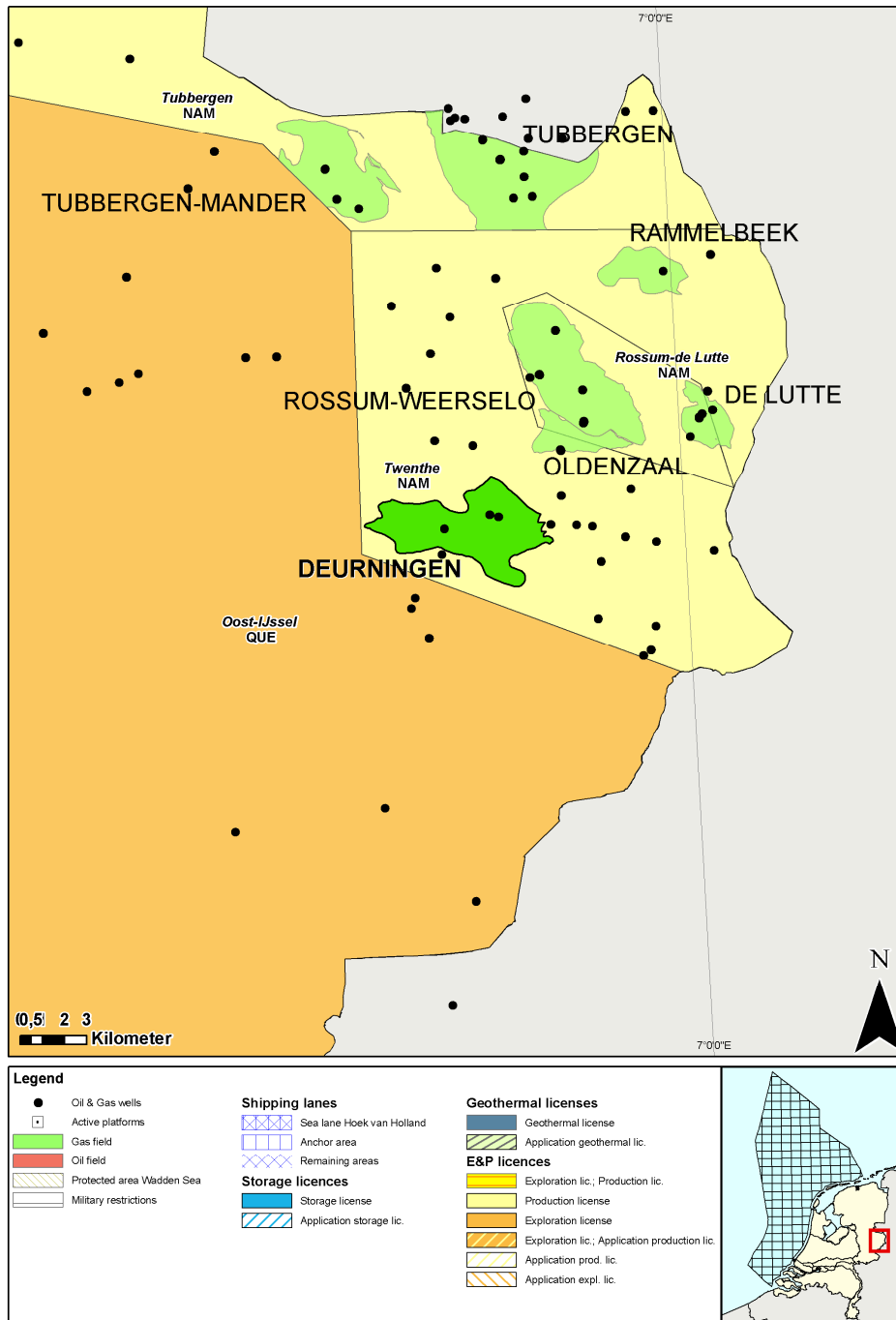




Fact sheet Deurningen

Stranded fields - Q4 2009



Location map of the Deurningen gas field

General information

The Deurningen gas field was discovered in 1997 by NAM by well Deurningen-01. It is situated in the Twenthe concession of the NAM in the eastern part of the onshore of the Netherlands and located at the boundary of the Overijssel-Achterhoek Platform and the Lower Saxony Basin. Gas is trapped in the Zechstein 2 Carbonate Formation (ZEZ2C). The well is tested at several reservoir levels. Complete results of RFT's are available on the composite well log.

The Zechstein 2 Carbonate Formation consists of fine grained dolomitic limestone with high organic material contents and shows a large variation in thickness (TNO, 2000). The Zechstein 2 Carbonate is characterized by a great variation in thickness and composition within the area. More information on the thickness pattern, 3D seismic and facies information is available in Van der Sanden (1996) and Geluk (2000). Further regional information on the sedimentology and the structural configuration of the area is available in map sheet X Almelo-Winterswijk (TNO-NITG, 1998).

Sequence of events

Date	Event
27-11-1972	Applied for Production license Twenthe (NAM)
27-01-1977	Production license Twenthe granted (NAM)
20-04-1997	Spud date Deurningen-01
15-05-1997	RFT's 1117,5 - 1245,5m ah (ZEZ3C & ZEZ2C Zechstein)
15-05-1997	RFT sample 1117,5 m ah (ZEZ3C Zechstein)
15-05-1997	RFT's 1480,5 - 1689,5m ah (DC Carboniferous)
15-05-1997	RFT sample 1482,5 m ah (DC Carboniferous)
04-07-1997	Production test (ZEZ3, ZEZ2 & DC)
12-05-1997	TD reached 1700.0 m ah

Plug data

Depth m ah	Porosity %	Horizontal permeability mD	Grain Density g/cm ³
1118	19.6	24.07	2.854
1141	14.8		2.853
1153	9.3	0.74	2.785
1162	6.9	0.04	2.824
1202	0.3		2.954
1214	3.4	0.01	2.799
1236	3		2.857
1241	10.3	0.28	2.843
1246	7.2	0.04	2.852
1471	7.8	0.14	2.711
1482	15.8	4.88	2.686
1489	14.8	1.74	2.706
1541	13.3	0.46	2.71
1596	13.5	0.73	2.716

Hydrocarbon specifications

Reservoir	CH ₄ %	CO ₂ %	N ₂ %	H ₂ S %	GHV MJ/m ³
Zechstein (ZEZ2C)	82	3	7		39,37

Volumes

Reservoir	GIIP 10 ⁹ m ³	Reserves 10 ⁹ m ³		
	Exp.	Proven	Expected	Possible
Zechstein (ZEZ2C)	0,46			

Productivity

Test depth	Borehole pressure Bar
1115-1125 m-RT (ZEZ3)	115
1200-1205 m-RT (ZEZ2)	
1235-1238 m-RT (ZEZ2)	125
1479-1495 m-RT (DC)	142

Well status

DRN-01: Closed-in since 25 May 1997.

Infrastructure

The nearest production facility is located approximately four kilometers to the northeast.

Public References

- Geluk M.C. 2000, Late Permian (Zechstein) carbonate-facies maps, the Netherlands, *Geologie en Mijnbouw*: 79 (1) 17-27
- NITG-TNO 1998. Geological Atlas of the Deep subsurface of the Netherlands. Map sheet X: Almelo-Winterswijk. Utrecht.
- RGD & NOGEPa 1993, Stratigraphic nomenclature of the Netherlands, Mededelingen Rijks Geologische Dienst, Nr. 50
- 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 1997: Composite well log, DRN-01. *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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