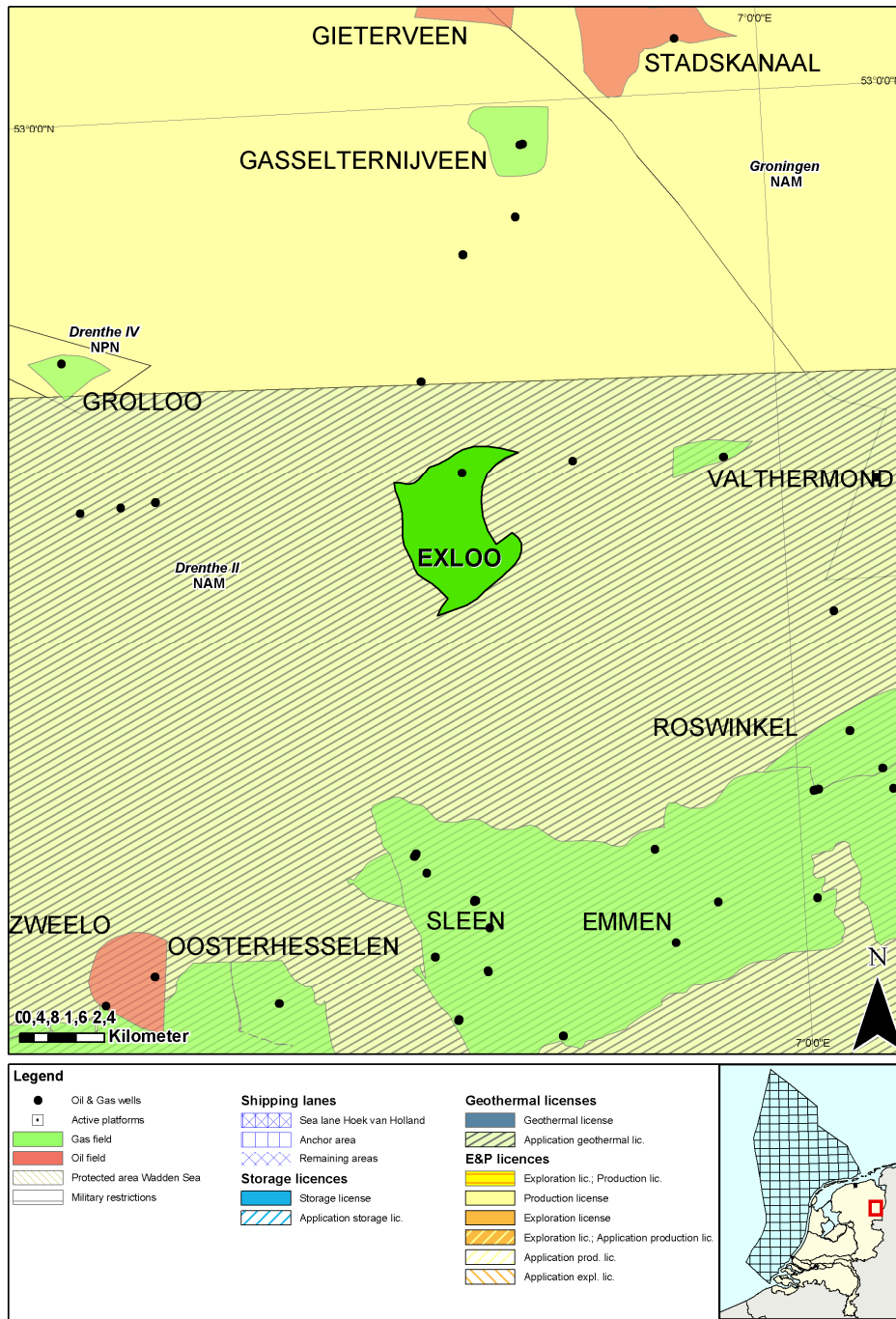




Fact sheet Exloo

Stranded fields - Q4 2009



Location map of the Exloo gas field

General information

The Exloo gas field was discovered in 1972 by NAM. The field contains gas in the Zechstein 2 Carbonate reservoir and is situated in the Drenthe II concession (NAM).

The Zechstein 2 Carbonate (Main dolomite) has a thickness of ca. 20m in the Exloo-02 well. 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. Photos of the Zechstein reservoir levels and production tests data are available. 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
04-11-1968	Production license Drenthe granted (NAM)
13-06-1972	Spud date EXO-02
26-05-1973	TD reached 3920 m ah
22-06-1973	Perforations 3861.0-3895.4 m ah
12-01-1973	TD reached 4283.0 m ah
20-11-1981	Production license area expanded with ca 7,4 km ² (NAM)
18-07-2007	Split up Production license Drenthe; Drenthe II to NAM

Reservoir data

Geological unit RGD & NOGEPA (1993)	Top m ah	Base m ah	Net m ah	N/G %	Porosity %	Permeability mD
Zechstein 2 Carbonate	3848	3910	62	100	2-20	0-2.7

Plug data

Depth m ah	Porosity %	Horizontal permeability mD	Grain density g/cm ³
3861.1	22.2	2.7	2.834
3862.6	16.5	0.6	2.843
3864.1	16.5		2.838
3865.6	18.8	0.4	2.842
3870.2	8.2		2.856
3873.2	19.4	0.7	2.832
3876.2	4.8		2.882
3879.2	2.3		2.926
3882.2	3.5		2.9834
3885.2	6.7		2.822
3888.2	7.5		2.85
3891.2	5.9		2.827
3894.2	1.9		2.891
3900.2	1.7		2.895
3903.8	0.4		2.844

More detailed plug data of this interval is available.

Hydrocarbon specifications

Reservoir	CH₄ %	CO₂ %	N₂ %	H₂S %	GHV MJ/m³
Zechstein 2 Carbonate	23.1	7.1	31.5	38.0	18.1

Volumes

Reservoir	GIIP 10⁹ m³	Reserves 10⁹ m³		
		Proven	Expected	Possible
Zechstein 2 Carbonate	2-4		0.5	

Well status

EXO-02, Abandoned

Infrastructure

The nearest production facility is located approximately eight 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 & NOGPA 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 1974, 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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