Routine Core Analysis
Well : Poseidon - 2
Offshore
Western Australia

Prepared for
ConocoPhillips Exploration Australia Pty. Ltd.

October 2010

File: PRP-09079

Rock Properties
Core Laboratories
Perth
Australia

11th October 2010

ConocoPhillips Exploration Australia Pty. Ltd.
Level 3
53 Ord Street
PERTH WA 6005

Attention : Rob Rutherford

Subject : Routine Core Analysis
Well : Poseidon - 2
File : PRP-09079

Dear Rob,

Presented herein is the final report of a routine core analysis study conducted on a core from the above well that arrived at our laboratory in December 2009.

We appreciate the opportunity to present this service to ConocoPhillips Exploration Australia Pty. Ltd. Please contact us should you require any further information or assistance.

Yours sincerely,
Core Laboratories Australia Pty Ltd

James Brown
Senior Core Analyst

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INTRODUCTION

Cores 1 to 3 arrived at Core Laboratories on the 8th December 2009.

Services performed and presented in the report include:

- Surface spectral core gamma
- CT scanning
- Profile permeametry on slabbed core
- Core photography on slabbed core – ultra violet and white light (prints and CD-Rom)
- Permeability, porosity (at ambient and overburden) and grain density measurements on plugs
- Residual fluid saturations by Dean - Stark

The reported data for the above services are presented digitally on a CD-Rom, with the exception of the core photographs and CT-Scans which are presented under separate covers.

SUMMARY

A total of 237 horizontal and 8 vertical plugs were cut from the core. Porosity, permeability and grain density measurements were made on 201 horizontal and all vertical samples at net confining stresses of 400psi, 800psi and 5600psi. Residual fluid saturations were determined on 31 samples.

	Minimum	Maximum	Average
Net Confining Pressure of 400psig.			
SS Permeability, Hg Bulk Volume Porosity			
Cool Solvent, Humidity Dried			
Porosity (%)	0.1	12.9	3.2
Permeability, Kair, (md) (Horizontal)	<0.001	0.940	0.080
Permeability, Kair, (md) (Vertical)	0.002	0.055	0.014
Grain Density (g/cc)	2.616	3.489	2.724
Net Confining Pressure of 400psig.			
Warm Solvent, Convection Oven Dried			
Porosity (%)	0.2	12.8	4.0
Permeability, Kair, (md) (Horizontal)	0.003	1.50	0.074
Permeability, Kair, (md) (Vertical)	0.009	0.067	0.026
Grain Density (g/cc)	2.638	3.514	2.734
Residual Brine Saturation, Sw. (%)	26.9	85.6	57.4
Net Confining Pressure of 5600psig.			
CMS-300			
Porosity (%)	0.3	12.2	4.8
Permeability, Kair, (md) (Horizontal)	<0.001	0.275	0.026
Permeability, Kinf, (md) (Horizontal)	<0.001	0.171	0.024

Note: Permeability from fractured samples is not included in the above table.

LABORATORY PROCEDURES

Initial Inventory:

The cores arrived on the 8th December 2009 resinated in aluminium inner core barrels, each approximately 4.5m in length. From the markings on the core barrels and the accompanying manifest, an inventory of the core was made and can be found in the back of this report.

Core Preparation:

After the core inventory, the 4.5m lengths of core were cut down into one metre lengths (and sealed) for ease of handling and processing. A surface spectral core gamma was run down the core, prior to being CT scanned. Core 2 was not scanned as it was fast tracked for routine core analysis. After reviewing the CT-Scans, seven full diameter sections were chosen and preserved for later analysis.
The aluminium inner core barrel was then milled from the core (Dean-Stark samples were taken at this point). Next plug samples (both horizontal and vertical plugs) were taken; this was followed by Scal samples. After all the samples were taken the cores were slabbed in half and the core surfaces cleaned. One half of the core underwent ultra violet photography prior to the profile permeability being determined down the core (cores 1 and 2 only). After profile permeability was run, the cores were photographed under white light. The other half section of core was described.

Surface Core Gamma:

The spectral core gamma was calibrated using known standards prior to the core being run. The total core gamma trace is plotted on the integrated core log.

CT Scanning:

The one metre lengths of core were CT scanned, to identify bedding dip, fractures, lithology and rubble sections so that the cores could be orientated for plugging and slabbing. Core 2 was not CT scanned as the routine core analysis was fast tracked.

Sample Preparation:

Six sets of samples were taken.

Set 1 - 31 horizontal samples taken for residual fluid saturations (identified as _DS)
Set 2 - 170 horizontal routine core analysis samples taken from cores 2 and 3 with no identifier
Set 3 - 8 vertical samples taken from the cores (identified as _V)
Set 4 – 11 horizontal samples taken from the cores for later analysis (identified as samples S1_)
Set 5 – 25 horizontal samples taken from the cores for later analysis (identified as samples S2_)
Set 6 – 7 full diameter samples taken from the cores (identified as GM_)
Set 7 – 19 samples for petrology from core 1(identified as _TS)

Set 1 Samples were 1.5” diameter plugs cut and trimmed with mineral oil. These then underwent Dean-Stark analysis. After completion of Dean-Stark analysis, the samples were warm solvent cleaned with toluene and methanol, to remove any residual hydrocarbons and salts, prior to

convection oven drying. Porosity, permeability and grain density were measured on the cleaned and dried samples. Off-cuts from the trimmed plugs were placed into labelled snap-lock plastic bags.

Set 2 Samples were 1.0" diameter plugs cut and trimmed with 2% potassium chloride brine. These were cool solvent cleaned with toluene and methanol, to remove any residual hydrocarbons and salts. Complete salt removal was indicated by the methanol, in which the samples were immersed, producing a negative reaction to silver nitrate, prior to being controlled humidity oven dried (at 60°C and 40% relative humidity). Off-cuts from the trimmed plugs were placed into labelled snap-lock plastic bags. The samples were allowed to cool down to room temperature in the snap-lock plastic bags prior to porosity, permeability and grain density being determined.
The samples were then re-cleaned with warm solvents, toluene followed by methanol to remove any residual hydrocarbons and salts. Complete salt removal was indicated by the methanol, in which the samples were immersed, producing a negative reaction to silver nitrate, prior to being dried in a convection oven at 105°C. The samples were cooled down to room temperature in an evacuated desiccator prior to re-determining porosity, permeability and grain density. To ensure complete drying at both drying stages (humidity and convection drying), the samples were weighted at regular intervals to a constant weight (+/- 0.01g).

Set 3 Samples were prepared in the same manner as Set 2 samples.

Sets 4 and 5 Samples were 1.5" diameter plugs cut and trimmed using a 2% potassium chloride brine. The plugs were wrapped in Saran wrap, aluminium foil and placed into snap-lock plastic bags, then stored in a cooler unit for later analysis.

Set 6 Samples were full diameter samples taken at the requested depths, preserved and stored for later analysis.

Set 7 Samples were petrology samples taken where indicated from core 1and placed into labelled snap-lock plastic bags.

Core Slabbing:

The cores were slabbed in half using brine as the blade lubricant except for the preserved full diameter sections. After slabbing, the cut faces of the core sections were cleaned prior to having profile permeability measured, being photographed and described.

Profile Permeametry:

Profile permeametry was conducted on the cut face of the one half core section using the PDPK™300 profile permeameter. Measurements were made approximately every ten centimetres; a total of 568 point measurements were made. Core 1 profile permeability was not determined.

Core Photography:

Prior to profile permeametry, the one-half section of the core was photographed under ultra violet light. White light photography was done after the profile permeability using a digital camera. The large format images of the core were annotated with the ambient (400psig (convection oven dried)) routine core

analysis data. A set of A4 prints and a CD-ROM containing the images was forwarded under a separate cover.

Grain Volume and Grain Density:

The weight, diameter and length of all routine core analysis plug samples were measured before they were processed through the Ultrapore™ porosimeter to determine grain volume. As a standard quality control measure, a calibration check plug was run with every batch of samples. Grain density data is calculated from grain volume and sample weight data.

Permeability and Porosity:

Permeability was determined using an Ultra-Perm^{TM} 500 at a confining stress of 400psi. Permeability is calculated using the Darcy equation below for all samples both after cool solvent/humidity drying and warm solvent/convection drying.

$$Kair = 2000P_1\mu Q_1 L /(P_1^{2} - P_2^{2})A$$

Where:

- Kair = Permeability (md)
- μ = Viscosity (Centipoise)
- Q_1 = Flow rate (cc/sec) at upstream pressure
- L = Sample length (cm)
- A = Sample cross-sectional area (cm^2)
- P_1 = Upstream pressure (atmospheres)
- P_2 = Downstream pressure (atmospheres)

Porosity was calculated using the grain and bulk (mercury bulk volume) volumes as follows:

$$\phi = ((Vb-Vg)/Vb)*100$$

Where : ϕ = Porosity, fraction
Vg = Grain volume, cm^3
Vb = Bulk volume, cm^3

A sub selection of the above samples underwent porosity and permeability measurements using the CMS-300^{TM} at confining pressures of 800psi and 5600psi. Klinkenberg permeability (K_{inf}) and Forchheimer Factor Beta values are obtained directly from the CMS-300, since it operates by unsteady-state principles. Porosity data was obtained by combining pore volumes from the CMS-300 data with grain volumes from the Ultrapore porosimeter.

POROSITY, PERMEABILITY and GRAIN DENSITY

SAMPLE NUMBER	SAMPLE DEPTH	Cool Solvent and Humidity Dried: CONFINING STRESS 400psi Steady - State PERMEABILITY Kinf	Cool Solvent and Humidity Dried: CONFINING STRESS 400psi Steady - State PERMEABILITY Kair	Cool Solvent and Humidity Dried: Hg Bulk Volume POROSITY	Cool Solvent and Humidity Dried: GRAIN DENSITY	Warm Solvent and Connvection Oven: CONFINING STRESS 400psi Steady - State PERMEABILITY Kinf	Warm Solvent and Connvection Oven: CONFINING STRESS 400psi Steady - State PERMEABILITY Kair	Warm Solvent and Connvection Oven: Hg Bulk Volume POROSITY	Warm Solvent and Connvection Oven: GRAIN DENSITY	CMS 300 CONFINING STRESS 800psi. PERMEABILITY Kinf	CMS 300 CONFINING STRESS 800psi. PERMEABILITY Kair	CMS 300 CONFINING STRESS 800psi. POROSITY	CMS 300 CONFINING STRESS 5600psi. PERMEABILITY Kinf	CMS 300 CONFINING STRESS 5600psi. PERMEABILITY Kair	CMS 300 CONFINING STRESS 5600psi. POROSITY	CMS 300 CONFINING STRESS 5600psi. BETA	CMS 300 CONFINING STRESS 5600psi. b(N2)	COMMENTS
	(m)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(md)	(md)	(%)	(ft-1)	(psi)	
Core 2																		
1	5061.30		0.024	3.9	2.677		0.023	4.6	2.684									
2	5061.60		0.002	3.2	2.728		0.020	3.9	2.739									
3	5061.90		0.034	2.1	2.713		0.015	2.8	2.725	0.002	0.005	3.0	<0.001	0.001	2.3	1.53E+17	232.56	
4	5062.20		0.016	1.6	2.660		0.021	2.6	2.675									
5	5062.49		0.020	3.1	2.707		0.034	3.4	2.712									
6	5062.79		0.037	4.0	2.697		0.026	4.4	2.703	0.030	0.054	4.6	0.001	0.002	4.3	1.84E+16	176.68	
7	5063.40		0.030	4.4	2.693		0.030	4.5	2.696									
8	5063.70		0.055	5.0	2.675		0.073	5.2	2.680									
9	5063.98		0.056	5.0	2.684		0.041	5.3	2.689	0.016	0.022	5.6	0.001	0.002	5.0	1.18E+16	166.91	
10	5064.30		0.034	4.8	2.678		0.036	5.4	2.687									
11	5064.60		0.046	6.5	2.702		0.020	6.6	2.709									
12	5064.91		0.045	6.2	2.680		0.043	6.7	2.682	0.015	0.021	6.9	0.001	0.004	6.3	3.86E+15	144.44	
13	5065.50		0.033	6.3	2.706		0.043	6.6	2.710									
14	5065.80		0.046	5.1	2.686		0.046	5.7	2.697									
15	5066.10		0.017	1.8	2.709		0.019	2.9	2.725	0.003	0.008	3.1	<0.001	0.001	2.2	9.81E+16	219.50	
16	5066.40		0.036	3.1	2.694		0.033	3.4	2.697									
17	5066.70		0.040	3.4	2.672		0.043	3.7	2.675									
18	5066.97		0.033	4.6	2.685		0.042	5.2	2.700	0.013	0.017	5.4	0.001	0.002	4.8	1.08E+16	165.05	
19	5067.30		0.082	5.6	2.670		0.135	6.2	2.677									
20	5067.61		0.020	3.4	2.733		0.029	4.3	2.746									
21	5067.90		0.027	3.7	2.687		0.032	3.6	2.692	0.006	0.014	4.4	0.001	0.002	3.7	1.32E+16	169.35	
22	5068.21		0.040	4.0	2.676		0.042	4.4	2.688									
23	5068.51		0.035	3.2	2.667		0.055	3.4	2.671									
24	5068.81		0.015	1.8	2.654		-	2.6	2.672	-	-	-	-	-	-	-	-	Fractured
25	5069.13		0.019	3.1	2.692		0.026	3.9	2.703									
26	5069.43		0.033	3.4	2.645		0.028	3.6	2.664									
27	5069.71		0.013	3.1	2.693		0.021	3.5	2.697	0.007	0.010	3.8	<0.001	0.001	3.0	4.65E+16	199.33	
28	5069.97		0.022	3.7	2.693		0.031	4.1	2.700									
29	5070.30		0.028	3.5	2.663		0.037	4.1	2.670									
30	5070.61		0.194	3.3	2.728		0.020	3.7	2.737	0.003	0.006	4.2	<0.001	0.001	3.3	8.05E+16	214.07	
31	5070.91		0.019	2.9	2.723		0.026	3.7	2.733									
32	5071.24		0.029	2.1	2.682		0.030	3.7	2.695									
33	5071.50		0.014	2.5	2.734		0.021	3.1	2.744	0.003	0.006	3.2	<0.001	0.001	2.6	1.01E+17	220.44	
34	5071.81		0.025	2.6	2.706		0.036	2.7	2.713									
35	5072.11		0.017	2.2	2.758		0.025	3.1	2.769									
36	5072.41		0.021	3.3	2.755		0.019	4.2	2.774	0.003	0.007	4.7	<0.001	0.001	3.6	7.12E+16	210.73	
37	5072.72		0.021	4.3	2.679		0.033	4.6	2.685									
38	5073.31		0.028	4.2	2.673		0.031	5.0	2.688									
39	5073.61		0.041	3.8	2.679		0.035	3.7	2.685	0.006	0.013	4.6	<0.001	0.002	3.8	1.99E+16	178.56	
40	5073.90		0.021	3.7	2.736		0.026	4.0	2.745									
41	5074.20		0.020	3.1	2.690		0.037	3.5	2.697									
42	5074.50		0.023	1.8	2.705		0.028	2.6	2.719	0.005	0.011	3.5	<0.001	0.001	2.5	2.74E+16	186.16	
43	5075.10		0.008	1.9	2.789		0.015	2.4	2.799									
44	5075.40		0.022	2.7	2.713		0.012	5.8	2.731									
45	5075.70		0.032	2.6	2.684		0.036	3.4	2.696	0.006	0.013	3.8	<0.001	0.001	2.9	4.02E+16	195.70	
46	5075.97		0.017	2.7	2.732		0.030	3.2	2.738									
47	5076.31		0.019	3.2	2.689		0.029	3.8	2.699									
48	5076.60		0.025	3.2	2.697		0.030	3.7	2.706	-	-	-	-	-	-	-	-	
49	5076.91		0.024	2.1	2.678		0.032	3.1	2.693									
50	5077.21		0.007	2.2	2.842		0.012	3.0	2.861									
51	5077.51		0.012	2.0	2.918		0.013	2.3	2.927	0.011	0.022	2.7	<0.001	<0.001	1.1	-	-	

POROSITY, PERMEABILITY and GRAIN DENSITY

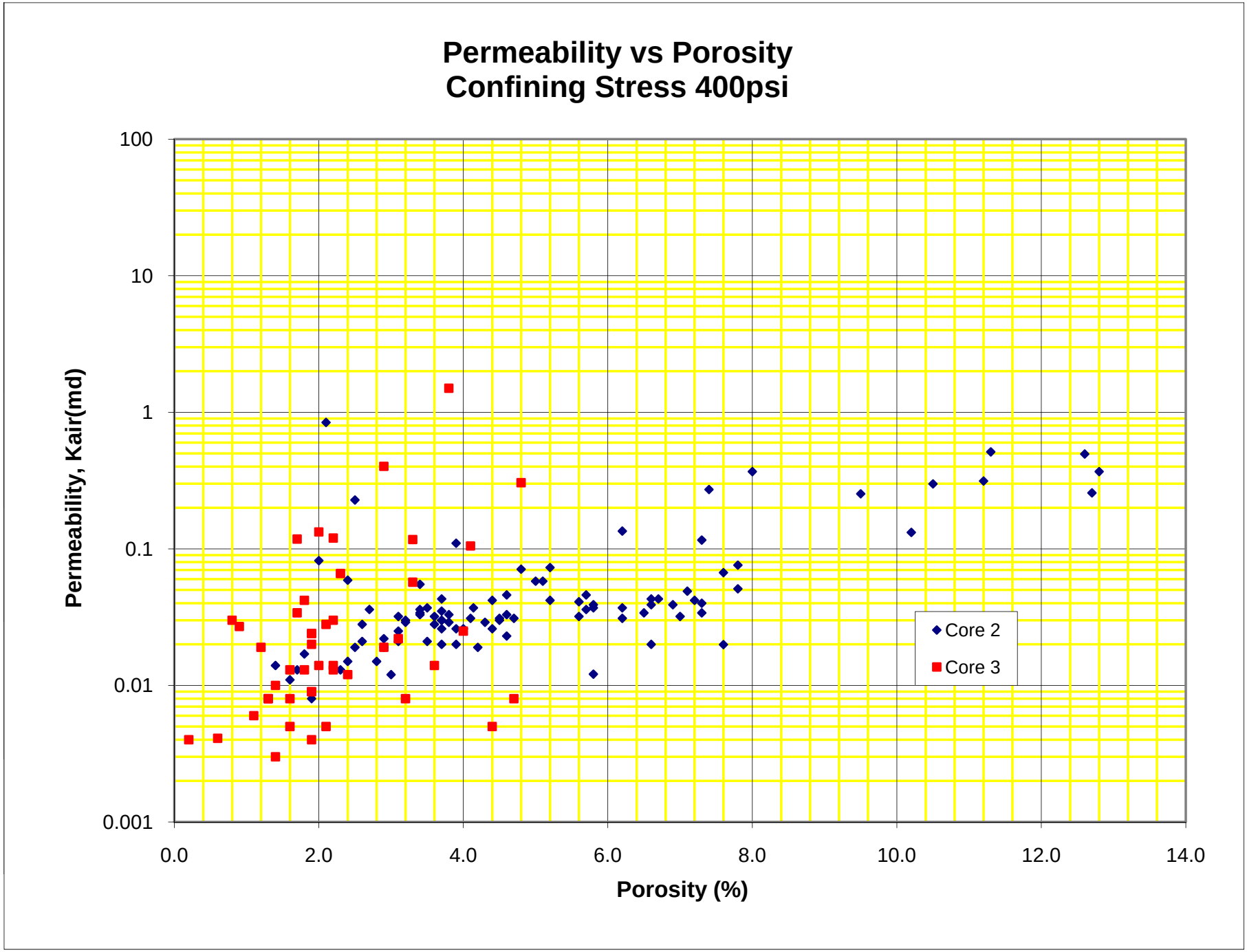
		Cool Solvent and Humidity Dried				Warm Solvent and Connvection Oven				CMS 300			CMS 300					
SAMPLE NUMBER	SAMPLE DEPTH	CONFINING STRESS 400psi Steady - State PERMEABILITY Kinf (md)	Kair (md)	Hg Bulk Volume POROSITY (%)	GRAIN DENSITY (g/cc)	CONFINING STRESS 400psi Steady - State PERMEABILITY Kinf (md)	Kair (md)	Hg Bulk Volume POROSITY (%)	GRAIN DENSITY (g/cc)	CONFINING STRESS 800psi. PERMEABILITY Kinf (md)	Kair (md)	POROSITY (%)	CONFINING STRESS 5600psi. PERMEABILITY Kinf (md)	Kair (md)	POROSITY (%)	BETA (ft-1)	b(N2) (psi)	COMMENTS
52	5077.81		0.004	1.0	2.738		0.011	1.6	2.748									
53	5078.11		0.014	1.4	2.726		0.017	1.8	2.733									
54	5078.43		0.072	4.9	2.704		0.071	4.8	2.706	0.018	0.024	5.3	0.001	0.002	4.5	1.26E+16	168.34	
55	5078.73		0.033	6.0	2.693		0.037	6.2	2.698									
56	5079.03		0.032	6.2	2.707		0.039	6.6	2.715									
57	5079.31		0.038	5.3	2.719		0.037	5.8	2.725	0.006	0.013	5.7	0.001	0.002	5.1	1.73E+16	175.51	
58	5079.61		0.026	2.7	2.680		0.022	2.9	2.683									
59	5080.20		0.037	6.5	2.671		0.039	6.9	2.673									
60	5080.51		0.029	5.7	2.719		0.031	6.2	2.724	0.005	0.011	6.5	0.001	0.002	5.8	1.67E+16	174.75	
61	5080.81		0.026	6.0	2.733		0.034	6.5	2.742									
62	5081.11		0.028	6.4	2.684		0.032	7.0	2.690									
63	5081.42		0.035	6.9	2.694		0.034	7.3	2.703	0.013	0.017	7.6	0.001	0.003	7.0	4.65E+15	148.05	
64	5082.10		0.035	7.2	2.703		0.040	7.3	2.706									
65	5082.41		0.033	7.2	2.713		0.020	7.6	2.718									
66	5082.74		0.048	8.0	2.732		0.051	7.8	2.734	0.019	0.024	8.4	0.002	0.005	7.4	2.47E+15	136.42	
67	5083.04		0.031	5.4	2.726		0.039	5.8	2.727									
68	5083.58		0.019	1.4	2.668		0.059	2.4	2.699									
69	5083.89		0.082	7.6	2.657		0.076	7.8	2.664	0.028	0.037	8.2	0.004	0.009	7.4	5.62E+14	112.64	
70	5084.19		0.058	7.4	2.725		0.067	7.6	2.730									
71	5084.48		0.281	7.1	2.717		0.272	7.4	2.723									
72	5084.80		0.078	7.8	2.667		0.070	8.0	2.674	0.027	0.036	7.8	0.003	0.008	7.2	9.36E+14	120.28	
73	5085.10		0.042	6.8	2.718		0.042	7.0	2.722									
74	5085.41		0.052	6.9	2.638		0.049	7.1	2.737									
75	5085.71		0.019	1.2	2.703		0.014	1.4	2.705									
76	5086.01		0.144	10.2	2.659		0.132	10.2	2.662	0.060	0.081	10.5	0.032	0.041	9.9	1.62E+13	20.05	
77	5086.61		0.304	12.8	2.763		0.257	12.7	2.762	0.163	0.281	12.8	0.083	0.108	12.1	2.58E+12	21.64	
78	5086.91		0.370	12.9	2.762		0.368	12.8	2.759	0.197	0.302	12.9	0.111	0.187	12.2	3.73E+12	47.84	
79	5087.19		0.498	12.4	2.728		0.495	12.6	2.731	0.299	0.434	12.9	0.171	0.275	12.1	6.17E+11	41.67	
80	5087.49		0.274	9.5	2.721		0.253	9.5	2.719	0.140	0.242	9.8	0.070	0.092	9.1	1.01E+12	22.67	
81	5087.80		0.477	10.7	2.693		0.513	11.3	2.691									
82	5088.11		0.318	10.6	2.678		0.299	10.5	2.674	0.179	0.261	10.5	0.076	0.099	9.7	3.75E+12	21.23	
83	5088.40		0.311	11.1	2.727		0.314	11.2	2.725	0.185	0.279	11.4	0.090	0.119	10.7	3.01E+12	22.18	
84	5088.70		0.016	3.0	2.696		0.033	3.8	2.705									
85	5088.98		0.078	4.0	2.680		0.031	4.7	2.685									
86	5089.60		0.032	3.1	2.692		0.029	3.2	2.693	0.004	0.009	3.8	0.001	0.003	3.1	7.58E+16	157.59	
87	5089.91		0.071	7.3	2.755		0.116	7.3	2.756									
88	5090.51		0.004	5.1	2.788		0.032	5.6	2.795									
89	5090.81		0.047	5.1	2.652		0.058	5.1	2.659	0.014	0.019	5.6	0.001	0.003	5.2	6.28E+15	153.85	
90	5091.09		0.053	4.9	2.653		0.058	5.0	2.654									
91	5091.38		0.039	4.2	2.654		0.046	4.6	2.660									
92	5091.85		0.028	1.5	2.651		0.019	2.5	2.657	0.013	0.020	2.9	0.001	0.002	1.9	1.51E+16	172.18	
93	5092.15		0.116	0.6	2.704		0.843	2.1	2.728									
94	5092.45		0.422	0.5	2.659		-	-	-									Fractured
95	5092.79		-	-	2.686		-	-	-	-	-	-	-	-	-	-	-	Badly fractured
96	5093.08		<0.001	1.6	2.682		-	2.1	2.686									Fractured
97	5093.53		0.019	1.2	2.652		0.013	1.7	2.653									
98	5093.84		0.053	1.3	2.647		0.082	2.0	2.654									
99	5094.17		0.056	3.5	2.657		0.110	3.9	2.660									
100	5094.44		<0.001	4.8	2.666		-	4.7	2.665									Fractured
101	5095.03		0.210	2.5	2.655		0.228	2.5	2.655									
102	5095.38		-	0.6	2.684		-	-	-									Fractured
103	5095.82		<0.001	2.0	2.636		-	2.7	2.638									Fractured

POROSITY, PERMEABILITY and GRAIN DENSITY

SAMPLE NUMBER	SAMPLE DEPTH	Cool Solvent and Humidity Dried				Warm Solvent and Connvection Oven				CMS 300			CMS 300					COMMENTS
		CONFINING STRESS 400psi		Hg	GRAIN	CONFINING STRESS 400psi		Hg	GRAIN	CONFINING STRESS 800psi.			CONFINING STRESS 5600psi.					
		Steady - State PERMEABILITY		Bulk Volume	DENSITY	Steady - State PERMEABILITY		Bulk Volume	DENSITY	PERMEABILITY		POROSITY	PERMEABILITY		POROSITY	BETA	b(N2)	
		Kinf	Kair	POROSITY		Kinf	Kair	POROSITY		Kinf	Kair		Kinf	Kair				
	(m)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(md)	(md)	(%)	(ft-1)	(psi)	
104	5096.08		0.013	1.8	2.919		0.008	1.9	2.922									
Core 3																		
105	5097.53		0.012	2.3	2.725		0.012	2.4	2.730	0.003	0.006	2.6	<0.001	<0.001	-	-	-	
106	5098.18		0.075	1.9	2.712		0.120	2.2	2.718									
107	5098.48		0.041	0.3	2.645		0.133	2.0	2.670									
108	5098.81		0.010	3.0	3.064		0.008	3.2	3.071	0.001	0.002	4.5	<0.001	<0.001	-	-	-	
109	5099.11		0.003	3.9	2.907		0.005	4.4	2.920									
110	5099.54		0.029	3.8	2.803		0.025	4.0	2.804									
111	5099.87		0.042	1.2	2.662		0.028	2.1	2.675	0.005	0.012	2.9	<0.001	<0.001	-	-	-	
112	5100.30		0.305	4.8	2.714		0.305	4.8	2.718									
113	5100.61		0.098	3.7	2.645		0.105	4.1	2.648									
114	5101.30		0.099	0.4	2.693		0.042	1.8	2.714	0.035	0.041	2.8	<0.001	<0.001	-	-	-	
115	5101.61		0.015	0.3	2.668		0.024	1.9	2.692									
116	5101.89		-	0.7	2.859		-	-	-									Fractured
117	5102.49		-	1.0	2.732		-	2.2	2.748	-	-	-	-	-	-	-	-	Fractured
118	5102.78		-	1.0	2.641		-	-	-									Fractured
119	5103.09		-	0.6	2.619		-	-	-									Fractured
120	5103.38		0.940	1.0	2.620		-	-	-	-	-	-	-	-	-	-	-	Fractured
121	5104.30		0.135	2.9	2.648		0.117	3.3	2.651									
122	5104.61		0.004	1.9	2.943		0.014	2.2	2.947									
123	5104.90		0.008	3.5	3.042		0.008	4.7	3.054	0.001	0.003	4.5	<0.001	<0.001	-	-	-	
124	5105.21		0.011	2.1	3.151		0.019	2.9	3.159									
125	5105.49		0.014	0.9	2.648		0.010	1.4	2.654									
126	5105.85		0.019	0.6	2.660		0.030	2.2	2.679	0.006	0.012	2.4	<0.001	<0.001	-	-	-	
127	5106.25		0.036	1.2	2.649		0.034	1.7	2.657									
128	5106.50		0.007	0.3	2.644		0.004	0.6	2.652									
129	5107.09		0.014	0.8	2.657		0.008	1.3	2.666									
130	5107.50		0.007	0.8	2.674		0.006	1.1	2.694	0.001	0.003	1.7	<0.001	0.001	0.7	2.68E+17	249.36	
131	5107.83		0.199	0.6	2.643		0.402	2.9	2.684									
132	5108.15		1.78	0.9	2.742		-	2.4	2.763									Fractured
133	5108.71		0.006	0.1	2.635		0.008	1.6	2.655	0.001	0.002	3.0	<0.001	<0.001	-	-	-	
134	5109.06		-	0.8	2.717		-	-	-									Fractured
135	5109.35		0.373	0.6	2.639		-	-	-									Fractured
136	5109.76		5.000	0.9	2.654		-	2.1	2.673									Fractured
137	5110.22		0.016	0.3	3.489		0.019	1.2	3.514									Fractured
138	5110.57		0.019	1.2	3.225		-	-	-									Fractured
139	5110.97		0.012	1.1	2.664		0.013	1.8	2.673	0.002	0.006	2.5	<0.001	0.001	1.6	1.27E+17	227.03	
140	5111.21		0.001	0.2	3.029		0.004	1.9	3.067									
141	5111.63		0.636	4.2	2.636		-	-	-									Fractured
142	5111.95		0.401	0.3	2.619		-	2.6	2.643									Fractured
143	5112.22		0.792	0.6	2.810		-	2.2	2.834									Fractured
144	5112.51		0.041	1.4	2.677		0.024	1.9	2.702	0.006	0.014	2.6	0.001	0.002	1.5	2.14E+16	180.21	
145	5112.80		0.002	0.7	3.073		0.022	3.1	3.121									
146	5113.05		0.018	0.1	2.616		0.014	2.6	2.684									
147	5113.52		<0.001	0.4	2.842		0.057	3.3	2.900	0.077	0.123	3.4	0.001	0.003	1.8	7.83E+15	158.17	
148	5114.13		-	0.8	2.790		-	-	-									Fractured
149	5114.47		0.006	0.5	2.734		0.003	1.4	2.752									
150	5114.73		0.007	0.9	2.874		0.005	1.6	2.885									
151	5115.03		-	0.5	2.720		-	-	-									Fractured
152	5115.41		0.016	3.5	2.682		0.014	3.6	2.681	0.003	0.007	4.1	0.001	0.002	3.2	2.31E+16	181.84	
153	5115.77		0.013	2.0	2.678		0.013	2.2	2.680									
154	5116.34		0.010	1.2	2.668		0.009	1.9	2.677									

POROSITY, PERMEABILITY and GRAIN DENSITY

SAMPLE NUMBER	SAMPLE DEPTH	Cool Solvent and Humidity Dried				Warm Solvent and Connvection Oven				CMS 300			CMS 300					COMMENTS
		CONFINING STRESS 400psi		Hg	GRAIN	CONFINING STRESS 400psi		Hg	GRAIN	CONFINING STRESS 800psi.			CONFINING STRESS 5600psi.					
		Steady - State PERMEABILITY		Bulk Volume	DENSITY	Steady - State PERMEABILITY		Bulk Volume	DENSITY	PERMEABILITY		POROSITY	PERMEABILITY		POROSITY	BETA	b(N2)	
		Kinf	Kair	POROSITY		Kinf	Kair	POROSITY		Kinf	Kair		Kinf	Kair				
	(m)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(g/cc)	(md)	(md)	(%)	(md)	(md)	(%)	(ft-1)	(psi)	
155	5116.61		0.018	1.2	2.656		0.020	1.9	2.671	0.004	0.009	2.1	<0.001	0.001	1.5	2.80E+16	186.59	
156	5116.94		0.002	0.6	2.690		0.005	2.1	2.707	<0.001	<0.001	-	-	-	-	-	-	
157	5117.24		0.069	0.1	2.665		0.013	1.6	2.677									
158	5117.55		0.058	0.9	2.675		0.027	0.9	2.676	0.017	0.024	1.5	0.004	0.009	0.9	6.19E+14	113.70	
159	5117.92		-	-	2.724		-	-	-									Badly fractured
160	5118.29		0.043	0.3	2.654		0.066	2.3	2.678									
161	5118.57		-	3.3	2.869		-	-	-									Fractured
162	5118.88		0.592	0.2	2.727		1.50	3.8	2.791									Fractured
163	5119.30		-	1.5	2.868		-	-	-									Fractured
164	5119.55		-	-	2.673		-	-	-									Badly fractured
165	5119.91		-	0.6	2.752		-	-	-									Fractured
166	5120.08		0.012	0.6	2.740		0.030	0.8	2.743	0.001	0.003	0.9	<0.01	<0.001	-	-	-	
167	5120.52		0.009	1.1	2.677		0.009	1.9	2.683									
168	5121.21		0.007	0.9	2.653		0.008	1.3	2.660									
169	5121.58		0.004	0.2	2.907		0.004	0.2	2.900	<0.001	<0.001	-	-	-	-	-	-	
170	5121.82		0.083	1.5	2.675		0.118	1.7	2.679									Hairline fract
Vertical samples																		
1V	5062.13		0.008	1.8	2.669		0.026	2.9	2.684									
2V	5067.22		0.022	4.5	2.692		0.033	5.2	2.701									
3V	5072.13		0.012	2.0	2.723		0.020	3.2	2.742									
4V	5077.42		0.005	2.2	2.937		0.009	2.7	2.953									
5V	5082.97		0.055	4.3	2.693		0.067	4.5	2.698									
6V	5097.83		0.007	3.8	3.000		0.012	4.4	3.010									
7V	5108.09		0.003	0.6	2.634		-	-	-									
8V	5114.65		0.002	0.9	2.723		0.016	1.8	2.739									


Permeability vs Porosity
Confining Stress 400psi
Permeability, Kair(md)
100
10
1
0.1
0.01
0.001
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
Porosity (%)
Core 2
Core 3

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
		Core 2		
1	5061.35	0.135	0.065	
2	5061.45	0.168	0.087	
3	5061.55	0.215	0.116	
4	5061.65	0.043	0.015	
5	5061.75	0.053	0.020	
6	5061.84	0.044	0.016	
7	5061.95	0.144	0.072	
8	5062.03	0.232	0.128	
9	5062.12	0.298	0.172	
10	5062.23	-	-	Poor seal
11	5062.22	-	-	Poor seal
12	5062.32	0.083	0.036	
13	5062.42	0.193	0.102	
14	5062.51	0.254	0.142	
15	5062.62	0.104	0.048	
16	5062.69	0.179	0.094	
17	5062.81	0.090	0.040	
18	5062.90	0.112	0.052	
19	5063.10	0.142	0.070	
20	5063.20	0.141	0.070	
21	5063.30	0.102	0.048	
22	5063.37	0.078	0.034	
23	5063.50	0.277	0.159	
24	5063.60	0.094	0.043	
25	5063.72	0.357	0.215	
26	5063.80	0.087	0.039	
27	5063.90	0.123	0.060	
28	5064.03	0.183	0.097	
29	5064.13	0.218	0.120	
30	5064.22	0.068	0.029	
31	5064.33	0.121	0.059	
32	5064.43	0.273	0.156	
33	5064.55	0.081	0.036	
34	5064.65	0.056	0.022	
35	5064.74	0.098	0.045	
36	5064.85	0.059	0.024	
37	5064.95	0.235	0.131	
38	5065.06	0.202	0.109	
39	5065.18	0.074	0.032	
40	5065.26	0.069	0.029	
41	5065.35	0.058	0.023	
42	5065.43	0.172	0.090	
43	5065.54	0.087	0.039	
44	5065.65	0.059	0.024	
45	5065.74	0.090	0.040	
46	5065.85	0.060	0.024	
47	5065.94	0.068	0.029	
48	5066.05	0.043	0.016	
49	5066.16	-	-	Poor seal
50	5066.16	0.424	0.262	
51	5066.25	0.106	0.050	
52	5066.34	0.067	0.028	
53	5066.43	0.149	0.076	
54	5066.54	0.092	0.042	
55	5066.62	0.049	0.019	
56	5066.73	0.136	0.068	
57	5066.83	0.126	0.062	
58	5066.94	0.131	0.065	
59	5067.05	0.061	0.024	
60	5067.16	0.049	0.018	
61	5067.25	0.102	0.047	
62	5067.35	0.061	0.025	
63	5067.43	0.010	0.002	
64	5067.54	0.020	0.006	
65	5067.70	0.059	0.024	
66	5067.79	0.035	0.012	
67	5067.87	0.027	0.008	
68	5067.97	0.035	0.012	
69	5068.05	0.065	0.027	
70	5068.16	0.087	0.038	
71	5068.25	0.075	0.032	
72	5068.34	0.074	0.031	
73	5068.45	0.061	0.024	
74	5068.54	0.094	0.043	
75	5068.63	0.006	0.001	
76	5068.75	-	-	Poor seal
77	5068.79	0.016	0.004	
78	5068.88	0.031	0.010	
79	5068.95	0.104	0.048	
80	5069.05	0.037	0.013	
81	5069.15	0.032	0.010	
82	5069.24	0.046	0.017	
83	5069.35	0.042	0.015	
84	5069.47	0.089	0.039	
85	5069.55	0.078	0.033	
86	5069.65	0.045	0.017	
87	5069.74	0.117	0.056	
88	5069.84	0.085	0.037	
89	5070.02	0.045	0.017	
90	5070.12	0.071	0.030	
91	5070.24	0.065	0.026	
92	5070.34	0.061	0.024	
93	5070.43	0.056	0.022	

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
94	5070.54	-	-	Poor seal
95	5070.65	-	-	Poor seal
96	5070.77	-	-	Poor seal
97	5070.77	0.083	0.036	
98	5070.87	0.047	0.017	
99	5070.96	0.035	0.012	
100	5071.05	0.111	0.052	
101	5071.15	0.025	0.007	
102	5071.27	0.033	0.011	
103	5071.36	0.016	0.004	
104	5071.41	0.121	0.058	
105	5071.53	0.031	0.010	
106	5071.66	0.019	0.005	
107	5071.76	0.032	0.011	
108	5071.86	0.014	0.003	
109	5071.95	0.023	0.007	
110	5072.03	0.069	0.029	
111	5072.21	0.188	0.100	
112	5072.30	0.071	0.030	
113	5072.39	0.065	0.026	
114	5072.48	0.044	0.016	
115	5072.57	0.056	0.022	
116	5072.75	0.096	0.043	
117	5072.85	0.062	0.025	
118	5072.95	0.073	0.031	
119	5073.03	0.462	0.287	
120	5073.15	0.097	0.044	
121	5073.25	0.052	0.020	
122	5073.35	0.065	0.026	
123	5073.45	0.083	0.036	
124	5073.56	0.151	0.076	
125	5073.65	0.082	0.036	
126	5073.75	0.071	0.030	
127	5073.86	0.111	0.052	
128	5073.95	0.060	0.024	
129	5074.05	0.185	0.097	
130	5074.12	0.075	0.032	
131	5074.25	0.123	0.059	
132	5074.35	0.208	0.112	
133	5074.47	0.280	0.159	
134	5074.56	0.089	0.039	
135	5074.65	0.171	0.089	
136	5074.72	0.199	0.106	
137	5075.05	0.048	0.018	
138	5075.15	0.068	0.028	
139	5075.25	-	-	Poor seal
140	5075.26	0.082	0.036	
141	5075.35	0.075	0.032	
142	5075.45	0.163	0.083	
143	5075.55	0.154	0.078	
144	5075.67	0.255	0.143	
145	5075.78	0.154	0.078	
146	5075.86	0.152	0.077	
147	5075.94	0.295	0.170	
148	5076.02	0.261	0.147	
149	5076.12	0.068	0.028	
150	5076.20	0.028	0.009	
151	5076.34	0.120	0.057	
152	5076.44	0.194	0.103	
153	5076.52	0.197	0.105	
154	5076.64	0.106	0.049	
155	5076.74	0.099	0.045	
156	5076.84	0.052	0.020	
157	5076.95	0.055	0.022	
158	5077.05	0.086	0.038	
159	5077.15	0.051	0.019	
160	5077.27	0.066	0.027	
161	5077.35	0.147	0.074	
162	5077.53	0.049	0.018	
163	5077.65	0.137	0.068	
164	5077.74	0.091	0.041	
165	5077.89	0.112	0.053	
166	5078.05	0.065	0.027	
167	5078.15	0.049	0.018	
168	5078.24	0.187	0.098	
169	5078.32	0.106	0.049	
170	5078.40	0.272	0.154	
171	5078.50	0.392	0.237	
172	5078.61	0.134	0.065	
173	5078.77	0.506	0.319	
174	5078.85	0.178	0.093	
175	5078.95	0.269	0.152	
176	5079.06	0.331	0.194	
177	5079.18	0.216	0.117	
178	5079.28	0.248	0.138	
179	5079.37	0.194	0.103	
180	5079.46	0.415	0.253	
181	5079.57	0.125	0.060	
182	5079.69	0.110	0.051	
183	5079.79	0.134	0.065	
184	5079.79	0.204	0.109	
185	5079.90	0.020	0.006	
186	5079.98	0.234	0.129	
187	5080.07	0.247	0.137	

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
188	5080.17	0.180	0.094	
189	5080.28	0.094	0.042	
190	5080.36	0.100	0.046	
191	5080.47	0.195	0.104	
192	5080.56	0.362	0.215	
193	5080.67	0.201	0.108	
194	5080.77	0.095	0.043	
195	5080.86	0.085	0.037	
196	5080.96	0.091	0.041	
197	5081.04	0.139	0.069	
198	5081.15	0.117	0.056	
199	5081.25	0.259	0.145	
200	5081.36	0.212	0.114	
201	5081.45	0.221	0.120	
202	5081.54	0.389	0.234	
203	5081.65	0.087	0.038	
204	5081.75	0.271	0.153	
205	5081.85	0.298	0.171	
206	5081.95	0.198	0.106	
207	5082.05	0.278	0.158	
208	5082.19	0.144	0.072	
209	5082.30	0.173	0.090	
210	5082.43	0.178	0.093	
211	5082.49	0.108	0.050	
212	5082.59	0.323	0.189	
213	5082.68	0.093	0.042	
214	5082.78	0.311	0.180	
215	5082.90	0.114	0.054	
216	5083.06	0.220	0.120	
217	5083.17	0.103	0.048	
218	5083.26	0.197	0.105	
219	5083.37	0.034	0.011	
220	5083.45	0.222	0.121	
1	5083.64	0.069	0.028	Fast track
2	5083.79	0.890	0.609	Fast track
3	5083.82	1.02	0.708	Fast track
4	5083.93	0.300	0.175	Fast track
5	5083.97	1.02	0.712	Fast track
6	5084.02	0.903	0.618	Fast track
7	5084.06	-	-	Poor seal
8	5084.06	0.162	0.084	Fast track
9	5084.12	0.213	0.117	Fast track
10	5084.15	0.428	0.265	Fast track
11	5084.21	0.942	0.649	Fast track
12	5084.27	0.149	0.076	Fast track
13	5084.31	0.275	0.157	Fast track
14	5084.39	0.231	0.128	Fast track
15	5084.44	0.494	0.313	Fast track
16	5084.55	1.11	0.779	Fast track
17	5084.59	0.370	0.223	Fast track
18	5084.64	0.083	0.036	Fast track
19	5084.68	0.150	0.076	Fast track
20	5084.73	0.596	0.386	Fast track
21	5084.78	0.500	0.317	Fast track
22	5084.86	0.333	0.197	Fast track
23	5084.91	0.558	0.358	Fast track
24	5084.96	0.480	0.302	Fast track
25	5085.01	0.175	0.092	Fast track
26	5085.05	0.298	0.173	Fast track
27	5085.14	1.01	0.703	Fast track
28	5085.18	0.815	0.553	Fast track
29	5085.23	0.321	0.189	Fast track
30	5085.28	0.149	0.076	Fast track
31	5085.37	0.853	0.579	Fast track
32	5085.46	0.357	0.214	Fast track
33	5085.56	0.033	0.011	Fast track
34	5085.65	0.039	0.014	Fast track
35	5085.79	0.185	0.098	Fast track
36	5085.87	0.624	0.407	Fast track
37	5085.98	0.702	0.466	Fast track
38	5086.09	0.925	0.635	Fast track
39	5086.20	0.850	0.577	Fast track
40	5086.32	0.978	0.676	Fast track
41	5086.40	1.03	0.716	Fast track
42	5086.47	1.34	0.960	Fast track
43	5086.52	0.700	0.465	Fast track
44	5086.64	0.741	0.496	Fast track
45	5086.72	1.15	0.810	Fast track
46	5086.82	0.907	0.621	Fast track
47	5086.93	1.03	0.718	Fast track
48	5087.01	1.32	0.945	Fast track
49	5087.12	0.827	0.559	Fast track
50	5087.23	1.05	0.734	Fast track
51	5087.31	1.05	0.733	Fast track
52	5087.40	1.48	1.060	Fast track
53	5087.44	1.12	0.784	Fast track
54	5087.52	0.346	0.206	Fast track
55	5087.62	0.567	0.364	Fast track
56	5087.72	0.871	0.593	Fast track
57	5087.83	1.01	0.700	Fast track
58	5087.92	0.648	0.425	Fast track
59	5088.05	0.290	0.168	Fast track
60	5088.16	0.632	0.413	Fast track
61	5088.25	0.434	0.269	Fast track

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
62	5088.32	0.720	0.480	Fast track
63	5088.44	0.734	0.490	Fast track
64	5088.52	0.114	0.054	Fast track
65	5088.68	0.820	0.554	Fast track
66	5088.75	0.881	0.601	Fast track
67	5088.85	1.30	0.927	Fast track
68	5089.03	1.09	0.761	Fast track
69	5089.14	1.45	1.05	Fast track
70	5089.23	0.448	0.279	Fast track
71	5089.32	0.110	0.052	Fast track
72	5089.42	0.261	0.148	Fast track
73	5089.52	0.089	0.040	Fast track
74	5089.66	0.433	0.268	Fast track
75	5089.75	0.130	0.064	Fast track
76	5089.85	0.225	0.124	Fast track
77	5089.95	0.485	0.306	Fast track
78	5090.05	0.337	0.200	Fast track
79	5090.14	0.506	0.321	Fast track
80	5090.28	0.233	0.130	Fast track
81	5090.38	0.737	0.493	Fast track
82	5090.47	0.942	0.647	Fast track
83	5090.56	0.843	0.571	Fast track
84	5090.66	0.940	0.646	Fast track
85	5090.76	0.910	0.623	Fast track
86	5090.89	0.114	0.055	Fast track
87	5090.97	0.436	0.270	Fast track
221	5091.07	0.141	0.069	
222	5091.17	0.123	0.060	
223	5091.24	0.071	0.030	
224	5091.34	0.054	0.021	
225	5091.42	0.143	0.072	
226	5091.52	0.052	0.020	
227	5091.64	0.046	0.017	
228	5091.72	0.046	0.017	
229	5091.80	0.136	0.068	
230	5091.90	0.119	0.057	
231	5092.02	0.100	0.046	
232	5092.11	0.080	0.035	
233	5092.22	0.401	0.245	
234	5092.31	0.012	0.003	
235	5092.39	-	-	Poor seal
236	5092.39	-	-	Poor seal
237	5092.52	0.121	0.058	
238	5092.63	0.158	0.081	
239	5092.73	0.872	0.593	
240	5092.84	0.223	0.122	
241	5092.93	0.124	0.060	
242	5093.03	0.141	0.070	
243	5093.18	0.092	0.041	
244	5093.28	0.051	0.020	
245	5093.39	-	-	Poor seal
246	5093.48	-	-	Poor seal
247	5093.57	0.039	0.014	
248	5093.64	0.063	0.026	
249	5093.78	0.059	0.024	
250	5093.91	0.049	0.019	
251	5093.98	0.113	0.054	
252	5094.05	0.175	0.092	
253	5094.12	0.180	0.094	
254	5094.22	0.077	0.033	
255	5094.33	0.107	0.050	
256	5094.41	-	-	Poor seal
257	5094.43	0.492	0.310	
258	5094.55	0.226	0.124	
259	5094.65	0.033	0.011	
260	5094.65	0.044	0.016	
261	5094.72	0.273	0.155	
262	5094.83	0.240	0.133	
263	5094.94	0.132	0.065	
264	5095.02	0.101	0.046	
265	5095.16	0.179	0.094	
266	5095.27	0.119	0.057	
267	5095.36	0.040	0.014	
268	5095.45	0.089	0.040	
269	5095.53	-	-	Poor seal
270	5095.58	0.098	0.045	
271	5095.90	0.157	0.080	
272	5095.90	0.061	0.025	
273	5096.00	0.007	0.001	
274	5096.12	0.246	0.138	
275	5096.23	0.047	0.018	
276	5096.31	0.049	0.018	
277	5096.40	0.056	0.022	
278	5096.50	0.088	0.039	
279	5096.59	0.061	0.024	
280	5096.69	0.077	0.033	
281	5096.79	0.061	0.024	
		Core 3		
282	5097.56	0.077	0.033	
283	5097.65	0.035	0.012	
284	5097.75	0.048	0.018	
285	5097.85	0.029	0.009	
286	5098.00	-	-	Poor seal
287	5098.00	0.210	0.114	

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
288	5098.10	0.146	0.073	
289	5098.17	0.600	0.388	
290	5098.25	0.076	0.032	
291	5098.35	0.097	0.044	
292	5098.43	0.116	0.055	
293	5098.53	0.044	0.016	
294	5098.63	0.043	0.016	
295	5098.72	0.721	0.479	
296	5098.88	0.047	0.017	
297	5098.98	0.108	0.051	
298	5099.05	0.158	0.081	
299	5099.15	0.333	0.196	
300	5099.30	0.188	0.099	
301	5099.39	0.187	0.099	
302	5099.49	0.275	0.157	
303	5099.57	0.287	0.165	
304	5099.67	0.154	0.078	
305	5099.80	0.521	0.331	
306	5099.89	0.306	0.177	
307	5099.98	0.113	0.053	
308	5100.03	0.138	0.068	
309	5100.13	-	-	Poor seal
310	5100.13	-	-	Poor seal
311	5100.21	0.138	0.069	
312	5100.33	0.835	0.566	
313	5100.41	0.148	0.075	
314	5100.50	0.138	0.069	
315	5100.58	0.422	0.259	
316	5100.68	0.397	0.242	
317	5100.77	0.152	0.077	
318	5100.86	-	-	Poor seal
319	5100.86	-	-	Poor seal
320	5101.17	0.060	0.024	
321	5101.26	3.46	2.69	
322	5101.26	2.42	1.83	
323	5101.37	0.065	0.026	
324	5101.47	0.138	0.068	
325	5101.56	0.138	0.068	
326	5101.66	-	-	Poor seal
327	5101.68	0.204	0.110	
328	5101.78	0.132	0.065	
329	5101.87	0.094	0.043	
330	5101.99	0.111	0.052	
331	5102.03	-	-	Poor seal
332	5102.04	0.090	0.041	
333	5102.12	0.129	0.063	
334	5102.20	1.46	1.06	
335	5102.30	-	-	Poor seal
336	5102.31	-	-	Poor seal
337	5102.81	0.104	0.048	
338	5102.93	0.091	0.041	
339	5103.06	-	-	Poor seal
340	5103.06	-	-	Poor seal
341	5103.17	-	-	Poor seal
342	5103.28	0.093	0.042	
343	5103.34	0.212	0.115	
344	5103.46	0.273	0.155	
345	5103.78	0.115	0.055	
346	5103.88	-	-	Poor seal
347	5103.90	0.985	0.679	
348	5104.04	0.029	0.009	
349	5104.14	0.003	0.000	
350	5104.23	0.071	0.029	
351	5104.34	0.113	0.053	
352	5104.44	0.016	0.004	
353	5104.53	0.043	0.016	
354	5104.64	0.088	0.039	
355	5104.72	0.048	0.018	
356	5104.83	0.040	0.014	
357	5104.93	0.004	0.001	
358	5105.03	0.020	0.005	
359	5105.15	0.037	0.013	
360	5105.24	0.111	0.052	
361	5105.34	0.010	0.002	
362	5105.42	0.034	0.012	
363	5105.51	0.023	0.007	
364	5105.61	-	-	Fracture
365	5105.66	0.045	0.017	
366	5105.73	0.077	0.033	
367	5105.81	0.045	0.017	
368	5105.93	0.023	0.007	
369	5106.01	0.047	0.018	
370	5106.12	0.373	0.225	
371	5106.20	0.551	0.353	
372	5106.29	0.002	<0.001	
373	5106.38	0.045	0.017	
374	5106.45	0.076	0.033	
375	5106.53	0.134	0.066	
376	5106.63	0.033	0.011	
377	5106.72	0.003	<0.001	
378	5106.80	-	-	Fracture
379	5106.85	-	-	Fracture
380	5106.96	-	-	Fracture
381	5107.01	0.021	0.006	

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
382	5107.12	0.023	0.007	
383	5107.29	0.027	0.008	
384	5107.37	0.001	<0.001	
385	5107.44	<0.001	<0.001	
386	5107.54	0.034	0.011	
387	5107.66	0.043	0.015	
388	5107.75	0.027	0.008	
389	5107.86	0.378	0.226	
390	5107.96	0.039	0.014	
391	5108.02	-	-	Poor seal
392	5108.06	0.019	0.005	
393	5108.21	6.55	5.32	Poor seal
394	5108.21	5.58	4.48	Poor seal
395	5108.48	0.022	0.006	
396	5108.63	-	-	Poor seal
397	5108.69	0.457	0.284	
398	5108.77	0.019	0.005	
399	5108.90	-	-	Poor seal
400	5108.96	-	-	Poor seal
401	5109.03	-	-	Poor seal
402	5109.12	-	-	Poor seal
403	5109.17	-	-	Poor seal
404	5109.29	<0.001	<0.001	
405	5109.43	0.001	<0.001	
406	5109.52	0.001	<0.001	
407	5109.61	0.005	0.001	
408	5109.69	0.142	0.071	
409	5109.80	0.001	<0.001	
410	5109.90	0.056	0.022	
411	5109.99	0.461	0.287	
412	5110.03	0.042	0.015	
413	5110.13	-	-	Poor seal
414	5110.25	0.052	0.020	
415	5110.34	0.021	0.006	
416	5110.40	0.059	0.024	
417	5110.50	0.046	0.017	
418	5110.59	0.016	0.004	
419	5110.72	0.001	<0.001	
420	5110.86	0.009	0.002	
421	5110.99	-	-	Poor seal
422	5111.19	-	-	Poor seal
423	5111.34	0.013	0.003	
424	5111.36	-	-	Poor seal
425	5111.47	<0.001	<0.001	
426	5111.61	-	-	Poor seal
427	5111.71	0.010	0.002	
428	5111.80	-	-	Poor seal
429	5111.80	-	-	Poor seal
430	5111.91	0.002	<0.001	
431	5112.04	0.010	0.002	
432	5112.15	0.404	0.242	
433	5112.31	0.111	0.053	
434	5112.38	0.213	0.116	
435	5112.43	0.149	0.076	
436	5112.55	0.015	0.004	
437	5112.65	0.537	0.343	
438	5112.75	0.015	0.004	
439	5112.83	0.123	0.059	
440	5113.02	0.046	0.017	
441	5113.10	0.018	0.005	
442	5113.20	0.135	0.067	
443	5113.30	0.030	0.010	
444	5113.39	0.039	0.013	
445	5113.56	0.010	0.002	
446	5113.66	0.086	0.038	
447	5113.74	0.059	0.024	
448	5113.86	0.035	0.012	
449	5113.86	0.048	0.018	
450	5113.94	0.003	<0.001	
451	5114.04	0.010	0.002	
452	5114.21	0.063	0.026	
453	5114.30	0.014	0.003	
454	5114.39	0.056	0.022	
455	5114.54	0.153	0.077	
456	5114.64	0.083	0.036	
457	5114.76	-	-	Poor seal
458	5114.80	0.027	0.008	
459	5114.91	0.001	<0.001	
460	5114.98	0.009	0.002	
461	5115.06	0.088	0.039	
462	5115.36	0.625	0.406	
463	5115.46	0.080	0.035	
464	5115.57	0.069	0.029	
465	5115.66	0.106	0.050	
466	5115.78	0.117	0.056	
467	5115.87	0.246	0.137	
468	5115.96	0.260	0.147	
469	5116.03	0.025	0.008	
470	5116.11	0.002	<0.001	
471	5116.18	0.034	0.011	
472	5116.31	0.186	0.099	
473	5116.43	0.144	0.072	
474	5116.56	0.187	0.099	
475	5116.65	0.021	0.006	

PROFILE PERMEAMETRY

SAMPLE POINT	DEPTH (m)	PERMEABILITY Ka (md)	PERMEABILITY Kinf (md)	COMMENTS
476	5116.75	0.018	0.005	
477	5116.84	0.005	0.001	
478	5116.95	0.019	0.005	
479	5117.07	0.185	0.098	
480	5117.13	0.115	0.055	
481	5117.18	0.932	0.637	
482	5117.30	0.135	0.067	
483	5117.38	0.008	0.002	
484	5117.50	0.005	0.001	
485	5117.61	0.082	0.036	
486	5117.73	0.005	0.001	
487	5117.80	0.008	0.001	
488	5117.89	0.065	0.027	
489	5118.04	-	-	Poor seal
490	5118.05	0.029	0.009	
491	5118.14	0.098	0.045	
492	5118.21	0.184	0.097	
493	5118.33	-	-	Poor seal
494	5118.34	0.345	0.204	
495	5118.50	0.232	0.128	
496	5118.62	-	-	Poor seal
497	5118.67	0.021	0.006	
498	5118.76	0.030	0.010	
499	5118.86	-	-	Poor seal
500	5118.97	0.036	0.012	
501	5119.13	0.931	0.631	
502	5119.32	-	-	Poor seal
503	5119.41	0.010	0.002	
504	5119.50	0.038	0.013	
505	5119.68	0.313	0.182	
506	5119.76	0.422	0.259	
507	5119.82	0.018	0.005	
508	5119.99	0.658	0.430	
509	5120.05	8.47	7.00	
510	5120.06	0.101	0.046	
511	5120.16	0.109	0.051	
512	5120.27	0.019	0.005	
513	5120.34	0.006	0.001	
514	5120.46	0.444	0.274	
515	5120.54	-	-	Poor seal
516	5120.54	-	-	Poor seal
517	5120.73	0.074	0.031	
518	5120.82	0.105	0.049	
519	5120.93	-	-	Poor seal
520	5121.01	0.128	0.062	
521	5121.11	0.043	0.015	
522	5121.20	0.101	0.046	
523	5121.30	0.021	0.006	
524	5121.42	0.031	0.010	
525	5121.51	0.015	0.004	
526	5121.62	0.192	0.102	
527	5121.72	0.125	0.061	
528	5121.80	0.025	0.007	
529	5121.87	0.053	0.020	
530	5122.02	0.098	0.044	
531	5122.12	0.037	0.013	
532	5122.21	0.051	0.019	
533	5122.30	0.448	0.277	
534	5122.40	0.042	0.015	
535	5122.47	0.027	0.008	
536	5122.54	0.013	0.003	

POROSITY, PERMEABILITY, GRAIN DENSITY and RESIDUAL FLUID SATURATIONS

		Warm Solvent and Convection Oven Dried						
SAMPLE NUMBER	SAMPLE DEPTH	CONFINING STRESS 400psi Steady - State PERMEABILITY		Hg Bulk Volume POROSITY	GRAIN DENSITY	Residual Fluid Saturations		COMMENTS
		Kinf	Kair			Sw	So	
	(m)	(md)	(md)	(%)	(g/cc)	(%)	(%)	
1DS	5061.04		0.013	3.9	2.690	72.1	9.4	
2DS	5063.03		0.019	5.8	2.669	71.5	23.6	
3DS	5065.14		0.011	4.0	2.685	63.4	29.4	
4DS	5067.45		0.015	2.9	2.715	60.0	36.3	
5DS	5071.62		0.004	1.1	2.728	65.1	2.5	
6DS	5073.06		0.020	4.5	2.673	57.6	40.7	
7DS	5074.75		0.015	2.7	2.760	59.3	36.1	
8DS	5076.15		0.004	1.1	2.709	29.4	48.3	
9DS	5077.94		0.004	1.5	2.773	71.3	11.1	
10DS	5079.86		0.014	3.0	2.687	66.2	20.6	
11DS	5081.78		0.022	7.2	2.717	73.6	15.3	
12DS	5083.29		0.005	3.0	2.728	42.1	47.5	
13DS	5084.35		0.054	7.3	2.718	69.4	5.8	
14DS	5086.29		0.258	10.7	2.682	58.3	4.9	
15DS	5087.35		0.261	10.4	2.674	57.3	7.2	
16DS	5089.36		0.070	1.7	2.718	52.5	36.6	
17DS	5091.58		0.010	3.0	2.656	37.8	58.8	
18DS	5094.75		0.029	4.9	2.663	28.7	67.9	
19DS	5090.18		0.051	8.5	2.765	62.9	14.3	
20DS	5097.93		0.006	1.9	2.747	61.9	35.5	
21DS	5100.07		0.013	2.4	2.699	33.7	65.9	
22DS	5102.89		-	3.4	2.661	-	-	Fracture
23DS	5104.09		0.012	6.4	3.127	36.7	22.2	
24DS	5106.07		0.039	1.3	2.654	76.6	9.8	

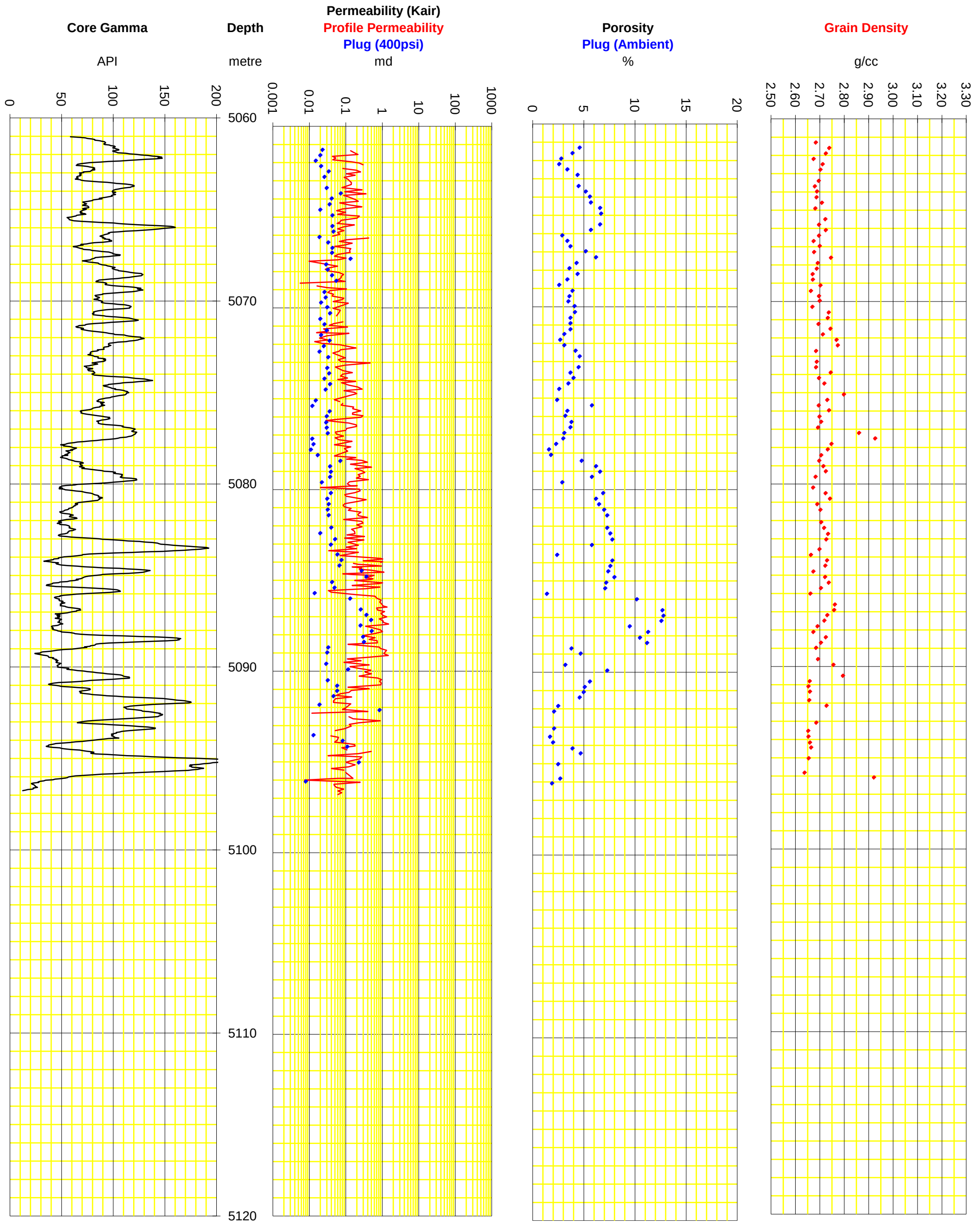
POROSITY, PERMEABILITY, GRAIN DENSITY and RESIDUAL FLUID SATURATIONS

		Warm Solvent and Convection Oven Dried						
SAMPLE NUMBER	SAMPLE DEPTH	CONFINING STRESS 400psi Steady - State PERMEABILITY		Hg Bulk Volume POROSITY	GRAIN DENSITY	Residual Fluid Saturations		COMMENTS
		Kinf	Kair			Sw	So	
	(m)	(md)	(md)	(%)	(g/cc)	(%)	(%)	
25DS	5109.55		3.51	2.0	2.775	85.6	2.1	Fracture
26DS	5111.75		2.32	1.8	2.616	-	-	Fracture
27DS	5113.86		0.007	1.4	2.694	47.3	48.9	
28DS	5115.92		-	3.2	2.748	79.5	17.3	Fracture
29DS	5118.05		-	4.3	2.963	26.9	49.8	Fracture
30DS	5120.97		0.020	2.4	2.678	50.8	47.0	
31DS	5114.87		0.008	2.4	2.682	66.1	21.4	

COMPANY : ConocoPhillips Australia Exploration Pty.Ltd
WELL : Poseidon - 2

INTEGRATED CORELOG

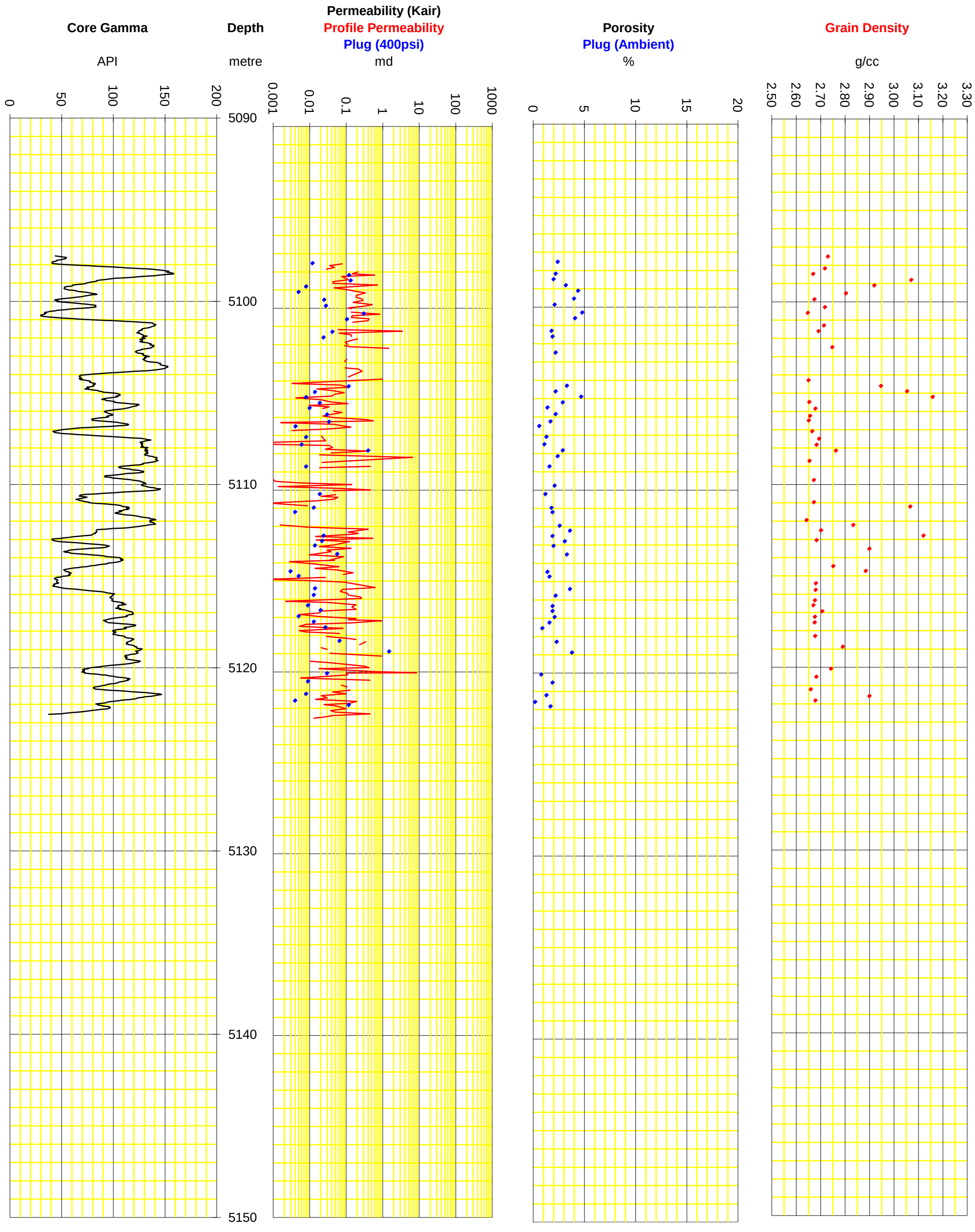
VERTICAL SCALE
1 : 200



COMPANY : ConocoPhillips Australia Exploration Pty.Ltd
WELL : Poseidon - 2

INTEGRATED CORELOG

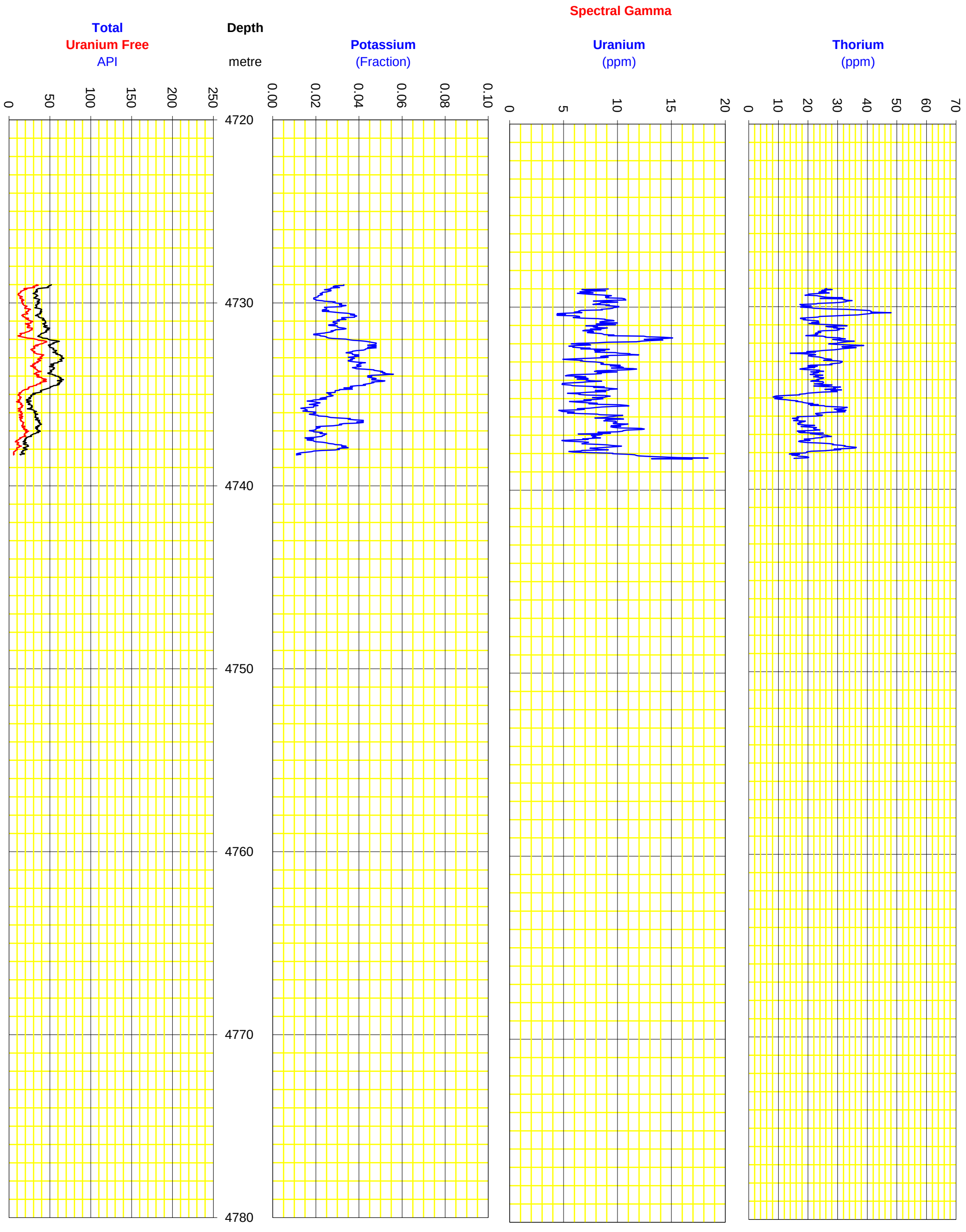
VERTICAL SCALE
1 : 200



COMPANY : ConocoPhillips Australia Exploration Pty.Ltd
WELL : Poseidon - 2

SPECTRAL CORE GAMMA

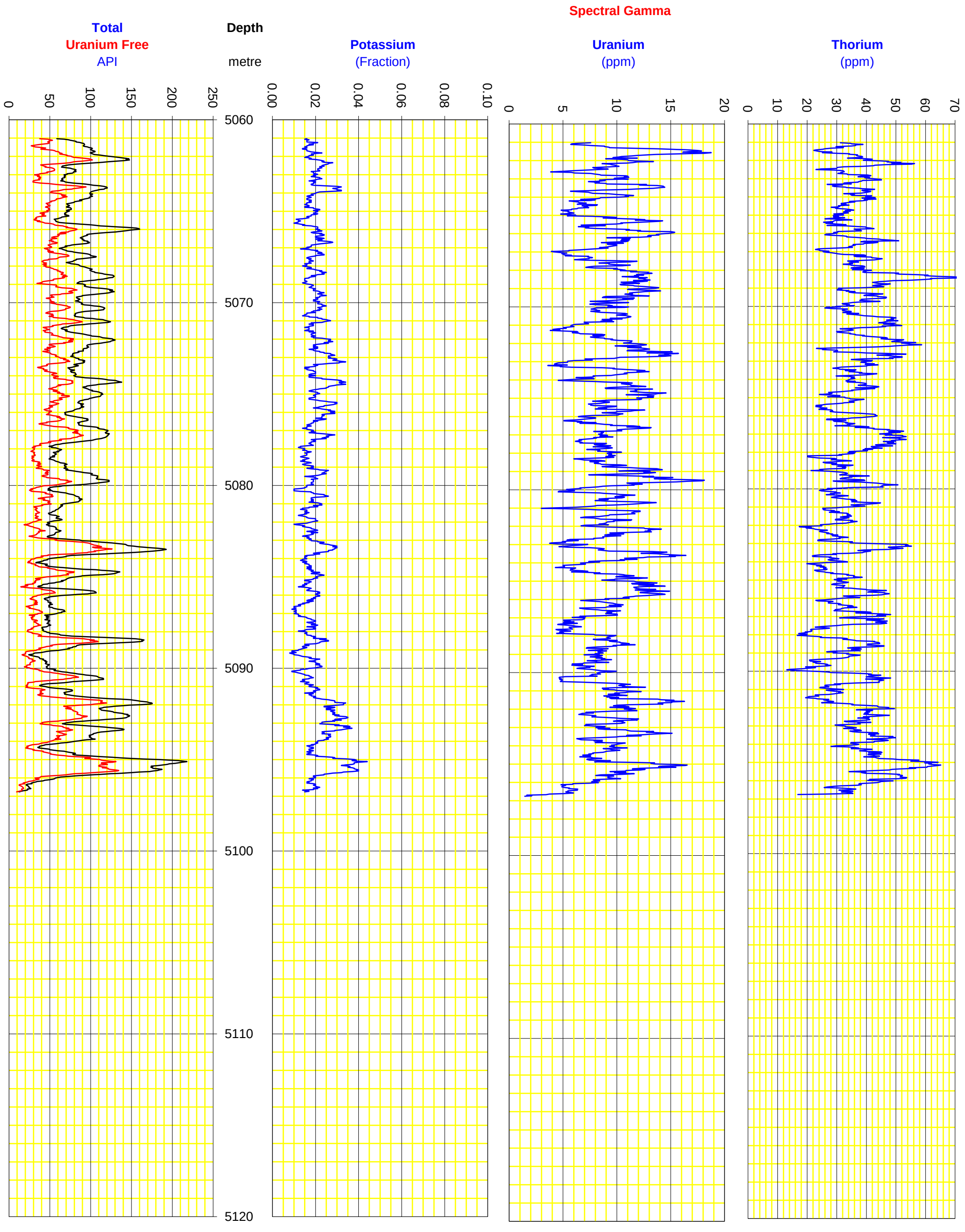
VERTICAL SCALE
1 : 200



COMPANY : ConocoPhillips Australia Exploration Pty.Ltd
WELL : Poseidon - 2

SPECTRAL CORE GAMMA

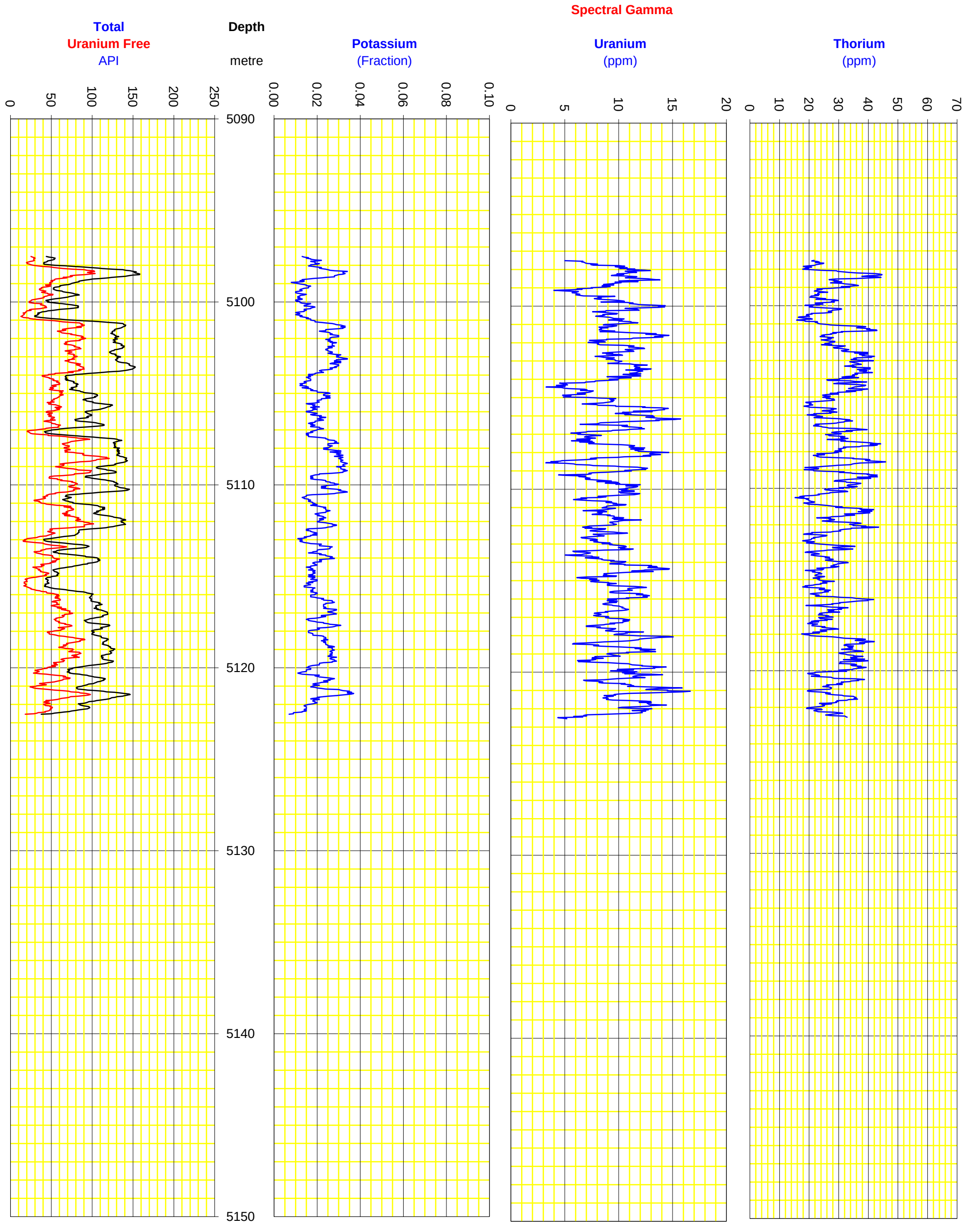
VERTICAL SCALE
1 : 200



COMPANY : ConocoPhillips Australia Exploration Pty.Ltd
WELL : Poseidon - 2

SPECTRAL CORE GAMMA

VERTICAL SCALE
1 : 200



CORE INVENTORY

Barrel	Depth Top (m)	Depth Bottom (m)	Comments
		Core 1	
1	4729.00	4733.50	
2	4733.50	4738.40	
Laboratory Depths 4729.00-4738.40m			
		Core 2	
1	5061.00	5064.50	
2	5064.50	5068.92	
3	5068.92	5073.38	
4	5073.38	5078.04	
5	5078.04	5082.54	
6	5082.54	5087.17	
7	5087.17	5091.67	
8	5091.67	5096.82	
Laboratory Depths 5061.00-5096.82			
		Core 3	
1	5097.50	5099.24	
2	5099.24	5103.50	
(C3-A)	5103.50	5103.74	Waxed sample
3	5103.74	5108.24	
(C3-B)	5108.24	5108.49	Waxed sample
4	5108.49	5113.25	
5	5113.25	5117.75	
6	5117.75	5122.64	
Laboratory Depths 5097.50-5122.60m			

Barrel	Depth Top (m)	Depth Bottom (m)	Comments

SAMPLE and PLUG INVENTORY

Sample	Depth (m)	Comments	Sample	Depth (m)	Comments	Sample	Depth (m)	Comments
Core 1			17	5066.70		49	5076.91	
1 TS	4729.50		18	5066.97		50	5077.21	
2 TS	4730.20		V2	5067.22		V4	5077.42	
3 TS	4730.57		19	5067.30		51	5077.51	
4 TS	4731.20		4DS	5067.45		52	5077.81	
5 TS	4731.85		20	5067.61		S2-11	5077.87	
6 TS	4732.25		S2-5	5067.66		9DS	5077.94	
7 TS	4732.45		21	5067.90		53	5078.11	
8 TS	4733.15		22	5068.21		54	5078.43	
9 TS	4733.80		23	5068.51		S1-5	5078.49	
10 TS	4734.50		24	5068.81		S2-12	5078.68	
11 TS	4734.72		S2-6	5069.09		55	5078.73	
12 TS	4735.10		25	5069.13		56	5079.03	
13 TS	4735.80		26	5069.43		57	5079.31	
14 TS	4736.35		27	5069.71		58	5079.61	
15 TS	4736.90		S1-3	5069.93		S2-13	5079.65	
16 TS	4737.10		28	5069.97		10DS	5079.86	
17 TS	4737.50		29	5070.30		59	5080.20	
18 TS	4738.15		30	5070.61		S2-14	5080.24	
19 TS	4738.30		31	5070.91		60	5080.51	
Core 2			32	5071.24		61	5080.81	
1DS	5061.04		S2-7	5071.45		62	5081.11	
1	5061.30		33	5071.50		63	5081.42	
2	5061.60		5DS	5071.62		S2-15	5081.48	
S2-1	5061.88		34	5071.81		11DS	5081.78	
3	5061.90		S2-8	5072.07		64	5082.10	
V1	5062.13		35	5072.11		S1-6	5082.15	
4	5062.20		V3	5072.13		S2-16	5082.15	
5	5062.49		36	5072.41		65	5082.41	
S1-1	5062.58		37	5072.72		66	5082.74	
S2-2	5062.75		6DS	5073.06		V5	5082.97	
6	5062.79		38	5073.31		67	5083.04	
2DS	5063.03		39	5073.61		12DS	5083.29	
7	5063.40		40	5073.90		68	5083.58	
8	5063.70		S2-9	5074.15		69	5083.89	
9	5063.98		41	5074.20		70	5084.19	
S2-3	5064.25		42	5074.50		13DS	5084.35	
10	5064.30		7DS	5074.75		71	5084.48	
11	5064.60		43	5075.10		72	5084.80	
12	5064.91		44	5075.40		73	5085.10	
3DS	5065.14		45	5075.70		74	5085.41	
13	5065.50		S1-4	5075.75		75	5085.71	
14	5065.80		46	5075.97		S2-17	5085.76	
15	5066.10		8DS	5076.15		76	5086.01	
16	5066.40		47	5076.31		14DS	5086.29	
S1-2	5066.50		S2-10	5076.56		S2-18	5086.56	
S2-4	5066.65		48	5076.60		77	5086.61	

SAMPLE and PLUG INVENTORY

Sample	Depth (m)	Comments
78	5086.91	
79	5087.19	
15DS	5087.35	
80	5087.49	
S1-7	5087.76	
81	5087.80	
82	5088.11	
S2-19	5088.35	
83	5088.40	
84	5088.70	
S1-8	5088.93	
85	5088.98	
16DS	5089.36	
86	5089.60	
87	5089.91	
19DS	5090.18	
S2-20	5090.24	
88	5090.51	
89	5090.81	
90	5091.09	
91	5091.38	
17DS	5091.58	
92	5091.85	
93	5092.15	
94	5092.45	
95	5092.79	
96	5093.08	
97	5093.53	
98	5093.84	
99	5094.17	
100	5094.44	
18DS	5094.75	
101	5095.03	
102	5095.38	
103	5095.82	
S1-9	5096.04	
104	5096.08	
Core 3		
S2-21	5096.14	
105	5097.53	
V6	5097.83	
20DS	5097.93	
106	5098.18	
107	5098.48	
108	5098.81	
S1-10	5098.86	
109	5099.11	
110	5099.54	
111	5099.87	
21DS	5100.07	
112	5100.30	
113	5100.61	
114	5101.30	
115	5101.61	
116	5101.89	
117	5102.49	
118	5102.78	
22DS	5102.89	
119	5103.09	
120	5103.38	
23DS	5104.09	
S2-22	5104.26	
121	5104.30	
122	5104.61	
123	5104.90	
124	5105.21	
125	5105.49	
126	5105.85	
24DS	5106.07	
127	5106.25	
128	5106.50	
129	5107.09	
130	5107.50	
131	5107.83	
V7	5108.09	
132	5108.15	
133	5108.71	
134	5109.06	
135	5109.35	
25DS	5109.55	
136	5109.76	
137	5110.22	
138	5110.57	
139	5110.97	
140	5111.21	
141	5111.63	
26DS	5111.75	
142	5111.95	
143	5112.22	
144	5112.51	
145	5112.80	
146	5113.05	
147	5113.52	
27DS	5113.86	
148	5114.13	
149	5114.47	
S1-11	5114.50	
S2-23	5114.59	
V8	5114.65	
150	5114.73	
31DS	5114.87	
151	5115.03	
152	5115.41	
153	5115.77	
28DS	5115.92	
154	5116.34	
S2-24	5116.40	
155	5116.61	
156	5116.94	
157	5117.24	
158	5117.55	
159	5117.92	
29DS	5118.05	
160	5118.29	
161	5118.57	
162	5118.88	
163	5119.30	
164	5119.55	
165	5119.91	
166	5120.08	
167	5120.52	
30DS	5120.97	
S2-25	5121.17	
168	5121.21	
169	5121.58	
170	5121.82	