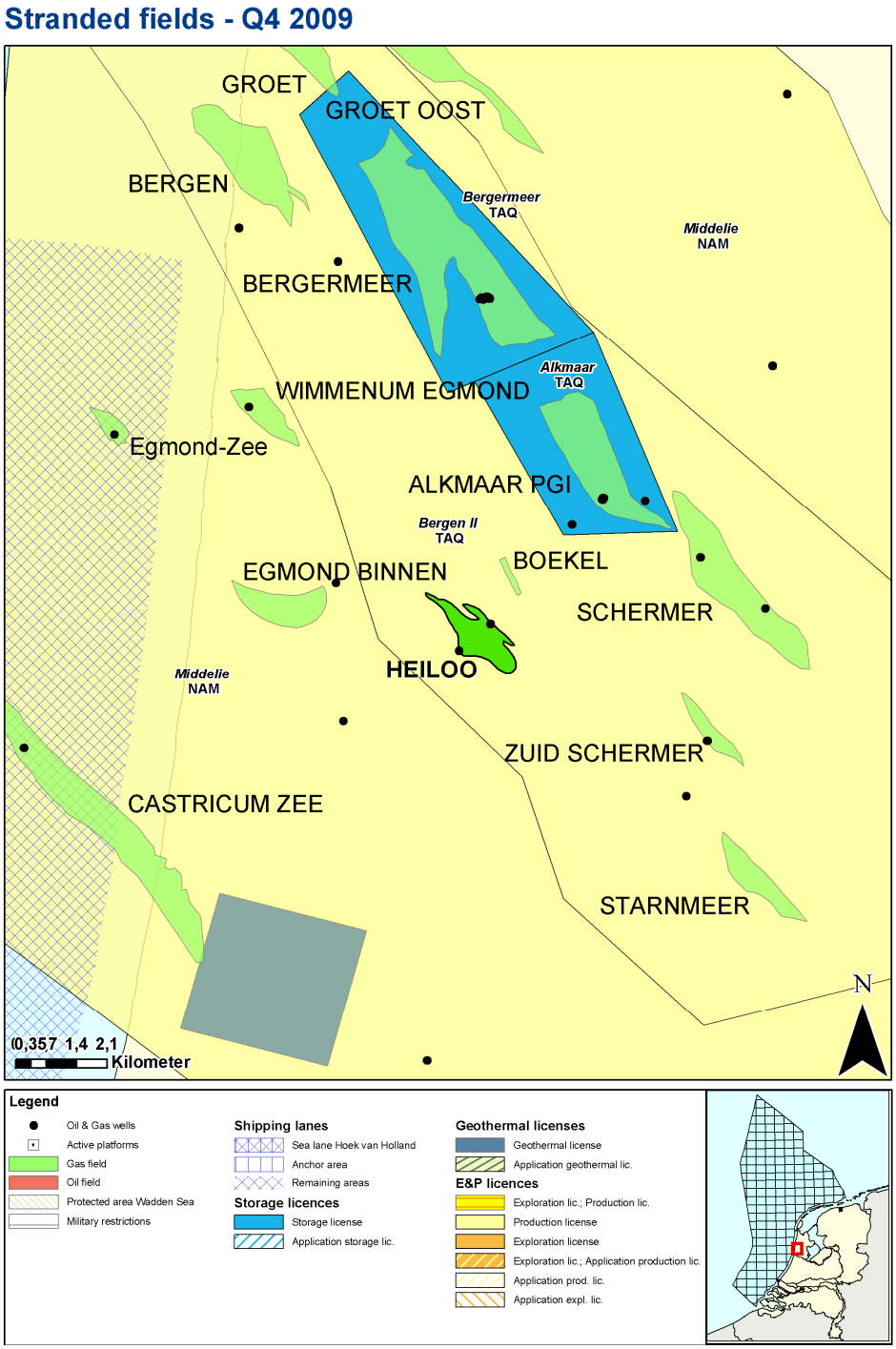
Fact sheet Heiloo



Location map of the Heiloo gas field

General information

The Heiloo gas field was discovered in 1965 by Amoco by well Heiloo-01. The field is situated in the Bergen II concession of TAQA. It is located in the middle of the Central Netherlands Basin. Gas is contained in the sandstones of the Buntsandstein Subgroup (RBM). Well HLO-01 also showed minor gas readings in the sandstones of the Rotliegend (ROSL), though not in commercial quantities. Complete results of the DST's in this well are available on the composite well log. Well Heiloo-02 also showed gas in the Rotliegend.

Regional information on the sedimentology and the structural configuration of the area is available in map sheet IV: Texel-Purmerend (RGD, 1993).

Sequence of events

Date	Event
11-01-1965	Spud date Heiloo-01 (Amoco)
14/15-03-1965	Production test (DST) 1702,5 - 1752,5 m ah
15-03-1965	Acid job
15/18-03-1965	Production tests (DST) 1702,5 - 1752,5 m ah
March-1965	TD reached 2272,5 m ah
20-03-1965	Well completed
01-05-1969	Production license Bergen granted (Amoco)
11-02-1982	Spud date Heiloo-02 (Amoco)
26-04-1982	TD reached 2458 m ah
23-12-2006	Split up Production license Bergen in Alkmaar, Bergermeer and Bergen II
23-12-2006	Production license Bergen II effective (BP Nederland Energie)

Plug data

Depth m ah	**Porosity** %	**Horizontal permeability** mD	**Grain density** g/cm^3	**Stratigraphy**
1778	16.3	23	2.73	RBMVL
1783	17.2	58	2.68	RBMVL
1783	24.5	315	2.67	RBMVL
1784	21.4	130	2.69	RBMVL
1796	9.2	0.73	2.67	RBMVL
2084	0.8	0.02	2.74	ZEZ3C
2090	14.4	49	2.85	ZEZ3C
2091	23.4	67	2.85	ZEZ3C
2115	1.8	0.01	2.71	ZEZ3C
2116	5.3	0.01	2.75	ZEZ3G
2122	11.6	0.16	2.82	ZEZ3G
2333	15.9	0.42	2.66	ROSL
2346	22.8	36	2.66	ROSL
2346	22.4	307	2.66	ROSL
2347	21.6	31	2.68	ROSL
2349	27.4	2.1	2.67	ROSL

More detailed information of this interval is available (Heiloo-02)

Reservoir data

Geological unit RGD & NOGEPA (1993)	**Top** m ah	**Base** m ah	**Net** m ah	**N/G** %	**Porosity** %
Buntsandstein Formation (RBSH)	1708 m ah	1720 m ah	11,8	100	4 - 20
Upper Rotliegend Formation (ROSL)	1995,1 m ah	2214,3 m ah	216,3	98,6	10 - 25

Hydrocarbon specifications

Reservoir	CH_4 %	CO_2 %	N_2 %	H_2S %	GHV MJ/m^3
Main Buntsandstein Subgroup (RBM)	95,27	0,24	2,42	0	41,78

Volumes

Reservoir	GIIP 10^9 m^3	Reserves 10^9 m^3		
		Proven	Expected	Possible
Main Buntsandstein Subgroup (RBM)	0 - 0,5		0-0.5	

Productivity

Test depth	Interval m-RT	Flowing Tubing Pressure in psi	Flowing BHP in psi	Q well production MMCF/d
Main Buntsandstein Subgroup (RBM) Before acid job	1702,5 - 1752,5	315		1,07
Main Buntsandstein Subgroup (RBM) After acid job	1702,5 - 1752,5	698	1018	1,42

Well status

HLO-01: Plugged and abandoned
HLO-02: Plugged and abandoned

Infrastructure

The nearest production facility is located approximately eight kilometers to the north.

Public References

RGD 1993. Geological Atlas of the Deep subsurface of the Netherlands. Map sheet IV: Texel-Purmerend. Haarlem.

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

SodM 1965, Proces-Verbaal nr. 2193. (Official Report of the State Supervision of the Mines on the proven occurrence of gas/oil in a well)

Amoco 1965: Composite well log, HLO-01. *On open file*

Amoco 1982: Composite well log, HLO-02. *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