



TECHNICAL APPENDIX

Sillaro

The field commenced production in May 2010 from Sillaro-2dir and the following month the Sillaro-1dir well was tied-in.

During 2011, Sillaro reached a total production of 28.3 MScm (1.0 bcf) at an average gas flow rate of around 79,000 Scm/day (2.7 MScf/day). In 2011 Sillaro completed its first full year of production. In May a planned 3-day shut-down allowed the Company to record the bottom hole pressure of the producing levels, with the aim of evaluating reservoir behavior one year after production started. Dedicated Reservoir Engineering and Management (DREAM) incorporated the results into an updated dynamic model of the field. The results have confirmed remaining Proved reserves (1P) of 178.4 MScm (6.3 bcf) and Proved+Probable reserves (2P) of 201.1 MScm (7.1 bcf).

Cascina Castello (Vitalba)

In 2010, due to the pressure and flow rate drop and water incursion, the Company reduced production from the gas field and decided to side track the existing well to recover the remaining attic gas based on seismic reinterpretation and subsequent static and dynamic studies.

In November 2011, the planned work-over, which included a side track (Vitalba-1dirA), updip from Agnadello-1 and downdip from Vitalba-1dir, was drilled. The well found 4 metres of SAN A2 gas bearing sand structurally higher than Agnadello-1. Regrettably, the SAN A1 sand, although higher than in Agnadello, was found to be water bearing due to a rise in the gas/water contact.

Production restarted on 8 February 2012 from the Pliocene SAN A2 sand level and gradually increased to reach a stabilised rate of 17,000 Scm/day (0.6 MScf/day).

The updated assessment of SAN A2 gas remaining reserves estimates 1P reserves of 28.3 MScm (1.0 bcf), 2P reserves of 51.0 MScm (1.8 bcf) and Proved+Probable+Possible reserves (3P) of 70.8 MScm (2.5 bcf). After the first year of production an updated static and dynamic model of the field will be developed.

San Vincenzo

The Santa Maddalena-1dir well (SM1dir) was drilled in 2004 by the previous operator (Edison) and the test flowed up to 100,000 Scm/day (3.5 MScf/day). In 2008 Po Valley gained 100% ownership of the licence.

In February 2011, the Company shot 31 km of 60 fold 2D seismic lines. Seismic quality was good and the Company finalised a new seismic interpretation. The structural relief of the gas field from the new interpretation resulted in a reduced bulk rock volume and, therefore, in a reduced gas in place amount. This data was incorporated into an updated static and dynamic reservoir model by DREAM that suggests reduced 1C gas resources of 51.0 MScm (1.8 bcf) and 2C resources of 59.5 MScm (2.1 bcf) would be produced from the SM1dir well. 3C resources of 79.3 MScm (2.8 bcf) are estimated if a second well within the field structure should be drilled.



Bezzecca

The Bezzecca-1 well was drilled from March to May 2009 and was tested across three gas bearing levels of lower Pliocene and upper Miocene sequences. The tests flowed at stabilised rates up to 62,000 Scm/day (2.2 MScf/day) and exhibited rapid pressure recovery. The well was then completed in single-selective mode over the three levels.

An application to increase the size of the existing Cascina Castello production licence to include the nearby Bezzecca area was lodged in January 2011.

The gas field has Low estimate Contingent resources (1C) of 19.8 MScm (0.7 bcf), Best estimate Contingent resources (2C) of 116.1 MScm (4.1 bcf) and High estimate Contingent resources (3C) of 189.7 MScm (6.7 bcf).

Crocetta

The Fantuzza resources evaluation following the July 2010 field reassessment was standing at 1C of 51.0 MScm (1.8 bcf) from 1 well, 2C of 161.4 MScm (5.7 bcf) and 3C of 235.0 MScm (8.3 bcf) from 2 wells. Following a review of additional existing ENI well data within the area, the resources are being updated by the Company and FRL.

Cadelbosco Di Sopra

This exploration permit, together with the adjacent Grattasasso permit, was awarded to the Company in February 2011 and it contains the former ENI Correggio gas field.

A preliminary exploration assessment of the Correggio gas field (which produced 7.1 BScm / 253 bcf from 41 productive wells) confirmed the presence of remaining gas potential in this area.

During 2011, the Company interpreted 111km of 2D seismic (purchased from ENI) and together with a dynamic study and history match analysis carried out by DREAM, assessed the remaining Quaternary and Pliocene potential of the area.

Two Quaternary prospects, Zini-1 and Canolo-1, and one Pliocene prospect named Canolo-2 have been identified:

- Zini Qu: 1C gas resources of 31.1 MScm (1.1 bcf), 2C resources of 76.5 MScm (2.7 bcf) and 3C resources of 130.3 MScm (4.6 bcf);
- Canolo Qu: 1C gas resources of 19.8 MScm (0.7 bcf), 2C resources of 31.2 MScm (1.1 bcf) and 3C resources of 48.1 MScm (1.7 bcf)
- Canolo Pl: 1C gas resources of 11.3 MScm (0.4 bcf), 2C resources of 101.9 MScm (3.6 bcf) and 3C resources of 297.3 MScm (10.5 bcf)

The licence also includes the Bagnolo in Piano “deep” (Cretaceous carbonates) oil discovery (three wells drilled by ENI in the 1980s with target around 4,400 metres below mean sea level - bmsl). Structural seismic interpretation together with former well information and core data has been reviewed to determine the oil potential of the feature. 1C oil resources of 3.7 mmbbls, 2C oil resources of 4.3 mmbbls and 3C oil resources of 5.1 mmbbls were evaluated within the structure. Improved recovery factors should be achieved once modern stimulation techniques together with horizontal drilling could be tested on the first appraisal well.

AR168PY

AR168PY is located offshore in the north Adriatic sea (water depth: 30 - 50m). ENI previously drilled and tested positive gas flows in separate wells during the 1980s and 1990s (Irma-1, Carola-1, Carola-2) prior to relinquishing the area.



While waiting for the final award of the licence, the Company carried out a review of the Carola/Irma discoveries with the support of all existing technical documentation from the Ministry.

The review of the Irma-Carola gas discovery data resulted in estimated 1C resources of 620.1 MScm (22.0 bcf), 2C resources of 702.3 MScm (24.8 bcf) and 3C resources of 761.7 MScm (26.9 bcf).

Final recovery will be dependent on the finalised development plan.

Grattasasso

This licence, North and contiguous of Cadelbosco di Sopra, was awarded to the Company in January 2011. It includes the “deep” Eocene Ravizza oil discovery (1 well and 3 side-tracks drilled by ENI in the 1980s with target around 4,500 metres bmsl).

Structural seismic interpretation together with prior well information and core data was collected to perform a static reservoir study and to determine the oil potential of the feature. 1C oil resources of 2.2 mmbbls, 2C oil resources of 5.7 mmbbls and 3C oil resources of 10.7 mmbbls were evaluated within the Ravizza structure. As in the case of Bagnolo in Piano, improved recovery factors should be achieved once modern stimulation techniques together with horizontal drilling could be tested on the first appraisal well.

“Arithmetic” Total of Po Valley Energy Reserves and Resources

Reserves

- Proved (1P): 207 MScm (7.3 Bcf)
- Proved plus Probable (2P): 252 MScm (8.9 Bcf)
- Proved plus Probable plus Possible (3P): 272 MScm (9.6 Bcf)

Contingent Resources gas

- Low estimate (1C): 0.8 BScm (28.4 Bcf)
- Best estimate (2C): 1.3 BScm (44.1 Bcf)
- High estimate (3C): 1.7 BScm (61.5 Bcf)

Contingent Resources oil

- Low estimate (1C): 5.9 mmbbls
- Best estimate (2C): 10 mmbbls
- High estimate (3C): 15.8 mmbbls



Abbreviations

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| MScm | : million standard cubic metres |
| Mscf | : million standard cubic feet |
| bcf | : billion cubic feet |
| BScm | : billion standard cubic metres |
| mmbbls | : million barrels |
| MScf/d | : million standard cubic feet per day |
| Scm/d | : standard cubic metres per day |
| 1P | : Proved reserves |
| 2P | : Proved plus probable reserves |
| 3P | : Proved plus probable plus possible reserves |
| 1C | : Low estimate contingent resources |
| 2C | : Best estimate contingent resources |
| 3C | : High estimate contingent resources |

Definitions (2007 SPE/WPC/AAPG/SPEE Petroleum Resource Management System)

RESERVES are those quantities of hydrocarbon anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.

Proved Reserves are those quantities of hydrocarbon, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations (1P).

Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P).

Possible Reserves are those additional reserves which analysis of geoscience and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P) Reserves, which is equivalent to the high estimate scenario.

CONTINGENT RESOURCES are those quantities of hydrocarbon estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources, the general cumulative terms low/best/high estimates are denoted as 1C/2C/3C respectively.

PROSPECTIVE RESOURCES are those quantities of hydrocarbon estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. For Prospective Resources, the general cumulative terms low/best/high estimates still apply.

No specific terms are defined for incremental quantities within Contingent and Prospective Resources.