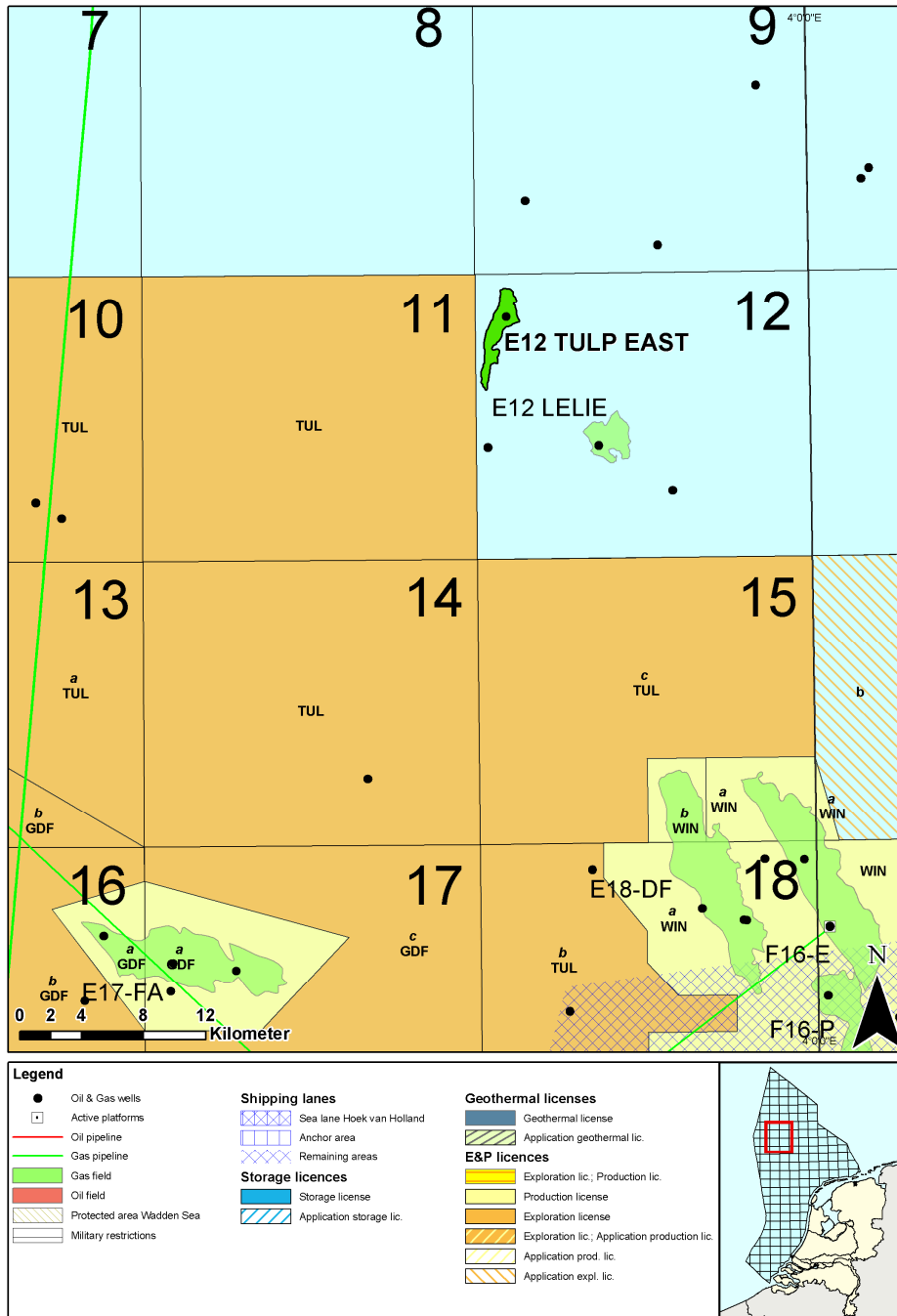




# Fact sheet E12-Tulip East field

## Stranded fields - Q4 2009



Location map of the E12-TE field

### **General information**

The E12-Tulip East gas field (E12-TE) was discovered in 1991 with exploration well E12-03. The gas is contained in sandstone of the Millstone Grit Formation (DCGM). The field has not been developed and currently lies the exploration license of GDF.

Data presented in this fact sheet are partly taken from an evaluation study on the E12-TE gas field. This study was compiled by TNO-NITG on behalf of the MEA in 1988.

The E12-TE field is defined by a N-S elongated structure, dipping to the east. It is confined by a fault on its western side, and by a dip closure on the other sides. The gas bearing rock is of Carboniferous age, and belongs to the Millstone Grit Formation (DCGM). The reservoir rock consists of a heterogeneous sequence of fine to medium fine grained sandstone beds and thick clay bodies. The clay bodies constitute barriers against vertical flow.

### **Sequence of events**

Date	Event
14-06-1978	Award exploration license E12 to NAM
14-06-1884	Relinquishment of areas E12b and E12c by NAM
14-06-1988	Expiration of exploration license E12a of NAM
29-12-1988	Exploration license application E12a by Elf Petroland
17-11-1989	Award exploration license E12a to Elf Petroland
16-01-1990	Exploration license E12a effective
08-06-1991	Spud date well E12-03 (Elf Petroland)
04-09-1991	Completion date well E12-03
20-12-1991	Production license application E12a by Elf Petroland
1999	Withdrawal of production license application and subsequent expiration of exploration license E12a
22-04-2009	Exploration license E12 effective (GDF)

### **Reservoir data**

Geological unit RGD & NOGEP (1993)	Top m TVD/MSL	Base m VD/MSL	Gross m	Net m	N/G -	Porosity %	Gas sat. %
Millstone Grit Fm DCGM Above GWC	3453.8	3500.5	46.7	16.8	0.360	9.3	41
Millstone Grit Fm DCGM Below GWC	3500.5	3530.5	30.0	23.6	0.787	13.2	

### **Plug data**

Depth m ah	Porosity %	Horizontal permeability mD	Grain density g/cm <sup>3</sup>
3494.03	6.76	0.1	2.65
3495.3	7.67	2.87	2.68
3496.03	9.57	0.23	2.67
3497.04	9.57	0.23	2.74
3498.07	8.36	0.13	2.74
3499.03	9.35	0.14	2.74
3500.03	9.48	0.2	2.71
3501.07	8.56	0.36	2.67
3502.03	8.95	0.18	2.64
3503.03	6.18	0.15	2.62

3504.05	4.62	0.09	2.64
3505.06	4.73	0.52	2.64
3506.04	3.07	0.01	2.74
3508.18	5.48	5.21	2.74
3509.04	7.41	0.26	2.69
3510.33	1.11	0.88	2.65
3511.15	0.9	0.5	2.64
3512.08	3.18	0.01	2.73
3513.07	2.65	0.01	2.71
3515.08	0.72	0.01	2.78

More detailed plug data of this interval is available.

### Contacts

Reservoir	Top structure m TVD/MSL	GWC m TVD/MSL
Millstone Grit Fm DCGM	Approx. 3400	3503 ± 2 from RFT

### Hydrocarbon specifications

Reservoir	CH <sub>4</sub> %	CO <sub>2</sub> %	N <sub>2</sub> %	H <sub>2</sub> S %	GHV MJ/m <sup>3</sup>	Density Rel. to air
Millstone Grit Fm DCGM	63.81	2.66	32.49	No info	24.43	0.719

### Volumes

GHP 10 <sup>9</sup> m <sup>3</sup> st				Reserves 10 <sup>9</sup> m <sup>3</sup> st			
P90 (1P)	Exp.	P50 (2P)	P10 (3P)	P90 (1P)	Exp.	P50 (2P)	P10 (3P)
0.88	1.17	1.16	1.46	0.46	0.68	0.66	0.90

### Productivity

Reservoir	Interval m TVD/MSL	Q50 calculated in m <sup>3</sup> /d at 50 bar drawdown	Kh mDm	Res. Pres. Bara at 3429 m TVD/MSL	BHT °C at 3429 m TVD/MSL
Millstone Grit Fm DCGM	3459.5- 3498.5	1 x 10 <sup>5</sup>	76	404	106

Results of DST #1 in well E12-03

Q50 based on available public data from composite log

### Well status

E12-03: Plugged and Abandoned

### Infrastructure

The nearest platform is: F16-A at 34 km. The nearest pipeline is also located at this platform.

### Public References

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

SodM 1991, Proces-Verbaal nr. 6139. (Official Report of the State Supervision of the Mines on the proven occurrence of gas/oil in a well)

TNO-NITG 1998, Advies Winningsvergunningaanvraag E12a, Report NITG 98-149-C (Advice production license application E12a. *Screened version on open file.*)

E12-03: Composite log of well. *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](http://www.nlog.nl/nl/pubs/maps/geologic_maps/NCP1.html)*

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