IHS ENERGY GROUP
Creating Energy from Information ™

DMP2 Production Data
Y2K Export Format

FORMAT NAME:.........DMP2 Production
FILE EXTENSION:...........................DP2
FORMAT VERSION:...........................1.1
FORMAT STATUS:..........................Final
RELEASE DATE: 2/18/2000

DMP2 Production Export Format

FORMAT CHANGE SUMMARY

The DMP2 Production Export format is a revised version of the old Dwights Detail Production Export format. The primary emphasis in updating this record was to expand the date fields to be Year 2000 compliant, add latitude and longitude coordinates and improve the presentation of test records.

Highlights of the format changes are:

- File Header and Start/End records have been added to the formats. See Appendix A for more information.

- Latitude and Longitude records were added to the RECWHDR record. This record is now exported for all states and products (i.e., oil and gas).

- Added API number to the RECWHDR record.

- The REC2TST and RECWTST test records are now associated with the RECWHDR record. All individual well tests will immediately follow the RECWHDR record.

  Gas Example: RECWHDR
  REC2TST

  Oil Example: RECWHDR
  RECWTST
  RECWTST

- Number fields with implied decimals have been replaced with explicit decimals.
- Date fields have been expanded to a 4-digit year.

For more detail change information, see the "changes" section below each Record Type name.

DMP2 Production Export Format

File Header Information
New record, see Appendix A for details.

Item Description	Format	Column / Length	PI/Dwights' Mnemonic
Record Key	A	1 (20)	N/A
Data Type	A	21 (20)	N/A
Download Format	A	41 (12)	N/A
Version (x.x)	A	53 (4)	N/A
Delimiter	A	57 (7)	N/A
Write Date (YYYY/MM/DD)	A	64 (10)	N/A
Entity Count	N	74 (6)	N/A

Note: This record is written each time that data is exported to a file. It occurs only once and is the first record in the file.

Start Record Label
New record, see Appendix A for details.

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
START_US_PROD	A	30	N/A
Entity ID	A	40	N/A

Identifying Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1RCI'	A	7	REC1RCI
Prod ID (Entity ID)	A	40	PRODID
District (where applicable)	A	3	DIST
Lease/Well name	A	36	LEASENAM
Well Number	A	20	WELL
File Source (CD, P2000 or ONLINE)	A	7	PROPTYPE
Primary Product Code	A	1	PRODTYPE

Status Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1STA'	A	7	REC1STA
Lease Status Code	A	2	STATCD
Lease Status Description	A	3	STATUS
Status 'as of date' (YYYYMM)	M	6	STATDAT
Completion Date (YYYYMM)	M	6	COMPDAT
First Production Date (YYYYMM)	M	6	FPDAT
Production through Date (YYYYMM)	M	6	LPDAT
API State Code	A	2	STATECD
State Postal Abbreviation (i.e., TX=Texas)	A	2	STATE
County/Parish Name	A	15	COUNTY
AAPG Basin Code	A	3	BASINCD
Basin Name	A	45	BASIN

Gas Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1GAS'	A	7	REC1GAS
Gas/Casinghead Gas Gatherer	A	5	GASGATH
Gas Cumulative through Last Production Date	N	20	GASCUM
Gas Cumulative 'developed since' date (YYYYMM)	M	6	GASSINCE
Gas Gravity (nnn.nn)	N	6	GASGRAV

Liquid Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1LIQ'	A	7	REC1LIQ
Oil/Condensate Gatherer	A	5	LIQGATH
Liquid Cumulative through Last Production Date	N	20	LIQCUM
Liquid Cumulative 'developed since' date (YYYYMM)	M	6	LIQSINCE
Liquid Gravity (nnnn.n)	N	6	LIQGRAV

Field/Reservoir/Location Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1FLD'	A	7	REC1FLD
Field Code	N	9	FLDCD
Field Name	A	70	FIELD
Reservoir Name	A	60	RESV
Entity Location	A	56	LOC

Operator Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1OPE'	A	7	REC1OPE
Operator Code	N	6	OPERCD
Operator Name	A	40	OPERATOR

Engineering Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC1ENG'	A	7	REC1ENG
Well Identifier	N	20	APINO
Temperature Gradient (nnnnn.nnn)	N	9	TGRAD
N-factor (slope of the back pressure test) (nn.nnn)	N	6	NFAC
Total Depth	N	5	TD
Upper Perforation	N	5	UPERF
Lower Perforation	N	5	LPERF
Gas-Oil Ratio	N	4	GOR
State Dependant Special Code	A	7	SPECLCD

Gas Test Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC2TST'	A	7	REC2TST
Date of the Test (YYYYMMDD)	D	8	TESTDAT
Cumulative Production at Test Time (mcf)	N	13	CUMTEST
Well Head Shut in Pressure	N	5	WHSIP
Bottom Hole Pressure (BHP)	N	5	BHP
BHP Divided by Z-factor	N	5	BHPZ
BHP Measured or Calculated Code ('M'/'C')	A	1	BHPMC
Barrels per day Water	N	5	BDWTR
Barrels per day Condensate	N	5	BDCOND
Well Head Flowing Pressure	N	5	WHFLOW
Potential	N	7	POTEN
Initial Test Code	N	3	INITSTCD

Note: This record is associated with the RECWHDR record.

Individual Well Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'RECWHDR'	A	7	RECWHDR
Well Number	A	20	WELLNO
Sate Identification/Serial Number	A	20	STIDCD
Well Identifier	N	20	APICDW
Total Depth (ft)	N	5	TDW
Completion Date (YYYYMMDD)	D	8	CDATE
Well Type	A	40	WTYPE
Well Location	A	20	WLOC
Surface Latitude (±nn.nnnnn)	N	9	SRFLAT
Surface Longitude (±nnn.nnnnn)	N	10	SRFLONG
Surface Lat/Long Source	A	1	SRFLLSRC
Surface Datum	A	1	SRFLLDAT
Bottom Hole Latitude (±nn.nnnnn)	N	9	BTMLAT
Bottom Hole Longitude (±nnn.nnnnn)	N	10	BTMLONG
Bottom Hole Lat/Long Source	A	1	BHLLSRC
Bottom Hole Datum	A	1	BHLLDAT
Well Status Code	A	1	WSTATCD

Note: This record is associated with the RECWHDR record and it is available for ALL states and products (i.e., oil & gas).

Oil Well Test Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'RECWTST'	A	7	RECWTST
Date of Test (YYYYMMDD)	D	8	TESTDATW
Flowing Pressure (psi)	N	6	FPW
Gas/Oil Ratio (scf/bbl)	N	7	GORW
Basic Sediments and Water %	N	3	BSWW
Potential of Well (bbls/day)	N	6	NETOILW
Water Produced with Oil (bbls/day)	N	6	WATERW
Liquid Gravity (nnnnn.n)	N	7	LIQGRAVW
Choke Orifice Size (64th)	N	6	CHOKE
Upper Perforation	N	6	UPERFW
Lower Perforation	N	6	LPERFW
Producing Method	A	35	PRODMETH
Well Head Shut-In Pressure	N	7	WHSIPRES

Note: This record is associated with the RECWHDR record and it is associated ONLY with TX and LA oil properties

Annual Production Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC3YTD'	A	7	REC3YTD
Year (YYYY)	Y	4	YEAR
Number of Wells (for oil leases)	N	5	NUMWELLS
Oil/Condensate Production	N	15	OIL
Water Production	N	15	WATER
Gas/Casinghead Gas Production	N	15	GAS
Days Produced	N	7	DAYSON

Monthly Oil/Condensate Production Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC4OIL'	A	7	REC4OIL
'OIL'	A	9	MOILKEY
Monthly Oil in BBLS (First occurrence)	N	15	MOIL
………………… …………………..	N	15	MOIL
Monthly Oil in BBLS (Last occurrence)	N	15	MOIL

Monthly Water Production Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC4WTR'	A	7	REC4WTR
'WATER'	A	9	MWTRKEY
Monthly Water in BBLS (First occurrence)	N	15	MWATER
………………… …………………..	N	15	MWATER
Monthly Water in BBLS (Last occurrence)	N	15	MWATER

Monthly Gas/Casinghead Production Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC4GAS'	A	7	REC4GAS
'GAS'	A	9	MGASKEY
Monthly Gas in MCF (First occurrence)	N	15	MGAS
………………… …………………..	N	15	MGAS
Monthly Gas in MCF (Last occurrence)	N	15	MGAS

Monthly Number of Wells Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC4WEL'	A	7	REC4WEL
'WELLS'	A	9	MWELKEY
Monthly Wells (First occurrence)	N	9	MWELLS
………………… …………………..	N	9	MWELLS
Monthly Wells (Last occurrence)	N	9	MWELLS

Monthly Days Produced

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC4DAY'	A	7	REC4DAY
'DAYSON'	A	9	MDAYKEY
Monthly Days Produced (First occurrence)	N	9	MDAYSON
………………… …………………..	N	9	MDAYSON
Monthly Days Produced (Last occurrence)	N	9	MDAYSON

First Twelve Months Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC3FST'	A	7	REC3FST
First Year Production Occurs (YYYY)	Y	4	FYEAR
First Month Production Occurs (MM)	N	2	FMONTH
Number of Wells First Month	N	4	FMWELS
Oil/Condensate Production First Month	N	7	FMOIL
Water Production First Month	N	7	FMWATER
Gas/Casinghead Production First Month	N	9	FMGAS
Number of Wells First 12 Month	N	4	F12MWELS
Oil/Condensate Production First 12 Month	N	9	F12MOIL
Water Production First 12 Month	N	9	F12MWTR
Gas/Casinghead Production First 12 Month	N	11	F12MGAS

Last Twelve Months Information

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
'REC3LST'	A	7	REC3LST
Last Year Production Occurs (YYYY)	Y	4	LYEAR
Last Month Production Occurs (MM)	N	2	LMONTH
Number of Wells Last Month	N	4	LMWELS
Oil/Condensate Production Last Month	N	7	LMOIL
Water Production Last Month	N	7	LMWATER
Gas/Casinghead Production Last Month	N	9	LMGAS
Number of Wells Last 12 Month	N	4	L12MWELS
Oil/Condensate Production Last 12 Month	N	9	L12MOIL
Water Production Last 12 Month	N	9	L12MWTR
Gas/Casinghead Production Last 12 Month	N	11	L12MGAS

End Record Label

New record, see Appendix A for details.

Item Description	Format	Maximum Length	PI/Dwights' Mnemonic
END_US_PROD	A	30	N/A
Entity ID	A	40	N/A

EXPORT FILE FORMAT

Two new records have been added to the Year 2000 formats that will better enable the management and handling of the data contained within an IHS Energy Group download. The first is a single line record of meta-data describing the contents of the download file; and the second is the incorporating of start/end record labels for each entity contained in the download file. Each item is discussed in detail below and an example of this new file structure is provided.

File Header Record

In order to make the task of importing the IHS Energy ASCII download files easier, an identification record has been added to the output file that will indicate the content and format of the proceeding data. It is a single line of meta-data in a fixed field format, independent of the chosen format of the export file (i.e., comma or fixed field). This record is written each that time new data is added to a file. Therefore, in the case of the download being written to a new file, this record would be the first one in the file. If the data is appended to an existing file, the record will be added to the file ahead of the newly appended data—not the existing data. Please note it is possible for a single file to have several data sections that are not necessarily in sync with each other as to type or format.

Below is the layout for the record:

Item Description	FORMAT	Maximum Length	Example Contents
Record Key	A	20	"IHS Energy Group"
Data Type	A	20	US Well Data US Production Data
Download Format	A	12	297, 298, DMP2…
Version (x.x)	A	4	1.0 (x.x trailed by a blank)
Delimiter	A	7	Fixed or Comma
Write Date (YYYY/MM/DD)	A	10	1998/01/24
Entity ID Count	N	6	12

Start/End Record Label

A special record will mark the beginning and end of data for each entity that is exported from any of the new formats utilized by IHS Energy Group. This record label will be the internal record identifier used within the CD-ROM internal structures. These are up to thirty characters long, are all capital letters, and have segments separated by underscores.

Following each start/end record label is the unique id for the entity. For US Well data, this is the UWI. For US Production data, this is the Entity ID.

Start/End record labels will be devised for each data type (i.e., production & well). Initially we will create exports for US Well and US Production data. Other labels will be created as exports for other data types are created. Each label can be up to thirty characters long. Below is the format for the record labels:

US Well Data Start/End Record

Item Description	Format	Column	Maximum Length	Example Contents
Record Label	A	1	30	START_US_WELL END_US_WELL
UWI	A	31	20	999999999XX

US Production Data Start/End Record

Item Description	Format	Column	Maximum Length	Example Contents
Record Label	A	1	30	START_US_PROD END_US_PROD
Entity ID	A	31	40	999999999XX

The format of this record will be determined by the export format chosen by user. If the export is comma delimited, then the start/end records will be comma delimited and vice-versa for fixed field records.

Export File Structure Example

Two styles of delimiters will be supported in the new Year 2000 formats. This is discussed in detail in a subsequent section. The example below is for a comma delimited 298 Production download with three producing entities being reported.

```
IHS ENERGY GROUP     US PRODUCTION DATA  DMP2          1.1 COMMA  1999/06/01     3
"START_US_PROD",111111111
   (single entity data)
"END_US_PROD",111111111
"START_US_PROD",222222222
   (single entity data)
"END_US_PROD",222222222
"START_US_PROD",333333333
   (single entity data)
"END_US_PROD",333333333
```

COMMA DELIMITED FORMAT

In comma-delimited exports, a comma is placed between fields and the data for each field is trimmed to a minimal length. A comma is not added after the last field of a record.

TEXT FIELDS

TEXT fields are trimmed of all leading or trailing blanks. They are started and ended with double quotes ("). If there are only blanks in the field then the output is two double quotes next to each other. For example if two text fields were next to each other and each contained only blanks, the output would look like "","".

DATE FIELDS

All dates are output as indicated on the individual export formats. If any of the three data elements (year, month, or day) are missing from the data, the appropriate number of zeros are added to bring the full length to the specified number of characters and to preserve data integrity. However, if there is no data for any of the three elements, nothing should be written except the comma separating this field from the next.

NUMBER FIELDS

Number fields are trimmed of all leading and trailing blanks, and are written exactly as indicated by their field format. If the field has no value (all blanks), nothing will be written except the comma separating this field from the next.