

2.9 FMT AND RCI

Baker Atlas made a total of 4 FMT and 2 RCI runs on 6506/6-1. The 2 RCI runs were generally unsuccessful, both failing after a short time in the hole because of the high downhole temperatures. There was also a temperature-related failure on one of the FMT runs. The following table summarises all the runs.

FMT and RCI Run Summary - 6506/6-1					
Run No.	Depth	Type	Attempts/Success		Comments
			Points	Samples	
4.1	4966.0 - 5346.0	FMT/GR/CHT/20L/4L	44/14	1/1 5169.0 mMD	Completed pressure and sampling program
4.1	5035.8	RCI/GR	1/1	1/0 5035.8 mMD	Temperature Gauge failure. No sample
4.2	5035.3 - 5168.5	RCI/GR	7/4	1/0 5035.5 mMD	Pretest piston and pressure gauge failure. No sample.
5.1	5267.0 - 5267.9	FMT/GR/CHT/20L/4L	3/3	1/1 5267.5 mMD	HP Gauge failed
6.1	5033.5 - 5371.0	FMT/GR/20L/4L	36/4	2/2 5035.5 mMD 5033.5 mMD	Completed pressure and sampling program
6.2	5749.0 - 5033.8	FMT/GR/20L/4L	33/2	1/1 5035.3 mMD	Completed pressure and sampling program

See below for a summary of the successful pressure points and for a summary of the results of analyses of the FMT samples undertaken by Oilphase.

A pressure data plot can be found at the end of Section 2.8

The following tables summarize the FMT and RCI pretest pressures and sampling results. Note that the listing here only lists the successful tests where there is a degree of confidence about the results. A full listing of all the points is included in the Appendix 7.

Formation Pressures in Run Order

Run No.	Test No.	Tool Type	Test Type	Depth (m)			Gauge Type	Formation Pressure		Comments
				BRT	TVD	TVDSS		bars	g/cce	
4.1	4	FMT	P	5036.0	5026.5	5008.5	Qtz	806.44	1.64	Straight to pressure. k=57.9
4.1	5	FMT	P	5037.0	5027.5	5009.5	Qtz	806.56	1.64	Slight build-up k=0.4
4.1	6	FMT	P	5038.0	5028.5	5010.5	Qtz	806.50	1.63	Straight to pressure. k=31.4
4.1	7	FMT	P	5037.5	5028.0	5010.0	Qtz	806.49	1.64	Straight to pressure. k=166.9
4.1	8	FMT	P	5037.0	5027.5	5009.5	Qtz	806.48	1.64	Slight build-up. k=0.8
4.1	9	FMT	P	5063.5	5053.3	5035.3	Qtz	807.35	1.63	Slow build-up. K=0.2
4.1	11	FMT	P	5065.0	5055.3	5037.3	Qtz	807.27	1.63	Up 1m, Good, k=0.3
4.1	17	FMT	P	5168.0	5157.3	5139.3	Qtz	810.89	1.60	Poor to moderate. Not quite stable. K=0.1
4.1	18	FMT	P	5169.0	5158.3	5140.3	Qtz	810.75	1.60	Good to very good, stable, k=104.4
4.1	25	FMT	P	5242.0	5230.3	5212.3	Qtz	812.75	1.58	Moderate to good. K=0.3
4.1	26	FMT	P	5269.0	5256.9	5238.9	Qtz	813.45	1.58	Good, k=3.8
4.1	29	FMT	P	5271.0	5258.9	5240.9	Qtz	816.93	1.58	Moderate to good. K=1.3
4.1	30	FMT	P	5276.0	5263.8	5245.8	Qtz	813.83	1.58	Very Good, stable pressure. K=16.7
4.1	38	FMT	P	5169.0	5158.3	5140.3	Qtz	810.98	1.60	Very good, k=1.3
4.1	S	FMT	P	5169.0	5158.3	5140.3	Qtz	810.98	1.60	20L chamber filled in 16mins; 4L filled in 4 mins flowing at 750 bar.
4.1	1	RCI	S	5035.8	5026.3	5008.3	Qtz	806.20	1.64	84.87mD mobility on pretest. 195.56 on sample.
4.2	1	RCI	P	5035.8	5026.3	5008.3	Qtz	805.90	1.63	Abort test. Problem with pre-test piston.
4.2	4	RCI	P	5035.8	5026.3	5008.3	Qtz	806.26	1.64	34.7mD mobility
4.2	5	RCI	P	5035.8	5026.3	5008.3	Qtz	805.27	1.63	Good
4.2	6	RCI	P	5035.3	5025.8	5007.8	Qtz	806.16	1.64	Good
4.2	7	RCI	S	5035.5	5026.0	5008.0	Qtz	806.13	1.63	Try to sample but seal fails after pumping 1 litre
5.1	2	FMT	P	5267.5	5255.4	5237.4	Qtz	813.86	1.58	Good, K=2.9
5.1	S	FMT	S	5267.5	5255.4	5237.4	Qtz	813.83	1.58	Sample, K=3.7. HP Gauge stopped working during test
6.1	1	FMT	S	5035.5	5026.1	5008.1	Qtz	806.86	1.64	Lost seal after 46 secs K=3.456 mD
6.1	2	FMT	S	5033.5	5024.1	5006.1	Qtz	806.99	1.64	Filled in 26 sec K=21.851 mD
6.1	14	FMT	P	5267.5	5255.4	5237.4	Qtz	814.10	1.58	Good test, from previous test to check tool - OK, K=3.848
6.2	28	FMT	P	5267.5	5255.4	5237.4	Qtz	814.49	1.58	Good - done to verify tool OK, K=14.949mD
6.2	32	FMT	P	5289.2	5276.8	5258.8	Qtz	814.79	1.57	Lost seal at end of test had to cycle pump
6.2	34	FMT	S	5035.3	5025.9	5007.9	Qtz	807.14	1.64	20 lt plugged after 40 sec.

Oilphase performed FMT/RCI sample handling and sample validation services at the wellsite on well 6506/6-1. The contents of the 20 litre dump chambers were analysed for contamination and water content. Any liquids were preserved for later re-evaluation, if required.

The four litre sampling chambers had their opening pressures recorded and were then heated and pressurized for 24 hours. The contents were then transferred to Oilphase conventional sample bottles and shipped back to the Oilphase laboratory for further analyses if required. During the transfer process small samples were taken from these chambers for wellsite analyses.

The main results for the samples were:-

- All the liquid samples were found to be highly contaminated with mud filtrate.
- The gas samples had a high methane content with small amounts of heavy components, CO₂ and H₂S. This was indicative of dry gas.
- Water analyses were performed on the 20 litre dump chambers from 5169.0 m and 5267.5 m. The samples had a low salt content. Ion balance calculations show that the waters contain large concentrations of anions not typical of marine derived or formation waters.

Summaries of the sampling and the main Oilphase wellsite analyses are outlined below. For full details see the Oilphase final well report.

FMT/RCI Samples				
Run No.	Depth (mMD)	Chamber	Fluid Recovered	Comment
4.1 FMT	5169.0	20L dump 4L PVT	Filtrate and 26 cu ft gas	Both chambers opened and analysed at wellsite. Samples stored in 1 2.5l plastic container and 2 CSBs
4.1 RCI	5035.8	Multiple 4L/850ml/600 ml	None	Tool failed - No samples
4.2 RCI	5035.5	Multiple 4L/850ml/600 ml	None	Tool failed - No samples
5.1 FMT	5267.5	20L dump 4L PVT	Filtrate plus 26.2 cu ft of gas	20 L chamber opened & analysed 4L chamber contents transferred to 1 5l plastic container and 3 CSBs
6.1 FMT	5035.5 5033.5	20L dump 4L PVT	Filtrate plus minor gas	20 L chamber opened & analysed 4L chamber contents transferred to 25 litre IATA can and 3 CSBs
6.2 FMT	5035.3	20L dump 4L PVT	Filtrate plus 31.7 cu ft gas	20 L chamber opened & analysed 4L chamber contents transferred to 1 5l plastic container and 3 CSBs

Oilphase Wellsite Formation Water Analysis - 6506/6-1

Source	Sample 1.01 from 5169.0 mMD	Sample 1.04 from 5267.5 mMD
Sample from	20 litre FMT dump chamber	20 litre FMT dump chamber

Density (g/cc)	1.005	1.004
Conductivity	N/A	6.8
Ambient Temperature (°C)	21.4	23.8
pH @ 20°C	N/A	5.59
Na ⁺ mg/l	781	751
K ⁺ mg/l	594	632
Mg ²⁺ mg/l	301	207
Ca ²⁺ mg/l	1881	1490
Sr ²⁺ mg/l	159	Not detected
Ba ²⁺ mg/l	Not detected	Not detected
Cl ⁻ mg/l	1934	1006
SO ₄ ²⁻ mg/l	1382	501
H ₂ S ppm	28	15
CO ₂ ppm	N/A	N/A
Hg	N/A	N/A
TRITIUM (KBq/L)	N/A	N/A

FMT Samples, Wellsite Gas Analysis Summary - 6506/6-1

Sample No.	1.03	1.04	1.05	1.09	1.12	1.13
Depth mMD	5169.0	5267.5	5267.5	5033.5	5035.3	5035.3
N ₂	0.19	0.15	0.41	0.00	0.00	0.00
CO ₂	9.38	9.41	10.35	8.07	7.29	7.24
H ₂ S	0.00	0.00	0.00	0.00	0.00	0.00
CH ₄	89.80	89.94	88.75	89.67	90.99	90.55
C ₂ H ₆	0.57	0.45	0.45	1.76	1.40	1.89
C ₃ H ₈	0.04	0.03	0.03	0.32	0.21	0.21
IC ₄ H ₁₀	0.02	0.01	0.00	0.09	0.07	0.06
NC ₄ H ₁₀	0.00	0.01	0.00	0.04	0.00	0.04
IC ₅ H ₁₂	0.00	0.00	0.00	0.03	0.05	0.00
NC ₅ H ₁₂	0.00	0.00	0.00	0.00	0.00	0.00
Pseudo C ₈	0.00	0.00	0.00	0.00	0.00	0.00
C ₇ ⁺	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00
Molar Mass	18.79	18.77	19.06	18.72	18.39	18.44

Sample Contamination Results

Sample No	Depth mMD	Formation	Contamination
1.01	5169.0	Tilje	100
1.02	5169.0	Tilje	80 - 100
1.04	5267.5	Tilje	> 70
1.05	5267.5	Tilje	80 - 100
1.08	5035.5	Tilje	90 - 100
1.09	5033.5	Tilje	90 - 100
1.12	5035.3	Tilje	80 - 100
1.13	5035.3	Tilje	100

CASING DATA

BIT SIZE	INTERVAL	CASING	SHOE DEPTH	MUD SYSTEM
9-7/8"	451.0 - 1425 m	N/A	Pilot Hole	Seawater
36"	451.5 - 551.0 m	30"	548.6	Seawater
26"	551.0 - 1437.0 m	20"	1424.5	Seawater
17.5"	1437.0 - 2805.0 m	13 3/8"	2794.0	KCl/Glycol WBM
12.25"	2805.0 - 4276.0 m	9 5/8"	4267.0	VersaPro OBM
8.5"	4276.0 - 5491.0 m	7"	5489.0	VersaPro OBM

GEOCHEMICAL REPORT ON WELL NOCS 6506/6-1

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Chapter 1

INTRODUCTION

1.1 General Well Information

The aims of the ExxonMobil-designed analytical program were to evaluate the possible source rock sections of the Tertiary/Cretaceous and Jurassic and any migrated hydrocarbons present. A mineral oil based mud system (Versapro) was used in drilling the section of well below 2805 m. The well was turbodrilled below the main cored interval (below 5274 m). Besides cuttings, core and swc samples, a gas sample and an oil sample from FMT 4L were received for analysis (see Table 1). The gas sample proved to be virtually deficient in gas and measurements were obtained on the traces of methane, ethane and carbon dioxide present. Another gas sample from the same interval was obtained at a later date and good data was obtained from this.

1.2 Analytical Program

The analytical program for well NOCS 6506/6-1 decided by ExxonMobil and the number of samples for the individual analyses are listed in Table 1.

Table 1 Analytical Program

Sample Depth (m)	Sample Type	Headspace and Occluded Gas	Lithology Description	Sample preparation	Sample preparation - solvent extraction of cuttings	Leco TOC	Leco TOC on extracted cuttings	RockEval on extracted cuttings, unextracted swc and core	GHM Thermal Extraction (x') and Pyrolysis-GC	SOXTEC Extraction	MPLC & Deasphaltene	EOM GC	Whole Oil GC	Sat GC	Aro GC	Sat GCMS	Vitrinite Reflectance	Visual Kerogen	Gas isotopes
3018	cut	x	x																
3036	cut	x	x																
3054	cut	x	x																
3072	cut	x	x																
3090	cut	x	x																
3099	swc					x										x	x		
3108	cut	x	x		x	x		x											
3126	cut	x	x		x	x		x											
3144	cut	x	x		x	x		x											
3150	swc					x		x										x	
3162	cut	x	x		x	x	x	x											
3180	cut	x*	x		x	x		x								x	x		
3198	cut	x	x		x	x		x											
3216	cut	x	x		x	x		x	x'										
3234	cut	x	x		x	x		x											
3252	cut	x	x		x	x		x											
3270	cut	x	x		x	x	x	x								x			
3288	cut	x	x		x	x		x										x	
3306	cut	x	x		x	x		x											
3315.2	swc					x		x								x	x		
3324	cut	x	x		x	x		x	x'										
3342	cut	x	x		x	x		x											
3360	cut	x	x		x	x	x	x											
3378	cut	x	x		x	x		x											
3396	cut	x	x		x	x		x								x	x		
3414	cut	x	x																
3432	cut	x	x		x	x		x											
3450	cut	x	x		x	x		x											
3468	cut	x	x		x	x		x											
3486	cut	x	x		x	x	x	x											
3504	cut	x	x													x			
3520.8	swc					x												x	

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3522	cut	x	x																
3540	cut	x	x		x	x		x											
3558	cut	x	x		x	x		x											
3576	cut	x	x		x	x		x											
3594	cut	x	x		x	x	x	x											
3599.8	swc					x		x	x	x	x		x	x	x	x	x	x	
3612	cut	x	x		x	x		x											
3630	cut	x	x		x	x		x											
3640	swc					x		x										x	
3648	cut	x	x		x	x		x											
3666	cut	x	x		x	x		x											
3684	cut	x	x		x	x	x	x											
3702	cut	x	x		x	x		x									x		
3720	cut	x	x		x	x		x										x	
3738	cut	x	x		x	x		x											
3756	cut	x	x		x	x		x											
3774	cut	x	x		x	x		x											
3792	cut	x	x		x	x		x									x	x	
3810	cut	x	x		x	x	x	x											
3815	swc					x													
3828	cut	x	x																
3846	cut	x	x		x	x		x											
3857.8	swc					x		x									x	x	
3864	cut	x	x		x														
3882	cut	x	x		x	x		x											
3900	cut	x	x		x	x		x										x	
3918	cut	x	x		x	x		x											
3936	cut	x	x		x	x	x	x											
3950.5	swc					x		x	x								x	x	
3954	cut	x	x		x														
3972	cut	x	x		x	x		x											
3990	cut	x	x		x	x		x											

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4008	cut	x	x		x	x		x								x	x		
4026	cut	x	x		x	x	x	x											
4044	cut	x	x		x														
4062	cut	x	x		x	x		x											
4070.5	swc					x		x									x	x	
4080	cut	x	x		x														
4098	cut	x	x		x	x		x									x		
4112	swc					x		x										x	
4116	cut	x	x		x														
4125	swc					x		x											
4132.5	swc					x											x	x	
4134	cut	x	x		x														
4150.5	swc					x		x									x	x	
4152	cut	x	x		x	x		x											
4170	cut	x	x		x	x		x											
4188	cut	x	x		x	x		x											
4206	cut	x	x		x	x		x									x	x	
4207	swc					x												x	
4224	cut	x	x		x	x		x											
4242	cut	x	x		x	x	x	x											
4254.5	swc					x		x									x	x	
4260	cut	x	x		x	x		x											
4276	cut	x	x		x	x		x											
4296	cut	x	x		x		x	x									x	x	
4314	cut	x	x		x		x	x	x										
4332	cut	x	x		x		x	x											
4350	cut	x	x		x		x	x	x										
4368	cut	x	x		x		x	x											
4386	cut	x	x		x		x	x	x	x	x		x	x	x				
4400	cut	x	x		x		x	x									x	x	
4420	cut	x	x		x		x	x	x										
4440	cut	x	x		x		x	x											

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4450	cut	x	x		x		x	x	x	x				x	x				
4470	cut	x	x		x		x	x									x	x	
4496	cut	x	x		x		x	x											
4510	cut	x	x		x		x	x											
4530	cut	x	x		x		x	x										x	
4550	cut	x	x		x		x	x											
4570	cut	x	x		x		x	x											
4590	cut	x	x		x		x	x											
4610	cut	x	x		x		x	x									x	x	
4630	cut	x	x		x		x	x											
4650	cut	x	x		x		x	x											
4670	cut	x	x		x		x	x											
4690	cut	x	x		x		x	x											
4710	cut	x	x		x		x	x									x		
4730	cut	x	x		x		x	x										x	
4750	cut	x	x		x		x	x											
4770	cut	x	x		x		x	x	x	x			x	x	x	x	x	x	
4790	cut	x	x		x		x	x											
4800	cut	x	x		x		x	x									x		
4839	cut	x	x		x		x	x											
4881	cut	x	x		x		x	x										x	
4920	cut	x	x		x		x	x									x		
5001	ccp																		
5004.04	ccp																		
5040	cut	x	x		x		x	x									x		
5079	cut	x	x		x		x												
5121	cut	x	x		x		x	x											
5160	cut	x*	x		x		x	x											
5199	cut	x	x		x		x	x											
5212	ccp					x			x								x	x	
5217	ccp																		
5220.36	ccp																		

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5223	ccp																		
5224	ccp																	x	
5225	ccp																		
5226	ccp																x		
5227	ccp																		
5228	ccp																		
5229	ccp																		
5230	ccp					x		x		x	x		x	x	x	x			
5231	ccp																		
5232	ccp																		
5233	ccp																		
5234	ccp																	x	
5236	ccp																x		
5239	ccp																		
5240	ccp																		
5241	ccp																		
5241	cut	x*	x																
5242	ccp																		
5243	ccp					x											x		
5244	ccp																		
5245	ccp																		
5247	ccp																x		
5248	ccp																	x	
5250	ccp					x			x								x	x	
5251	ccp																		
5252	ccp																		
5253	ccp																	x	
5254	ccp					x			x								x	x	
5255	ccp																		
5256	ccp																		
5257	ccp																		
5258	ccp																		x

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5259	ccp																x	x	
5260	ccp					x			x									x	
5261	ccp																		
5263	ccp																		
5264	ccp																		
5265	ccp																		
5266	ccp								x										
5267	ccp					x				x	x		x	x	x	x	x	x	
5268	ccp																	x	
5269	ccp																		
5270	ccp																x		
5271	ccp																	x	
5272	ccp																		
5273	ccp																		
5274	ccp																		
5280	cut	x	x		x														
5319	cut	x	x		x		x	x									x		
5361	cut	x*	x		x		x										x		
5370	cut	x	x		x		x										x		
5400	cut	x	x		x		x	x									x		
5439	cut	x	x		x		x	x		x	x		x	x	x	x	x		
5481	cut	x	x		x		x										x		
5491	cut	x	x		x		x	x									x		
3102	mud											x							
5169	FMT												x						x
5169																			x
		143*	147	26	110	101	54	115	15	8	8	1	1	8	8	8	56	54	2
* those marked with asterisk have lost headspace through loose lids																			

Table 2a Headspace gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	1900	3965	6	5	2	0	2	3978	13	0.3	3.93
NOCS 6506/6-1	1936	1546	6	4	2	0	2	1559	13	0.9	4.61
NOCS 6506/6-1	1972	4704	11	3	1	0	1	4719	15	0.3	4.41
NOCS 6506/6-1	2008	3981	14	2	0	0	1	3997	16	0.4	2.85
NOCS 6506/6-1	2044	2484	9	1	0	0	1	2495	11	0.4	1.73
NOCS 6506/6-1	2080	2557	11	2	1	0	1	2571	14	0.5	2.08
NOCS 6506/6-1	2116	1247	6	2	1	0	1	1256	9	0.7	1.9
NOCS 6506/6-1	2152	1969	9	2	1	0	1	1982	13	0.6	1.71
NOCS 6506/6-1	2188	815	6	2	1	1	1	824	9	1.1	1.86
NOCS 6506/6-1	2200	3372	21	6	2	1	2	3402	30	0.9	1.88
NOCS 6506/6-1	2240	4031	31	10	4	2	2	4079	48	1.2	2.08
NOCS 6506/6-1	2280	1528	20	12	7	39	7	1606	78	4.9	0.17
NOCS 6506/6-1	2320	651	10	5	3	2	4	671	21	3.1	1.97
NOCS 6506/6-1	2360	4674	90	51	30	17	41	4862	188	3.9	1.81
NOCS 6506/6-1	2400	7878	136	63	31	17	32	8126	247	3	1.79
NOCS 6506/6-1	2440	170	5	3	2	1	3	181	11	5.8	2.01
NOCS 6506/6-1	2480	3892	85	43	20	13	25	4052	160	4	1.52
NOCS 6506/6-1	2520	3155	73	38	18	12	23	3296	141	4.3	1.51
NOCS 6506/6-1	2560	1301	48	31	15	11	23	1406	105	7.5	1.38
NOCS 6506/6-1	2600	4884	137	69	29	20	39	5139	254	5	1.46
NOCS 6506/6-1	2640	2599	106	55	21	15	32	2795	196	7	1.33
NOCS 6506/6-1	2680	2116	79	38	14	10	19	2256	140	6.2	1.47
NOCS 6506/6-1	2720	2089	68	37	14	11	24	2219	130	5.9	1.34
NOCS 6506/6-1	2760	2505	115	50	18	10	18	2698	193	7.1	1.7
NOCS 6506/6-1	2800	3084	129	52	17	10	16	3291	208	6.3	1.68
NOCS 6506/6-1	2805	2117	108	50	17	11	19	2303	186	8.1	1.62
NOCS 6506/6-1	2840	1367	87	23	4	2	2	1483	116	7.8	2.03
NOCS 6506/6-1	2880	1788	169	53	10	6	8	2025	237	11.7	1.77
NOCS 6506/6-1	2920	2695	203	62	11	7	7	2977	282	9.5	1.64
NOCS 6506/6-1	2960	5500	361	97	14	9	11	5981	481	8	1.69
NOCS 6506/6-1	3000	1590	271	108	15	11	9	1995	406	20.3	1.4
NOCS 6506/6-1	3018	1167	266	113	16	14	13	1576	409	25.9	1.15
NOCS 6506/6-1	3036	472	45	17	2	2	2	538	67	12.4	0.76
NOCS 6506/6-1	3054	767	62	21	2	2	6	854	87	10.1	0.72
NOCS 6506/6-1	3072	476	23	8	1	1	2	508	33	6.4	0.84
NOCS 6506/6-1	3090	236	22	12	2	2	4	274	38	13.8	0.85
NOCS 6506/6-1	3108	1811	89	29	3	3	3	1936	124	6.4	1.14
NOCS 6506/6-1	3126	1240	78	30	4	3	6	1356	116	8.5	1.27
NOCS 6506/6-1	3144	1368	90	32	6	4	4	1500	132	8.8	1.45

Table 2a Headspace gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	3162	203	20	13	3	2	5	241	38	15.8	1.26
NOCS 6506/6-1	3180	8	0	0		0	9	9	1	15.7	0
NOCS 6506/6-1	3198	1782	191	144	35	24	25	2176	394	18.1	1.46
NOCS 6506/6-1	3216	2417	198	111	24	16	26	2765	349	12.6	1.54
NOCS 6506/6-1	3234	394	35	27	8	4	3	467	74	15.7	1.7
NOCS 6506/6-1	3252	695	62	47	14	8	12	826	131	15.8	1.71
NOCS 6506/6-1	3270	117	8	14	5	4	20	149	32	21.4	1.39
NOCS 6506/6-1	3288	168	13	13	4	2	1	199	31	15.8	1.6
NOCS 6506/6-1	3306	1976	155	133	38	26	19	2328	352	15.1	1.48
NOCS 6506/6-1	3324	3792	267	225	72	47	51	4404	611	13.9	1.55
NOCS 6506/6-1	3342	981	79	80	24	17	10	1182	200	17	1.41
NOCS 6506/6-1	3360	535	54	66	23	16	14	694	159	23	1.44
NOCS 6506/6-1	3378	1196	92	85	26	18	19	1416	220	15.6	1.46
NOCS 6506/6-1	3396	1300	101	82	21	16	9	1520	221	14.5	1.35
NOCS 6506/6-1	3414	741	45	32	8	5	3	831	90	10.9	1.44
NOCS 6506/6-1	3432	173	12	11	3	3	3	202	29	14.5	1.16
NOCS 6506/6-1	3450	1128	82	79	17	13	15	1319	191	14.5	1.31
NOCS 6506/6-1	3468	534	506	59	13	11	5	1122	589	52.5	1.13
NOCS 6506/6-1	3486	464	30	32	8	7	5	541	77	14.3	1.12
NOCS 6506/6-1	3504	327	42	51	11	10	8	441	114	25.9	1.08
NOCS 6506/6-1	3522	162	14	23	5	6	19	210	48	22.8	0.88
NOCS 6506/6-1	3540	1241	61	67	13	14	10	1396	155	11.1	0.92
NOCS 6506/6-1	3558	1002	74	89	18	21	19	1205	203	16.9	0.85
NOCS 6506/6-1	3576	1159	86	94	21	23	25	1383	224	16.2	0.91
NOCS 6506/6-1	3594	804	101	130	24	27	70	1085	281	25.9	0.9
NOCS 6506/6-1	3612	951	82	100	17	22	13	1172	221	18.9	0.75
NOCS 6506/6-1	3630	937	64	59	9	11	27	1080	142	13.2	0.89
NOCS 6506/6-1	3648	15	2	8	2	4	5	32	17	53.4	0.49
NOCS 6506/6-1	3666	283	31	38	6	8	5	367	84	22.8	0.74
NOCS 6506/6-1	3684	197	27	32	5	6	4	267	70	26.2	0.79
NOCS 6506/6-1	3702	147	16	20	3	4	3	190	43	22.6	0.9
NOCS 6506/6-1	3720	164	21	26	4	5	13	218	55	25.1	0.81
NOCS 6506/6-1	3738	484	53	52	7	8	4	602	119	19.7	0.87
NOCS 6506/6-1	3756	343	46	47	6	7	5	448	106	23.5	0.86
NOCS 6506/6-1	3774	357	43	41	5	6	17	452	95	21	0.87
NOCS 6506/6-1	3792	242	34	36	3	5	3	320	78	24.4	0.53
NOCS 6506/6-1	3810	1470	149	91	6	11	6	1727	257	14.9	0.55
NOCS 6506/6-1	3828	1386	179	144	11	21	64	1742	356	20.4	0.53
NOCS 6506/6-1	3846	825	69	42	3	5	2	943	118	12.5	0.54

Table 2a Headspace gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	3864	646	64	46	3	7	7	766	120	15.7	0.46
NOCS 6506/6-1	3882	198	18	14	1	2	2	233	36	15.3	0.51
NOCS 6506/6-1	3900	134	29	32	4	7	7	206	71	34.6	0.55
NOCS 6506/6-1	3918	183	16	11	1	2	4	214	31	14.5	0.54
NOCS 6506/6-1	3936	71	10	9	1	2	4	94	22	24	0.58
NOCS 6506/6-1	3954	436	43	27	3	5	5	514	78	15.1	0.6
NOCS 6506/6-1	3972	103	8	6	1	1	2	118	15	12.9	0.54
NOCS 6506/6-1	3990	380	48	34	4	6	9	472	92	19.5	0.58
NOCS 6506/6-1	4008	449	41	28	3	6	7	527	78	14.8	0.55
NOCS 6506/6-1	4026	82	9	6	1	1	2	98	17	17.1	0.57
NOCS 6506/6-1	4044	650	148	103	14	20	14	936	285	30.5	0.7
NOCS 6506/6-1	4062	639	95	53	6	8	7	800	162	20.2	0.7
NOCS 6506/6-1	4080	1505	169	73	11	14	154	1772	268	15.1	0.82
NOCS 6506/6-1	4098	3119	292	116	20	20	18	3566	447	12.5	1.03
NOCS 6506/6-1	4116	196	14	5	1	1	3	217	20	9.4	0.8
NOCS 6506/6-1	4134	346	25	8	1	1	1	382	35	9.2	0.72
NOCS 6506/6-1	4152	1707	133	45	6	7	19	1898	190	10	0.92
NOCS 6506/6-1	4170	771	43	10	1	1	2	827	56	6.7	0.94
NOCS 6506/6-1	4188	4154	321	93	13	12	25	4592	438	9.5	1.04
NOCS 6506/6-1	4206	2482	262	81	10	10	8	2845	364	12.8	1.05
NOCS 6506/6-1	4224	754	70	21	3	3	3	851	97	11.4	1.03
NOCS 6506/6-1	4242	3112	222	57	8	7	11	3406	294	8.6	1.15
NOCS 6506/6-1	4260	847	63	17	2	2	2	931	84	9.1	0.91
NOCS 6506/6-1	4276	689	58	15	2	2	3	765	77	10	0.96
NOCS 6506/6-1	4296	6724	573	165	23	21	11	7505	781	10.4	1.09
NOCS 6506/6-1	4314	14772	1943	611	85	72	42	17482	2711	15.5	1.19
NOCS 6506/6-1	4332	6550	584	167	21	20	11	7343	792	10.8	1.04
NOCS 6506/6-1	4350	983	81	28	4	4	3	1099	116	10.6	0.96
NOCS 6506/6-1	4368	1785	135	31	4	3	3	1958	173	8.8	1.21
NOCS 6506/6-1	4386	9860	936	213	31	21	13	11061	1201	10.9	1.49
NOCS 6506/6-1	4400	5049	331	64	9	6	3	5458	409	7.5	1.43
NOCS 6506/6-1	4420	11976	1335	251	32	23	13	13617	1641	12.1	1.41
NOCS 6506/6-1	4440	10573	1130	204	31	19	13	11957	1384	11.6	1.63
NOCS 6506/6-1	4450	6335	478	87	13	8	6	6920	585	8.5	1.55
NOCS 6506/6-1	4470	1024	150	48	7	6	3	1234	210	17	1.19
NOCS 6506/6-1	4496	2410	214	57	9	7	5	2697	287	10.6	1.29
NOCS 6506/6-1	4510	521	59	24	4	4	3	613	92	15	1.09
NOCS 6506/6-1	4530	147	13	7	1	1	2	169	22	13	0.94
NOCS 6506/6-1	4550	349	29	9	2	1	2	390	41	10.4	1.37

Table 2a Headspace gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	4570	394	42	12	3	2	2	452	58	12.8	1.57
NOCS 6506/6-1	4590	577	60	17	4	2	3	660	83	12.6	1.65
NOCS 6506/6-1	4610	991	187	66	16	9	10	1269	278	21.9	1.79
NOCS 6506/6-1	4630	412	49	15	4	2	3	482	69	14.4	2.05
NOCS 6506/6-1	4650	684	125	43	12	6	11	870	186	21.4	2.12
NOCS 6506/6-1	4670	240	20	6	2	1	2	269	28	10.6	2
NOCS 6506/6-1	4690	178	12	3	1	0	1	195	17	8.6	2.34
NOCS 6506/6-1	4710	259	16	3	1	0	1	279	20	7.3	2.72
NOCS 6506/6-1	4730	120	5	1	0	0	1	127	7	5.4	2.56
NOCS 6506/6-1	4750	160	7	1	0	0	2	169	9	5.5	2.45
NOCS 6506/6-1	4770	48	5	2	0	0	1	56	8	13.6	2.49
NOCS 6506/6-1	4790	177	8	2	0	0	1	188	11	5.7	2.8
NOCS 6506/6-1	4800	280	12	2	0	0	2	295	15	5.2	1.91
NOCS 6506/6-1	4839	312	9	1	0	0	1	322	10	3.1	1.62
NOCS 6506/6-1	4881	2	0	0			0	3	0	10.2	
NOCS 6506/6-1	4920	495	6	0	0	0	1	502	7	1.3	0.97
NOCS 6506/6-1	5040	1675	61	8	0	1	7	1745	70	4	0.54
NOCS 6506/6-1	5079	3438	168	23	1	3	8	3634	196	5.4	0.46
NOCS 6506/6-1	5121	2695	64	7	1	1	11	2767	73	2.6	0.76
NOCS 6506/6-1	5160							0	0		
NOCS 6506/6-1	5199	2697	116	20	1	3	36	2837	140	4.9	0.32
NOCS 6506/6-1	5241							0	0		
NOCS 6506/6-1	5280	354	49	13	1	2	5	419	65	15.5	0.74
NOCS 6506/6-1	5319	1978	127	17	1	2	13	2124	147	6.9	0.51
NOCS 6506/6-1	5361							0	0		
NOCS 6506/6-1	5370	391	8	1	0	0	1	400	9	2.3	0.82
NOCS 6506/6-1	5400	3482	80	12	1	2	8	3577	95	2.6	0.57
NOCS 6506/6-1	5439	820	9	1	0	0	2	830	11	1.3	0.5
NOCS 6506/6-1	5481	842	22	3	0	0	1	867	26	3	0.55
NOCS 6506/6-1	5491	1192	30	4	0	1	2	1226	35	2.8	0.83

Table 2b Occluded gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	1900	21	1	1	0	0	3	23	2	10.7	6.53
NOCS 6506/6-1	1936	22	1	1	0	0	3	24	2	8	2.27
NOCS 6506/6-1	1972	20	0	1	0	0	2	22	1	6	1.23
NOCS 6506/6-1	2008	40	2	3	0	0	3	46	5	11.5	0.94
NOCS 6506/6-1	2044	21	1	1	0	0	3	24	3	12.1	0.48
NOCS 6506/6-1	2080	17	1	1	0	0	4	19	2	11.5	0.54
NOCS 6506/6-1	2116	12	2	1	0	0	4	15	3	19.7	0.93
NOCS 6506/6-1	2152	21	3	1	0	0	7	26	5	18.5	0.52
NOCS 6506/6-1	2188	11	2	1	0	0	6	14	3	22.8	0.38
NOCS 6506/6-1	2200	31	3	2	0	1	10	38	7	18.5	0.52
NOCS 6506/6-1	2240	18	2	1	1	1	6	23	5	20.4	0.87
NOCS 6506/6-1	2280	25	4	3	2	2	16	36	11	29.9	0.9
NOCS 6506/6-1	2320	25	3	4	3	3	20	38	13	33.7	1.04
NOCS 6506/6-1	2360	40	5	4	5	5	33	59	19	31.8	0.97
NOCS 6506/6-1	2400	53	6	10	8	8	30	85	31	37	0.98
NOCS 6506/6-1	2440	51	8	16	8	9	44	92	41	44.8	0.93
NOCS 6506/6-1	2480	36	5	8	5	6	30	60	24	39.7	0.92
NOCS 6506/6-1	2520	37	6	9	7	8	33	67	30	44.6	0.89
NOCS 6506/6-1	2560	33	7	11	7	9	44	67	34	51	0.79
NOCS 6506/6-1	2600	63	11	17	11	14	70	115	52	45.3	0.75
NOCS 6506/6-1	2640	52	14	21	11	15	77	114	61	53.8	0.72
NOCS 6506/6-1	2680	22	6	25	7	10	60	71	49	69.3	0.76
NOCS 6506/6-1	2720	36	6	10	6	8	41	65	30	45.6	0.85
NOCS 6506/6-1	2760	38	8	14	7	8	41	76	38	49.5	0.91
NOCS 6506/6-1	2800	34	7	12	7	8	39	69	34	50.2	0.92
NOCS 6506/6-1	2805	32	8	15	5	6	33	66	35	52.4	0.9
NOCS 6506/6-1	2840	24	4	4	2	1	2	35	11	32.1	1.44
NOCS 6506/6-1	2880	24	3	3	1	1	2	33	9	27.2	1.49
NOCS 6506/6-1	2920	37	5	6	2	2	3	52	15	29.1	1.28
NOCS 6506/6-1	2960	37	7	8	3	3	9	58	21	35.7	1.12
NOCS 6506/6-1	3000	50	17	22	7	6	15	102	52	50.7	1.11
NOCS 6506/6-1	3018	33	6	10	3	3	5	55	22	40.3	0.92
NOCS 6506/6-1	3036	4	1	2	0	1	2	8	4	46.3	0.65
NOCS 6506/6-1	3054	87	8	8	2	3	10	107	20	18.9	0.77
NOCS 6506/6-1	3072	94	5	4	1	1	2	105	11	10.1	0.68
NOCS 6506/6-1	3090	32	3	3	1	1	3	40	8	20.4	0.83
NOCS 6506/6-1	3108	39	5	6	1	2	6	53	14	26.4	0.91
NOCS 6506/6-1	3126	53	6	5	2	2	31	67	14	21.4	0.97
NOCS 6506/6-1	3144	18	2	2	0	0	2	22	4	18.5	0.97

Table 2b Occluded gas

Well name	Lower depth (m)	C1	C2	C3	iC4	nC4	C5+	Sum C1-C4	Sum C2-C4	Wetness	iC4/nC4
NOCS 6506/6-1	3162	26	2	2	1	1	2	33	6	19.2	1.25
NOCS 6506/6-1	3180	59	6	7	3	2	5	77	18	23.4	1.23
NOCS 6506/6-1	3198	54	8	8	3	3	7	76	22	28.6	1.02
NOCS 6506/6-1	3216	38	5	6	3	2	8	53	15	28.9	1.26
NOCS 6506/6-1	3234	21	3	3	2	1	23	31	10	31.5	1.63
NOCS 6506/6-1	3252	40	8	10	5	4	9	66	26	39.8	1.4
NOCS 6506/6-1	3270	38	3	4	3	2	12	50	12	23.3	1.44
NOCS 6506/6-1	3288	34	4	5	4	3	8	49	15	30.8	1.39
NOCS 6506/6-1	3306	52	7	14	8	7	15	88	36	40.7	1.25
NOCS 6506/6-1	3324	57	8	12	8	6	21	89	33	36.7	1.34
NOCS 6506/6-1	3342	36	4	9	6	4	6	59	23	38.5	1.31
NOCS 6506/6-1	3360	59	7	9	5	5	12	86	27	31.1	1.16
NOCS 6506/6-1	3378	68	11	11	6	5	15	101	33	32.6	1.18
NOCS 6506/6-1	3396	65	12	15	7	6	19	106	41	38.3	1.15
NOCS 6506/6-1	3414	61	8	12	5	5	7	91	30	33.1	1.07
NOCS 6506/6-1	3432	71	11	15	7	6	7	110	39	35.8	1.14
NOCS 6506/6-1	3450	67	8	11	5	5	8	96	28	29.6	0.97
NOCS 6506/6-1	3468	55	7	9	4	4	6	79	24	30.8	0.97
NOCS 6506/6-1	3486	46	7	9	4	4	5	69	23	33.6	0.96
NOCS 6506/6-1	3504	16	2	4	2	2	9	25	9	37.3	0.78
NOCS 6506/6-1	3522	45	5	5	2	2	7	59	13	22.8	0.95
NOCS 6506/6-1	3540	80	10	9	4	4	23	106	27	25	0.89
NOCS 6506/6-1	3558	68	8	7	3	3	9	89	20	23.1	0.95
NOCS 6506/6-1	3576	72	10	10	4	5	7	101	29	28.5	0.87
NOCS 6506/6-1	3594	36	4	5	2	2	15	49	13	26.3	0.82
NOCS 6506/6-1	3612	84	9	10	3	5	7	111	27	24.3	0.7
NOCS 6506/6-1	3630	49	7	10	3	4	26	74	24	33	0.77
NOCS 6506/6-1	3648	112	17	13	4	5	10	151	39	25.9	0.72
NOCS 6506/6-1	3666	46	7	7	2	3	17	65	19	29.7	0.78
NOCS 6506/6-1	3684	52	9	9	2	3	8	75	23	31	0.64
NOCS 6506/6-1	3702	51	6	6	2	3	5	68	17	25.2	0.76
NOCS 6506/6-1	3720	54	6	5	2	2	13	69	15	21.8	1.05
NOCS 6506/6-1	3738	56	9	9	3	3	8	81	24	30.1	0.88
NOCS 6506/6-1	3756	135	23	10	2	3	18	173	38	21.8	0.82
NOCS 6506/6-1	3774	51	9	9	2	3	8	73	22	30.5	0.75
NOCS 6506/6-1	3792	40	6	9	2	3	13	60	20	32.8	0.66
NOCS 6506/6-1	3810	3	2	4	1	2	4	12	9	75.8	0.43
NOCS 6506/6-1	3828	80	10	12	2	3	6	107	27	25.2	0.48
NOCS 6506/6-1	3846	81	9	10	1	2	4	103	23	22	0.54