

PETROLEUM EXPLORATION AND PRODUCTION ACTIVITIES IN SOUTH AFRICA

Restriction Notice on Applications
 As of the 28 of June 2018, no new applications for Technical Cooperation Permits, Exploration Rights and Production Rights will be received until a notice of invitation for application is published. This affects all acreage offshore. It does not affect:
 - Reconnaissance permits - i.e. spec surveys/multi-client surveys
 - Applications made before the 28th June 2018
 - Current permit and right holders' exclusive rights to apply for exploration rights (from a TCP) or production rights (from an ER)
 The above-mentioned restriction does not apply to onshore areas under restriction notice dated 3rd February 2014.

Mineral and Petroleum Resources Development Act, No.28 of 2002.
Role of Petroleum Agency SA
 Under section 71 of the above Act, Petroleum Agency SA has been appointed the designated Agency, with the following responsibilities:
 - Promotion and regulation of exploration and production on and offshore
 - Receive applications, evaluate and recommend the award of permits and rights
 - Review, evaluate and recommend approval of EMPs
 - Monitor compliance of licence conditions
 - Maintain and add value to the national petroleum exploration and production database
 - Acquire reconnaissance data
 - Collect all prescribed fees
Permits and rights
 The above Act defines the following permits and rights:
 - Reconnaissance Permit - 12 months, non-exclusive
 - Technical Cooperation Permit - 12 months, exclusive desk-top study, exclusive right to apply for Exploration Right
 - Exploration Right - exclusive, transferable, 3 years, renewable for a maximum of 3 periods of 2 years each.
 - Production Right - exclusive, transferable, 30 years, renewable.

PANDE & TEMANE GAS FIELDS
 Combined reserves in excess of 5.5 Tcf. Now operated by Sasol/ENH partnership.

ONSHORE RIGHTS		
REF NUM	TYPE	CLIENT NAME
12/2/209	TCP	Bulwark Oil & Gas
12/2/210	TCP	Bulwark Oil & Gas
12/2/211	TCP	Bulwark Oil & Gas
12/2/213	TCP	Bulwark Oil & Gas
12/2/214	TCP	Bulwark Oil & Gas
12/2/215	TCP	Bulwark Oil & Gas
12/2/217	TCP	Bulwark Oil & Gas
12/2/235	TCP	Motuoane Energy
12/2/240	TCP	Motuoane Energy
12/2/241	TCP	Horomela Hale
12/2/243	TCP	Africa Geodata
12/2/244	TCP	Africa Geodata
12/2/245	TCP	Africa Geodata
12/2/246	TCP	Africa Geodata
12/2/247	TCP	Africa Geodata
12/3/002/1C	ER	Thungela Operations
12/3/270	ER	Afro Energy (Pty) Ltd
12/3/271	ER	Afro Energy (Pty) Ltd
12/3/272	ER	Afro Energy (Pty) Ltd
12/3/370	ER	Karobela Energy
12/3/373	ER	Imbokodo
12/3/374	ER	Imbokodo
12/3/315/1B	ER	Motuoane Energy
12/3/318/1A	ER	Rhino Oil
12/3/364	ER	Gondwana Energy
12/3/365	ER	Gondwana Energy
12/4/007	PR	Tetra4 (Pty) Ltd

ONSHORE APPLICATIONS		
REF NUM	TYPE	CLIENT NAME
12/2/234	TCP	Rhino Oil
12/2/238	TCP	Solium Energy
12/2/239	TCP	Solium Energy
12/2/240	TCP	Motuoane Energy
12/2/248	TCP	Serpentine Energy
12/2/249	TCP	H2Au Ltd
12/2/250	TCP	H2Au Ltd
12/2/251	TCP	H2Au Ltd
12/3/031/1A	ER	Tetra4 (Pty) Ltd
12/3/202	ER	Bundu Gas and Oil
12/3/208	ER	Falcon Oil and Gas
12/3/214/1A	ER	Gold One Africa
12/3/262/1C	ER	Booi Brothers
12/3/288/1A	ER	Twala Mayamonde
12/3/294/1A	ER	Rhino Oil
12/3/341	ER	Motuoane Energy
12/3/345	ER	Crowne Royale Energy
12/3/350	ER	Rhino Oil
12/3/367	ER	Bastion
12/3/368	ER	Bastion
12/3/376	ER	Panoro2B
12/3/377	ER	Rhino Oil and Gas
12/3/378	ER	Rhino Oil and Gas
12/3/379	ER	Rhino Oil and Gas
12/3/381	ER	Plateau Helium SA
12/3/382	ER	Plateau Helium SA
12/3/383	ER	Afro Energy
12/3/384	ER	Consulting Eva Mining
12/3/385	ER	Legacy Box Consulting

KUDU GAS FIELD
 BW Kudu (56%) Namcor (44%)
 Discovered in 1974 by a Chevron / Regent / Soekor consortium. The reservoir comprises Barremian (Early Cretaceous) aeolian sandstones with average porosities up to 22% at 4400m.

TOSACO 362ER
 Prospects/leads mapped in the drift sequence

SUNBIRD (Operator) (76%) PETROSA (24%) 003PR

PETROSA (100%) 248ER

SHELL (40.5%) QATAR (40.5%) 274ER
UMBONO (10%) OK ENERGY (9%)

IBHUBESI GAS FIELD
 Ibhubesi gas field comprises fluvial type channels and lobes of Albian to early Cretaceous age. Currently, this production right is under a Gas Market Development Plan with an Integrated Field Development Plan (IFP) ongoing.

SUNGU-SUNGU Petroleum (100%) 223ER
 Reprocessed 2D seismic data. Currently evaluating prospectivity in the drift sequence

- ONSHORE / OFFSHORE KEY**
- PETROLEUM EXPLORATION WELL
 - ▲ OIL SHOWS
 - COAL FIRED POWER STATION
 - GAS TURBINE POWER STATION
 - POSSIBLE FUTURE GAS PIPELINE
 - SEISMIC LINES
 - KOEBERG NUCLEAR POWER PLANT
 - COAL FIELD
 - ONSHORE OPEN ACREAGE
 - OFFSHORE OPEN ACREAGE
 - AREAS UNDER APPLICATION
 - TECHNICAL COOPERATION PERMIT
 - EXPLORATION RIGHT
 - PRODUCTION RIGHT
 - MINING LEASE (OIL) - Block 9
 - MINING LEASE (GAS) - Block 9

TotalEnergies (Operator) (40%) Shell (40%) PetroSA (20%) 224ER
 Interpretation of the recently acquired 3D seismic data is ongoing. Several prospective areas have been identified in the drift sequences

E-CE GAS FIELD (PetroSA 100%)
 Originally the Sable oil field, gas is now being produced from this Aptian age deep marine channel sandstone reservoir to supplement the feed to the Mossel Bay plant.

ORIBI/ORYX OIL FIELD (PetroSA 100%)
 Submarine fan deposits of Albian (Early Cretaceous) age. Currently not in production.

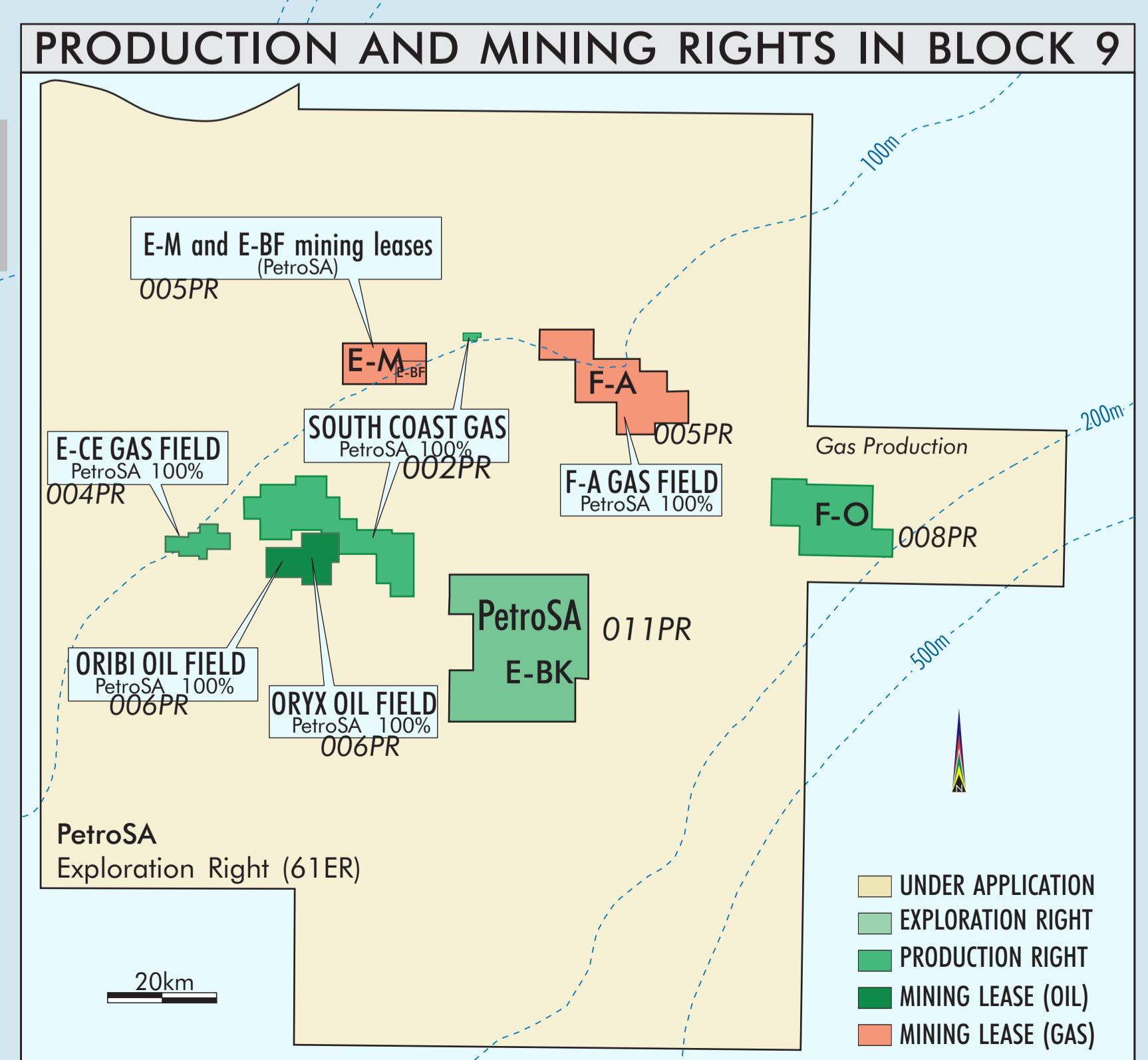
PETROSA BLOCK 9
 Ongoing exploration and appraisal of oil and gas discoveries. 061ER

F-A GAS FIELD & SATELLITES (PetroSA 100%)
 Currently producing from Early Cretaceous shallow marine sandstone reservoirs. Separate 91 km pipelines convey gas and condensate to the PetroSA GTL synfuels refinery at Mossel Bay where petrol, diesel, kerosene, etc are produced. F-O Field, 4 wells drilled and currently 2 producing.

TOTALENERGIES (45%) MAIN STR (10%) QATAR PETROLEUM (25%) CNR (20%) 013PR
 Two deep water, gas and condensate Apt-Albian discoveries, commercialisation is currently under discussion

NEW AGE ALGOA (50%) 201ER RIFT Petroleum (50%)
 Prospectivity evaluation of the synrift and post rift sequences ongoing

BG INTERNATIONAL (50%) IMPACT AFRICA (50%) 252ER



Visit our website at www.petroleumagency.co.za for more information
 This map does not constitute a final authority. Requests for further details should be addressed to the Chief Executive, Petroleum Agency SA.