START\_STN (blank), BEGIN, END

START\_PLUS -ve or +ve number

END\_STN (blank), BEGIN, END

END\_PLUS -ve or +ve number

Notes:

PLUS - If STN is (blank) then number is an absolute stationing.

If STN is BEGIN then add number to INIT\_STN from Geometry table.

If STN is END then subtract number from (INIT\_STN + LENGTH) from Geometry

table.

START\_DATE

START\_SHIFT Midnight(default), Day, Afternoon

END\_DATE

END\_SHIFT Midnight, Day, Afternoon (default)

DURATION no. of scheduled shifts

Notes:

Area Exceptions (temporary)

START\_STN + END\_STATION

START\_STN + DURATION

Reference Exceptions (permanent)

START\_STN only

Period Exceptions (temporary)

START\_DATE/SHIFT + END\_DATE/SHIFT

START\_DATE/SHIFT + DURATION

Date Exceptions (permanent)

START\_DATE/SHIFT only

A reference exception can be ANDed with a period/date exception.

Procedure:

Change any or all of the following:

Rate FT\_P\_MS | (blank) use current rate.

TNS\_P\_MS | number > 0 use number.

| 99999 use default from Rates table.

| 0 is not allowed.

| must specify one or the other, not both.

INCRS (%). If non-blank use as a multiplier to FT\_P\_MS/TNS\_P\_MS.

0 puts unit/section into idle/shutdown mode.

REASON Optional when INCRS is 0.

Notes:

Do not change rate if all (blank).

Any entry will cause a restart after a shutdown, to restart at current rate set INCRS to 100

with (blank) FT\_P\_MS/TNS\_P\_MS

Tons/Foot TNS\_P\_FT

Unit UNIT

Notes:

Can only be specified if AFFECTED\_SECT is specified and AFFECTED\_UNIT is not.

Is added to AFFECTED\_SECT (using the above rate) if it is not already there.

Is removed from the AFFECTED\_SECT if it is there.

The effective rate in the AFFECTED\_SECT is sum of individual units in AFFECTED\_SECT.

Availabilty AVAILABILITY (%). Probability shift is mined.

Calendar CAL\_NO

Comments:

COMMENT

* SAMPLES and ADJUSTMENTS Tables

Can be missing or be overridden by TONS\_PER\_FT in RATES table.

Add a third type: CMR for CM retreat sections.

* RESULTS Table

BEGIN

SECT

TYPE

UNIT

SUPER

START

END

AREA

LATE

LEAD

MAX\_USED

PERIOD

Add RECOV

Add LINEAR\_FEET

Add SCHEDULE List of shifts scheduled each day this period: 0 thru 32 entries, comma delimited.

PERIOD\_DAYS Sum of days scheduled in period: from SCHEDULE (where shifts > 0).

DAYS List of shifts mined each day this period: 0 thru 32 entries, comma delimited.

WORK\_DAYS Sum of days worked in period: from DAYS (where shifts > 0).

SHIFTS Sum of shifts worked in period: from DAYS.

Add DELAYS List of shifts delayed each day this period: 0 thru 32 entries, comma delimited.

Add TYPE\_DAYS List of delay types corresponding to shifts in DELAYS: 0 thru 32 characters,

comma delimited.

Note: possibly remove SEAM\_HT from quality fields and include DLN\_THICK from ADJUSTMENTS on reports.

Database Editing

* Auto complete section names
* Ability to filter/sort tables for display/editing
* Allow both lower and upper case
* Import calendars from Excel
* Set ‘dirty flag’ in sequence table
* Will need:

Updated ‘New’ database function

‘Import’ old database function

* Check RECOV value in GEOMETRY table (e.g. warn if <35% for CMs)
* Ability to copy/paste/insert multiple rows (perhaps color rows?)
* CASE editing with option to run
* Updated ‘Export’ function
* Change section names as a group

Report Writer

* Need only ‘Select Report’ option from current VCReport
* Add ‘Print Preview’ function
* Add Quality Data Reports
* Add this as an option to Database Editing/Microstation

WinFore

* Reduce to ‘Run’ option only with a single ‘Start’ button: still allow case editing
* Also invoke from Database Editing/Microstation (would go directly to start)
* There would be no Results (VCReport) or Geometry(VCMine) options

Bobby will handle the following

Microstation

* Show delays from Sequence Table
* Remove Access button from Forecaster Menu
* Additional mapping features: quality, clean tns/ft, feet/ms, etc.
* Specify Geometry and/or ref exceptions graphically
* Advance/Retreat dialog needs additional parameters to calculate retreat geometry
* More fields/totals in ‘Timing Loop Results’ dialog and display