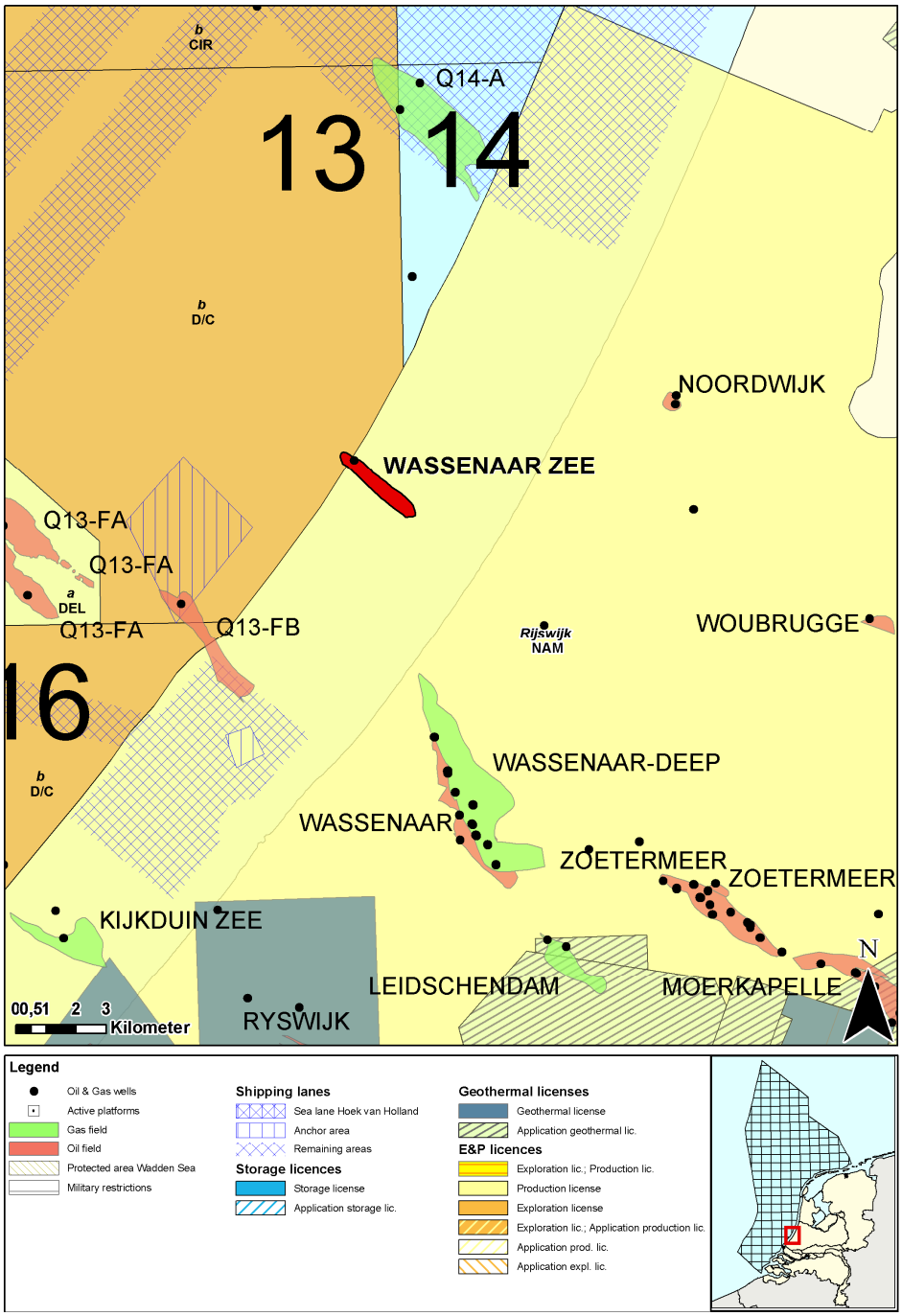
Fact sheet Wassenaar-Zee

Stranded fields - Q4 2009



Location map of the Wassenaar-Zee oil field

General information

The Wassenaar-Zee oil field was discovered in 1980 by NAM by well Wassenaar-Zee-01 (WAZ-01). The oil is trapped in anticlinal structure bounded by a NE-SW trending fault. The field contains oils in the Rijswijk Member (KNNSR) and below in two layers of the Delfland Subgroup (SLD). The Delfland sand layers are tested at several reservoir levels. Complete results of RFT's are available on the composite well log.

The oil field is situated within the territorial zone of the Rijswijk concession, approximately three km of the coast. The northwest tip of the field lies in the Q13b block of Delta Hydrocarbons. The field is located within the West Netherlands Basin.

Regional information on the sedimentology and the structural configuration of the area is available in map sheet VII Noordwijk-Rotterdam.

Sequence of events

Date	Event
04-06-1980	Spud date Wassenaar-Zee-01
18-06-1980	RFT's 1434.0 – 2008.5 m ah
08-07-1980	TD reached 2200.0 m ah
12-07-1980	Formation interval test 1423 m ah (KNNCR)
21/22-07-1980	Production test 1435,5 - 1444,5 m ah (SLD)
Rijswijk	
03-01-1955	Production license Rijswijk granted (NAM)
20-03-1957	Production license area expanded with ca 1900 km^2 (NAM)
07-06-1979	Production license area expanded with ca 25 km^2 (NAM)
Q13	
19-03-1968	Amoco exploration license Q13
19-03-1978	Amoco exploration license Q13b relinquished, Q10a still of Amoco
26-11-1980	Amoco exploration license Q13b
1983	Amoco exploration license Q13a relinquished
15-04-1985	NAM exploration license Q13a
26-11-1986	Amoco exploration license Q13b relinquished
16-01-1994	Wintershall exploration license Q13b
15-04-1991	NAM exploration license Q13a relinquished
05-08-1994	Wintershall exploration license Q13b relinquished, open blocks Q13b/c merge to form Q13b
23-12-2008	Island Netherlands exploration license Q13b-deep
29-12-2008	New Operator: Delta Hydrocarbons

Reservoir data

Geological unit RGD & NOGEPA (1993)	**Top** m ah	**Base** m ah	**Net** m ah	**N/G** %	**Porosity** %
Rijswijk Member (KNNSR)	1421	1432	5 - 10	40 - 50	7,7
Upper Delfland Subgroup (SLD)	1436,5	1457,5	10 - 15	40 - 50	14,7

Contacts

Reservoir	**Top structure** m TVD/MSL	**GWC** m TVD/MSL
Rijswijk Member (KNNSR)	Approx. 1300	1428

Volumes

Reservoir	**STOIIP** 10^6 m^3	**Reserves** 10^6 m^3		
		Proven	Expected	Possible
Rijswijk Member (KNNSR) & Upper Delfland Subgroup (SLD)	2 - 4			

Hydrocarbon specifications

Reservoir	**CH_4** %	**CO_2** %	**N_2** %	**H_2S** %	**GHV** MJ/m^3
Delfland Subgroup[1] (SLD)	94.76	0.64	0.63	-	40.65

[1]*Characteristics of associated gas*

Productivity

Test depth	**Reservoir pressure** bar
RFT 1434.0 m-RT (SLD)	142.7
RFT 1440.0 m-RT (SLD)	143.2
RFT 1440.5 m-RT (SLD)	143.2
RFT 1456.5 m-RT (SLD)	143.7
RFT 1520.0 m-RT (SLD)	150.1
RFT 1588.0 m-RT (SLD)	160.8
RFT 1715.0 m-RT (SLD)	169.7
RFT 1715.5 m-RT (SLD)	169.6
RFT 1791.0 m-RT (SLD)	177.4
RFT 1817.5 m-RT (SLD)	179.9
RFT 1818.5 m-RT (SLD)	179.9
RFT 1832.3 m-RT (SLD)	181.5
RFT 1838.0 m-RT (SLD)	181.9
RFT 1867.0 m-RT (SLD)	185.0
RFT 1889.0 m-RT (SLD)	187.2
RFT 1909.0 m-RT (SLD)	189.3
RFT 1920.5 m-RT (SLD)	190.5
RFT 1932.5 m-RT (SLD)	191.7
RFT 1993.5 m-RT (SLD)	197.8
RFT 2008.5 m-RT (SLD)	199.4

Stratigraphic interval	**Interval** m ah	**Reservoir pressure** in bar abs	**GOR** m^3 / m^3	**Water cut** %	**Q** well production at s.c. m^3/d/bar
Delfland Subgroup (SLD)	1436,5 - 1444,5	142,5 (1410 m ah)	20	0	2,2

More RFT and production test information is available on the well log

Well status

Wassenaar-Zee-01: Closed-in

Public References

TNO-NITG 2002. Geological Atlas of the Deep subsurface of the Netherlands. Map sheet VII: Noordwijk-Rotterdam, Map sheet VIII: Amsterdam Gorinchem. Utrecht.

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

SodM 1981, Proces-Verbaal nr. 5896. (Official Report of the State Supervision of the Mines on the proven occurrence of gas/oil in a well)

NAM 1980: Composite well log; WAZ-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 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