

DELIVERABLES AND TIMING

The project deliverables will consist of the following items:

- 1) High resolution standard digital images for cuttings samples (1024 x 780 pixels) and enhanced quality images at 4 different levels of magnification (x5, x10, x20 and x50) for selected wells.
- 2) User friendly PhotoSTRAT™ viewing software for viewing individual and multiple images.
- 3) Lithostratigraphic tops database with tops and thickness for each formation of each well.
- 4) A3 summary panel with integrated thumb nail images lithological and other freely available supplementary data.
- 5) High resolution core scan images delivered via user friendly software.
- 6) Hard copy fan fold plots of individual wells available by request, at extra cost.

Completion: Available for immediate purchase.

PRICE AND TERMS

The **PhotoSTRAT™ and Core and Slide Scan reference dataset** is available to E & P companies on a single company or group basis

Single company, entry fee for a minimum of 17 wells (25 year license).

£65,000 before 31st March 2017, £75,000 post completion

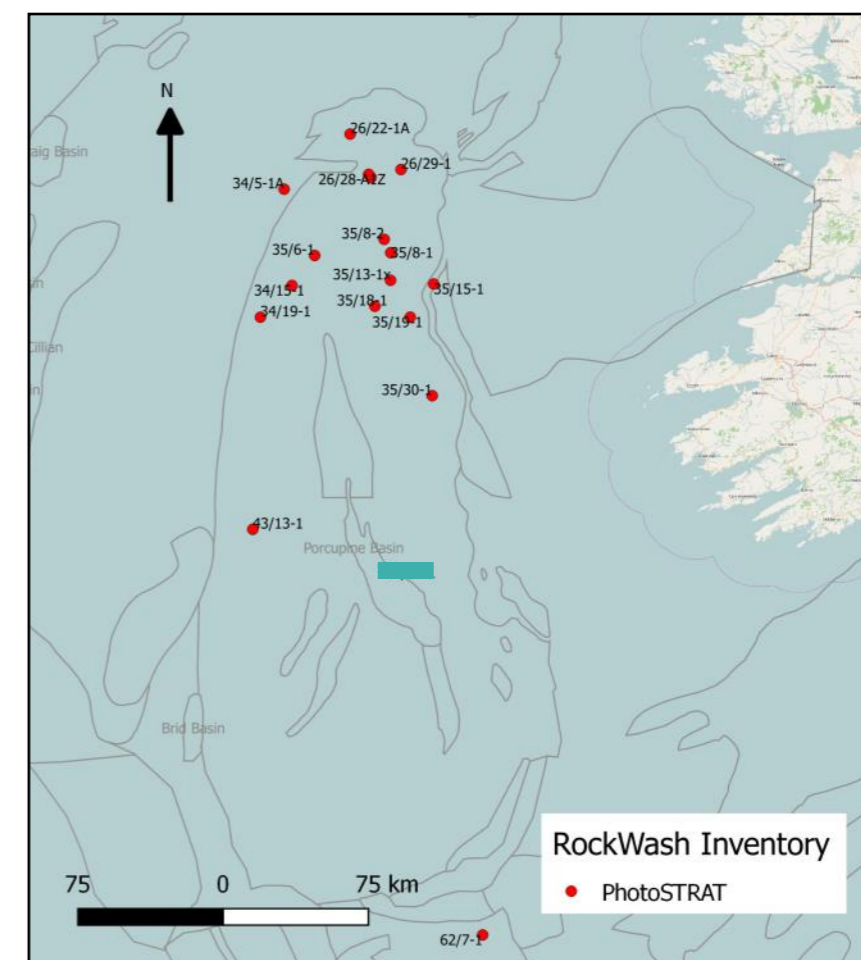
Availability: August 2017

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7. All local taxes will be added as appropriate.

Digital Rock Atlas, Porcupine Basin

A Lithostratigraphic Reference of 17 wells for the Porcupine Basin



- **High resolution & scaled images for every available cuttings sample in each well.**
- **XRF elemental data and inferred mineral composition**
- **High resolution core (>700m) and petrographic slide scan images (approximately 60).**
- **Images and elemental data integrated with relevant geological data.**

Cost: Single company, £65,000 before 31st March 2017, £75,000 post completion

Availability: August 2017

Further Information and Contacts:

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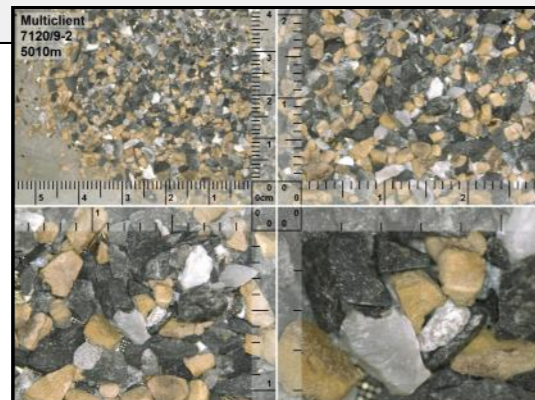
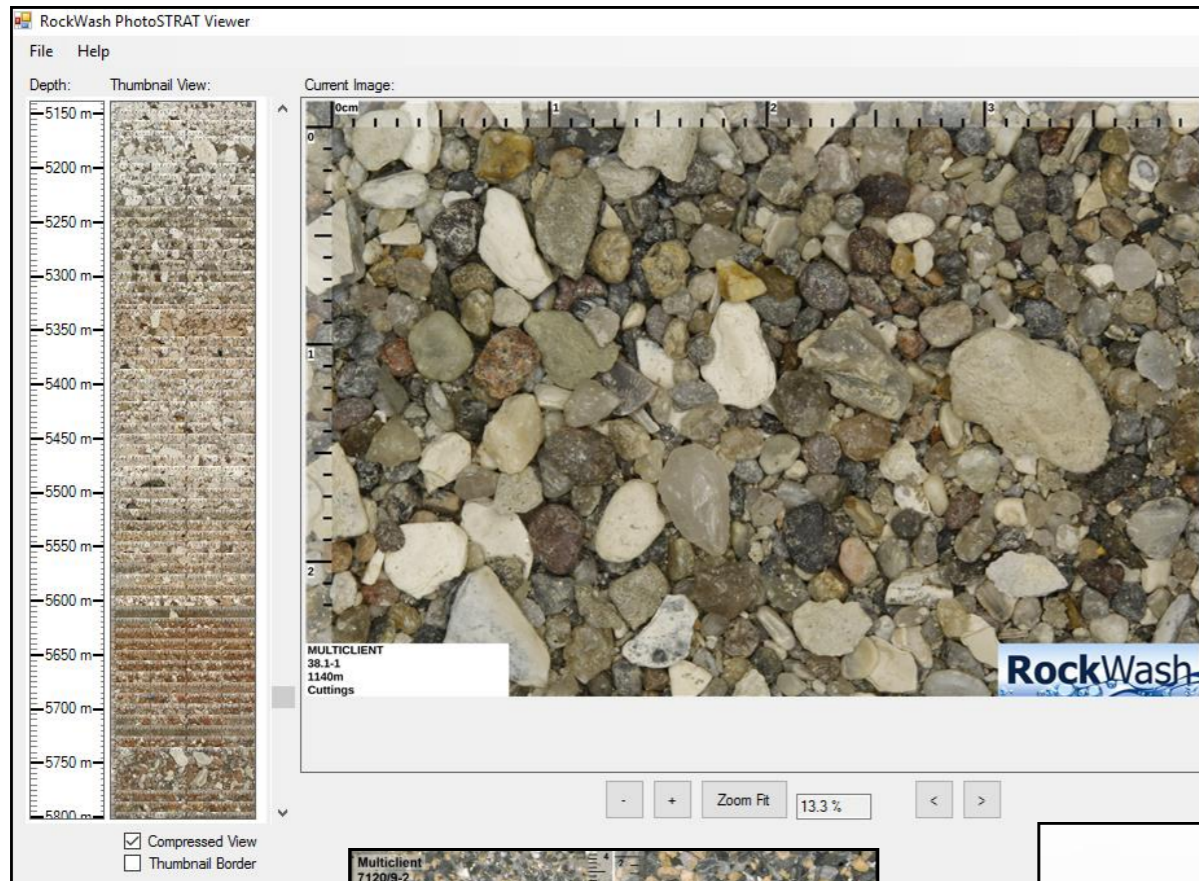
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INTRODUCTION

The key lithostratigraphic units of the Porcupine Basin are presented visually for the first time as high resolution images of cuttings samples, core and thin sections.

RockWash Prep and Store Ltd has initiated this project after discussion with the industry to build a high resolution digital cuttings image (PhotoSTRAT™), XRF elemental data and core and petrographic slide scan databases for the exploration wells of the Irish offshore regions. This will provide an easily accessible reference set for each of the classic type sections.

This dataset will prove to be an invaluable resource for all geoscientists both at their work stations and at the wellsite. It will, in particular, enable the re-evaluation of many of the early wells drilled in the Porcupine, which are no longer available for sampling and provide a link from cuttings data through to petrophysical and seismic work flows. The dataset will help further the understanding of the existing lithostratigraphic framework and provide an invaluable reference for future wells.



Porcupine Basin Selected Wells

Well Name	Type or Reference well	Key stratigraphic features	Cored Intervals	m
26/22-1A	Type well	The most complete Jurassic - Triassic sequence and typical for elsewhere in the Porcupine Basin Connemara Discovery well: Jurassic syn-rift and Carboniferous pre rift for the Northern Porcupine	Jurassic / Triassic	23.00
26/28-1	Type well & Tertiary Reference well		Jurassic – Carb/ Dev	54.70
26/28-A1,A1Z			Jurassic	66.78
26/29-1			Jurassic and Carboniferous	25.79
34/5-1A			Carboniferous	3.78
34/15-1	Reference well		Upper Carboniferous	6.50
34/19-1	Reference well	Tertiary	Jurassic and Carboniferous	9.20
35/6-1	Reference well	Tertiary	Middle Jurassic	4.83
35/8-1	Type well	Tertiary & Lower Cretaceous, Barremian Oil Shows	Eocene & L. Cretaceous	86.42
35/8-2	Type well & Tertiary Reference well	Spanish Point Discovery	Upper Jurassic	400.50
35/13-1x	Reference well		Eocene & L. Cretaceous	4.00
35/15-1			Devonian-Carboniferous	2.70
35/18-1			Eocene and Lower Cretaceous	4.00
35/19-1	Reference well	Tertiary and Cretaceous	Upper Cretaceous	17.00
35/30-1	Type well	Lower Cretaceous & Thick Upper and Middle Jurassic	Cuttings only	0.00
43/13-1			Cuttings only	0.00
62/7-1	Type well	Lower Cretaceous and Middle Lower Jurassic - Key Southern Porcupine data point.	Jurassic	16.45
				725.65

PRODUCT DESCRIPTION

PhotoSTRAT:

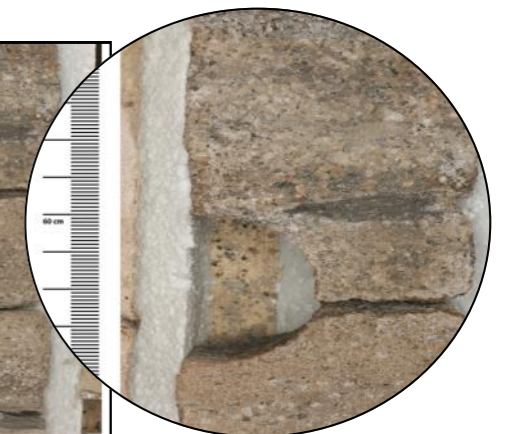
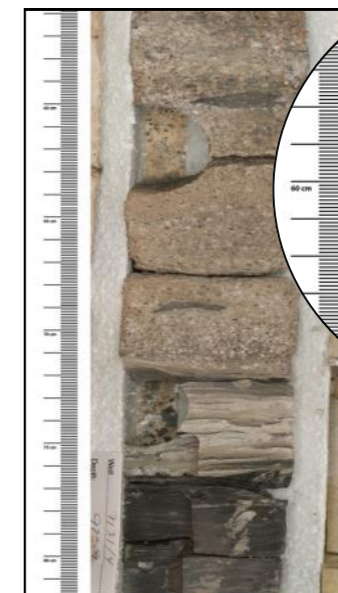
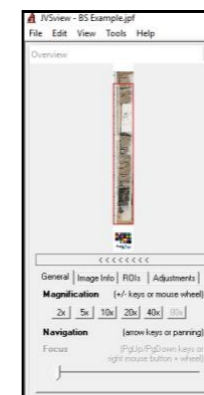
Cuttings samples from available intervals in each of the wells are systematically washed using the RockWash method and apparatus, photographed at high resolution (1024 x 780 pixels) and, for selected wells, at varying magnifications (x5, x10, x20 and x50). Images can be used for lithological descriptions and for building type sections with which well logs can be validated and other geological data complemented.

XRF Elemental analysis:

Reading of approximately 30 major and trace elements from cuttings samples for the generation of inferred mineral and lithology profiles.

Core and Slide Scanning:

New high resolution (45 micron / pixel) scanned images of 45 cores from 17 wells (>800m) and available petrological slide scans (number to be confirmed) will be captured and provided in a digital format. Scaled images can be viewed instantly and rapidly at the desk top at different levels of magnification (x 2 to x 40) via specialist compression viewing software. Core images are available in plane and UV light while the slide scanned images (approximately 60) can be viewed in plane and cross polarised light. A high level of image clarity is achieved by the adaptive focus capability at all levels of magnification enabling core and slide descriptions and measurements to be undertaken at the desk top remotely from the storage facility.



Core and slide Scan example at different magnifications