FIELDBASETM

FIELD & RESERVOIR DATA

Now you have a single source of engineering & geological data for offshore fields and reservoirs.

Combine Fields/Sands/Reservoirs/Plays & Pools, with your favorite Energy Graphics data, such as Leases, Production, & Wells.

| First School | Status | Supervise | Status | Stat

Economic evaluations — Field development — Prospect analogues
Well planning — Competitor analysis
Benchmarking — Trend analysis

Data—The nucleus of any exploration project.

"Utilize FieldBase with INTELLEX Report to gather and report wells, completion data, production and reserve history all in one convenient system!"

Let Energy Graphics show you the possibilities.



6102 Milwee ST., Ste M Houston, TX 77092

USA

Phone: 281-558-2061 Fax: 281-558-7340

E-mail: sales@energygraphics.com Web: www.energygraphics.com FieldBase is Energy Information Partner's Gulf of Mexico field and reservoir database. Containing information on over 1200 fields, 8600 productive sands and 25,000 fault-block reservoirs, it is based on data developed and released by the Minerals Management Service, U.S. Geological Survey and the U.S. Department of Energy, as well as technical articles in professional and trade journals.

The complicated and confusing array of fields, pools, plays, sands and reservoirs are now joined with the traditional exploration data such as lease ownership, wells, production, and completions enabling geoscientists, engineers, landmen and managers to easily view data in ways that reveal the underlying operational, engineering and geological relationships.

Engineering Data

FieldBase provides annual MMS field reserve data beginning with 1975. Highlight any field or group of fields displayed in INTELLEX Report's Main report window and quickly view the yearly estimated recoverable hydrocarbons and cumulative production for the field in the Detail window.

Use FieldBase to identify the producing unit in a fault block ("reservoirs") and then extract the monthly or yearly production volumes from the completions and wells that penetrate it. Aggregate the reservoir detail to the sand and field levels to develop production profiles of the operating companies in your targeted areas.

Geological Data

FieldBase's integration of MMS sand and reservoir age determinations allow users to retrieve and view field, sand, reservoir, and play data based on geological ages and depositional styles such as aggradational, progradational, retrogradational, or submarine fan.

FieldBase sands are collections of one or more reservoir fault blocks in any field. Use INTELLEX Report's Mapview capability to display outlines of the sand boundaries and then "click" on them to report detail sand attributes such as porosity, temperature, reserves and production.

Play and Pool Interpretations

MMS assigned plays enable users to unravel the genetic trend of fields of the same age and depositional style. FieldBase contains play names and pool codes based upon combinations of chronozone abbreviations, depositional styles, and the number of plays and sub-plays the chronozone contains.

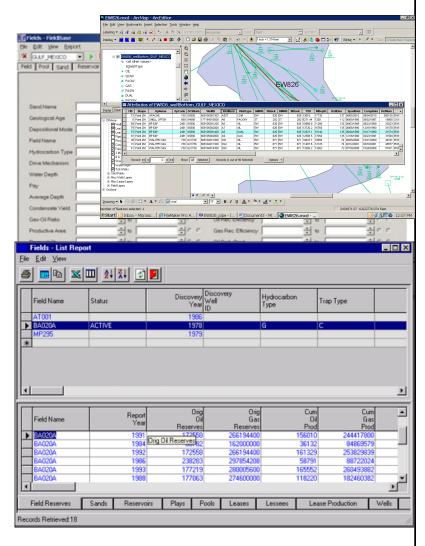
Use these groupings to identify important producing trends in the Gulf of Mexico or retrieve fields in specified plays and then view all sands and reservoirs with their engineering characteristics in easy-to-use spreadsheet style views.

Dynamic Reporting

Retrieve fields by ad hoc combinations of reservoir, well and production parameters. Color-fill the producing completions in each field, or have fields, sands and reservoirs outlined separately.

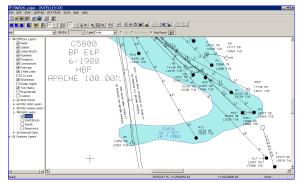
Below top: Using FieldBase data to display all Ship Shoal Active Fields and the Sands identified in SS167 Field.

Below bottom: INTELLEX Report Spreadsheet style Main/Detail field reports have tabs at the bottom for viewing reports on associated data .



Through FieldBase and INTELLEX Report you can easily combine summary level information about fields with the detail data on their producing units. Over 140 data elements are available to report for sands, reservoirs, fields, pools and plays.

FieldBase is not simply a compilation of new data types. FieldBase and INTELLEX Report integrate information on regional plays, pools and fields with Energy Graphics' most up-to-date information for Gulf of Mexico wells, leases, completions, directional surveys, production, platforms and pipeline data presently delivered through the INTELLEX Report software. INTELLEX Report users will see offshore data in an entirely new light, organized by fields and the stratigraphic units that produce in them.



Frequency Comparison

.218

Viewing Field **Outlines**

Outlines for all fields, sands and faultblock reservoirs included in the database to allow map displays of data that fit a specified criteria and fit the detailed data. Click map items to generate reports.

Producing zones are no longer just a name with no geological context, but are part of larger defined sand units with an assigned geological age and depositional style. With FieldBase your existing Gulf of Mexico data types become even more were developed and useful, and the time consuming and costly process of accessing and reporting disparate data from multiple, incompatible software applications is streamlined.

Intuitive Queries and Reports

Accessing data and displaying reports from FieldBase is simple and intuitive, allowing users to test ideas quickly and discover critical data relationships. Database queries are done through a series of selection screens that allow users to make retrievals on ad hoc combinations of the most important data elements.

Spreadsheet style main/detail reports present all aspects of a producing field's engineering, geological and operational parameters, including leases, wells, completions and production on easy to select tabs.

INTELLEX With Report's spreadsheet style reporting and exporting capabilities, users can easily design their own custom reports and export them into standard spreadsheet programs for proprietary statistical analysis and graphing.

Lognormal Distribution .164 Probability .055 .000 138 #1 Chi-Square Accept Cancel 1.00 3000.0 Prefs.. 0.80 2000.0 0.60 1500.0종 0.40 1000.0 500.0

Integration With Other Programs

FieldBase data can also be exported into other popular applications you are accustomed to using for doing additional types of analysis.

Powerful GIS Capabilities

A major part of FieldBase is a series of data layers that are accessed with the powerful map-viewing capabilities of INTELLEX Report.

INTELLEX Report's GIS capability allows you to click on an outline to retrieve relevant field, sand or reservoir information in areas of interest and then link to EGI's Gulf of Mexico databases.

INTELLEX Report's various displays allow you to see your retrieved data in relationship to your own exploration lead, prospect or field development project.

The FieldBase Data

FieldBase is an Oracle™ based database containing Field, Reservoir, Sand, Play and Pool level engineering and geological information for over 1200 Fields in the Federal Gulf of Mexico. FieldBase is updated monthly, assuring users access to the most recent data as it becomes available from the MMS. Major database attributes* are:

Field level data

Field name, alias, code & status
Discovery year & well, water depth
Hydrocarbon & trap types
First & last production dates
Total oil, gas & water production
Avg daily oil, gas & water production
Yearly original and remaining oil & gas reserves

Sand level data

Sand name, code, depth & age

Play and field name
Hydrocarbon, trap and depositional types
Permeability & porosity
Drive mechanism & area
Pay thickness & water saturation
Oil/gas recovery efficiency & Yield
API gravity, gas gravity & GOR
Initial Temperature & Pressure
Total oil, gas & water production
Avg daily oil, gas & water production

Play & Pool level data

Field & play names, pool & play codes
Depth, age, depositional mode
Pool hydrocarbon & trap types, drive mechanism
Permeability & porosity

Latest original and remaining oil & gas reserves

Play & Pool level data (continued)

Area, pay thickness & water saturation
Oil/gas recovery efficiency & Yield
API gravity, gas gravity & GOR
Initial Temperature & Pressure
Total oil, gas & water production
Avg daily oil, gas & water production
Latest original and remaining oil & gas reserves

Reservoir level data

Reservoir name, code, depth & age Play, field & sand name Discovery year & water depth Hydrocarbon, trap and depositional types Min & max permeability & porosity G/O, O/W, & G/O contact depths & areas Gross/net oil/gas pay and pay volume (a-f) Oil, gas, water saturations & recovery factors API gravity, gas gravity & GOR (initial & producing) Initial & present temperature & pressure Bubble & dew point pressures Water/oil ratio, oil viscosity Total oil, gas & water production Avg daily oil, gas & water production Latest original and remaining oil & gas reserves BOI, BGI factors Horizontal/vertical permeability

*Although defined in FieldBase, many attributes above may not contain data due to varying governmental regulations restricting data release.

Who Can Use FieldBase?

FieldBase extends the power and convenience of INTELLEX Report to a greater variety of end-users and increases productivity by providing a tighter integration of many typically disparate datasets.

Reservoir Engineers: Perform economic evaluation, risk analysis and field development.

Explorationists: Conduct prospect generation and regional trend analysis.

Landmen: Create analysis of leases by play trends.

Drilling Engineers: Improve well planning through offset analysis.

Geotechs: Simplify and enhance data retrievals and mapping.

Corporate Planners: Rapidly develop competitor analysis, benchmarking, acquisition analysis.

If you are a current user of INTELLEX Report, you already have the software you need. The FieldBase data loads directly into your system and integrates with its existing functionality. FieldBase will change the way you look at the Gulf of Mexico without changing the way you like to work with INTELLEX Report's powerful capabilities.

FieldBase and INTELLEX Report Program Platforms

INTELLEX Report is a database inspector and report generator using the Oracle database management software. Utilization of FieldBase data requires version 4.5 and higher, and will run under Windows 98, NT 4.0 or 2000. INTELLEX Report runs as a stand-alone program or as a companion to the Energy Graphics Unix based INTELLEX Exploration System for exploration mapping and data management.

Energy Information, Inc. is an Energy Graphics, Inc. affiliated company. FieldBase is a trademark of Energy Information, Inc. INTELLEX and INTELLEX Report are registered trademarks of Energy Graphics, Inc. All other brand names or products are trademarks or registered trademarks of their respective companies. Copyright © 2019 Energy Information, Inc.