

Attachment to WCR

Core Analysis & Petrological Final Rpt

Iona-1

(W970)





**PETROLEUM DIVISION**

**SPECIAL CORE ANALYSIS and PETROLOGICAL  
FINAL REPORT**

of

**24 DEC 1998**      *IONA-1*

for

***WESTERN UNDERGROUND GAS STORAGE PTY LIMITED***

by

**ACS LABORATORIES PTY LTD**

22 December, 1998



Western Underground Gas Storage Pty Limited  
Level 4  
459 Collins Street  
MELBOURNE VIC 3000

Attention: Andy Whittle  
Alan Tapley

**FINAL REPORT: 0433-08**

**CLIENT REFERENCE:** Fax dated 17<sup>th</sup> November, 1998  
**MATERIAL:** 1½" Core Plugs  
**LOCALITY:** Iona-1  
**WORK REQUIRED:** Special Core Analysis and Petrology

Please direct technical enquiries regarding this work to the signatories below under whose supervision the work was carried out.

A handwritten signature in black ink, appearing to read 'Kevin H Flynn'.

**KEVIN H FLYNN**  
Manager  
East Region

A handwritten signature in black ink, appearing to read 'G. Kraishan'.

**Dr GHAZI KRAISHAN**  
Petrologist, Geological Services  
East Region

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***CHAPTER 4***

**CRITICAL THROUGHPUT ANALYSES**

**4.2 Test Results**

**4.2.1 Permeability Summary**

**PERMEABILITY SUMMARY**

**Client** Western Underground Gas Storage Pty Limited  
**Well** Iona-1  
**Overburden** 1000 psi

Stack Number	Depth (metres)	Porosity (percent)	Permeability to Air (milliDarcy's)	Residual Water Saturation (percent)	Permeability to Air at Residual Water saturation	
					Ambient Temperature (70°F)	Reservoir Temperature (134°F)
1	1306.9-1312.4	24.5	14176	8.5	13659	-
2	1306.9-1312.4	23.9	11132	8.2	10991	-
Composite	1306.9-1312.4	24.2*	-	8.4*	10199	10217

\* Denotes average values