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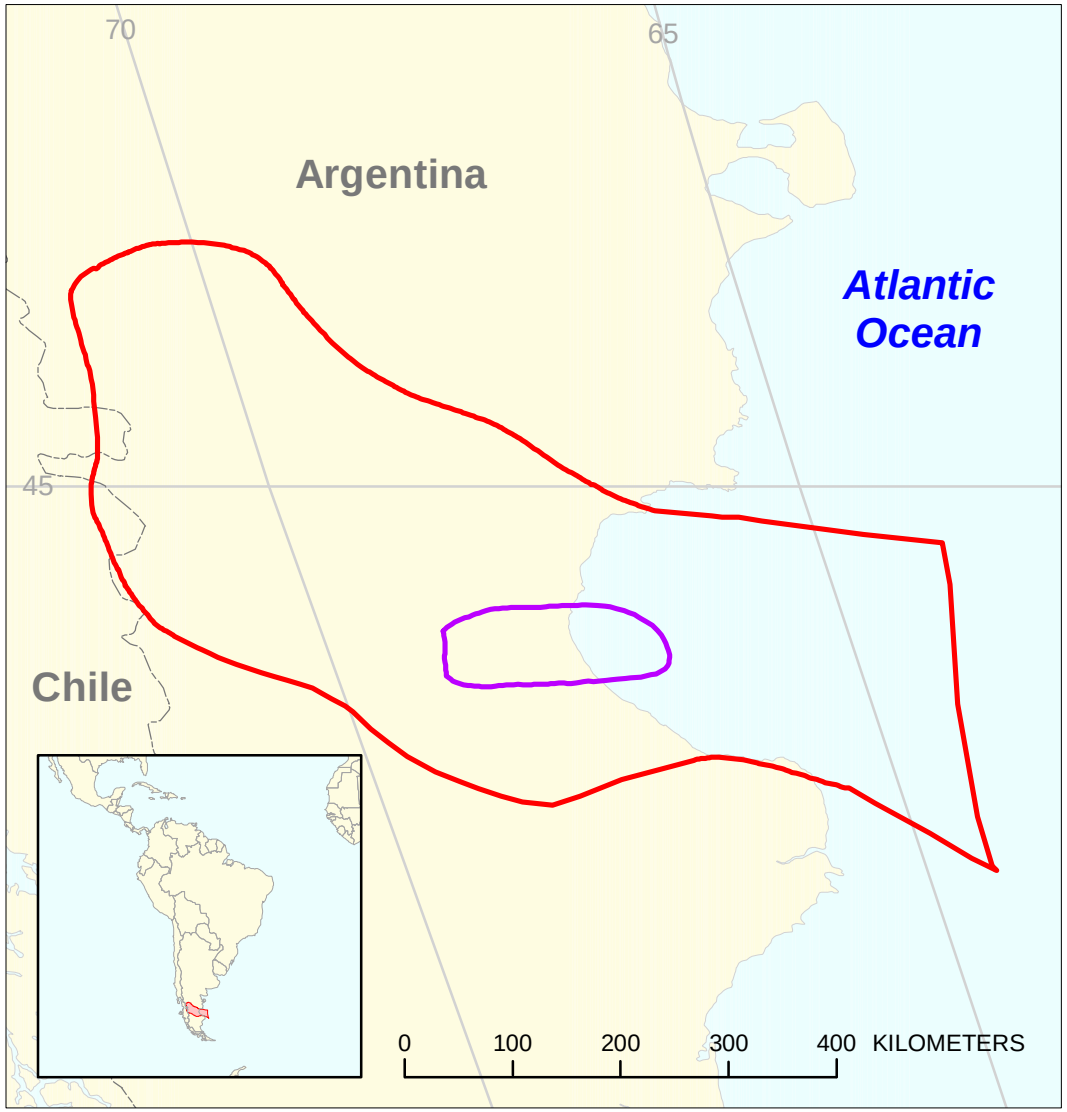
Hypothetical Basin-Centered Gas Assessment Unit 60580201



Hypothetical Basin-Centered Gas Assessment Unit 60580201

San Jorge Basin Geologic Province 6058

Geologic Summary

Detailed map of this assessment unit

Assessment Input Data

Assessment Results

This assessment unit was not assessed quantitatively.

USGS PROVINCE: San Jorge Basin (6058) **GEOLOGIST:** C.J. Schenk

TOTAL PETROLEUM SYSTEM: Aguada Bandera (605802)

ASSESSMENT UNIT: Hypothetical Basin-Centered Gas (60580201)

DESCRIPTION: This hypothetical assessment unit is defined by a regionally extensive pod of source rock that is in the gas-generative window in the central part of the San Jorge Basin. This has the potential for a basin-centered gas accumulation.

SOURCE ROCKS: Source rocks include lacustrine mudstones of the Upper Jurassic Aguada Bandera Formation, and possibly mudstones of the Upper Jurassic-Early Cretaceous Cerro Guadal Formation.

MATURATION: Gas generation probably began in the Late Cretaceous and continued into the Tertiary.

MIGRATION: Hydrocarbons in this assessment unit remain in proximity to the generative mudstones, and probably have not migrated any appreciable distance.

RESERVOIR ROCKS: Reservoirs are postulated to be fractured mudstones and sandstones of the Upper Jurassic and Early Cretaceous.

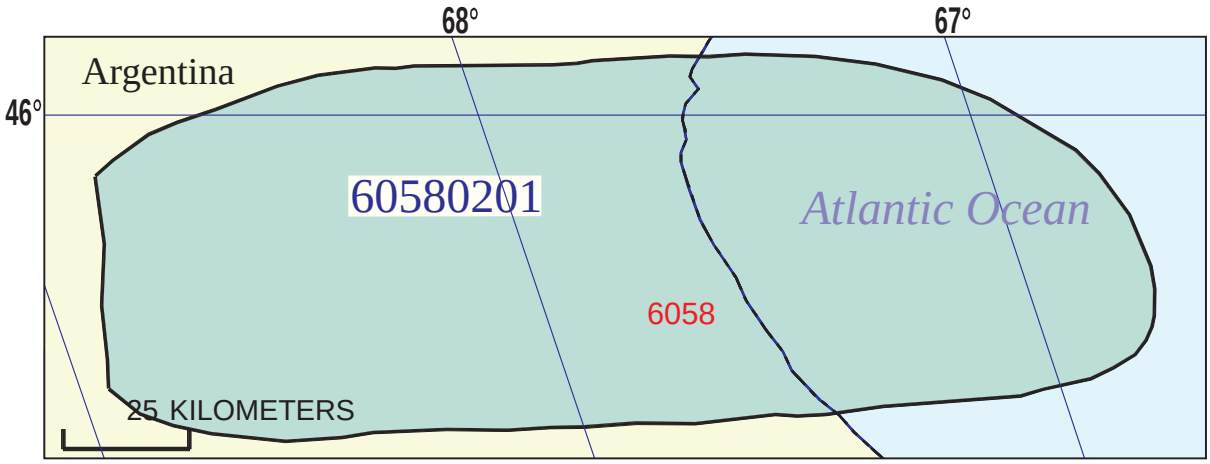
TRAPS AND SEALS: The low permeability host rocks serve as the regional trap and seal for this basin-centered accumulation.

REFERENCES

Figari, E., Conforto, G., Cid de La Paz, M., and Cevallos, M., 1998, Extensional tectonics and related structures in the south flank of the San Jorge Basin, Argentina, *in* Mello, M.R., and Yilmaz, P.O., eds., Petroleum geology in a changing world: American Association of Petroleum Geologists International Conference, Extended Abstracts Volume, Rio de Janiero, p. 864-865.

Fitzgerald, M.G., Mitchum, R.M., Uliana, M.A., and Biddle, K.T., 1990, Evolution of the San Jorge Basin, Argentina: American Association of Petroleum Geologists Bulletin, v. 74, no. 6, p. 879-920.

Petroconsultants, 1994, San Jorge Basin, Argentina–Basin Monitor: Geneva, Switzerland, Petroconsultants International, chapter paginated.



Hypothetical Basin-Centered Gas Assessment Unit - 60580201

EXPLANATION

- Hydrography
- Shoreline
- 6058 Geologic province code and boundary
- Country boundary
- Gas field centerpoint
- Oil field centerpoint
- 60580201 Assessment unit code and boundary

Projection: Robinson. Central meridian: 0

SEVENTH APPROXIMATION
NEW MILLENNIUM WORLD PETROLEUM ASSESSMENT
DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS

Date:……..	2/3/99		
Assessment Geologist:……..	C.J. Schenk		
Region:……..	Central and South America	Number:	6
Province:……..	San Jorge Basin	Number:	6058
Priority or Boutique……..	Priority		
Total Petroleum System:……	Aguada Bandera	Number:	605802
Assessment Unit:……..	Hypothetical Basin-Centered Gas	Number:	60580201
* Notes from Assessor	Continuous accumulation.		

CHARACTERISTICS OF ASSESSMENT UNIT

Oil (<20,000 cfg/bo overall) **or** Gas (≥20,000 cfg/bo overall):… _____

What is the minimum field size?…… _____ mmboe grown (≥1mmboe)
(the smallest field that has potential to be added to reserves in the next 30 years)

Number of discovered fields exceeding minimum size:…… Oil: _____ Gas: _____
Established (>13 fields) _____ Frontier (1-13 fields) _____ Hypothetical (no fields) _____

Median size (grown) of discovered oil fields (mmboe):
1st 3rd _____ 2nd 3rd _____ 3rd 3rd _____
Median size (grown) of discovered gas fields (bcfg):
1st 3rd _____ 2nd 3rd _____ 3rd 3rd _____

Assessment-Unit Probabilities:

Attribute	Probability of occurrence (0-1.0)
1. **CHARGE:** Adequate petroleum charge for an undiscovered field ≥minimum size……	_____
2. **ROCKS:** Adequate reservoirs, traps, and seals for an undiscovered field ≥ minimum size……	_____
3. **TIMING OF GEOLOGIC EVENTS:** Favorable timing for an undiscovered field ≥ minimum size	_____

Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3):…… _____

4. **ACCESSIBILITY:** Adequate location to allow exploration for an undiscovered field ≥ minimum size…… _____

UNDISCOVERED FIELDS

Number of Undiscovered Fields: How many undiscovered fields exist that are ≥ minimum size?:
(uncertainty of fixed but unknown values)

Oil fields:……min. no. (>0) _____ median no. _____ max no. _____
Gas fields:……min. no. (>0) _____ median no. _____ max no. _____

Size of Undiscovered Fields: What are the anticipated sizes (**grown**) of the above fields?:
(variations in the sizes of undiscovered fields)

Oil in oil fields (mmbo)……min. size _____ median size _____ max. size _____
Gas in gas fields (bcfg):…….. min. size _____ median size _____ max. size _____

Assessment Unit (name, no.)

_____

AVERAGE RATIOS FOR UNDISCOVERED FIELDS, TO ASSESS COPRODUCTS

(uncertainty of fixed but unknown values)

Oil Fields:	minimum	median	maximum
Gas/oil ratio (cfg/bo)……			
NGL/gas ratio (bngl/mmcfg)……			

Gas fields:	minimum	median	maximum
Liquids/gas ratio (bngl/mmcfg)……			
Oil/gas ratio (bo/mmcfg)……			

SELECTED ANCILLARY DATA FOR UNDISCOVERED FIELDS

(variations in the properties of undiscovered fields)

Oil Fields:	minimum	median	maximum
API gravity (degrees)……			
Sulfur content of oil (%)……			
Drilling Depth (m) ……			
Depth (m) of water (if applicable)……			

Gas Fields:	minimum	median	maximum
Inert gas content (%)……			
CO_2 content (%)……			
Hydrogen-sulfide content(%)……			
Drilling Depth (m)……			
Depth (m) of water (if applicable)……			

Assessment Unit (name, no.)

_____

ALLOCATION OF UNDISCOVERED RESOURCES IN THE ASSESSMENT UNIT TO COUNTRIES OR OTHER LAND PARCELS (uncertainty of fixed but unknown values)

1. _____ represents _____ areal % of the total assessment unit

Oil in Oil Fields:	minimum	median	maximum
Richness factor (unitless multiplier):……			
Volume % in parcel (areal % x richness factor):…			
Portion of volume % that is offshore (0-100%)……			

Gas in Gas Fields:	minimum	median	maximum
Richness factor (unitless multiplier):……			
Volume % in parcel (areal % x richness factor):…			
Portion of volume % that is offshore (0-100%)……			