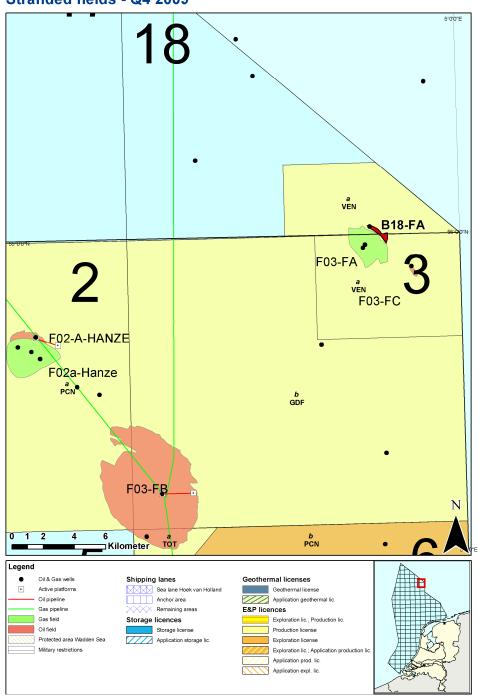




Fact sheet B18-FA

Stranded fields - Q4 2009



Location map of the B18-FA oil field

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General information

The B18-FA oil field was discovered in 1982 by NAM by well B18-03. It is situated in the production licenses F03a and B18a, both owned by Venture F3. The field is located in the northern part of the Dutch Central Graben, close to the Schill Grund High. The oil is contained in the clastic sandstones of the Lower Graben Formation (SLCL), in a NW-SE anticline, split up by a rift in the central part. The composite well log of the B18-03 discovery well shows complete results of the available RFT's. The well showed oil and minimal quantities of associated gas.

Sequence of events

| Date | Event |
|---------------|--|
| 08-03-1968 | NAM exploration license F03 |
| 04-01-1982 | Spud date B18-03 |
| 04/05-02-1982 | RFT's 2415,5-2444 (SGGS) and 2778-2830m AH (SLCL) |
| 11-02-1982 | Production test 2822-2833,5m AH (SLCL) |
| 17-02-1982 | Production test 17-02-1982m AH (SLCL) |
| 03-02-1982 | TD reached (2986m AH) |
| 09-09-1982 | NAM production license F03 |
| 09-10-1985 | NAM exploration license B18a |
| 30-11-2007 | Transfer license B18a to EDP F3, currently named Venture F3 |
| 13-12-2007 | F03 is split up in F03a and F03b |
| 13-12-2007 | NAM production license F03a |
| 13-12-2007 | Transfer license F03a to EDP F3 B.V., currently named Venture F3 |

Reservoir data

| Geological unit | Тор | Base | N/G | Net | Porosity |
|-------------------------------|-----------|-----------|--------------------|-------|--------------------|
| RGD & NOGEPA (1993) | m ah | m ah | % | m | % |
| Lower Graben Formation (SLCL) | 2769 m ah | 2868 m ah | 40-50 ¹ | 27,51 | 10-20 ¹ |

¹Data from CWL

Plug data

| Depth m ah | Porosity % | Horizontal permeability mD | Grain density cc/kg | Formation |
|---------------|------------|-------------------------------|------------------------|-----------|
| 2780 | 23.2 | 818.8 | 2.652 | SLCL |
| 2780.3 | 20.8 | 374.8 | 2.661 | SLCL |
| 2780.6 | 22 | 255.5 | 2.658 | SLCL |
| 2780.9 | 20.5 | 315.6 | 2.653 | SLCL |
| 2781.2 | 8.5 | | 2.554 | SLCL |
| 2781.5 | 8.2 | | 2.501 | SLCL |
| 2782.4 | 6.6 | | 2.406 | SLCL |
| 2782.7 | 6.2 | | 2.363 | SLCL |
| 2783.3 | 9.8 | | 2.556 | SLCL |
| 2783.6 | 11.5 | 4.4 | 2.611 | SLCL |
| 2783.9 | 11.6 | 12.6 | 2.64 | SLCL |

Hydrocarbon specifications

Gas properties

| Reservoir | CH ₄ % | C_2H_6 | CO ₂ % | N ₂ % | H ₂ S % | GHV MJ/m ³ |
|------------------------|-------------------|----------|-------------------|------------------|--------------------|-----------------------|
| Lower Graben Fm (SLCL) | 79,73 | 10,52 | 1,78 | 1,28 | - | 39,51 |

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Oil properties

| Reservoir | Specific gravity kg/m ³ | GOR in m ³ / m ³ |
|------------------------|---------------------------------------|---|
| Lower Graben Fm (SLCL) | 826 | 78 |

Volumes

Oil

| STOIIP 10 ⁶ m ³ st | | | Reserves 10 ⁶ m ³ st | | |
|--|------|----------|--|------|----------|
| P90 (1P) | Exp. | P10 (3P) | P90 (1P) | Exp. | P10 (3P) |
| | 1,09 | | 0,19 | 0,33 | 0,47 |

Productivity

| Test depth | Reservoir pressure in bar abs | Q well production at s.c. m ³ /d | Wellhead pressure bara |
|------------------------|-------------------------------|---|---------------------------|
| Lower Graben Fm (SLCL) | | 306 oil | 94 |

Well status

B18-03; plugged and abandoned.

Infrastructure

The nearest platform is: F03-OLT at approximately 20 km.

Public References

RGD & NOGEPA 1993, Stratigraphic nomenclature of the Netherlands, Mededelingen Rijks Geologische Dienst, Nr. 50

RGD 1984, Evaluatie van Olie- en Gasreserves in blok B18 ten behoeve van aanvrage spontane winningsvergunning, Report RGD 84RES14EX. (Advice production license application B18)

SodM 1982, Proces-Verbaal nr. 3978. (Official Report of the State Supervision of the Mines on the proven occurrence of gas/oil in a well)

NAM 1982: Composite well log, B18-03. On open file

For more information stranded Oil&Gas fields in the Netherlands:

http://www.nlog.nl/nl/reserves/reserves/stranded.html

For released Well data and Seismic data contact DINOloket:

http://www.dinoloket.nl

For geological maps of the deep subsurface of the Netherlands:

http://www.nlog.nl/nl/pubs/maps/geologic_maps/NCP1.html

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