



## GaS Maps

# The story of a web GIS deployment for GDF SUEZ E&P UK Limited Subsurface

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**€74.7 billion**

In 2014 revenues



**152,900**

employees

**ENGIE** is active across the entire energy value chain, in power and natural gas, upstream to downstream:

**Exploration & production**, purchasing and marketing of natural gas, LNG and power

Transport, distribution, management and development of major in power and natural-gas infrastructure (transport and distribution networks, storage sites, LNG terminals)

Development and marketing of energy and, in cooperation with SUEZ Environnement, of environmental services.





# Strategy



New areas, new regions, new geographies, new geologies > GIS



Create and manage new options

Develop and build infrastructure strategies



Infrastructure proximity, logistics, routing etc.

## Geospatial

Right information, right people, right time > geospatial



Leverage existing positions, skills, and Group synergies

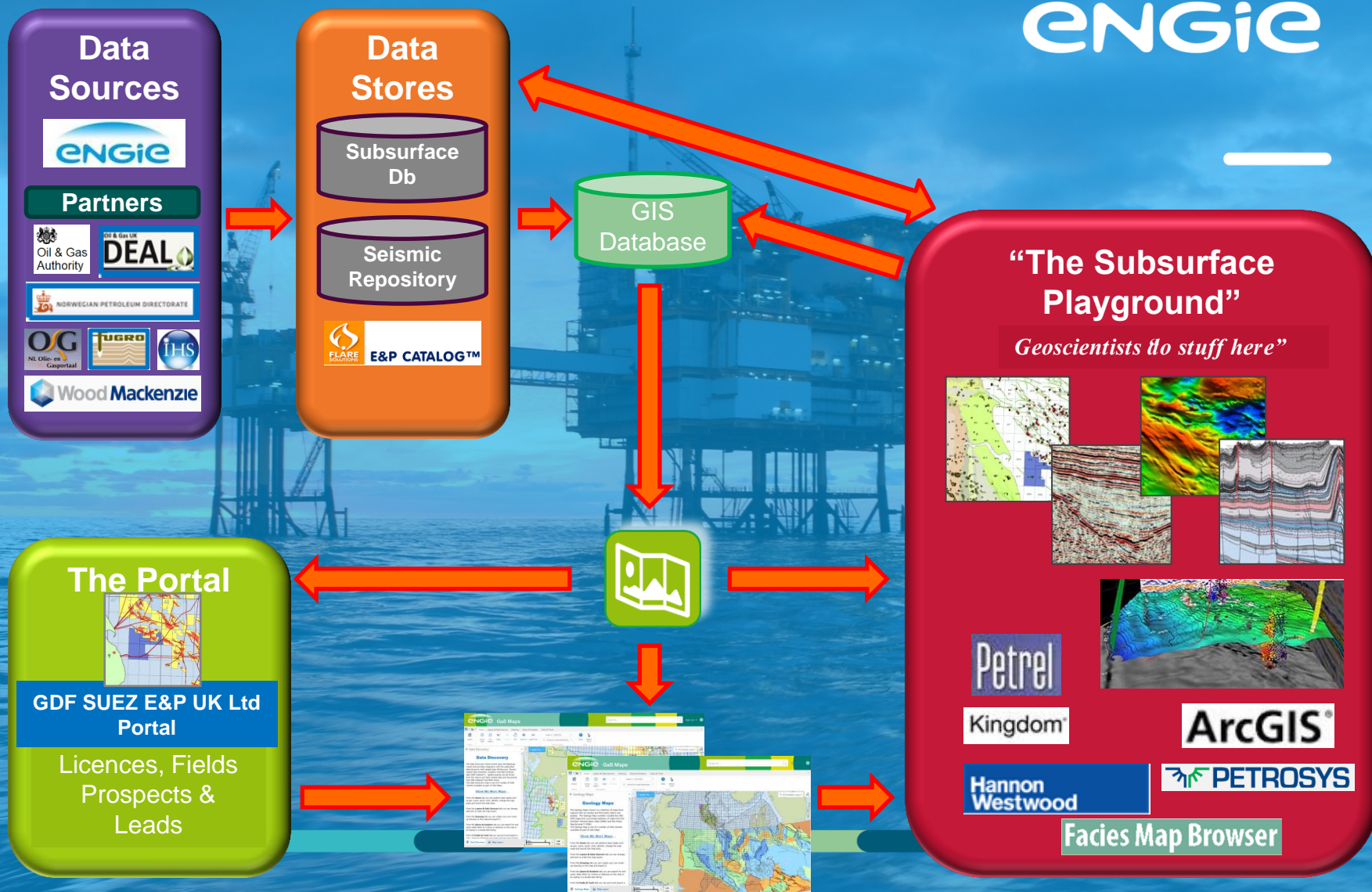
Shape existing areas



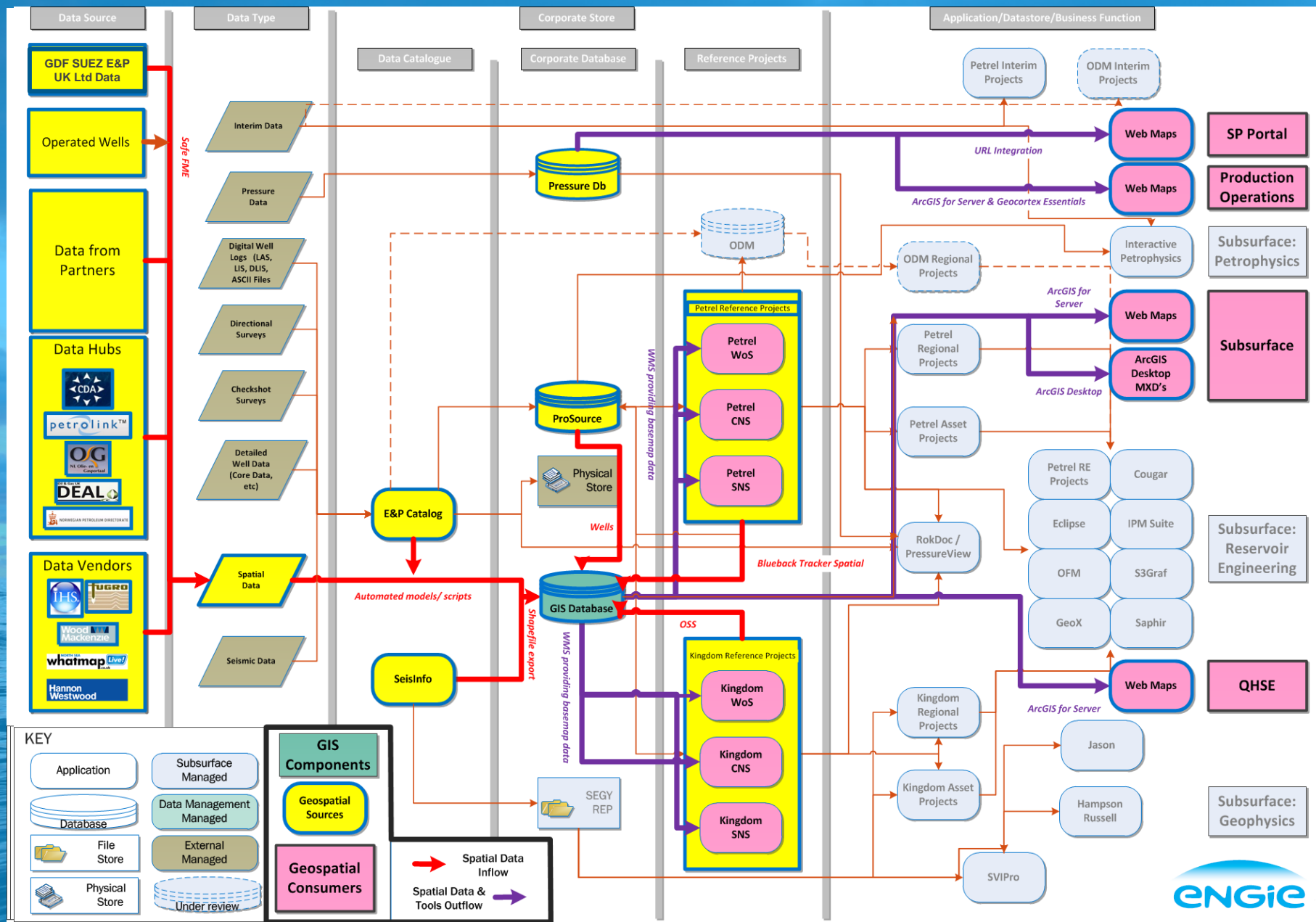
GIS to embed geo-contextual information in Asset Dashboards



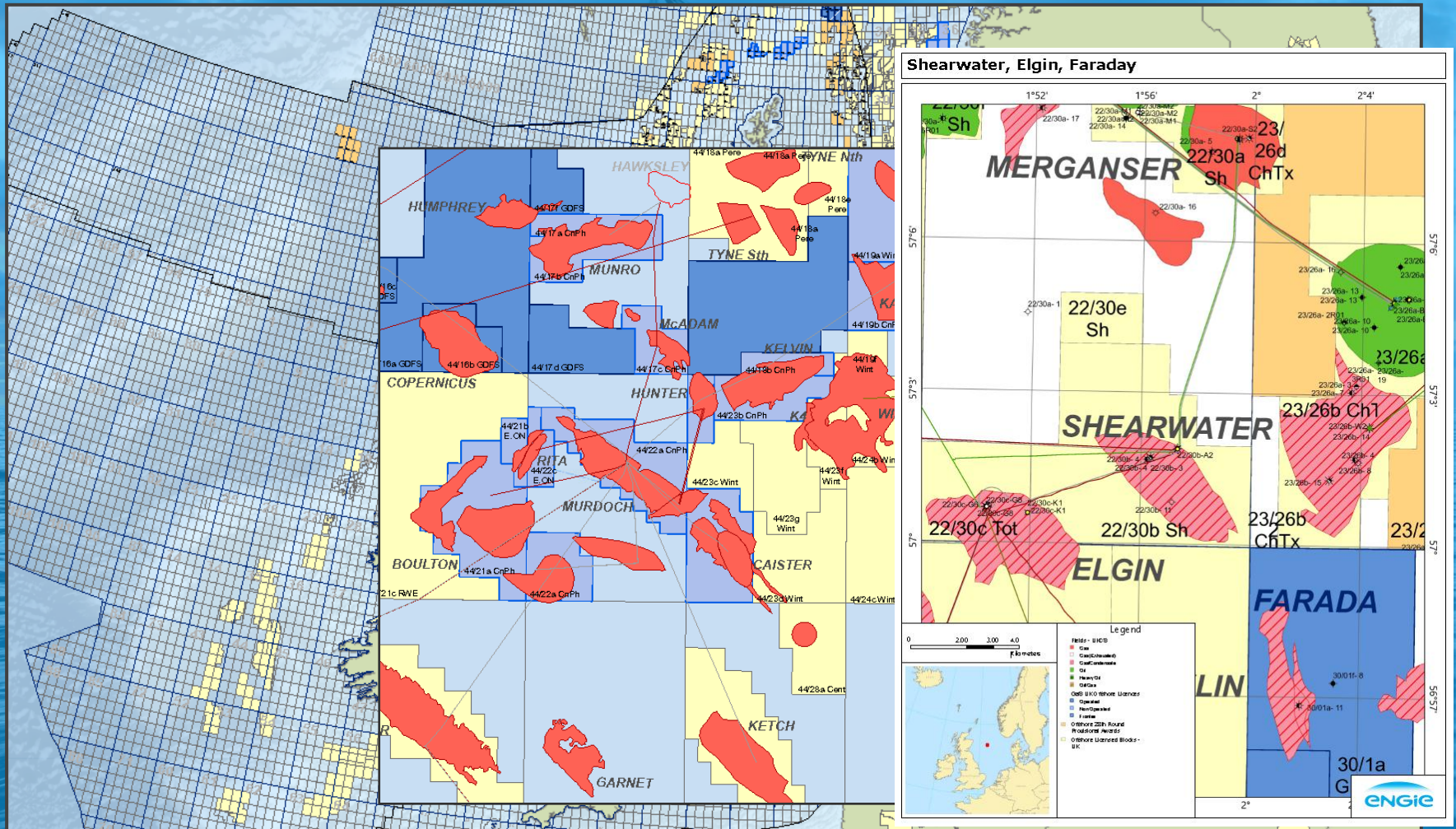
# Workflows





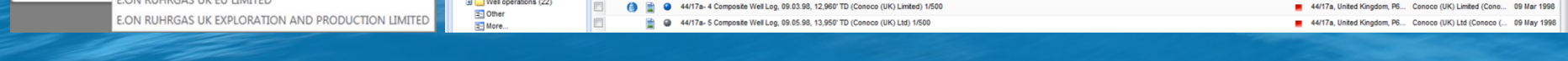
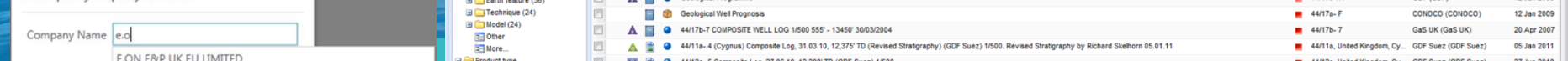
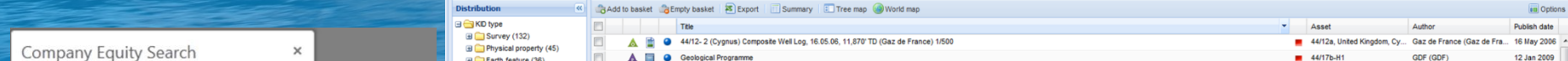
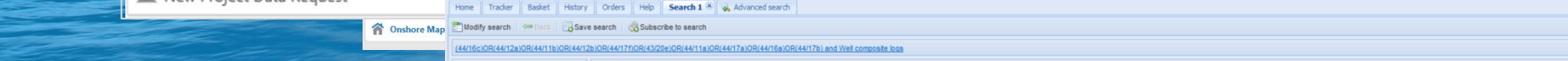
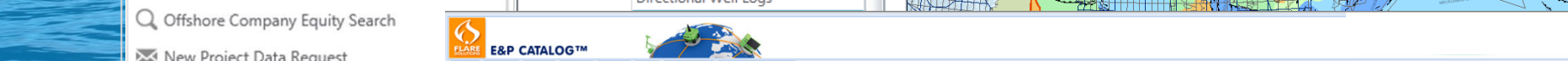
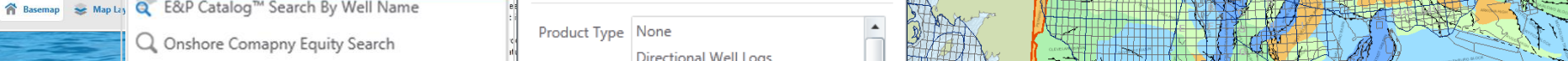
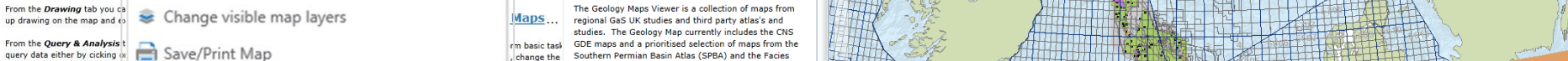
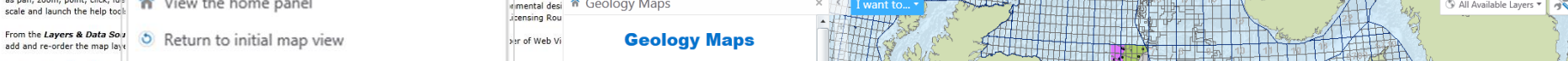
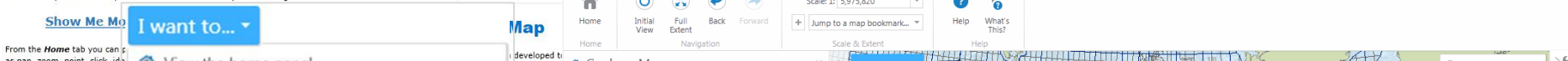
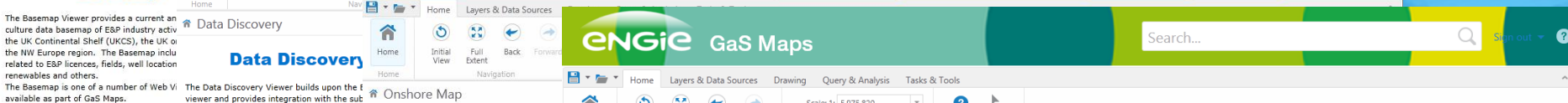
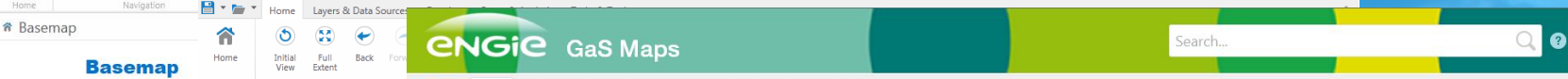
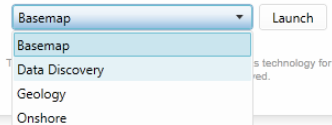


# I want my map to look like a map....





# GaS Maps



**I want to...**

- View the home panel
- Return to initial map view
- Change visible map layers
- Save/Print Map
- E&P Catalog™ Product Type & Block Selection**
- E&P Catalog™ Search By Well Name
- Onshore Company Equity Search
- Offshore Company Equity Search
- New Project Data Request

### Geology Maps

The Geology Maps Viewer is a collection of maps from regional GaS UK studies and third party atlas's and studies. The Geology Map currently includes the CNS GDE maps and a prioritised selection of maps from the Southern Permian Basin Atlas (SPBA) and the Facies Maps (FMA).

**Product Type**

Product Type: None  
Directional Well Logs

### Company Equity Search

Company Name:

- E.ON E&P UK EU LIMITED
- E.ON E&P UK LIMITED
- E.ON RUHRGAS UK E&P LIMITED
- E.ON RUHRGAS UK EU LIMITED
- E.ON RUHRGAS UK EXPLORATION AND PRODUCTION LIMITED

E&P CATALOG™				
Home	Tracker	Basket	History	Orders
Search 1	Advanced search			
Modify search	Back	Save search	Subscribe to search	
Distribution				
Add to basket Empty basket Export Summary Tree map World map				
KD type	Title	Asset	Author	Publish date
Survey (132)	44/12-2 (Cygnus) Composite Well Log, 16.05.06, 11.87° TD (Gaz de France) 1/500	44/12a, United Kingdom, Cy...	Gaz de France (Gaz de Fra...	16 May 2006
Physical property (45)	Geological Programme	44/17b-H1	GDF (GDF)	12 Jan 2009
Earth feature (36)	Geological Well Prognosis	44/17a-F	CONOCO (CONOCO)	12 Jan 2009
Technique (24)	44/17b-7 COMPOSITE WELL LOG 1/500 555' - 13455' 30/03/2004	44/17b-7	GaS UK (GaS UK)	20 Apr 2007
Model (24)	44/11a-4 (Cygnus) Composite Log, 31.03.10, 12.375° TD (Revised Stratigraphy) (GDF Suez) 1/500. Revised Stratigraphy by Richard Skelhorn 05.01.11	44/11a, United Kingdom, Cy...	GDF Suez (GDF Suez)	05 Jan 2011
Other	44/12a-5 Composite Log, 27.06.10, 12.200° TD (GDF Suez) 1/500	44/12a, United Kingdom, Cy...	GDF Suez (GDF Suez)	27 Jun 2010
Product type	44/17b-H1Z (44/17b-72) Munro, Composite Well Log, 28.07.05, 15.279° TD (ConocoPhillips) 1/500	44/17b, United Kingdom, P1...	ConocoPhillips (ConocoPhill...	28 Jul 2005
Well data files (59)	Composite Well Log Well 44/17a-6 & 44/17a-6Z	44/17a-6, 44/17a-6Z	Conoco	30 Nov 2009
Geological wellfiles (52)	44/17b-H1Z (44/17b-72) Composite Log, 18.06.05 - 05.07.05, 12.678° - 15.279° (ConocoPhillips) 1/500	44/17b, United Kingdom, Ma...	ConocoPhillips (ConocoPhill...	05 Jul 2005
Well engineering wellfiles (47)	44/17a-4 Composite Well Log, 09.03.96, 12.960° TD (Conoco (UK) Limited) 1/500	44/17a, United Kingdom, PE...	Conoco (UK) Limited (Cono...	09 Mar 1996
Petrophysical wellfiles (26)	44/17a-5 Composite Well Log, 09.05.96, 13.950° TD (Conoco (UK) Ltd) 1/500	44/17a, United Kingdom, PE...	Conoco (UK) Ltd (Conoco L...	09 May 1996
Well operations (22)				
Other				
More...				

# GaS Maps

Dynamic maps embedded in SharePoint  
> URL integration

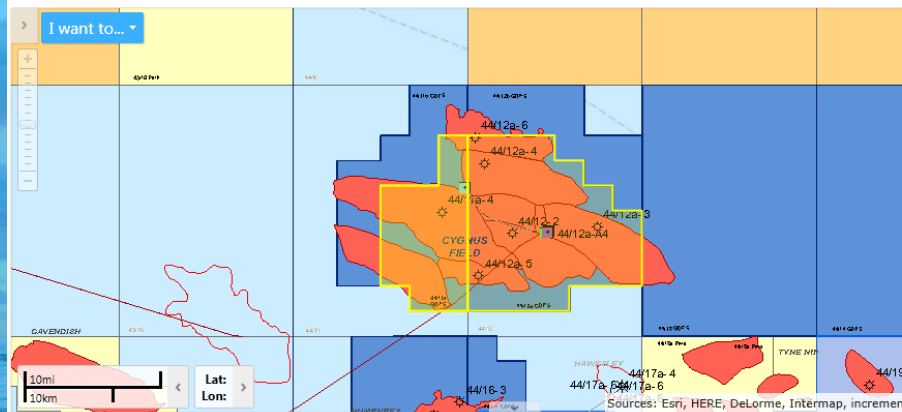


GaS UK Portal > Assets > Licence

## Licence

P1055

Region: Southern North Sea Block: 44/11a; 44/12a Licence Status: Active Licence Round: 20



★ Selected Results (3)

<< View History View Selected >> Refine Results | List View | Charting View | Zoom to All | Reports | Export to CSV | Export to Shapefile | Select All | Select None

GDF Licence Assets

Block	Licence	Licence Round	Licence Status	Opp or Non-Opp	Region
★ 44/11a;44/12a	P1055				Southern North Sea



## Asset Summary

Summary: Asset Test Main Stage: Depleted

Summary Data

Drill Ready? ☒ Yes Planned Drill Date 01/01/2016

BPP Class ☒ Lead

Licence EXL 288,P108

Block 16/2a

Water Depth 312.00

Infrastructure Asset? ☒ Yes

Reservoir Summary

Main HC Fluid Type ☒ Gas

Primary Reservoir

Secondary Reservoir

Lead Description

Geological Summary

Source

Seal

Trap

Migration

Target Description

Reservoir

Target Top ☐ Target Base ☐

Reservoir Properties

Gross

Net Sand

Net Pay

Net to Gross Ratio

Stratigraphic Column

Asset Map

Dynamic maps embedded in Ops Dashboards  
> ArcGIS Javascript API, HTML5, Bootstrap, Logi Info

Dynamic searches from maps to  
the corporate database  
> Oracle Views

44/24a- 5

Zoom to Feature | Pan to Feature | Create a Report | Copy to Drawing | Add to Selected | Export Feature Attachments

Details	Attributes	Links	Deviation Header	Deviation Survey	SNS	Checkshot Header	Checkshot Data	Log Data	Corp Formation	Tops Offshore	Cored Interval	Strat	ODM Core Analysis	Casing
UBHI	WELL_NAME	DEPTH_M	TWO_WAY_TRAVEL_TIME_S	SOURCE	CHECKSHOT_NAME									
B-GB44-24A-5	44/24a- 5	2316.48		1.8630	GDF Operated	44/24a- 5_VELSV_DM	Verified							
B-GB44-24A-5	44/24a- 5	2331.72		1.8710	GDF Operated	44/24a- 5_VELSV_DM	Verified							
B-GB44-24A-5	44/24a- 5	2346.96		1.8760	GDF Operated	44/24a- 5_VELSV_DM	Verified							
B-GB44-24A-5	44/24a- 5	2362.20		1.8830	GDF Operated	44/24a- 5_VELSV_DM	Verified							
B-GB44-24A-5	44/24a- 5	2377.44		1.8910	GDF Operated	44/24a- 5_VELSV_DM	Verified							
B-GB44-24A-5	44/24a- 5	2423.16		1.9140	GDF Operated	44/24a- 5_VELSV_DM	Verified							



# Business benefit



Quantifying – a continuous challenge

GIS is great – but is it a nice to have?

Some definitive “hard” benefits

Integrated benefits

Revisit the Strategy

But....





Thank you

Any questions?

**Grahame Blakey**

GIS Integration Project Manager  
GDF SUEZ E&P UK Ltd

