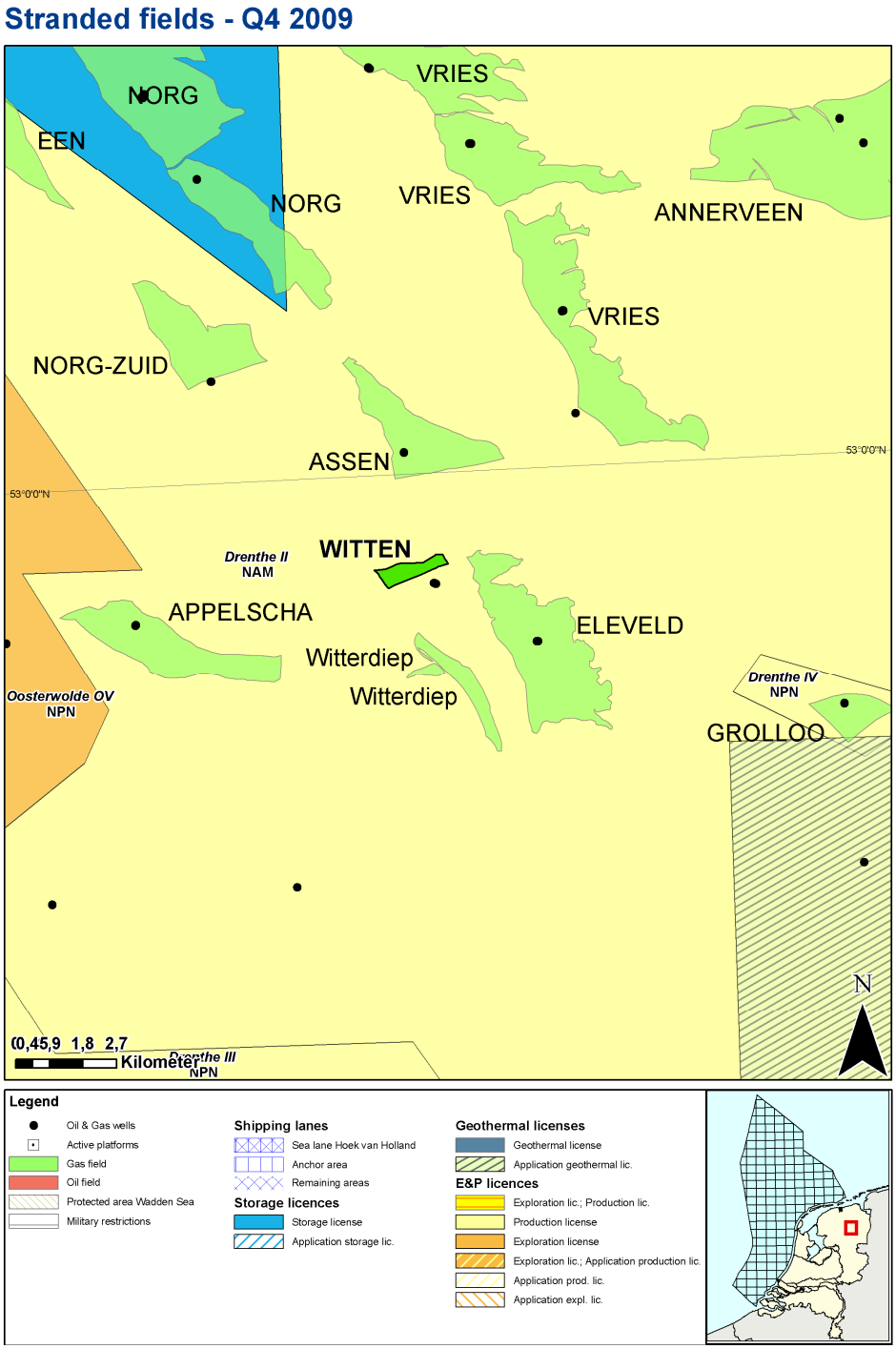
Fact sheet Witten



Location map of the Witten gas field

General information

The Witten gas field was discovered in 1995 by NAM by well Witten-01-sidetrack1 (WIT-01-S1). The field contains gas in the Slochteren formation (ROSL). As a secondary target gas can be found in the Limburg Group (DC). The Rotliegend structure is a dip closed horst block. Complete results of RFT's of the Slochteren Formation are available on the composite well log. The gas is not produced due to the small size of the Witten field.

The gas field is situated within the Drenthe II concession of NAM. The Witten gas field lies on the boundary between the Friesland platform and Lauwerszee Trough.

Regional information on the sedimentology and the structural configuration of the area is available in Map sheet VI: Veendam-Hoogeveen.

Sequence of events

Date	Event
04-11-1968	NAM license Drenthe
20-11-1981	Area Drenthe license expanded and changed
19-11-1994	Spud date Witten-01
15-12-1994	Sidetrack #1 (Kickoff 2535 m ah)
02-01-1995	RFT's 3285.0 – 3440.6 m ah
02-01-1995	RFT sample 3322.4 m ah (ROSL Rotliegend)
01-01-1995	TD reached 3481.0 m ah
18-07-2007	Drenthe license split up in Drenthe II, Drenthe III and Drenthe IV
28-08-2007	NAM production license Drenthe II (after split up Drenthe license)

Plug data

Depth m	**Porosity** %	**Horizontal permeability** mD	**Grain density** g/cm^3
3282.05	5.5	0.58	2.733
3283.15	6.9	5.2	2.689
3284.5	5.3	0.09	2.721
3338.1	16.5	25.05	2.671
3338.83	13.5	8.4	2.677
3339.13	26.4	2018.76	2.661
3339.43	26.2		2.7
3339.43	23.1	1790.2	2.666
3340.08	20.5	524.73	2.665
3341.03	16	18.24	2.686
3341.35	22	204.94	2.668
3341.95	16.1	14.21	2.693
3342.25	20.8	120.16	2.671
3342.55	22.1	388.24	2.665
3342.9	18.2		2.683

More detailed information of this interval is available

Reservoir data

Geological unit RGD & NOGEPA (1993)	**Top** m ah	**Base** m ah	**Net** m ah	**N/G** %	**Porosity** %
Upper Rotliegend Formation (ROSL)	3200	3260	± 55	90 – 100	0 - 10

Contacts

Reservoir	**Top structure** m TVD/MSL	**GWC** m TVD/MSL
Upper Rotliegend Formation (ROSL)	Approx. 3100	3140

Hydrocarbon specifications

Reservoir	**GHV** MJ/m^3
Slochteren Formation (ROSL)	36.4

Volumes

Reservoir	**GIIP** $10^9 m^3$	**Reserves** $10^9 m^3$ Proven	Expected	Possible
Slochteren Formation (ROSL)	0 - 0,5			

Productivity

Test depth	**Reservoir pressure** bar
RFT 3285.5 m-RT (ROSL)	337.7
RFT 3293.0 m-RT (ROSL)	359.4
RFT 3294.0 m-RT (ROSL)	358.4
RFT 3294.4 m-RT (ROSL)	375.8
RFT 3301.5 m-RT (ROSL)	359.1
RFT 3305.5 m-RT (ROSL)	360.0
RFT 3308.9 m-RT (ROSL)	363.3
RFT 3322.4 m-RT (ROSL)	362.8
RFT 3322.4 m-RT (ROSL)	364.8
RFT 3323.6 m-RT (ROSL)	372.6
RFT 3334.2 m-RT (ROSL)	362.6
RFT 3342.2 m-RT (ROSL)	381.4
RFT 3352.0 m-RT (ROSL)	383.4
RFT 3354.6 m-RT (ROSL)	379.4
RFT 3366.5 m-RT (ROSL)	388.5
RFT 3377.5 m-RT (ROSL)	379.9
RFT 3388.9 m-RT (ROSL)	399.1
RFT 3396.2 m-RT (ROSL)	369.5
RFT 3438.0 m-RT (ROSL)	392.3
RFT 3440.6 m-RT (ROSL)	368.2

More RFT information is available on the well log

Well status

Witten-01-sidetrack1: Plugged and abandoned

Infrastructure

The gas field is situated between the producing gas fields Witterdiep (south), Eleveld (east) and Assen (north). The nearest production facility is located approximately thirteen kilometers to the north.

Public References

TNO-NITG 2000. Geological Atlas of the Deep subsurface of the Netherlands. Map sheet VI: Veendam-Hoogeveen. Utrecht.

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

NAM 1995: Composite well log, Witten-1/1A. *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 DINO*loket:*
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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