Four tests were performed

DST 1C (5008-5045mRKB): No hydrocarbons at surface. Tight and waterbearing.

DST 2B (4899-4912m and 4930-4965.2mRKB): Dry gas in slugs. Tight formation with trapped gas and water, with an uncertain gas/water contact. Produced dry gas could come from DST 4 permeable zone by channeling through liner annulus

DST 3 (4768-4803mRKB): Dry gas in slugs. Tight formation with trapped gas and water, with an uncertain gas/water contact. Produced dry gas could come from DST 4 permeable zone by channeling through liner annulus.

DST 4 (4666-4714mRKB): 90000 SM^3/d dry gas produced (no water) using 8/64" choke.

The pore pressure at top Brent: 4666m RKB was 968 bara, with a corrected temperature of 160 DEG C.

With the poor reservoir characteristics found in the well 30/10-6, no commercial production was possible, and the well was permanently plugged and abandoned.

WELL ABSTRACT, 30 / 10 - 6

Total duration - 22 days

Wellbore					Mud		Casing						
size (in)	*report no.*	*from (m)*	*to (m)*	*inclination*	*type*	*SG **	*size (in)*	*W/T **	*grade*	*from (m)*	*to (m)*	*top cmnt.*	*LOT*
36"	1 - 12	109	205		regular bentonite mud	1,05	30"	309,7	X52	106,2	205	109	
26"	13 - 22	205	643		regular bentonite mud	1,05							

***) SG in kg/l, W/T in lbs/ft, meter (m) is measured depth, LOT at casing shoe**

WELL ABSTRACT, 30 / 10 - 6.B

Total duration - 289 days

Wellbore					Mud		Casing						
size (in)	*report no.*	*from (m)*	*to (m)*	*inclination*	*type*	*SG **	*size (in)*	*W/T **	*grade*	*from (m)*	*to (m)*	*top cmnt.*	*L=LOT, F=FIT*
36"	1 - 4	109	205	0,25	simple bentonite mud	1,05	30"	309,7	X52	105,8	205	109	
26"	5 - 19	205	1420	0,25 0,75	regular bentonite mud	1,09 1,12	18 3/4" 20"	129,8	X56	105,6 115,1	115,1 1410	106	1,51 (F 1410) 1,86 (L 1410)
17 1/2"	20 - 55	1420	3076	0,25 1,75	gypsum mud	1,25 1,36	14" 14" 13 3/8"	99,3 72 72	P110 P110 P110	106,1 1496 1507,8	1496 1507,8 3064	1664 1625 (CBL)	1,84 (L 3064) 1,87 (L 3064) 1,88 (L 3064)
12 1/4"	56 - 107	3076	4368	0,75 3	gypsum mud	1,38 1,82	10 3/4" 10 3/4" 10 3/4" 9 5/8"	108,7 102,6 97,1 53,5	C95 C95 C95 Q125	106,2 515,1 1006,6 2308	515,1 1006,6 2308 4353	3300 4125 (CBL)	1,7 (L 3288) 2,06 (L 4353) 2,2 (F 4355)
8 1/2"	108 - 166	4368	5075	0,6 3	polymer mud	1,95 2,11	7"	38	Q125	4285,4	5073	4280	2,2 (F 4373) 2,23 (L 5073) 2,28 (F 5073) 2,29 (L 5073)
5 7/8"	167 - 289	5075	5250	1,75	polymer mud	2,05							

***) SG in kg/l, W/T in lbs/ft, meter (m) is measured depth, LOT at casing shoe**

6.5 Drillstem Testing

Four drillstem tests were conducted

6.5.1 DST 1A, 1B AND 1C (5008 - 5045 MRKB)

The objective with DST 1 was to determine the movable fluid(s) within the interval.

6.5.1.1 Operations

The interval 5008 - 5045 mRKB was perforated overbalanced in mud with 3 $^{3}/_{8}$" VANN TCP guns run on drillpipe prior to setting packer and running test string. DST 1A failed, due to a leak in the packer sealbore extension. A second packer was set above the first, and a new test string was run. DST 1B failed due to washout of the drain plug and valve.

The table below summarizes the operations for DST 1C:

17-AUG-92	01:00	Perforate interval 5008 - 5045 mRKB (log) with 3 $^{3}/_{8}$" VANN TCP guns run on drillpipe.
30-AUG-92	20:28	Open LPR-N
	20:45	Open well at choke for pre-flow, flow to surge tank.
	20:50	Close LPR-N for initial build-up. Build-up prolonged to 36 hours due to bad weather.
1-SEP-92	07:09	Open LPR-N
	07:20	Open well on 8/64" adjustable choke to tank.
	09:01	Open well fully on adjustable choke.
	10:45	Close choke manifold, produce through bubble hose at data header.
	16:40	Close LPR-N, attempt to cycle OMNI to circulating position in an attempt to spot a lighter cushion. Close well at data header.
	21:29	OMNI locked in well test position, reopen well at data header.
2-SEP-92	14:36	Shut in well at LPR-N for main build-up.
	22:32	End of main build-up

6.5.1.2 Flow results

The measured mud cushion flow rates and the cumulative production are plotted in fig. 6.5. The total cumulative flow for the whole test was approx. 900 litres. The average production for the last 12 hours was 25 litres/hour (0.6 m^3/day).

6.5.1.3 Sampling

Some fluid samples that were recovered from the LPR-N, where analysed. The composition was very similar to the mud filtrate samples. The analysis of these samples is detailed in the lab report from West Lab[22].

6.5.2 DST 2A AND 2B (4899 - 4912 AND 4930 - 4965.2 MRKB)

The objectives with DST 2 were:

- Check the productivity in a zone that is deemed tight from core measurement
- Investigate for presence of possible open fractures

6.5.2.1 Operations

The intervals 4899 - 4912 and 4930 - 4965.2 mRKB were perforated overbalanced in mud with 3 $^3/_8$" VANN TCP guns run on drillpipe prior to setting the packer and running the test string. DST 2A was a misrun, as it was not possible to sting into the packer.

The main results from DST 2B are summarized in the table below:

10-SEP-92	10:00	Perforate interval 4899 - 4912 and 4930 - 4965.2 mRKB with VANN 3 $^3/_8$" TCP on drillpipe
17-SEP-92	16:03	Open LPR-N
	16:05	Open well on choke manifold for pre-flow to surge tank
	16:09	Close LPR-N for initial build-up
	19:00	Open LPR-N
	19:20	Open well on choke manifold for main flow to surge tank

	19:35	Divert flow through bubble hose downstream choke (for closer monitoring of flow rate and cumulatives)
19-SEP-92	01:15	First gas bubble to surface.
20-SEP-92	00:00	Close well at LPR-N for main build-up
	23:57	End of main build-up

6.5.2.2 Flow results

The production of mud cushion at surface was monitored closely. The calculated flow rates and cumulative production are plotted in fig. 6.11.

The total cumulative production of mud was 10.2 m^3. The total volume from top of perforations to choke manifold was approx. 16.8 m^3. As can be seen from the plot, the surface rate was quite stable at around 80 litres/hour for 36 hours, until the first gas bubble arrived at surface. From this point on, the production became more and more sluggish with time. In the last eight hours, several large slugs of 0.5 - 1 m^3 arrived at surface.

6.5.2.3 Sampling

Six 20-litre gas samples were taken during the last few hours of the main flow. Two gas samples were also taken at the choke manifold at the end of the build-up. The results are detailed in Geco's lab report[26]. All samples were fairly equal, with a methane content of around 96%, Ethane 2% and no CO_2. The CO_2 has most probably gone into solution as the gas has bubbled through the tubing liquids.

Liquid samples were taken when the tubing volume was reversed out at the end of the test. A summary of the recovered samples is given below:

Sample no.	Time	SG (g/cc)	Cumul volume	Depth of sample
1	1:07	1.95	10.562	3072
2	1:08	1.97	11.024	3212
3	1:09	1.96	11.485	3353
4	1:10	1.83	11.946	3493
5	1:11	1.73	12.408	3633
6	1:12	1.72	12.869	3773
7	1:13	1.06	13.331	3914
8	1:14	1.03	13.792	4054
9	1:15	1.02	14.254	4194
10	1:16	1.04	14.715	4334
11	1:21	1.08	15.176	4475
12	1:22	1.03	15.638	4615
13	1:23	2.11	16.099	4755

6.5.3 DST 3 (4768 - 4803 MRKB)

The main objectives with DST 3 were:

- Check the movable fluid(s) at the base of the Upper Sands
- Evaluate productivity
- Check for presence of possible open fractures

6.5.3.1 Operations

The interval 4768 - 4803 mRKB was perforated overbalanced in mud with 3 $^{3}/_{8}$" VANN TCP guns run on drillpipe prior to setting the packer and running the test string.

The operations for DST 3 are summarized below:

25-SEP-92	10:30	Perforate interval 4768 - 4803 with 3 $^3/_8$" VANN TCP guns.
29-SEP-92	22:46	Open LPR.N
	22:50	Open well at choke manifold for pre-flow to tank.
	22:52	Close well at LPR-N for initial build-up
30-SEP-92	02:01	Open LPR-N
	02:02	Open well at choke manifold for main flow to tank
	03:10	Switch flow from surge tank to drum
	19:30	First gas to surface
01-OCT-92	17:32	Shut in well at LPR-N for main build-up
02-OCT-92	17:32	End of DST 2B

6.5.3.2 Flow results

A plot of liquid flow rate and cumulative production is presented in fig. 6.20.

The total cumulative surface liquid production was 9.8 m^3. Even though the initial surface rate for DST 3 was only 20% higher than for DST 2B, it only took 17 hours to get first gas to surface. After first gas, the well produced more and more sluggish. Towards the end of the flow, it was evident that the low gas rate was not sufficient to lift out the liquids in the string.

6.5.3.3 Sampling

Two 20-litre gas bottles were filled during main flow, and another two samples were taken at the end of the main build-up. The gas analysis[26] shows an almost identical composition to DST 2B. The only difference can be seen with the gas sample that was taken at the end of the build-up; it contains 3.15% CO_2. This gas did not bubble through liquids, but migrated as one large bubble when the well was shut in at LPR and choke due to density difference. Hence, most of the CO_2 is still contained in the gas sample.

Liquid samples were taken when the tubing volume was reversed out at the end of the test. A summary of the recovered samples is given below:

Sample no.	Time	SG (g/cc)	Depth of sample
1	18:00	1.03	813
2	18:05	1.03	1456
3	18:07	-	1711
4	18:09	1.33	1972
5	18:10	1.35	2099
6	18:11	-	2232
7	18:12	1.33	2364
8	18:13	1.36	2497
9	18:14	1.38	2625
10	18:15	1.41	2747
11	18:16	1.40	2880
12	18:17	1.43	3003
13	18:18	1.48	3140
14	18:19	1.53	3273
15	18:20	1.68	3400
16	18:21	1.99	3528
17	18:22	2.01	3660
18	18:23	1.85	3793
19	18:25	1.65	4048
20	18:26	1.07	4176
21	18:27	2.07	4299
22	18:28	2.02	4426
23	18:29	2.06	4554
24	18:30	2.09	END

The sample depths are calculated from the actual DST string composition, coupled with a record of pump strokes while reversing out.

Some of the samples have a higher Chlorides content, which could indicate that small amounts of formation water has flowed into the well. However, the analysis[22] is far from conclusive on this point, as there are too many fluids involved in the system (old mud in annulus, mud filtrate in formation, cement fluids, 2.11 sg mud, 1.42 sg mud cushion, possible formation water....)

6.5.4 DST 4 (4666 - 4714 MRKB)

Main objectives with DST 4 were the following:

Investigate productivity in the best zone in the well
Obtain representative fluid samples
Determine initial conditions

6.5.4.1 Operations

The interval 4666 - 4714 mRKB was perforated overbalanced in mud with 4 $^5/_8$" VANN TCP guns run on drillpipe prior to setting the packer and running the test string. The operations for DST 4 are summarized below:

09-OCT-92	02:00	Perforate interval 4666 - 4714 with 4 $^5/_8$" VANN TCP guns.
13-OCT-92	16:14	Open LPR-N
	16:16	Open well on choke manifold for pre-flow to tank
	16:23	Shut in well at LPR-N for initial build-up
14-OCT-92	06:01	Open LPR-N
	06:07	Open well on 8/64" fixed choke to tank
	09:00	By pass tank, with flow to flare
	09:15	First gas to surface
	14:00	Divert flow through separator
15-OCT-92	01:09	WHP drops from 364 to 286 bar in 2 minutes
	01:12	Switch to adjustable choke, fixed choke washed out
	01:17	Close well at choke manifold. No reaction on WHP
	01:31	Close LPR-N. Start main build-up
16-OCT-92	19:14	End of DST 4

6.5.4.2 Flow results

It was obvious that gas entered the well immediately, and first gas arrived at surface at a cumulative mud production of approx. 10m^3. The average flow rate for the stable part of the test when the flow was diverted through the separator, was 90000 Sm^3/D. No liquid hydrocarbons were recovered in the separator, the gas was completely dry.

6.5.4.3 Sampling

PVT samples were taken from both well head (2 * 600 cc) and separator outlet (8*20000 cc). Analysis[26,27] shows the gas to be very similar to samples from DST 2B and DST 3 (see table in

chapter 6.7 for comparison). A cold treating study was done in France on four gas bottles in an attempt to check for any heavy components, but none was recovered.

Liquid samples that were recovered from reverse circulation or bottom hole tools did not show any noticeable influx of formation water.

6.7 Fluids

DST 4 is definitely gas bearing. It is uncertain where a water level exists in well 30/10-6, it could be anywhere between the base of the good interval (4687 mRKB) and downwards.

The table lists the gas composition and properties for one sample each from DST 2B, 3 and 4:

	DST 2B	DST 3	DST 4
Gravity	0.58	0.62	0.62
Average mol. weight	16.76	17.81	17.96
Nitrogen (mol %)	0.65	0.37	0.29
Carbon dioxide (mol %)	0	3.15	4.99
Methane (mol %)	96.29	94.10	92.68
Ethane (mol %)	2.29	1.40	1.49
Propane (mol %)	0.37	0.21	0.21
Butanes-plus (C_4^+) (mol %)	0.40	0.77	0.34

The analysis from DST 4 has been retained for simulation of physical properties in the well test interpretation software.

elf aquitaine production

EP/P/EXP/TIS/93-006RP

Pau, October 1993

NORWAY

Quadrant 30

30/10-6

ORGANIC GEOCHEMICAL STUDY OF SOURCE ROCKS, RESERVOIR RESIDUAL FLUIDS & DST FLUID

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1 Introduction

Well 30/10-6 is a wildcat drilled on licence PL 142

Six cores were cut from 4663 m to 4716 m (cores 1 to 4) and from 4946 m to 4982 m driller depth (cores 5 and 6). Four DST were performed, three of which (DST's 2, 3 and 4) recovering dry gas, the fourth one (DST 1) retrieving water.

The present report deals with the microscopical and geochemical analyses carried out on both the source rocks from the whole well section and the reservoir rocks All depths referred to in this report are driller or core depths.

The main objectives of this study are to evaluate the maturity and the potential of source rocks present throughout the well section and to determine the quantity and composition of the residual fluid (rock impregnation) remaining in the porous network of the reservoir. Detailed characterization of the reservoired tested fluids (gases) was also carried out aiming at assessing the maturity of the hydrocarbons. Link between the reservoired fluids and the residual fluids is investigated.

2 Optical study of the organic matter

The optical study of the organic matter in reflectance-fluorescence was carried out on 35 samples distributed from 2090 m

2.1 Nature of the organic matter

The cutting sample at 2090-2100 m shows rare fragments of coal (vitrinite-inertinite and orange fluorescent sporinite). Very rare yellow fluorescent Dinocysts have also been observed. The sample is polluted to some extent by green fluorescent mud additives.

The cutting samples at 2205 m and 2520-2535 m contain rare fragments of coal (vitrinite-inertinite). The fluorescence shows frequent to abundant orange sporinites. Some yellow algae (Tasmanaceae, Botryococcus and Dinocysts) have also been observed. A pale beige groundmass is present in the sample at 2520-2535 m. These samples are polluted to some extent, probably by mud additives (lignite).

LEGENDS OF TABLES AND FIGURES OF ORGANIC INVENTORY ANALYSES : ABBREVIATIONS, UNITS AND CUT OFFS

SAMPLE TYPE : ND=unwashed cuttings; DE=cuttings washed on site..... [the ND are washed and the DE are washed anew in the laboratory]
CA=core; CL=sidewall core; TE=outcrop; BO=mud; XX=other or undetermined
IR : Insoluble residue after HCl attack (% weight of rock)

TOC : Total organic carbon (% weight of rock) ..... [measured with Rock Eval+TOC analyser or LECO]
IOC : Insoluble organic carbon in chloroform (% weight of rock) Id.
OC : Organic carbon (total or insoluble)

X-RAY DIFF. : ALBite ; ORThoclase ; ANHydrite (or chlorite/kaolinite) ; QuaRtZ ; CALcite ; DOLomite ; SIDerite ; uNDosed (% weight of rock)

ROCK EVAL ANALYSIS

Carried out on :
RT : Total rock
RI_RT : Insoluble residue after HCl attack
RE : Rock extracted with chloroform
RI_RE : Rock extracted with chloroform, and after HCl attack

Measured parameters : .... [# : result not given because meaningless]
Tmax : Temperature of S2 peak (°C) ..... [meaningless if S2 small]
S1 : Free hydrocarbons in the rock (mgHC/g of rock) ..... [meaningless if the analysis is performed on the extracted rock]
S2 : Hydrocarbons yielded by pyrolysis (mgHC/g of rock)
S3 : CO2 yielded by pyrolysis (mg CO2/g of rock)

Calculated parameters :
PI : Production Index= S1/(S1+S2) ..... [# : meaningless if S1 and S2 < .2]
HI : Hydrogen Index = (S2/OC)x100 (mg HC/g OC)
OI : Oxygen Index = (S3/OC)x100 (mg CO2/g OC) .. [to be used with caution for analyses carried out on RT or RE if OC < 2%;
IO>170 : mineral contribution to S3 peak]

EXTRACT ANALYSIS

EOM: extractable organic matter with chloroform (% per weight of rock)
Normalized composition of the extract (% EOM) .....[generally not performed if EOM < .03 %]
SAT: Saturated hydrocarbons
ARO: Aromatic hydrocarbons
POL: Polar compounds (Resins+Asphaltenes)
HC: SAT+ARO (mg HC/g of rock)

Q1: Contaminations or cavings, affecting the Rock Eval and TOC analyses | I=high; M=medium; F=low;
Q2: Contaminations or cavings, affecting the organic extract | N=nil or not detected; U=unknown

30/10-6 : Maturity data in incident light

DEPTH (m)	S. T.	REFLECTANCE			FLUO
		VRo%	S.D.	N.R.	eqRo%
2090/2100	Cttg	0.62	0.03	8	
2205	Cttg	0.67	0.10	28	
2520/2535	Cttg	0.73	0.08	22	0.60-0.65
2845/2855	Cttg				
2975/2980	Cttg				0.65-0.70
3220/3225	Cttg	0.83	0.06	30	
3320/3325	Cttg				
3490/3520	Cttg				
3580/3600	Cttg	1.00	0.06	30	
3695/3705	Cttg				
3815/3825	Cttg				
3940/3950	Cttg				
4080/4090	Cttg	1.21	0.07	30	
4275/4285	Cttg				
4350/4360	Cttg				
4437.5	Cttg	1.32	0.04	27	
4465/4470	Cttg	1.32	0.07	30	
4540.5	SWC	1.68	0.12	42	
4577.5/4582.5	Cttg	1.46	0.11	39	
4616.5	SWC	1.76	0.13	33	
4642.5/4645	Cttg	1.72	0.11	22	
4674.15	K2	1.69	0.06	30	
4698.2	K4	1.73	0.07	30	
4715.6	K4	1.68	0.07	30	
4800	Cttg	1.75	0.08	30	
4875	Cttg	1.82	0.11	37	
4950.6	K5	1.95	0.10	30	
4976.8	K6	2.15	0.11	30	
5025	Cttg	2.12	0.12	36	
5097	SWC	2.15	0.11	30	
5100	Cttg	2.18	0.11	31	
5175	Cttg	2.30	0.16	30	
5178	SWC	2.25	0.10	30	
5230	SWC	2.32	0.16	30	
5235	Cttg	2.31	0.13	30	

S.T. = Sample type
S.D. = Standard deviation
N.R. = Number of readings

TABLE 30/10-6

DESCRIPTION OF ANALYSED SAMPLES AND ORGANIC CARBON CONTENT

LAB. REF.	SAMPLE TYPE	DEPTHS Metres		IR %	TOC %	IOC %	LITHOLOGY
B50897	ND	2090.00	2100.00		.40		SILTY SHALE
B50898	ND	2205.00			.50		SILTY SHALE
B50899	ND	2520.00	2535.00		.59		SILTY SHALE
B50900	ND	2845.00	2855.00		.27		SHALY SANDSTONE, CALCAREOUS
B50901	ND	2975.00	2980.00		.33		SHALY SANDSTONE, CALCAREOUS
B50902	ND	3220.00	3225.00		.42		SHALY SANDSTONE, CALCAREOUS
B50903	ND	3320.00	3325.00		.42		SHALY SANDSTONE, CALCAREOUS
B50904	ND	3490.00	3520.00		.40		SHALY SANDSTONE, CALCAREOUS
B50905	ND	3580.00	3600.00		.31		SHALY SANDSTONE, CALCAREOUS
B50906	ND	3695.00	3705.00		.39		SHALY SANDSTONE, CALCAREOUS
B50907	ND	3815.00	3825.00		.51		SHALY SANDSTONE, CALCAREOUS
B50908	ND	3940.00	3950.00		.94		SHALY SANDSTONE, CALCAREOUS
B50909	ND	4080.00	4090.00		.91		SHALY SANDSTONE, CALCAREOUS
B50910	ND	4275.00	4285.00		.59		SHALY SANDSTONE, CALCAREOUS
B51704	ND	4350.00			1.10		SHALE
B51705	ND	4360.00			2.58		SHALE
B51706	ND	4370.00			1.11		SHALE
B51707	ND	4390.00			1.87		SHALE
B51708	ND	4405.00			2.10		SHALE
B51709	ND	4417.50			2.14		SHALE
B51229	ND	4437.50			1.75		SHALE
B51710	ND	4450.00			2.08		SHALE
B51711	ND	4460.00			1.58		SHALE
B51230	ND	4465.00	4470.00		2.39		SHALE
B51712	ND	4480.00			2.04		SHALE
B51713	ND	4500.00			2.30		SHALE
B51714	ND	4515.00			1.65		SHALE
B51715	ND	4530.00			1.00		SHALE
B51716	ND	4550.00			1.32		SHALE
B51717	ND	4565.00			.19		SHALE
B51231	ND	4577.50	4582.50		1.67		SHALE
B51718	ND	4600.00			2.17		SHALE
B51719	ND	4615.00			3.12		SHALE
B51720	ND	4630.00			2.26		SHALE
B51721	ND	4645.00			1.92		SHALE
B51722	ND	4660.00			1.61		SHALE
B50286	CA0001	4663.50			.20		SANDSTONE
B50287	CA0001	4664.00			.24		SANDSTONE
B50288	CA0001	4664.50			.33		SANDSTONE
B50289	CA0001	4665.00			.25		SANDSTONE
B50290	CA0001	4665.50			.22		SANDSTONE
B50291	CA0001	4666.00			.26		SANDSTONE
B50292	CA0001	4666.50			.24		SANDSTONE
B50293	CA0001	4667.00			.28		SANDSTONE
B50294	CA0001	4667.50			.24		SANDSTONE

TABLE (Continued) 30/10-6

DESCRIPTION OF ANALYSED SAMPLES AND ORGANIC CARBON CONTENT

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	LITHOLOGY
B50295	CA0001	4668.00		.20		SANDSTONE
B50296	CA0001	4668.50		.22		SANDSTONE
B50297	CA0001	4669.00		.24		SANDSTONE
B50298	CA0001	4670.00		.47		SANDSTONE
B50299	CA0001	4670.50		.25		SANDSTONE
B50300	CA0001	4671.00		.28		SANDSTONE
B50301	CA0002	4672.00		.27		SANDSTONE
B50302	CA0002	4672.75		.17		SANDSTONE
B50303	CA0002	4673.25		.22		SANDSTONE
B50304	CA0002	4673.75		.27		SANDSTONE
B50305	CA0002	4674.25		.25		SANDSTONE
B50306	CA0002	4675.00		.20		SANDSTONE
B50307	CA0002	4675.50		.22		SANDSTONE
B50308	CA0002	4676.00		.24		SANDSTONE
B50309	CA0002	4676.50		.22		SANDSTONE
B50310	CA0002	4677.25		.20		SANDSTONE
B50311	CA0002	4677.75		.20		SANDSTONE
B50312	CA0002	4678.25		.23		SANDSTONE
B50313	CA0002	4679.00		.24		SANDSTONE
B50314	CA0002	4679.50		.32		SANDSTONE
B50315	CA0002	4680.00		.20		SANDSTONE
B50316	CA0002	4680.50		.23		SANDSTONE
B50317	CA0002	4681.00		.20		SANDSTONE
B50318	CA0002	4681.75		.34		SANDSTONE
B50319	CA0002	4682.25		.34		SANDSTONE
B50320	CA0002	4682.75		.28		SANDSTONE
B50321	CA0002	4683.25		.25		SANDSTONE
B50322	CA0002	4683.75		.26		SANDSTONE
B50323	CA0002	4684.25		.26		SANDSTONE
B50324	CA0002	4684.75		.26		SANDSTONE
B50325	CA0002	4685.25		.37		SANDSTONE
B50326	CA0002	4686.00		.28		SANDSTONE
B50327	CA0002	4687.00		.55		SANDSTONE
B50328	CA0002	4687.50		.39		SANDSTONE
B50329	CA0002	4688.00		.25		SANDSTONE
B50330	CA0002	4688.50		.43		SANDSTONE
B50331	CA0002	4689.25		.20		SANDSTONE
B50332	CA0002	4689.75		.20		SANDSTONE
B50333	CA0002	4690.25		.21		SANDSTONE
B50334	CA0003	4691.00		.19		SANDSTONE
B50335	CA0003	4691.75		.19		SANDSTONE
B50336	CA0003	4692.25		.18		SANDSTONE
B50337	CA0003	4692.75		.21		SANDSTONE
B50338	CA0003	4693.25		.25		SANDSTONE
B50339	CA0004	4697.00		.30		SANDSTONE

TABLE (Continued) 30/10-6

DESCRIPTION OF ANALYSED SAMPLES AND ORGANIC CARBON CONTENT

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	LITHOLOGY
B50340	CA0004	4697.75		.39		SANDSTONE
B50341	CA0004	4698.75		.39		SANDSTONE
B50342	CA0004	4700.00		.67		SANDSTONE
B50343	CA0004	4701.00		.23		SANDSTONE
B50344	CA0004	4702.00		.22		SANDSTONE
B50345	CA0004	4703.00		.20		SANDSTONE
B50346	CA0004	4704.00		.21		SANDSTONE
B50347	CA0004	4705.00		.19		SANDSTONE
B50348	CA0004	4706.00		.21		SANDSTONE
B50349	CA0004	4707.00		.22		SANDSTONE
B50350	CA0004	4708.00		.22		SANDSTONE
B50351	CA0004	4709.00		.44		SANDSTONE
B50352	CA0004	4710.00		.31		SANDSTONE
B50353	CA0004	4711.00		.31		SANDSTONE
B50354	CA0004	4712.00		.38		SANDSTONE
B50355	CA0004	4713.00		.25		SANDSTONE
B50356	CA0004	4714.00		2.11		SANDSTONE
B50357	CA0004	4715.00		.45		SANDSTONE
B50358	CA0004	4716.00		.33		SANDSTONE
B50359	CA0005	4946.00		.23		SANDSTONE
B50360	CA0005	4947.00		.17		SANDSTONE
B50361	CA0005	4948.00		.10		SANDSTONE
B50362	CA0005	4949.00		.15		SANDSTONE
B50363	CA0005	4950.00		.08		SANDSTONE
B50364	CA0005	4951.00		.16		SANDSTONE
B50365	CA0005	4952.00		.32		SANDSTONE
B50366	CA0005	4953.00		.22		SANDSTONE
B50367	CA0005	4954.00		.06		SANDSTONE
B50368	CA0005	4955.00		.17		SANDSTONE
B50369	CA0005	4956.00		.31		SANDSTONE
B50370	CA0005	4957.00		.15		SANDSTONE
B50371	CA0005	4958.00		.12		SANDSTONE
B50372	CA0005	4958.75		.10		SANDSTONE
B50373	CA0005	4960.00		.25		SANDSTONE
B50374	CA0005	4961.00		.29		SANDSTONE
B50375	CA0005	4962.00		.19		SANDSTONE
B50376	CA0005	4963.00		.08		SANDSTONE
B50377	CA0006	4964.00		#		SANDSTONE
B50378	CA0006	4964.25		0.00		SANDSTONE
B50379	CA0006	4965.00		.73		SANDSTONE
B50380	CA0006	4966.00		.13		SANDSTONE
B50381	CA0006	4967.00		.17		SANDSTONE
B50382	CA0006	4968.00		.26		SANDSTONE
B50383	CA0006	4968.75		.14		SANDSTONE
B50384	CA0006	4970.00		.09		SANDSTONE

TABLE (Continued) 30/10-6

DESCRIPTION OF ANALYSED SAMPLES AND ORGANIC CARBON CONTENT

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	L I T H O L O G Y
B50385	CA0006	4971.00		.13		SANDSTONE
B50386	CA0006	4972.00		.17		SANDSTONE
B50387	CA0006	4973.00		.24		SANDSTONE
B50388	CA0006	4974.00		.13		SANDSTONE
B50389	CA0006	4975.00		.10		SANDSTONE
B50390	CA0006	4976.00		.34		SANDSTONE
B50391	CA0006	4977.00		.11		SANDSTONE
B50392	CA0006	4978.00		.11		SANDSTONE
B50393	CA0006	4979.00		.13		SANDSTONE
B50394	CA0006	4980.00		.12		SANDSTONE

TABLE 30/10-6

MINERALOGICAL COMPOSITION BY X-RAY DIFFRACTION

LAB. REF.	SAMPLE TYPE	DEPTHS Metres		IR %	TOC %	IOC %	ALB %	ORT %	ANH %	QRZ %	CAL %	DOL %	SID %	ND %
B50897	ND	2090.00	2100.00		.40		2	0	1	10	0	0	0	87
B50898	ND	2205.00			.50		1	0	1	15	1	0	0	82
B50899	ND	2520.00	2535.00		.59		4	0	1	21	0	0	0	74
B50900	ND	2845.00	2855.00		.27		0	0	6	17	21	0	0	56
B50901	ND	2975.00	2980.00		.33		3	0	2	23	12	0	6	54
B50902	ND	3220.00	3225.00		.42		3	0	2	28	11	0	0	56
B50903	ND	3320.00	3325.00		.42		3	0	2	30	9	0	0	56
B50904	ND	3490.00	3520.00		.40		2	0	2	32	20	0	0	44
B50905	ND	3580.00	3600.00		.31		2	0	3	29	34	0	0	32
B50906	ND	3695.00	3705.00		.39		1	0	2	28	25	0	1	43
B50907	ND	3815.00	3825.00		.51		2	0	1	25	19	0	0	53
B50908	ND	3940.00	3950.00		.94		6	0	1	20	14	0	0	59
B50909	ND	4080.00	4090.00		.91		4	0	3	17	6	0	1	69
B50910	ND	4275.00	4285.00		.59		2	0	2	24	9	0	0	63
B51704	ND	4350.00			1.10		3	0	1	23	13	0	0	60
B51705	ND	4360.00			2.58		1	0	1	26	7	0	1	64
B51706	ND	4370.00			1.11		0	0	0	9	4	0	0	87
B51707	ND	4390.00			1.87		4	0	0	28	9	1	0	58
B51708	ND	4405.00			2.10		2	0	0	22	17	1	1	57
B51709	ND	4417.50			2.14		6	0	0	16	23	1	0	54
B51229	ND	4437.50			1.75		0	0	0	10	16	0	0	74
B51710	ND	4450.00			2.08		2	0	0	18	11	7	12	50
B51711	ND	4460.00			1.58		0	0	1	11	14	3	10	61
B51230	ND	4465.00	4470.00		2.39		0	0	0	9	8	18	3	62
B51712	ND	4480.00			2.04		0	0	0	17	10	2	2	69
B51713	ND	4500.00			2.30		3	0	1	20	9	2	3	62
B51714	ND	4515.00			1.65		3	0	0	20	29	2	2	44
B51715	ND	4530.00			1.00		1	0	0	20	29	1	7	42
B51716	ND	4550.00			1.32		1	0	0	14	27	2	2	54
B51717	ND	4565.00			.19		0	0	0	10	3	0	0	87
B51231	ND	4577.50	4582.50		1.67		0	0	0	19	15	2	3	61
B51718	ND	4600.00			2.17		1	0	0	14	17	2	5	61
B51719	ND	4615.00			3.12		0	0	1	20	8	3	3	65
B51720	ND	4630.00			2.26		2	0	0	17	2	3	5	71
B51721	ND	4645.00			1.92		1	0	1	16	1	1	2	78
B51722	ND	4660.00			1.61		2	0	1	23	1	0	2	71
B50286	CA0001	4663.50			.20		10	0	0	75	0	1	1	13
B50287	CA0001	4664.00			.24		6	0	0	78	0	1	0	15
B50288	CA0001	4664.50			.33		6	0	0	75	0	0	0	19
B50289	CA0001	4665.00			.25		6	0	0	67	0	0	1	26
B50290	CA0001	4665.50			.22		9	0	0	64	0	0	0	27
B50291	CA0001	4666.00			.26		12	0	0	60	0	11	1	16
B50292	CA0001	4666.50			.24		8	0	0	74	0	0	0	18
B50293	CA0001	4667.00			.28		3	0	0	65	0	0	1	31
B50294	CA0001	4667.50			.24		5	0	0	5	0	3	1	86

TABLE (Continued) 30/10-6

MINERALOGICAL COMPOSITION BY X-RAY DIFFRACTION

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	ALB %	ORT %	ANH %	QRZ %	CAL %	DOL %	SID %	ND %
B50295	CA0001	4668.00		.20		2	0	0	74	0	1	0	23
B50296	CA0001	4668.50		.22		4	0	0	65	0	0	1	30
B50297	CA0001	4669.00		.24		5	0	0	39	0	21	16	19
B50298	CA0001	4670.00		.47		2	0	0	55	0	1	1	41
B50299	CA0001	4670.50		.25		3	0	0	28	0	34	17	18
B50300	CA0001	4671.00		.28		5	0	0	68	0	9	6	12
B50301	CA0002	4672.00		.27		4	0	0	69	0	0	0	27
B50302	CA0002	4672.75		.17		4	0	0	74	2	0	0	20
B50303	CA0002	4673.25		.22		5	0	0	67	3	0	0	25
B50304	CA0002	4673.75		.27		5	0	0	69	1	0	0	25
B50305	CA0002	4674.25		.25		2	0	0	57	0	0	0	41
B50306	CA0002	4675.00		.20		3	0	0	66	0	0	0	31
B50307	CA0002	4675.50		.22		3	0	0	55	0	0	0	42
B50308	CA0002	4676.00		.24		7	0	0	66	0	0	0	27
B50309	CA0002	4676.50		.22		6	0	0	74	1	0	0	19
B50310	CA0002	4677.25		.20		6	0	0	71	2	0	1	20
B50311	CA0002	4677.75		.20		6	0	0	69	4	0	0	21
B50312	CA0002	4678.25		.23		1	0	0	65	0	0	1	33
B50313	CA0002	4679.00		.24		3	0	0	66	0	0	1	30
B50314	CA0002	4679.50		.32		13	0	0	44	0	0	4	39
B50315	CA0002	4680.00		.20		2	0	0	76	1	0	1	20
B50316	CA0002	4680.50		.23		2	0	0	57	0	0	1	40
B50317	CA0002	4681.00		.20		3	0	0	64	2	1	1	29
B50318	CA0002	4681.75		.34		0	0	0	47	0	23	1	29
B50319	CA0002	4682.25		.34		3	0	0	60	0	16	1	20
B50320	CA0002	4682.75		.28		4	0	0	60	1	0	0	35
B50321	CA0002	4683.25		.25		6	0	0	62	0	11	1	20
B50322	CA0002	4683.75		.26		5	0	0	59	1	2	0	33
B50323	CA0002	4684.25		.26		4	0	0	64	5	3	0	24
B50324	CA0002	4684.75		.26		4	0	0	56	0	5	0	35
B50325	CA0002	4685.25		.37		3	0	0	40	0	6	1	50
B50326	CA0002	4686.00		.28		4	0	0	47	0	4	0	45
B50327	CA0002	4687.00		.55		4	0	0	41	0	21	1	33
B50328	CA0002	4687.50		.39		5	0	0	36	0	24	2	33
B50329	CA0002	4688.00		.25		3	0	0	14	0	2	4	77
B50330	CA0002	4688.50		.43		4	0	0	31	0	10	2	53
B50331	CA0002	4689.25		.20		6	0	0	65	0	0	0	29
B50332	CA0002	4689.75		.20		2	0	0	58	0	3	1	36
B50333	CA0002	4690.25		.21		3	0	0	59	0	1	0	37
B50334	CA0003	4691.00		.19		3	0	0	62	1	0	0	34
B50335	CA0003	4691.75		.19		3	0	0	62	1	0	1	33
B50336	CA0003	4692.25		.18		1	1	0	65	0	0	1	32
B50337	CA0003	4692.75		.21		6	0	0	69	1	2	1	21
B50338	CA0003	4693.25		.25		3	0	0	65	1	1	0	30
B50339	CA0004	4697.00		.30		2	0	0	44	0	2	1	51

TABLE (Continued) 30/10-6

MINERALOGICAL COMPOSITION BY X-RAY DIFFRACTION

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	ALB %	ORT %	ANH %	QRZ %	CAL %	DOL %	SID %	ND %
B50340	CA0004	4697.75		.39		9	0	0	50	0	12	1	28
B50341	CA0004	4698.75		.39		8	0	0	39	1	3	2	47
B50342	CA0004	4700.00		.67		3	3	0	29	0	2	4	59
B50343	CA0004	4701.00		.23		4	0	0	46	0	5	1	44
B50344	CA0004	4702.00		.22		2	0	0	53	1	4	1	39
B50345	CA0004	4703.00		.20		1	0	0	54	1	5	1	38
B50346	CA0004	4704.00		.21		2	0	0	66	2	6	1	23
B50347	CA0004	4705.00		.19		2	0	0	66	1	1	1	29
B50348	CA0004	4706.00		.21		2	0	0	65	2	1	1	29
B50349	CA0004	4707.00		.22		3	0	0	58	0	0	1	38
B50350	CA0004	4708.00		.22		8	0	0	59	0	0	1	32
B50351	CA0004	4709.00		.44		3	0	0	53	0	1	1	42
B50352	CA0004	4710.00		.31		6	0	0	58	0	0	1	35
B50353	CA0004	4711.00		.31		0	0	0	26	35	24	1	14
B50354	CA0004	4712.00		.38		3	0	0	44	0	0	1	52
B50355	CA0004	4713.00		.25		14	0	0	60	2	2	1	21
B50356	CA0004	4714.00		2.11		6	0	0	35	0	0	2	57
B50357	CA0004	4715.00		.45		5	1	0	67	3	1	0	23
B50358	CA0004	4716.00		.33		6	0	0	75	1	0	0	18
B50359	CA0005	4946.00		.23		1	0	0	69	0	0	0	30
B50360	CA0005	4947.00		.17		10	0	0	49	9	0	0	32
B50361	CA0005	4948.00		.10		2	0	0	65	0	0	0	33
B50362	CA0005	4949.00		.15		4	0	0	63	0	0	0	33
B50363	CA0005	4950.00		.08		3	0	0	75	22	0	0	0
B50364	CA0005	4951.00		.16		3	0	0	79	3	0	0	15
B50365	CA0005	4952.00		.32		4	0	0	63	0	0	0	33
B50366	CA0005	4953.00		.22		1	0	0	55	0	0	0	44
B50367	CA0005	4954.00		.06		3	0	0	78	1	0	0	18
B50368	CA0005	4955.00		.17		2	0	0	72	2	0	0	24
B50369	CA0005	4956.00		.31		4	0	0	61	1	0	0	34
B50370	CA0005	4957.00		.15		5	0	0	85	1	0	0	9
B50371	CA0005	4958.00		.12		3	0	0	61	1	0	0	35
B50372	CA0005	4958.75		.10		1	0	0	81	0	0	0	18
B50373	CA0005	4960.00		.25		1	0	0	74	4	0	0	21
B50374	CA0005	4961.00		.29		5	0	0	64	1	0	0	30
B50375	CA0005	4962.00		.19		22	0	0	49	8	0	0	21
B50376	CA0005	4963.00		.08		0	0	0	84	4	0	0	12
B50377	CA0006	4964.00		#									
B50378	CA0006	4964.25		0.00		0	1	0	60	29	2	0	8
B50379	CA0006	4965.00		.73		1	0	0	23	3	0	1	72
B50380	CA0006	4966.00		.13		3	0	0	72	4	11	0	10
B50381	CA0006	4967.00		.17		0	0	0	58	1	0	0	41
B50382	CA0006	4968.00		.26		4	0	0	66	3	0	2	25
B50383	CA0006	4968.75		.14		1	0	0	63	1	0	1	34
B50384	CA0006	4970.00		.09		1	0	0	77	3	0	0	19

TABLE (Continued) 30/10-6

MINERALOGICAL COMPOSITION BY X-RAY DIFFRACTION

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	IR %	TOC %	IOC %	ALB %	ORT %	ANH %	QRZ %	CAL %	DOL %	SID %	ND %
B50385	CA0006	4971.00		.13		2	0	0	68	0	0	0	30
B50386	CA0006	4972.00		.17		2	0	0	56	4	21	0	17
B50387	CA0006	4973.00		.24		2	0	0	58	1	0	1	38
B50388	CA0006	4974.00		.13		2	0	0	50	2	10	0	36
B50389	CA0006	4975.00		.10		2	0	0	71	0	0	2	25
B50390	CA0006	4976.00		.34		2	0	0	58	2	0	0	38
B50391	CA0006	4977.00		.11		1	0	0	89	1	0	0	9
B50392	CA0006	4978.00		.11		0	0	0	57	0	0	0	43
B50393	CA0006	4979.00		.13		6	0	0	67	0	0	0	27
B50394	CA0006	4980.00		.12		5	0	0	65	0	0	1	29

TABLE 30/10-6

RESULTS OF ORGANIC INVENTORY ANALYSIS

LAB. REF.	SAMPLE TYPE	DEPTHS Metres		ROCK-EVAL Q1	on	Tmax	S1	S2	S3	PI	HI	OI	TOC	IOC	EXTRACT ANALYSIS Q2	EOM	100(EOM/TOC)	SAT	ARO	POL	SAT/ARO	HC
B50897	ND	2090.00	2100.00		RT	#	.01	.32	.79	.03	80	>170	.40			.020	5.0					
B50898	ND	2205.00			RT	426	.01	.32	.51	.03	64	102	.50			.025	5.0					
B50899	ND	2520.00	2535.00		RT	426	.04	.39	.46	.09	66	78	.59			.041	6.9	24.1	18.0	57.9	1.34	.17
B50900	ND	2845.00	2855.00		RT	#	.22	.22	.47	.50	81	>170	.27			.102	37.9	61.4	18.7	19.9	3.29	.82
B50901	ND	2975.00	2980.00		RT	#	.12	.21	.44	.36	64	133	.33			.085	25.7	66.8	18.5	14.7	3.61	.72
B50902	ND	3220.00	3225.00		RT	#	.08	.17	.98	#	40	>170	.42			.050	11.9	52.6	17.3	30.1	3.03	.35
B50903	ND	3320.00	3325.00		RT	#	.04	.12	.22	#	29	52	.42			.023	5.4					
B50904	ND	3490.00	3520.00		RT	#	.04	.12	.30	#	30	75	.40			.027	6.9					
B50905	ND	3580.00	3600.00		RT	#	.05	.10	.20	#	32	65	.31			.021	6.7					
B50906	ND	3695.00	3705.00		RT	#	.07	.16	.28	#	41	72	.39			.031	8.0	47.7	23.3	29.0	2.04	.22
B50907	ND	3815.00	3825.00		RT	#	.14	.26	.24	.35	51	47	.51			.050	9.8	55.8	22.0	22.2	2.53	.39
B50908	ND	3940.00	3950.00		RT	423	.14	.25	.56	.36	27	60	.94			.033	3.5	32.6	22.1	45.3	1.48	.18
B50909	ND	4080.00	4090.00		RT	#	.14	.31	.14	.31	34	15	.91			.046	5.1	30.4	31.1	38.5	.98	.28
B50910	ND	4275.00	4285.00		RT	#	.12	.20	0.00	.38	34	0	.59			.038	6.4	37.8	23.8	38.3	1.59	.23
B51704	ND	4350.00			RT	458	.27	.41	.27	.40	37	25	1.10			.056	5.1	51.4	28.9	19.7	1.78	.45
B51705	ND	4360.00			RT	452	.83	.81	.48	.51	31	19	2.58			.159	6.2	50.9	23.9	25.2	2.13	1.19
B51706	ND	4370.00			RT	#	.30	.65	3.17	.32	59	>170	1.11			.041	3.7	53.3	21.7	25.0	2.46	.31
B51707	ND	4390.00			RT	462	.40	.63	1.01	.39	34	54	1.87			.089	4.8	42.7	27.1	30.2	1.57	.62
B51708	ND	4405.00			RT	463	.31	.66	1.33	.32	31	63	2.10			.070	3.3	33.9	31.0	35.1	1.09	.45
B51709	ND	4417.50			RT	#	.31	1.21	2.03	.20	57	95	2.14			.047	2.2	24.5	33.9	41.5	.72	.27
B51229	ND	4437.50			RT	467	.46	.88	2.37	.34	50	135	1.75			.068	3.9	55.8	24.6	19.6	2.26	.55
B51710	ND	4450.00			RT	#	.35	.72	.93	.33	35	45	2.08			.075	3.6	40.6	32.4	27.0	1.25	.55
B51711	ND	4460.00			RT	#	.24	.62	1.69	.28	39	107	1.58			.053	3.3	36.6	29.9	33.5	1.23	.35
B51230	ND	4465.00	4470.00		RT	466	.48	.85	1.84	.36	36	77	2.39			.066	2.8	51.6	30.4	18.0	1.70	.54
B51712	ND	4480.00			RT	#	.36	.78	2.55	.32	38	125	2.04			.061	3.0	41.0	30.7	28.3	1.34	.44
B51713	ND	4500.00			RT	459	.49	.81	.67	.38	35	29	2.30			.082	3.6	45.1	30.0	24.9	1.51	.61
B51714	ND	4515.00			RT	#	.25	.56	.84	.31	34	51	1.65			.045	2.7	45.4	31.5	23.1	1.44	.34
B51715	ND	4530.00			RT	#	.14	.28	.88	.33	28	88	1.00			.026	2.6					
B51716	ND	4550.00			RT	#	.25	.56	1.40	.31	42	106	1.32			.044	3.3	43.2	27.1	29.7	1.59	.31
B51717	ND	4565.00			RT	#	.02	.03	.47	#	16	>170	.19			.012	6.2					
B51231	ND	4577.50	4582.50		RT	#	.24	.55	.87	.30	33	52	1.67			.045	2.7	47.4	29.0	23.6	1.63	.34
B51718	ND	4600.00			RT	#	.27	.77	.99	.26	35	46	2.17			.045	2.1	40.6	27.6	31.8	1.47	.31
B51719	ND	4615.00			RT	475	.35	.96	.59	.27	31	19	3.12			.063	2.0	32.5	28.8	38.7	1.13	.39
B51720	ND	4630.00			RT	484	.19	.61	.36	.24	27	16	2.26			.033	1.5	19.1	31.9	49.0	.60	.17
B51721	ND	4645.00			RT	484	.15	.48	.24	.24	25	13	1.92			.027	1.4					
B51722	ND	4660.00			RT	484	.16	.45	.32	.26	28	20	1.61			.031	1.9	34.0	30.2	35.8	1.13	.20
B50286	CA0001	4663.50		N	RT	#	.08	.13	.38	#	65	>170	.20		N	.015	7.4					
B50287	CA0001	4664.00		N	RT	#	.09	.13	.22	#	54	92	.24		N	.016	6.8					
B50288	CA0001	4664.50		N	RT	#	.09	.16	.23	#	48	70	.33		N	.014	4.2					
B50289	CA0001	4665.00		N	RT	#	.07	.18	.34	#	72	136	.25		N	.016	6.5					
B50290	CA0001	4665.50		N	RT	#	.07	.23	.23	.23	105	105	.22		N	.012	5.6					
B50291	CA0001	4666.00		N	RT	#	.09	.10	.69	#	38	>170	.26		N	.019	7.3					
B50292	CA0001	4666.50		N	RT	#	.08	.19	.25	#	79	104	.24		N	.017	7.0					
B50293	CA0001	4667.00		N	RT	#	.11	.26	.24	.30	93	86	.28		N	.017	6.1					
B50294	CA0001	4667.50		N	RT	#	.06	.13	.33	#	54	138	.24		N	.012	4.9					

TABLE (Continued) 30/10-6

RESULTS OF ORGANIC INVENTORY ANALYSIS

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	ROCK-EVAL										EXTRACT ANALYSIS							
			Q1	on	Tmax	S1	S2	S3	PI	HI	OI	TOC	IOC	Q2	EOM	100(EOM/TOC)	SAT	ARO	POL	SAT/ARO	HC
B50295	CA0001	4668.00	N	RT	#	.06	.13	.20	#	65	100	.20		N	.013	6.7					
B50296	CA0001	4668.50	N	RT	#	.06	.18	.18	#	82	82	.22		N	.013	6.0					
B50297	CA0001	4669.00	N	RT	#	.05	.06	2.79	#	25	>170	.24		N	.015	6.5					
B50298	CA0001	4670.00	N	RT	389	.08	.58	.64	.12	123	136	.47		N	.018	3.7					
B50299	CA0001	4670.50	N	RT	#	.04	.05	2.71	#	20	>170	.25		N	.012	5.0					
B50300	CA0001	4671.00	N	RT	#	.05	.08	1.85	#	29	>170	.28		N	.013	4.7					
B50301	CA0002	4672.00	N	RT	385	.08	.51	.14	.14	189	52	.27		N	.013	4.9					
B50302	CA0002	4672.75	N	RT	#	.07	.11	.14	#	65	82	.17		N	.014	8.2					
B50303	CA0002	4673.25	N	RT	#	.06	.08	.16	#	36	73	.22		N	.013	6.1					
B50304	CA0002	4673.75	N	RT	#	.08	.11	.17	#	41	63	.27		N	.014	5.2					
B50305	CA0002	4674.25	N	RT	#	.08	.14	.12	#	56	48	.25		N	.013	5.3					
B50306	CA0002	4675.00	N	RT	#	.06	.10	.10	#	50	50	.20		N	.013	6.4					
B50307	CA0002	4675.50	N	RT	#	.06	.09	.11	#	41	50	.22		N	.013	5.8					
B50308	CA0002	4676.00	N	RT	#	.05	.10	.13	#	42	54	.24		N	.018	7.3					
B50309	CA0002	4676.50	N	RT	#	.06	.08	.15	#	36	68	.22		N	.015	7.0					
B50310	CA0002	4677.25	N	RT	#	.05	.07	.42	#	35	>170	.20		N	.012	6.0					
B50311	CA0002	4677.75	N	RT	#	.06	.07	.26	#	35	130	.20		N	.014	7.3					
B50312	CA0002	4678.25	N	RT	#	.06	.08	.36	#	35	157	.23		N	.012	5.1					
B50313	CA0002	4679.00	N	RT	#	.06	.09	.56	#	38	>170	.24		N	.013	5.6					
B50314	CA0002	4679.50	N	RT	#	.07	.07	.95	#	22	>170	.32		N	.013	4.2					
B50315	CA0002	4680.00	N	RT	#	.05	.12	.43	#	60	>170	.20		N	.015	7.7					
B50316	CA0002	4680.50	N	RT	#	.06	.10	.57	#	43	>170	.23		N	.012	5.3					
B50317	CA0002	4681.00	N	RT	#	.05	.07	.45	#	35	>170	.20		N	.012	6.0					
B50318	CA0002	4681.75	N	RT	#	.04	.05	1.16	#	15	>170	.34		N	.012	3.4					
B50319	CA0002	4682.25	N	RT	#	.05	.05	.84	#	15	>170	.34		N	.012	3.6					
B50320	CA0002	4682.75	N	RT	#	.06	.08	.59	#	29	>170	.28		N	.012	4.3					
B50321	CA0002	4683.25	N	RT	#	.05	.05	.66	#	20	>170	.25		N	.020	8.0					
B50322	CA0002	4683.75	N	RT	#	.05	.06	.40	#	23	154	.26		N	.016	6.1					
B50323	CA0002	4684.25	N	RT	#	.05	.13	.32	#	50	123	.26		N	.025	9.6					
B50324	CA0002	4684.75	N	RT	#	.05	.05	.43	#	19	165	.26		N	.103	39.8	80.3	8.0	11.8	10.06	.91
B50325	CA0002	4685.25	N	RT	#	.07	.15	.66	#	41	>170	.37		N	.134	36.1	77.3	8.6	14.1	8.98	1.15
B50326	CA0002	4686.00	N	RT	#	.05	.01	.47	#	4	168	.28		N	.020	7.1					
B50327	CA0002	4687.00	N	RT	#	.06	.10	.75	#	18	136	.55		N	.021	3.8					
B50328	CA0002	4687.50	N	RT	#	.04	.09	.75	#	23	>170	.39		N	.019	4.7					
B50329	CA0002	4688.00	N	RT	#	.06	.16	.65	#	64	>170	.25		N	.014	5.6					
B50330	CA0002	4688.50	N	RT	#	.06	.18	.75	#	42	>170	.43		N	.019	4.4					
B50331	CA0002	4689.25	N	RT	#	.05	.06	.24	#	30	120	.20		N	.016	8.2					
B50332	CA0002	4689.75	N	RT	#	.05	.06	.47	#	30	>170	.20		N	.018	8.9					
B50333	CA0002	4690.25	N	RT	#	.05	.07	.45	#	33	>170	.21		N	.018	8.4					
B50334	CA0003	4691.00	N	RT	#	.05	.06	.37	#	32	>170	.19		N	.012	6.6					
B50335	CA0003	4691.75	N	RT	#	.06	.04	.42	#	21	>170	.19		N	.013	6.9					
B50336	CA0003	4692.25	N	RT	#	.06	.07	.36	#	39	>170	.18		N	.015	8.2					
B50337	CA0003	4692.75	N	RT	#	.06	.07	.50	#	33	>170	.21		N	.014	6.9					
B50338	CA0003	4693.25	N	RT	#	.07	.04	.36	#	16	144	.25		N	.015	6.1					
B50339	CA0004	4697.00	N	RT	#	.07	.11	.51	#	37	>170	.30		N	.020	6.6					

TABLE (Continued) 30/10-6

RESULTS OF ORGANIC INVENTORY ANALYSIS

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	ROCK-EVAL Q1	on	Tmax	S1	S2	S3	PI	HI	OI	TOC	IOC	EXTRACT ANALYSIS Q2	EOM	100(EOM/TOC)	SAT	ARO	POL	SAT/ARO	HC
B50340	CA0004	4697.75	N	RT	#	.09	.09	.47	#	23	121	.39		N	.020	5.0					
B50341	CA0004	4698.75	N	RT	#	.08	.14	.62	#	36	159	.39		N	.016	4.2					
B50342	CA0004	4700.00	N	RT	#	.11	.15	.61	#	22	91	.67		N	.017	2.6					
B50343	CA0004	4701.00	N	RT	#	.08	.04	.72	#	17	>170	.23		N	.015	6.4					
B50344	CA0004	4702.00	N	RT	#	.08	.04	.67	#	18	>170	.22		N	.015	7.0					
B50345	CA0004	4703.00	N	RT	#	.10	.09	.97	#	45	>170	.20		N	.023	11.7					
B50346	CA0004	4704.00	N	RT	#	.05	.03	.53	#	14	>170	.21		N	.016	7.6					
B50347	CA0004	4705.00	N	RT	#	.06	.05	.50	#	26	>170	.19		N	.013	7.1					
B50348	CA0004	4706.00	N	RT	#	.06	.05	.69	#	24	>170	.21		N	.019	9.2					
B50349	CA0004	4707.00	N	RT	#	.05	.04	.34	#	18	155	.22		N	.012	5.7					
B50350	CA0004	4708.00	N	RT	#	.05	.04	.42	#	18	>170	.22		N	.018	8.2					
B50351	CA0004	4709.00	N	RT	#	.10	.11	.40	#	25	91	.44		N	.023	5.2					
B50352	CA0004	4710.00	N	RT	#	.07	.04	.45	#	13	145	.31		N	.018	5.7					
B50353	CA0004	4711.00	N	RT	#	.04	.03	.74	#	10	>170	.31		N	.015	4.8					
B50354	CA0004	4712.00	N	RT	397	.06	.17	.58	#	45	153	.38		N	.016	4.3					
B50355	CA0004	4713.00	N	RT	#	.07	.06	.29	#	24	116	.25		N	.017	6.8					
B50356	CA0004	4714.00	N	RT	#	.13	.33	.24	.28	16	11	2.11		N	.034	1.6	12.3	41.8	45.9	.29	.18
B50357	CA0004	4715.00	N	RT	#	.09	.08	.15	#	18	33	.45		N	.019	4.3					
B50358	CA0004	4716.00	N	RT	#	.10	.06	.13	#	18	39	.33		N	.018	5.6					
B50359	CA0005	4946.00	N	RT	#	.04	.06	.05	#	26	22	.23		N	.011	4.7					
B50360	CA0005	4947.00	N	RT	#	.02	.04	.26	#	24	153	.17		N	.014	8.3					
B50361	CA0005	4948.00	N	RT	#	.03	.10	.09	#	100	90	.10		N	.008	7.9					
B50362	CA0005	4949.00	N	RT	#	.03	.04	.04	#	27	27	.15		N	.007	4.3					
B50363	CA0005	4950.00	N	RT	#	.01	.01	.24	#	13	>170	.08		N	.006	7.4					
B50364	CA0005	4951.00	N	RT	#	.04	.05	.22	#	31	138	.16		N	.009	5.4					
B50365	CA0005	4952.00	N	RT	#	.05	.05	.08	#	16	25	.32		N	.011	3.4					
B50366	CA0005	4953.00	N	RT	#	.04	.13	0.00	#	59	0	.22		N	.010	4.4					
B50367	CA0005	4954.00	N	RT	#	.02	.05	.04	#	83	67	.06		N	.009	14.3					
B50368	CA0005	4955.00	N	RT	#	.04	.06	.07	#	35	41	.17		N	.008	4.5					
B50369	CA0005	4956.00	N	RT	#	.06	.09	.07	#	29	23	.31		N	.009	2.8					
B50370	CA0005	4957.00	N	RT	#	.03	.04	.07	#	27	47	.15		N	.008	5.1					
B50371	CA0005	4958.00	N	RT	#	.02	.03	.14	#	25	117	.12		N	.008	6.8					
B50372	CA0005	4958.75	N	RT	#	.03	.09	.03	#	90	30	.10		N	.007	6.6					
B50373	CA0005	4960.00	N	RT	#	.03	.03	.09	#	12	36	.25		N	.009	3.6					
B50374	CA0005	4961.00	N	RT	#	.04	.05	.07	#	17	24	.29		N	.013	4.3					
B50375	CA0005	4962.00	N	RT	#	.02	.06	.22	#	32	116	.19		N	.007	3.8					
B50376	CA0005	4963.00	N	RT	#	.03	.01	.15	#	13	>170	.08		N	.013	15.8					
B50377	CA0006	4964.00	N									#		N	.005						
B50378	CA0006	4964.25	N	RT	#	0.00	0.00	.28	#			0.00		N	.005						
B50379	CA0006	4965.00	N	RT	#	.03	.08	.79	#	11	108	.73		N	.011	1.5					
B50380	CA0006	4966.00	N	RT	#	.02	.01	.55	#	8	>170	.13		N	.012	9.4					
B50381	CA0006	4967.00	N	RT	#	.03	.02	.16	#	12	94	.17		N	.008	4.5					
B50382	CA0006	4968.00	N	RT	#	.05	.04	1.17	#	15	>170	.26		N	.010	3.7					
B50383	CA0006	4968.75	N	RT	#	.02	.03	.58	#	21	>170	.14		N	.006	4.1					
B50384	CA0006	4970.00	N	RT	#	.03	.02	.07	#	22	78	.09		N	.008	8.9					

TABLE (Continued) 30/10-6

RESULTS OF ORGANIC INVENTORY ANALYSIS

LAB. REF.	SAMPLE TYPE	DEPTHS Metres	ROCK-EVAL										EXTRACT ANALYSIS							
			Q1	on	Tmax	S1	S2	S3	PI	HI	OI	TOC	IOC	Q2	EOM	100(EOM/TOC)	SAT	ARO	POL	SAT/ARO	HC
B50385	CA0006	4971.00	N	RT	#	.03	.04	.11	#	31	85	.13		N	.007	5.2					
B50386	CA0006	4972.00	N	RT	#	.02	.04	.70	#	24	>170	.17		N	.009	5.2					
B50387	CA0006	4973.00	N	RT	#	.04	.04	.72	#	17	>170	.24		N	.010	4.3					
B50388	CA0006	4974.00	N	RT	#	.02	.04	.58	#	31	>170	.13		N	.009	7.0					
B50389	CA0006	4975.00	N	RT	#	.03	.04	.91	#	40	>170	.10		N	.009	9.0					
B50390	CA0006	4976.00	N	RT	#	.06	.06	.26	#	18	76	.34		N	.009	2.7					
B50391	CA0006	4977.00	N	RT	#	.04	.03	.04	#	27	36	.11		N	.015	14.1					
B50392	CA0006	4978.00	N	RT	#	.02	.03	.01	#	27	9	.11		N	.006	5.6					
B50393	CA0006	4979.00	N	RT	#	.03	.03	.16	#	23	123	.13		N	.016	12.3					
B50394	CA0006	4980.00	N	RT	#	.03	.05	.23	#	42	>170	.12		N	.015	12.3					

GAS COMPOSITION AND ISOTOPE RATIOS
WELL 30/10-6

Test number	dst 2b	dst 2b	dst 3	dst 3	dst 4
Sample gas bottle number	A-16138	A-17157	A-15708	A-16212	A-17103
Sample lab reference number	B50999	B51000	B50998	B50821	B50822
Tested interval top (m)	4899.00	4899.00	4768	4768	4666.00
Tested interval bottom (m)	4965.20	4965.20	4803	4803	4714.00
Reservoir lithology	sandstone	sandstone	sandstone	sandstone	sandstone
GROSS COMPOSITION (%)					
N2	0.80	0.67	0.45	0.64	0.43
CO2	#	#	#	2.52	4.22
C1	96.34	96.28	97.09	95.77	93.59
C2	2.18	2.35	2.02	0.86	1.54
C3	0.32	0.37	0.18	#	0.15
iC4	0.15	0.16	0.08	#	#
nC4	0.11	0.09	0.07	#	#
iC5	0.04	0.04	0.04	#	#
nC5	0.02	0.01	0.03	#	#
C6+	0.00	0.00	0.00	0.00	0.00
MOLECULAR RATIOS					
C1/C1-C4	0.97	0.97	0.98	0.99	0.98
C1/C2+C3	38.54	35.40	44.13	111.36	55.38
iC4/nC4	1.36	1.78	1.14	#	#
iC5/nC5	#	#	#	#	#
CARBON ISOTOPES (per mil PDB)					
C1	-35.50	-35.50	-36.00	-36.00	-36.00
C2	-20.90	-20.80	-23.00	-21.50	-22.20
C3	-24.90	-22.20	-19.60	-19.50	-19.10
C4	#	#	#	-20.10	-20.50
CO2	#	#	#	0.50	0.80
HYDROGEN ISOTOPES (per mil SMOW)					
C1	-154	-147	-149	-154	-154
OXYGEN ISOTOPES					
CO2	#	#	#	38.00	29.10

= trace or not determinable