

298 Production Data

YEAR 2000 Export Format

FORMAT NAME: 298 Production

FILE EXTENSIONS:

Comma Delimited98C

Fixed Field 98F

FORMAT VERSION: 1.1

FORMAT STATUS: Final

RELEASE DATE:2/18/2000

298 Production Export Format

FORMAT CHANGE SUMMARY

The 298 Production Export format is a revised version of the old PI 98 Production Export format. The primary emphasis in updating this record was to better organize the location records and to expand the date fields to accommodate a 4-digit year.

Highlights of the format changes are:

- File Header and Start/End records have been added to the formats. See Appendix A for more information.
- Regional location records have replaced the +A! Location records: +AC (Congressional location), +AT (Texas location), +AO (Offshore location) and +AR (Regulatory record).
- Number fields with implied decimals have been replaced with explicit decimals.
- Reference direction (\pm) has been added to Latitude and Longitude records.
- Date fields have been expanded to a 4-digit year.

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

298 Production Export

Record Type: File Header Record

New record, see Appendix A for details.

	Col. (Len)	Type
Record Key	1 (20)	A
Data Type	21 (20)	A
Download Format	41 (12)	A
Format Version (x.x)	53 (4)	A
Delimiter	57 (7)	A
Write Date (YYYY/MM/DD)	64 (10)	A
Entity Count	74 (6)	N

Record Type: Start Record Label

New record, see Appendix A for details.

	Col. (Len)	Type
"START_US_PROD"	1 (30)	A
Entity ID	31 (40)	A
Blank	71 (9)	A

Record Type ++: Unique ID Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Prod ID Number	4 (40)	A
File Source	44 (7)	A
Blank	51 (29)	A

Record Type +A: Entity Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Region Code	4 (2)	A
State Code	6 (2)	A
Field Code	8 (6)	A
County/Parish Code	14 (3)	A
County/Parish Name	17 (8)	A
Operator Code	25 (8)	A
Primary Product Code	33 (1)	A
Mode	34 (1)	A
Formation Code	35 (8)	A
AAPG Basin Code	43 (3)	A
Coal Bed Methane Indicator	46 (1)	A
Enhanced Recovery Flag	47 (1)	A
Blank	48 (32)	A

Record Type +AC: Congressional and Carter Location

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Township Direction	4 (1)	A
Township Number (xxx.x)	5 (5)	A
Range Direction	10 (1)	A
Range Number (xxx.x)	11 (5)	A
Section or Equivalent Indicator	16 (3)	A
Section or Equivalent Number (xxx.x)	19 (5)	A
Spot	24 (8)	A
Meridian Code	32 (2)	A
Meridian Name	34 (17)	A
State Code	51 (2)	A
County Code	53 (3)	A
Blank	56 (24)	A

Record Type +AT: Texas Location

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Railroad District	4 (2)	A
Block or League Indicator	6 (1)	A
Block or League Number	7 (4)	A
Block Fraction	11 (1)	A
Section or Labor Indicator	12 (1)	A
Section or Labor Number	13 (4)	A
Section Fraction	17 (3)	A
Lot Number	20 (4)	A
Township Direction	24 (1)	A
Township Number (xx.x)	25 (4)	A
Survey Name	29 (16)	A
Abstract Number	45 (7)	A
State Code	52 (2)	A
County Code	54 (3)	A
Blank	57 (23)	A

Record Type +AO: Offshore Location

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
OCS Number	4 (8)	A
Bottom Hole Block Prefix	12 (1)	A
Bottom Hole Block Number	13 (6)	A
Bottom Hole Block Suffix	19 (1)	A
Area Name	20 (8)	A
UTM Quadrant	28 (7)	A
State/Federal Waters Indicator	35 (1)	A
Water Bottom Zone	36 (2)	A
Blank	38 (42)	A

Record Type +AR: Regulatory Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Lease/Unit Code	4 (10)	A
Serial Number	14 (11)	A
Co-mingled Facility Code	25 (4)	A
Well Sub-Completion Code	29 (2)	A
Reservoir Code	31 (6)	A
State Offshore Flag	37 (1)	A
API Unique	38 (5)	A
District Code	43 (2)	A
Blank	45 (35)	A

Record Type +A#: Multiple County Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
County/Parish Code	4 (3)	A
County/Parish Name	7 (8)	A
County/Parish Code	15 (3)	A
County/Parish Name	18 (8)	A
County/Parish Code	26 (3)	A
County/Parish Name	29 (8)	A
Formation Name	37 (40)	A
Blank	77 (3)	A

Record Type +B: Name Record 1

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Lease Name	4 (36)	A
Operator Name	40 (36)	A
Blank	76 (4)	A

Record Type +C: Name Record 2

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Field Name	4 (40)	A
Date Production Started (YYYYMM)	44 (6)	M
Date Production Ended (YYYYMM)	50 (6)	M
Liquid Gravity (nn.n)	56 (4)	N
Reservoir Name	60 (20)	A

Record Type +D: Well Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
API Number	4 (15)	A
MMS Suffix	19 (3)	A
Well Number	22 (9)	A
Total Well Depth	31 (5)	N
Bottom Hole Pressure	36 (10)	N
Bottom Hole Temperature (BHP)	46 (10)	N
Type Well	56 (2)	A
Directional Drill Flag	58 (1)	A
Well Status	59 (1)	A
Michigan Permit Number	60 (5)	A
Bottom Hole Calculation	65 (1)	A
True Vertical Depth	66 (5)	N
Unit Well Serial Number	71 (8)	A
Blank	79 (1)	A

Record Type +D!: Lat/Long Record

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Surface Latitude ($\pm nn.nnnnn$)	4 (9)	N
Surface Longitude ($\pm nnn.nnnnn$)	13 (10)	N
Surface Lat/Long Source	23 (1)	A
Surface Datum	24 (1)	A
Bottom Hole Latitude ($\pm nn.nnnnn$)	25 (9)	N
Bottom Hole Longitude ($\pm nnn.nnnnn$)	34 (10)	N
Bottom Hole Lat/Long Source	44 (1)	A
Bottom Hole Datum	45 (1)	A
Plugged Date (YYYYMM)	46 (6)	M
Upper Perforation Depth	52 (5)	N
Lower Perforation Depth	57 (5)	N
Blank	62 (18)	A

Record Type +E: Test Information Record 1

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Test Number	4 (3)	A
Upper Perforation Depth	7 (5)	N
Lower Perforation Depth	12 (5)	N
Liquids per Day (nnnnn.n)	17 (7)	N
Gas per Day	24 (6)	N
Water per Day	30 (5)	N
Choke Size (nnn.n)	35 (5)	N
% Basic Sediment & Water (nn.n)	40 (4)	N
Flowing Tubing Pressure	44 (5)	N
Gas/Oil Ratio	49 (7)	N
Liquid Gravity (nn.n)	56 (4)	N
Final Shut-in Pressure	60 (5)	N
Gas Gravity (n.nnn)	65 (5)	N
Producing Method	70 (2)	A
Test Date (YYYYMMDD)	72 (8)	D

Record Type +E!: Test Information Record 2

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Test Number	4 (3)	A
BHP Divided by Z-Factor	7 (4)	N
Z-Factor (n.nnn)	11 (5)	N
N-Factor (nn.nnn)	16 (6)	N
Calculated Absolute Open Flow	22 (7)	N
Cum Gas at Test Date	29 (15)	N
Casing Line Pressure	44 (5)	N
Blank	49 (30)	A

Record Type +F: Cumulative Production

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Year (YYYY)	4 (4)	Y
Cumulative Liquid	8 (20)	N
Cumulative Gas	28 (20)	N
Cumulative Water	48 (20)	N
Blank	68 (12)	A

Record Type +G: Monthly Production

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Date (YYYYMM)	4 (8)	M
Liquid Production	12 (15)	N
Gas Production	27 (15)	N
Water Production	42 (15)	N
Allowable Production	57 (15)	N
Number of Wells	72 (5)	N
Days on Production	77 (2)	N
Blank	79 (1)	A

Record Type +I: Cumulative Injection

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Year (YYYY)	4 (4)	Y
Cumulative Liquid Injection	8 (20)	N
Cumulative Gas Injection	28 (20)	N
Cumulative Water Injection	48 (20)	N
Blank	68 (12)	A

Record Type +J: Monthly Injection

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Date (YYYYMMDD)	4 (8)	D
Liquid Injection	12 (15)	N
Gas Injection	27 (15)	N
Water Injection	42 (15)	N
Number of Injection Wells	57 (5)	N
Days on Production	62 (2)	N
Blank	64 (16)	A

Record Type +K: Total Disposition for Current Month

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Date (YYYYMM)	4 (8)	M
Liquid Runs Monthly Total	12 (15)	N
Gas Runs Monthly Total	27 (15)	N
Blank	42 (38)	A

Record Type +L: Monthly Disposition by Transporter

	Col. (Len)	Type
Record Type Indicator	1 (3)	A
Date (YYYYMMDD)	4 (8)	D
Run Type	12 (20)	A
Transporter/Purchaser Name	32 (12)	A
Run Amount	44 (20)	A
Blank	64 (16)	A

Record Type: End Record Label

New record, see Appendix A for details.

	Col. (Len)	Type
"END_US_PROD"	1 (30)	A
Entity ID	31 (40)	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	Column	Maximum Length	Example Contents
Record Key	A	1	20	"IHS Energy Group"
Data Type	A	21	20	US Well Data US Production Data
Download Format	A	41	12	297, 298, DMP2...
Version (x.x)	A	53	4	1.1 (x.x trailed by a blank)
Delimiter	A	57	7	Fixed or Comma
Write Date (YYYY/MM/DD)	A	64	10	1998/01/24
Entity Count	N	74	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  298          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
```

Delimiters

Two styles of delimiters will be supported. These are fixed-field and comma delimited. For each style, certain rules are applied to the formatting of individual fields. These are discussed below in the section that covers the individual styles.

FIXED-FIELD FORMAT

In fixed-field exports the full length of the field, as defined in the export format definition will be used to hold the data. No special characters will be used to separate fields or indicate data types.

There are three types of fields on the download format: TEXT, DATES, and NUMBERS.

TEXT FIELDS

TEXT fields are written left justified with trailing blanks added to fill the full width of the declared field size.

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 data elements, blanks will be exported.

NUMBER FIELDS

Number fields are exported right justified with leading blanks to fill the entire declared length of the field. For explicit number fields, all places to the right of the decimal are padded with zeros to fill the full-declared precision. Zero values will be exported as a "0" value with the formatting appropriate to the field. If no value is available, the field will be blank filled.

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.