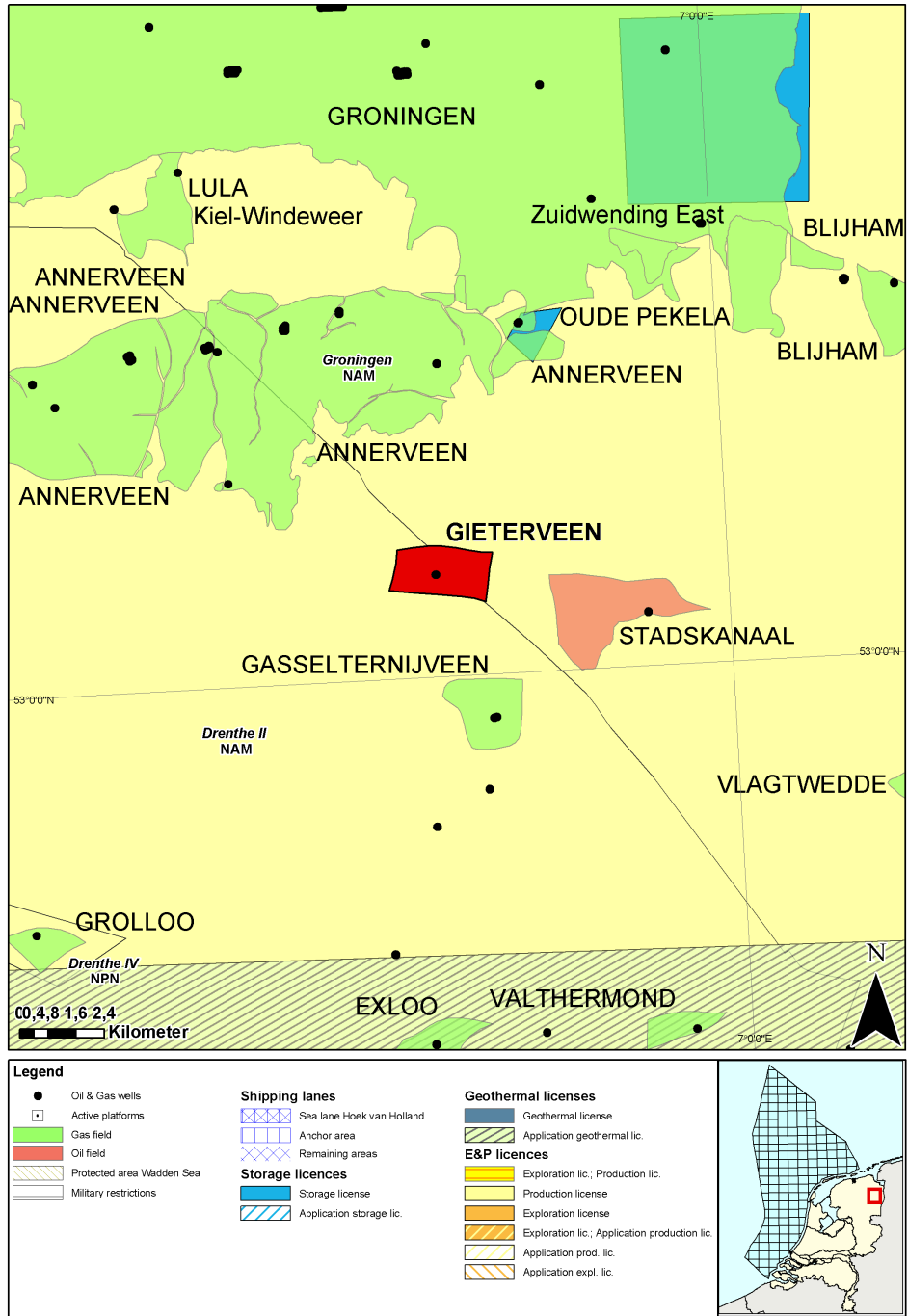




Fact sheet Gieterveen

Stranded fields - Q4 2009



Location map of the Gieterveen oil field

General information

The Gieterveen oil field was discovered in 1981 by NAM by well Gieterveen Oost-01. It is situated in the Drenthe II concession of the NAM, near the giant Groningen field. The field is located on the northwestern edge of the Lower Saxony Basin. Oil is contained in the Zechstein 2 Carbonate Member (ZEZ2C). Production test and results of RFT's are available on the composite well log.

The Zechstein 2 Carbonate is characterized by a great variation in thickness and composition within the area. To the south the Zechstein 2 Carbonate reaches a thickness of more than 190m. More information on the thickness pattern, 3D seismic and facies information is available in Van der Sanden (1996) and Geluk (2000).

Regional geological information of the Zechstein 2 Carbonate, the Slochteren Formation and the Tubbergen Formation, including the structural, regional porosity distribution of the Zechstein 2 Carbonate and burial history of the area is available in map sheet VI Veendam-Hoogeveen (TNO-NITG 2000).

Sequence of events

| Date | Event |
|------------|--|
| 04-04-1963 | Production license Groningen effective (NAM) |
| 04-11-1968 | Production license Drenthe granted (NAM) |
| 29-03-1981 | Spud date Gieterveen-Oost-01 |
| 14-06-1981 | Sidetracked (kickoff 2099 m ah) |
| 10-08-1981 | TD reached 4012 m ah |
| 13-08-1981 | RFT's 3699-3734 m ah (ROSL) |
| 20-11-1981 | Production license area expanded with ca 7,4 km ² (NAM) |
| 16-12-1981 | Production test 3633-3643 m ah (ZEZ2C) |
| 18-07-2007 | Split up Production license Drenthe; Drenthe II to NAM |

Reservoir data

| Geological unit | Top m ah | Base m ah | Net m ah | N/G % |
|---|-------------|--------------|-------------|----------|
| RGD & NOGEPa (1993) Zechstein 2 Carbonate Mbr (ZEZ2C) | 3633 m ah | 3643 m ah | 10 | 100 |

Hydrocarbon specifications

| Reservoir | CH ₄ % | CO ₂ % | N ₂ % | H ₂ S % | GHV MJ/m ³ |
|---|-------------------|-------------------|------------------|--------------------|-----------------------|
| Zechstein 2 Carbonate Mbr ¹ (ZEZ2C) | 76,09 | 1,08 | 7,63 | 0,4 | 43,5 |

¹Characteristics of associated gas.

Volumes

| Reservoir | STOIP 10 ⁶ m ³ | Reserves 10 ⁶ m ³ | | |
|--------------------------------------|--------------------------------------|---|----------|----------|
| | | Proven | Expected | Possible |
| Zechstein 2 Carbonate Mbr (ZEZ2C) | 0,5 - 1 | | | |

Productivity

| Test depth | Initial pressure in bar abs | Reference depth m TVD | CGR m ³ / 10 ⁶ m ³ |
|---|--------------------------------|--------------------------|--|
| Zechstein 2 Carbonate Mbr (ZEZ2C) 3633-3643 m ah | 595 | 3535 | 124 |

More detailed production information on CWL

Well status

GTV-01-s1: Plugged and abandoned.

Infrastructure

The nearest producing oil field is the Schoonebeek field, approximately 38 kilometers to the south.

Public References

- Geluk M.C. 2000, Late Permian (Zechstein) carbonate-facies maps, the Netherlands, *Geologie en Mijnbouw*: 79 (1) 17-27
- RGD & NOGEPa 1993, Stratigraphic nomenclature of the Netherlands, Mededelingen Rijks Geologische Dienst, Nr. 50
- TNO-NITG 2000. Geological Atlas of the Deep subsurface of the Netherlands. Map sheet VI: Veendam-Hoogeveen. Utrecht.
- Van der Sanden et al. 1996, Multi-disciplinary exploration strategy in the Northeast Netherlands Zechstein 2 Carbonate play, guided by 3D seismic. In: Rondeel, Batjes & Nieuwenhuijs (eds.) *Geology and gas and oil under the Netherlands*. Kluwer Academic Publishers (Dordrecht): 125-142

NAM 1987: Composite well log. *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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