

# RFT RESULTS

# WELL 7120/9-2

No.	Depth m	RKB	HP (PSI)	FP (PSD)	Perm	No.	Depth m	RKB	HP (PSI)	FP (PSD)	Perm
<b>Run# 1</b>						<b>Run # 3</b>					
1/1	1971		3540.2	3134.7	Good	3/1	2053		3680.5	3260.1	Good Segregated sample no. 3
1/2	1972.5		3543.1	<b>3136.1</b>	Fair	Took a <b>2%</b> gal and 1 gal segregated sample at 2053m and recovered 69.08 cuft gas, <b>1.25</b> litres filtrate. The 1 gal chamber was sent for pvt analysis.					
1/3	1974		3546.2	3136.8	Fair						
1/4	1976		3549.3	3139.6	Good						
1/5	1978		3552.5	3142.1	Good						
1/6	1980		3556.2	3145.1	Fair						
<b>1/7</b>	1982		3559.8	3148.2	Good						
1/8	1987.5		3569.5	3155.5	<b>Very Good</b>						
<b>1/9</b>	1994		3581.3	3170.3	Low						
1/10	1995		3583.3	3169.8	Good						
1/11	<b>1997.7</b>		3583.9	3169.8	Fair						
1/12	<b>1994</b>		3580.4	3169.4	Low	<b>Run# 4</b>					
1/13	1998		<b>3587.2</b>	3171.6	Good	4/1	2750		6085	-	Seal Failure
1/14	2000		3590.7	3174.5	Fair	4/2	2769		6122	-	Tight
1/15	2002		3594.3	3177.8	Fair	4/3	2739		6057	4394	Poor
1/16	2007		3603.2	3185.1	Low	4/4	2895.5		6398	-	Seal Failure
1/17	2010		3608.5	3189.9	Good	4/5	3039		6713	-	Tight
1/18	2015		3617.4	3197.4	Good	4/6	<b>3041.5</b>		6714	-	Tight
1/19	2020.5		3626.9	3205.6	Very Good	<b>4/7</b>	3063.5		6762	-	Tight
1/20	2029		3641.9	<b>3218.5</b>	Good	4/8	3079.5		6804	-	Tight
1/21	2040		3661.2	3234.8	Very Good	<b>Run# 5</b>					
1/22	2053		3682.7	3260.6	Good	5/1	3178.5		7039.6	-	Tight
1/23	2069		3710.8	3278.4	Poor	5/2	3179		7038.9	-	Seal Failure
<b>1/24</b>	2086.3		3749.4	-	<b>Tight</b>	5/3	3228.6		7152.5	5468.6	Low
1/25	2083.3		3744.4	-	Tight	5/4	3275		7253.1	-	Seal Failure
<b>1/26</b>	2099		3763.5	3330.6	Poor	5/5	3274.5		7253.4	5594.0	Low
1/27	2101.5		3767.7	3337.4	Poor	5/6	3533.6		7819.6	-	Tight
1/28	2148		3849.5	-	<b>Tight</b>	<b>5/7</b>	3534		7824.2	-	Tight
1/29	2148.5		3849.6	-	Tight	5/8	3965.1		8768.5	-	Tight
1/30	2164.1		3878.1	3421.5	Very Good	<b>5/9</b>	3965.5		8768.7	-	Tight (Hp gauge plugged off)
<b>1/31</b>	2190.1		3924.1	3461.1	Very Good	5/10	<b>4117.5</b>		9050	-	Seal Failure
<b>1/32</b>	2205.1		3951.1	3484.7	Good	5/11	4118.0		9056	-	Tight
1/33	2222		3984.2	3511.8	Very Good	5/12	4178.5		9194	-	Seal Failure
<b>1/34</b>	2265.1		4060.2	3578.8	Good	5/13	4187.5		9207	-	Tight
1/35	2285.1		4095.5	3608.0	Very Good	<b>5/14</b>	4188		9220	-	Tight
1/36	1995.0		3581.5	3167.2	Segregated sample no 1.	<b>5/15</b>	4248		9343	-	Tight
Took 2% gal and gal segregated sample at <b>1995m</b> . The 2% gal chamber contained 10.1 litre <b>filtrate</b> and traces of oil <b>film</b> . <b>1.</b> gal chamber was sent for analysis see 'special studies' in the report.						5/16	4247.5		9336	-	Tight
<b>Run# 2</b>											
2/1	2362		4233.4	3724.6	<b>Very Good</b>						
2/2	2381.5		4269.3	3755.4	Very Good Segregated sample no. 2						
2/3	2396		4295.3	3778.4	<b>Very Good</b>						
Took a 2% and 1 gal segregated sample at <b>2381.5</b> . Recovered <b>1.65 cuft</b> gas and 9.75 l of <b>filtrate</b> from <b>2%</b> gal chamber. The 1 gal chamber was sent for <b>pvt</b> analysis.											

**Note:**

The pressure points listed from run no. 4 and points **5/10 - 5/16** run no. 5 are all strain gauge measurements not corrected for **temperature** and to read **psia**.

The remaining pressures are from **Hp-gauge** and consequently no corrections are required.

APPENDIX 1

RUN NO. / SAMPLE NO.            1/36                    2/2                    3/1

1st sample

Depth	(MRKB)	1995	<b>2381.5</b>	2053
Chamber vol.	(GAL)	2.75	2.75	2.75
Filling time	(MIN)	31	10	116
P opening	(PSIG)	400	1700	2300
Gas volume	(SCF)		1.65	69.08
Oil volume	(LIT)	TRACE		
Filtrate volume	(LIT)	10.1	9.75	1.25
Salinity	(PPM CL)	78 K	78 K	62 K

Remarks

2nd sample

Depth	(MRKB)	1995	2381.5	2053
Chamber vol.	(GAL)	1	1	1
Filling time	(MIN)	17	4	16
P opening	(PSIG)			
P bubble	(PSIG)			

Remarks

**Remarks:**

- For PVT analysis (see appendix 2)

APPENDIX 2

Sample no. 1 ( 1995 m RKB)

1 gal: Contained mud filtrate with minor volume of gas in solution.

Sample no. 2 (2381 m RKB)

1 gal: Contained 2.59 l of mud filtrate and 1.19 l of gas under pressure. The gas was transferred into a 600 cc sample **container**.

Sample no. 3 (2053 m)

1 gal: Contained 0.82 l of mud filtrate and 2.96 l of gas under pressure. The gas was transferred into 3 x 600 cc containers.

Details of further analyses which were carried out on the samples are to be found in the following reports.

"RFT Sample Analyses for Norsk Hydro Well 7120/9-2, Norwegian **Sea**, Norway" 5. Dec. 1984, Core Lab.

**and,**

"Bottom Hole Samples from **7120/9-2-Composition**" 19. Sept. 1984. Norsk Hydro Research Centre Bergen.

Table B-9

Daily mud properties

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System: Boredata Sandnes

Norsk  
Hydro

Well: 7120/9-2  
Hud Contractor: PROMUD

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Date	Mud dens. 1)EPIH (r.d>	PV CPS	YP mPa	GEL 0 10		PH mPa	100 psi (cc>	HP/HT (cc)	Cl- inn/out mg/l	Alkalinity			Oil %	Sol %	H2O %	V.G. meter at 115 F					HUD TYPE	
				PF	PM					MF	600 grm	300 grm				200 grm	100 grm	6 grm	3 grm			
840417		19	23	16			7								100	84	65					Benton./sw.
840418		26	32	10	17										100	116	90					Benton./sw.
840419	1.04	24	30	7	13										100	108	84					Benton./sw.
840420	381 1.05	19	26	8	12										100	90	71					Benton./sw.
840421	1.08	9	15	5	7										100	47	38					Benton./sw.
840422	1.10	10	14	8	13										100	47	37					Benton./sw.
840423	1.15	13	16	11	17										100	58	45					Benton./sw.
840424	1.22	14	21	14	21										100	70	56					Benton./sw.
840426	1.21	15	18	9	16										100	66	51					Benton./sw.
840426	1.22	18	18	9	15										100	72	54					Benton./sw.
840427	1.22	17	16	10	17										100	66	49					Benton./sw.
840428	1.22	15	18	12	22		19								100	66	51					Benton./sw.
840429	1.22	14	15	9	21		18								100	58	44					Benton./sw.
840430	1.22	12	15	8	18		17								100	54	42					Benton./sw.
840501	1.22	13	16	9	18		17								100	58	45					Benton./sw.
840502	1165 1.22	15	16	9	17		18								100	62	47					Benton./sw.
840503	1.22	16	16	8	16										100	64	48					Benton./sw.
850504	1.23	15	14	8	20										100	58	43					Benton./sw.
B40505	1.22	16	14	9	23										100	60	44					Benton./sw.
840506	1.22	16	17	12	23										100	66	50					Benton./sw.
840507	1.22	13	14	12	26										100	53	40					Benton./sw.
840508	1.24	15	17	13	24										100	64	49					Benton./sw.
84050?	1.24	15	17	14	25										100	64	49					Benton./sw.
B40510	1.26	14	18	13	22										100	64	50					Benton./sw.
840511	1.26														100							Benton./sw.
840512	1.26														100							Benton./sw.
840513	1.26	25	20	17	24										100	90	65					Benton./sw.
840514	1.26	25	20	17	24										100	90	65					Benton./sw.
840515	1.25														100							Benton./sw.
840516	1.25	15	14	2	3										100	57	42					Benton./sw.
840517	1.25	12	12	2	2	8.00	4.2	43000	.20	.02			7	93	47	35				4	2	KCl/Polymer
840518	1.25	15	11	2	2	10.0	4.5	43000	.45	.13	.50		7	93	52	37						KCl/Polymer
840519	1.25	13	12	2	3	10.0	5.0	43000	.40	1.4	1.1		7	93	50	37						KCl/Polymer
840520	1.25	13	13	2	3	10.0	6.0	59000	.18	1.0	.45		10	90	60	47				7	3	KCl/Polymer
840521	1.25	13	13	2	3	10.0	6.0	59000	.18	1.0	.45		10	90	52	39				7	3	KCl/Polymer
840522	1.26	14	16	2	3	10.0	7.0	75000	.10	.50	.30		11	89	60	46				7	3	KCl/Polymer
840523	1.26	19	16	3	4	9.50	6.0	80000	.10	.25	.20		11	89	70	51				7	3	KCl/Polymer
840524	1.26	25	17	3	4	10.0	5.0	79000	.25	.50	.50		14	86	84	61				9	8	KCl/Polymer
840525	1.25	21	15	3	4	10.0	5.0	79000	.50	1.3	1.2		10	90	72	51				9	8	KCl/Polymer
840526	1.25	23	15	3	6	9.50	5.0	82000	1.3	.80	.80		14	86	76	53				10	6	KCl/Polymer
840527	1.25	22	15	3	6	10.0	5.5	84000	.14	.25	.70		10	90	74	52				11	6	KCl/Polymer
840528	1.25	22	15	4	8	10.0	5.8	82000	.16	.70	.56		10	90	74	52				12	6	KCl/Polymer
840529	1.25	22	15	3	9	10.0	5.8	83000	.35	.50	1.0		10	90	74	52				12	7	KCl/Polymer

Daily mud properties

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System : Boredata Sandnes  
Well: 7:20/9-2

Norsk  
Hydro

Hud Contractor: PROMUD

Date	Mud dens. DEPTH (r.d)	PV cps	YP mPa	GEL @ 10 mPa	GEL 10 mPa	Ph - psi	100 psi (cc)	HP/HT (cc)	Cl- inn/out mg/l	Alkalinity			Oil Sol X %	H2O %	V.G. meter at 115 F				MUD TYPE
										Pf	Pm	Mf			600 rpm	300 rpm	200 rpm	100 rpm	
840530	2048	1.25	21	16	4	9	10.0	5.0	84000	.15	.50	.70	10	90	74	57			KCl/Polymer
840531		1.25	19	15	4	8	9.50	5.5	85000	.35	.60	.80	10	90	68	49			KCl/Polymer
840601	.2186	1.25	18	15	4	10	10.0	5.5	80000	.40	.75	.80	10	90	66	48			KCl/Polymer
840602		1.25	18	17	6	12	9.80	4.8	80000	.40	.65	.80	10	90	70	52			KCl/Polymer
840603		1.25	18	16	4	8	10.0	5.2	81000	.50	.75	.90	10	90	68	50			KCl/Polymer
840604		1.25	17	15	3	B	9.70	5.2	80000	.40	.70	.80	10	90	64	47			KCl/Polymer
840605		1.25	17	15	5	9	9.70	4.8	82000	.30	.65	.70	10	90	64	47			KCl/Polymer
840606		.25	18	15	4	9	9.81	4.9	80000	.40	.70	.80	10	90	66	48			KCl/Polymer
840607		1.25	20	16	5	10	9.90	4.8	77000	.30	.45	.60	10	90	71	51			KCl/Polymer
840608		1.25	20	15	5	11	9.80	5.0	76000	.30	.40	.50	10	90	70	50			KCl/Polymer
840609		.25	20	15	4	10	9.80	5.1	80000	.05	.50	.40	10	90	70	50			KCl/Polymer
840610	2477	1.25	19	15	4	11	9.70	5.2	79000	.05	.40	.40	10	90	68	49			KCl/Polymer
840611		1.25	20	15	4	8	9.70	5.3	81000	.10	.50	.50	10	90	70	50			KCl/Polymer
840612		1.25	19	15	4	8	9.70	5.5	78000	.05	.50	.20	10	90	68	49			KCl/Polymer
840613		1.25	19	15	4	10	9.90	5.6	75000	.10	.50	.50	10	90	68	49			KCl/Polymer
840614		1.25	20	15	4	11	9.90	5.6	72000	.10	.40	.45	10	90	70	50			KCl/Polymer
840615		1.25	22	15	4	11	9.60	6.0	78000	.20	.40	.60	10	90	74	52			KCl/Polymer
840616		1.25	20	15	5	11	9.80	5.7	81500	.30	.45	.60	10	90	70	50			KCl/Polymer
840617		1.25	21	14	5	10	10.0	5.8	79000	.32	.50	.66	10	90	70	49			KCl/Polymer
840618		1.25	22	14	4	10	10.0	6.0	78500	.50	.35	.75	10	90	72	50			KCl/Polymer
840619		1.25	22	14	4	10	9.70	6.0	75000	.31	.45	.70	10	90	72	50			KCl/Polymer
840620	2688	1.25	23	14	4	10	9.90	6.0	78000	.40	.40	.70	10	90	74	51			KCl/Polymer
840621		1.25	21	15	4	11	9.50	6.0	75000	.30	.50	.80	10	90	72	51			KCl/Polymer
840622		1.25	20	13	4	9	9.00	6.2	75000	.30	.60	.91	10	90	66	46			KCl/Polymer
840623		1.25	17	8	3	8	11.0	7.5	77000	.70	1.2	1.3	10	90	50	33			KCl/Polymer
840624		1.25	20	11	6	12	11.0	8.2	70000	.40	1.4	1.2	10	90	62	42			KCl/Polymer
840625		1.25	18	9	3	8	11.0	9.5	62000	.70	1.7	1.6	10	90	54	36			KCl/Polymer
840626		1.25	20	15	5	12	11.0	7.0	63000	.30	1.4	.80	10	90	70	50			KCl/Polymer
840627		1.25	24	12	6	14	10.5	6.2	60000	.40	1.1	1.4	10	90	72	48			KCl/Polymer
840628		1.25	24	11	3	9	10.5	6.1	62000	.56	1.4	1.2	10	90	69	45			KCl/Polymer
840629		1.25	25	13	4	11	10.5	6.0	63000	.32	1.0	.81	10	90	75	50			KCl/Polymer
840630		1.25	21	11	3	B	10.5	6.2	61000	.55	1.4	1.2	10	90	63	42			KCl/Polymer
840701		1.25	20	12	3	7	10.5	6.3	65000	.40	1.2	1.2	11	89	64	44			KCl/Polymer
840702		1.25	22	11	3	9	10.5	6.1	59000	.30	1.1	.95	11	89	66	44			KCl/Polymer
840703		1.25	24	14	3	11	10.5	6.1	60000	.20	1.0	.71	10	90	76	52			KCl/Polymer
840704		1.25	26	12	3	9	10.5	6.0	58000	.20	1.1	.62	10	90	76	50			KCl/Polymer
840705		1.25	25	13	3	10	10.5	6.0	60000	.34	1.1	.94	10	90	76	51			KCl/Polymer
840706		1.25	24	15	3	7	10.5	5.6	58000	.35	1.1	.70	10	90	78	54			KCl/Polymer
840707		1.25	25	14	3	7	10.0	6.0	58000	.20	.90	.50	10	90	78	53			KCl/Polymer
840708		1.25	26	15	3	7	10.5	6.2	61000	.40	1.1	.75	10	90	82	56			KCl/Polymer
840709		1.25	23	14	3	6	9.50	6.6	62000	.20	.90	.40	11	89	74	51			KCl/Polymer
840710	3515	1.25	21	14	3	6	10.0	6.5	60000	.20	.80	.45	10	90	69	48			KCl/Polymer

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D a i l y m u d p r o p e r t i e s

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System : Boredata Sandnes  
Well: 7/20/9-2  
Contractor: PROMUD

Norsk  
Hydro

Hud

Date	Hud dens. (r.d> DEPTH	PV cps	YP mPa	GEL 0 mPa	GEL 10 mPa	Ph 10	100 psi (cc)	HP/HT (cc)	Cl- inn/out mg/l	Alkalinity			Oil *	Sol %	H2O X	V.G. meter at 115 F					HUD TYPE
										Pf	Pw	Hf				600 rpw	300 rpw	200 rpw	100 rpw	6 rpw	
840711	3534 *	1.25	21	13	3	6	10.0	6.0	56000	.25	.85	.50	10	90	68	47				KCl/Polymer	
840712		1.25	23	14	2.	6	10.0	6.0	55000	.20	.75	.35	10	90	73	50				KCl/Polymer	
840713		1.25	22	14	3	5	10.0	6.0	54000	.20	.75	.55	10	90	72	50				KCl/Polymer	
840714		1.25	19	12		7	10.0	6.0	56000	.20	.75	.50	10	90	62	43				KCl/Polymer	
840715		1.25	18	12	3	8	10.0	7.0	54000	.20	.80	.50	11	89	59	41				KCl/Polymer	
840716		1.25	17	11	3	8	10.0	7.4	55000	.20	.80	.55	10	90	56	39				KCl/Polymer	
840717		1.25	15	11	3	B	9.70	7.2	52000	.15	.80	.50	11	89	52	37				KCl/Polymer	
840718	3845	1.32	19	13	6	10	9.50	7.0	48000	.20	.60	.30	13	87	63	44				KCl/Polymer	
840719	3903	1.39	23	13	5	9	10.0	7.0	48000	.20	.70	.60	16	84	71	48				KCl/Polymer	
840720	3967	1.44	24	13	3	8	10.4	6.0	47500	.30	1.1	.70	17	83	73	49				Ligno/Polyw	
840721	4020	1.50	25	10	4	8	9.70	6.0	46000	.20	.60	.70	18	82	70	45				Ligno/Polym	
840722		1.50	24	11	4	10	10.2	6.0	43000	.30	.90	.80	18	82	70	46				Ligno/Polym	
840723		1.50	24	11	4	10	10.0	6.0	43000	.30	.90	.80	18	82	70	46				Ligno/Polym	
840724		1.50	18	10	4	7	9.80	5.8	42000	.25	.90	.80	17	83	56	38				Ligno/Polym	
840725	4145	1.56	23	11	5	9	9.50	6.0	41000	.20	.70	.70	19	81	68	45				Ligno/Polyw	
840726		1.56	24	10	4	7	10.0	5.6	39000	.30	.90	.80	19	81	68	44				Ligno/Polym	
840727	4254	1.65	28	11	7	10	10.0	6.0	38000	.20	.90	.80	23	77	78	50				Ligno/Polym	
840728	4254	1.60	18	8	4	7	10.0	6.1	35000	.20	.70	.90	19	81	52	34				Ligno/Polym	
840729	4261	1.55	22	8	4	9	10.0	6.0	31000	.35	.90	.94	18	82	58	36				Ligno/Polym	
840730		1.55	19	6	4	8	10.0	5.8	29000	.30	.50	.80	18	82	50	31				Ligno/Polym	
840731		1.55	23	10	5	9	10.0	5.9	32000	.30	.55	.90	18	82	66	43				Ligno/Polym	
840801		1:55	24	11	6	9	10.0	5.9	31500	.30	.50	.90	18	82	70	56				Ligno/Polym	
840802		1.55	24	10	6	9	10.0	5.9	31500	.30	.50	.90	18	82	68	44				Ligno/Polym	
840803		1.55	22	10	4	10	10.0	6.2	32500	.20	.40	.60	18	82	64	42				Ligno/Polyw	
840804		1.55	17	7	4	12	10.0	6.9	31000	.80	.55	2.7	19	81	48	31				Ligno/Polym	
840805		1.55	16	7	5	11	13.0	7.0	29500	2.5	7.0	5.9	18	82	46	30				Ligno/Polyw	
840806		1.55	18	8	5	11	13.0	7.7	29000	4.8	7.2	6.5	18	82	52	34				Ligno/Polym	
840807		1.55	15	7	5	9	13.0	15	29000	6.0	9.5	9.1	19	81	44	29				Ligno/Polym	
840808		1.55	18	7	5	8	13.0	7.6	29000	5.9	9.9	9.8	18	82	50	32				Ligno/Polym	
840809		1.55	16	8	5	14	13.0	9.1	29500	5.0	9.8	8.0	18	82	48	32				Ligno/Polyw	
840810		1.55	15	6	3	14	13.0	11	29000	6.5	12	9.8	19	81	42	27				Ligno/Polym	
840811		1.55	19	7	2	3	10.0	6.0	3500	.25	1.0	.35	17	83	51	32				Benton./Lig	
840812		1.55	19	7	2	3	10.0	6.4	6000	.70	4.0	1.5	17	83	49	31				Benton./Lig	
840813		1.55	21	8	3	5	10.5	6.6	6500	.25	1.8	.40	17	83	58	37				Benton./Lig	
840814		1.55	21	6	3	6	10.5	6.6	6500	.30	1.7	.40	17	83	58	37				Benton./Lig	
840815		1.55	22	9	3	5	11.5	6.6	7000	1.2	4.4	1.9	17	83	61	39				Benton./Lig	
840816		1.55	20	6	3	6	11.5	6.2	8000	.80	4.4	1.7	17	83	52	32				Benton./Lig	
840817		1.55	18	6	3	4	12.2	7.0	8000	1.0	5.8	2.0	17	83	48	30				Benton./Lig	
840818	4292	1.57	19	7	3	6	12.4	6.2	8000	1.1	5.4	1.4	17	83	51	32				Benton./Lig	
840819		1.57	18	6	2	5	12.4	6.2	8000	1.1	7.0	1.7	18	82	48	30				Benton./Lig	
840820	4424	1.60	18	6	2	7	11.7	6.2	8000	1.2	5.5	2.0	20	80	48	30				Benton./Lig	
840821		1.60	19	6	3	7	10.9	6.2	8000	1.0	3.8	1.9	20	80	50	31				Benton./Lig	
840822		1.60	19	6	3	7	10.9	6.2	8000	1.0	3.8	1.9	20	80	50	31				Benton./Lig	

Daily mud properties

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System : Boredata Sandnes

Well: 7120/9-2

Norsk  
Hydro

Hud Contractor: FROMUD

3

Date	Hud dens.	PV cps	YP mPa	GEL 0 mPa	GEL 10 mPa	Ph	100 psi (cc)	HP/HT (cc)	Cl- inn/out mg/l	Alkalinity			Oil %	Sol %	H2O %	V. G. meter at 115 F						HUD TYPE
										Pf	Pm	Hf				600 rpm	300 rpm	200 rpm	100 rpm	6 rpm	3 rpm	
840823	4580	1.68	21	6	3	7	10.7	5.2	8000	.60	3.0	1.7	22	78	54	33						Benton./Lig
<del>840824</del>	<del>4692</del>	<del>1.70</del>	<del>21</del>	<del>7</del>	<del>3</del>	<del>6</del>	<del>10.7</del>	<del>4.8</del>	<del>9000</del>	<del>.50</del>	<del>1.6</del>	<del>1.8</del>	<del>23</del>	<del>77</del>	<del>56</del>	<del>35</del>						Benton./Lig
840825	4703	1.76	22	7	3	7	10.7	5.0	9000	.40	1.2	1.8	24	76	58	36						Benton./Lig
<del>840826</del>	<del>4742</del>	<del>1.82</del>	<del>25</del>	<del>7</del>	<del>3</del>	<del>7</del>	<del>10.1</del>	<del>4.7</del>	<del>9500</del>	<del>.40</del>	<del>1.7</del>	<del>2.0</del>	<del>26</del>	<del>74</del>	<del>63</del>	<del>38</del>						Benton./Lig
<del>840827</del>	<del>4779</del>	<del>1.85</del>	<del>29</del>	<del>8</del>	<del>3</del>	<del>7</del>	<del>9.80</del>	<del>4.4</del>	<del>10000</del>	<del>.40</del>	<del>1.6</del>	<del>1.8</del>	<del>28</del>	<del>72</del>	<del>73</del>	<del>44</del>						Benton./Lig
<del>840828</del>	<del>4791</del>	<del>2.00</del>	<del>34</del>	<del>9</del>	<del>4</del>	<del>8</del>	<del>10.1</del>	<del>4.0</del>	<del>10000</del>	<del>.40</del>	<del>2.0</del>	<del>2.1</del>	<del>32</del>	<del>68</del>	<del>86</del>	<del>52</del>						Benton./Lig
84082?	2.00	35	7	3	B	9.50	3.2		10000	.30	1.7	2.0	32	68	84	49						Benton./Lig
840830	2.00	30	5	1.	5	10.2	1.9		10000	.40	2.0	2.0	32	68	70	40						Benton./Lig
840831	2.00	30	5	1.	5	9.80	2.8		10000	.40	2.0	2.0	32	68	70	40						Benton./Lig
840901	2.00	30	5	1.	5	9.80	2.8		10000	.40	2.0	2.0	32	68	70	40						Benton./Lig
<del>840902</del>	<del>2.00</del>	<del>29</del>	<del>5</del>	<del>2.</del>	<del>6</del>	<del>10.3</del>	<del>4.2</del>		<del>10000</del>	<del>.40</del>	<del>2.0</del>	<del>2.1</del>	<del>32</del>	<del>68</del>	<del>67</del>	<del>38</del>						Benton./Lig
840904	2.00	29	4.	2.	6	10.1	4.2		10000	.40	2.0	2.1	32	68	67	38						Benton./Lig
840904	2.00	29	4.	2	5	10.0	4.2		10000	.40	2.0	2.1	32	68	67	38						Benton./Lig
840905	2.00	29	4.	2	5	10.0	4.2		10000	.40	2.0	2.1	32	68	67	38						Benton./Lig
840906	2.00	29	4.	2	5	10.0	4.2		10000	.40	2.0	2.1	32	68	67	38						Benton./Lig
<del>840907</del>	<del>2.00</del>	<del>28</del>	<del>5</del>	<del>2.</del>	<del>5</del>	<del>10.0</del>	<del>4.4</del>		<del>10000</del>	<del>.42</del>	<del>2.0</del>	<del>2.0</del>	<del>32</del>	<del>68</del>	<del>66</del>	<del>38</del>						Benton./Lig
840908	2.00	30	4			11.4	5.8		10000	1.1	3.2	2.4	32	68	68	38						Benton./Lig
840909	2.00	30	4			11.4	5.8		10000	1.1	3.2	2.4	32	68	68	38						Benton./Lig
840910	2.00	28	5		10	12.4	7.5		9000	1.4	3.6	2.6	32	68	65	37						Benton./Lig
<del>840911</del>	<del>2.00</del>	<del>26</del>			3	6	10.6	8.1	<del>7600</del>	<del>.90</del>	<del>2.4</del>	<del>1.9</del>	<del>26</del>	<del>74</del>	<del>61</del>	<del>35</del>						Benton./Lig
<del>840912</del>	<del>2.00</del>	<del>28</del>	<del>4</del>			6	12.0	6.6	<del>9000</del>	<del>1.0</del>	<del>2.9</del>	<del>2.1</del>	<del>32</del>	<del>68</del>	<del>64</del>	<del>36</del>						Benton./Lig
840913	2.00	26	4			5	11.6	6.4	9000	.90	2.6	1.7	32	68	60	34						Benton./Lig
840914	2.00	25		2	5	12.1	7.2		10000	.90	4.2	2.9	32	68	57	32						Benton./Lig
840915	2.00	24	3	2	5	11.5	5.6		10000	.60	3.2	2.2	32	68	54	30						Benton./Lig
<del>840916</del>	<del>2.00</del>	<del>24</del>	<del>3</del>	<del>2</del>	<del>4</del>	<del>11.5</del>	<del>5.6</del>		<del>10000</del>	<del>.50</del>	<del>3.0</del>	<del>2.4</del>	<del>32</del>	<del>68</del>	<del>54</del>	<del>30</del>						Benton./Lig
840917	2.00	24	4	2	5	11.0	6.4		10000	.50	2.9	2.3	32	68	56	32						Benton./Lig
840918	2.00	27	6	3	6	10.5	5.0		9000	.40	2.3	1.7	32	68	66	39						Benton./Lig
840919	2.00	27	5.	3	7	10.0	4.4		9000	.50	2.4	2.0	32	68	65	38						Benton./Lig
840920	2.00	29	4	3	5	10.0	4.8		10000	.51	2.4	1.7	32	68	66	37						Benton./Lig
<del>840921</del>	<del>2.00</del>	<del>26</del>	<del>5</del>	<del>3</del>	<del>5</del>	<del>10.5</del>	<del>3.0</del>		<del>10000</del>	<del>.71</del>	<del>2.6</del>	<del>1.7</del>	<del>32</del>	<del>68</del>	<del>62</del>	<del>36</del>						Benton./Lig
<del>840922</del>	<del>2.00</del>	<del>30</del>	<del>4</del>	<del>3</del>	<del>6</del>	<del>10.5</del>	<del>4.4</del>		<del>10000</del>	<del>.70</del>	<del>2.6</del>	<del>1.9</del>	<del>32</del>	<del>68</del>	<del>68</del>	<del>38</del>						Benton./Lig
840923	2.00	30	4	2	5	10.5	3.0		10000	.50	2.5	1.7	32	68	68	38						Benton./Lig
840924	2.00	28	4	2	5	10.5	2.9		10000	.40	2.4	.6	32	68	64	36						Benton./Lig
840925	4964	1.95	26	3	2	4	10.5	3.6	10000	.40	2.5	.9	30	70	58	32						Benton./Lig
<del>840926</del>	<del>1.98</del>	<del>24</del>	<del>3</del>	<del>2</del>	<del>4</del>	<del>10.0</del>	<del>3.5</del>		<del>10000</del>	<del>.40</del>	<del>2.6</del>	<del>.6</del>	<del>30</del>	<del>70</del>	<del>54</del>	<del>30</del>						Benton./Lig
840927	1.98	26	3	2	4	10.0	3.2		10000	.40	2.4	.6	30	70	58	32						Benton./Lig
840928	1.98	26	3	2	4	10.5	4.0		10000	.50	2.4	.9	30	70	58	32						Benton./Lig
840929	4965	2.02	28	3	2	6	12.0	4.0	10000	1.1	3.2	2.4	35	65	62	34						Benton./Lig
<del>840930</del>	<del>2.02</del>	<del>26</del>	<del>3</del>	<del>2</del>	<del>4</del>	<del>12.0</del>	<del>3.1</del>		<del>10000</del>	<del>1.1</del>	<del>3.9</del>	<del>2.6</del>	<del>35</del>	<del>65</del>	<del>58</del>	<del>32</del>						Benton./Lig
841001	2.02	28	3	2	4	11.5	3.4		10000	1.1	3.4	2.6	35	65	62	34						Benton./Lig
<del>841002</del>	<del>2.02</del>	<del>28</del>	<del>3</del>	<del>2</del>	<del>4</del>	<del>11.0</del>	<del>4.0</del>		<del>10000</del>	<del>.60</del>	<del>3.2</del>	<del>2.0</del>	<del>34</del>	<del>66</del>	<del>62</del>	<del>34</del>						Benton./Lig
841003	2.02	28	3	2	4	10.5	4.2		10000	.40	2.6	1.5	34	66	62	34						Benton./Lig

D a i l y m u d p r o p e r t i e s

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System : Boredata Sandnes

Norsk  
Hydro

Hud Well: 7120/9-2  
Contractor: PROMUD

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Date	DEPTH	hud	PV	YP	GEL	GEL	Ph	100	HP/HT	Cl-	Alkalinity			Oil	Sol	H2O	V.G. meter at 115 F						HUD
		dens.	cps	mPa	mPa	mPa	(cc)	(cc)	psi	inn/out	Pf	Pm	Mf	%	%	X	600	300	200	100	6	3	TYPE
841004	5024	2.02	28	3	2	4	10.5	4.6		10000	.55	2.8	1.8		34	66	62	34					Benton./Lig
841005		2.02	25	3	2	4	10.0	3.8		10000	.50	1.8	1.6		34	66	56	31					Benton./Lig
841006		2.02	23	3	2	3	10.0	3.6		10000	.50	1.8	1.6		34	66	52	29					Benton./Lig
841007		2.02	22	3		4	11.3	3.5		10000	.70	4.2	1.7		34	66	50	28					Benton./Lig
841008		2.02	22	3	2	4	11.2	3.0		10000	.80	3.8	1.8		34	66	50	28					Benton./Lig
841009		2.02	22	3	2	4	11.3	3.2		10000	1.4	3.8	2.6		34	66	50	28					Benton./Llg
841010	5071	2.04	22	3	2	4	11.3	3.0		10000	1.0	3.6	2.3		34	66	50	28					Benton./Lig
841011		2.04	24	3	2	4	11.2	3.0		10000	.90	3.8	1.9		34	66	54	30					Benton./Lig
841012		2.04	20		1	3	11.2	3.2		10000	.90	3.7	1.9		34	66	45	25					Benton./Lig
841013		2.04	20	3		4	11.5	3.4		10000	1.4	9.4	2.4		34	66	46	26					Benton./Lig
841014	5072	2.04	20	3		4	12.0	3.6		10000	1.4	9.4	2.4		34	66	46	26					Benton./Llg
641015		2.04	22	3	2	4	12.0	4.2		10000	1.5	10	2.5		34	66	50	28					Benton./Lig
841016		1.55	17	8	2	5	12.0									100	50	33					Benton./Llg
841017		1.55	17	8	2	5	12.0									100	50	33					Benton./Lig
840118		1.55	17	8	2	4	12.0									100	50	33					Benton./Lig



TABLE B-10

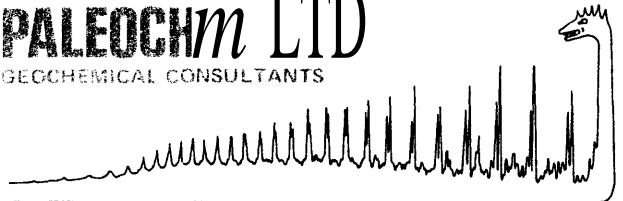
MUD MATERIAL CONSUMPTION

HOLE SIZE (in)	BARI TE (Mt)	BENTO NITE (Mt)	CAUSTIC SODA (Kg)	CALSIUM CHLORID (Kg)	LIME (Kg)	POTASS CL. Brine	SODA ASH (Kg)	SODIUM BICARB (Kg)	CMC LOVIS (Kg)	STARCH (Kg)	SOLTEX (Kg)	DRISPAC REG. (Kg)	DRISPAC SUPERLO (Kg)
36	17	17	175				350						
26	873	<b>149</b>	3900	<b>68800</b>			4250	700	10875			816	<b>272</b>
17 1/2	274	22	4525	<b>176950</b>	200	<b>397.5</b>	600	250		14800		4123	4972
12 1/4	447	17	6275	56350			<b>150</b>	1 950		1000		<b>1270</b>	7890
8 3/8	906	57	2025				250	6150		10425		<b>136</b>	<b>159</b>
6	<b>1143</b>	32						5000		8275	2041	227	
<b>Total:</b>	3660	294	16900	392100	200	397.5	5600	14050	10875	34500	<b>2041</b>	6577	13293

CHROME LIGNOS (Kg)	CHROME LIGNIT (Kg)	XC PO LYMER (Kg)	DRILL DETER Drum	DEFO AMER (Kg)	MICA (Kg)	HPHT FLUID LOSS	SPECIAL REMARKS
1000		<b>1875</b>					W.O.21 : 600 kg.
<b>13025</b>	6500	8825	17	25			
	<b>11075</b>	3125		75	375		Chemtrol X: 375 kg.
	<b>500</b>					3450	Miltemp: 1134kg
					2375	7125	Miltemp: 2223kg
14025	18075	13825	17	100	2750	10575	

U-410

**PALEOCHM LTD**  
GEOCHEMICAL CONSULTANTS



COMPANY INCORPORATED IN U.K. NO. 1509402  
VAT REGISTRATION NO. 354021394

UNIT 14. PARAMOUNT INDUSTRIAL ESTATE,  
SANDOWN ROAD, WATFORD WD2 4XA.  
TEL: 43196/31416 TELEX: 8812973

85/2097 - 1  
07 FEB. 1985

- 1 FEB. 1985

**REGISTRERT**  
**OLJERIKTORIET**

BA-85-1166  
@AWSPUNKSI

PETROLEUM GEOCHEMISTRY REPORT

PREPARED FOR

NORSK HYDRO.

Geochemical Source Rock Evaluation of Sediments from  
Well: 7120/9-2.

January 1985

1. Introduction

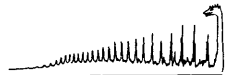
A total of one hundred and five cuttings samples and forty-nine sidewall cores were used for a geochemical source rock evaluation study of the Well: 7120/9-2. Samples from depths 1000 m - 5055.5 m of Tertiary to Late Permian ages were analysed. Biostratigraphic dating was provided by Norsk Hydro.

Maturity was determined by Vitrinite Reflectance (Ro) and Spore Colouration Indices (SCI) from Visual Kerogen analyses. Additional maturity data from pyrolysis techniques is reported.

Total Organic Carbon (TOC) contents of the sediments were used to determine organic richness and derive hydrogen indices (HI) and predict oil and/or gas type for kerogen rich sediments.

Concentration of headspace gases in samples from 1945 m - 3535 m were measured. Analyses from deeper strata were not requested.

Pyrolysis techniques were used to establish the hydrocarbon source potential of the sediments. Hydrocarbon typing by pyrolysis was supported by Visual Kerogen descriptions completed where possible at the same depth.



## 2. Samples and Techniques

All the cuttings samples were received in tin cans and the sidewall cores in Schlumberger jars.

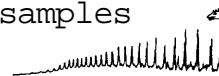
Prior to washing the headspace cuttings gases were determined by gas chromatographic separation of the C<sub>1</sub> - C<sub>4</sub> hydrocarbons using a Perkin Elmer F11 Gas Chromatograph. Results are recorded in Table 2.

Samples were then thoroughly washed with water to remove all traces of drilling mud and air dried under controlled conditions at 40°C. The cuttings samples were then carefully hand picked to remove obvious caved material and concentrate organic rich lithologies.

Samples for Vitrinite Reflectance measurements were ground ca 1 mm, mounted in an epoxy resin block and polished. Reflectivity values were measured using a reflected light microscope with an oil immersion objective. Results are recorded in Table 3. Histograms of reflectance distributions are presented in Figure 1. UV spore fluorescence colours are additionally recorded.

Samples for Total Organic Carbon (TOC) measurements were finely ground, sieved to homogenise and digested with fuming hydrochloric acid to remove mineral carbonate. Acid digested samples were then combusted in a Carlo Erba 1106 Carbon, Hydrogen, Nitrogen analyser and the TOC determined relative to those of calibrated standards. The results of these measurements are shown in Table 5. Repeats were run to ensure accuracy.

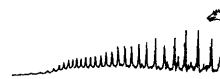
Samples for Screening Pyrolysis were ground, sieved and examined using a modified Hewlett-Packard 5711 Gas Chromatograph. To measure source rock potential, samples



were subjected to two initial isothermal heating periods of 150°C and 325°C and then ramped to 575°C. Two peaks of interpretative significance were evolved, which are conventionally referred to as P1 and P2 and were related to those of a calibrated standard. Standards are run daily to ensure accuracy.

Ground samples for Soluble Extract studies were extracted with geochemical grade dichloromethane using a high velocity mixer. Excess solvent was evaporated and the Total Soluble Extract (TSE) was separated on activated silica to provide saturate alkane, aromatic and residual fractions. Gas chromatographic data, for both saturate alkane and aromatic hydrocarbon fractions were requested.

All saturate alkane fractions and eight aromatic fractions were examined by quartz capillary gas chromatography using a Carlo Erba 2150 Gas Chromatograph with Grob type splitless injector system. Total Soluble Extract data is presented in Table 7 and SAC and aromatic distributions are displayed in Figures 2 - 7 and 12 - 14.



Well: 7120/9-2

LITHOLOGY DESCRIPTION

Depth Metres	Sample Type	Lithological Description
1140-70	Cuttings	100% light grey siltstone, micaceous.
1185-1200	Cuttings	100% med. -light grey siltstone, calcareous.
1200-15	Cuttings	100% med. grey shale, slightly calcareous.
1215-35	Cuttings	100% med. grey shale, slightly calcareous.
1230-45	Cuttings	100% med. grey shale, slightly calcareous.
1245-60	Cuttings	100% dark grey shale.
1260-75	Cuttings	100% dark grey mudstone, slightly calcareous.
1275-90	Cuttings	100% dark grey mudstone, slightly calcareous.
1290-1305	Cuttings	100% dark grey mudstone, slightly calcareous.
1305-20	Cuttings	100% dark grey shale, slightly calcareous.
1320-35	Cuttings	100% dark grey shale.
1335-50	Cuttings	100% dark grey mudstone.
1350-65	Cuttings	100% dark grey mudstone.
1365-80	Cuttings	100% dark grey mudstone, calcareous.
1380-95	Cuttings	80% dark grey /med. grey shale, 20% light grey siltstone.
1395-1410	Cuttings	100% dark grey mudstone.

Table 1

Well; 7120/9-2.

LITHOLOGY DESCRIPTION

Depth Metres	Sample Type	Lithological Description
1410-1425	Cuttings	100% dark grey mudstone, slightly calcareous.
1425-40	Cuttings	100% dark grey shale.
1440-55	Cuttings	100% dark grey shale.
1455-70	Cuttings	100% dark grey/light grey shale.
1470-85	Cuttings	100% dark grey mudstone.
1485-1500	Cuttings	100% dark grey - mudstone.
1500-15	Cuttings	100% dark grey mudstone.
1515-30	Cuttings	100% dark grey mudstone.
1530-45	Cuttings	100% dark /medium grey mudstone.
1545-60	Cuttings	100% dark grey mudstone.
1560-75	Cuttings	100% dark grey mudstone, slightly calcareous.
1575-90	Cuttings	100% dark grey mudstone, slightly calcareous.
1590-1605	Cuttings	100% dark grey/light grey mudstone.
1605-20	Cuttings	100% dark grey shale.
1620-35	Cuttings	100% medium grey mudstone.

Table 1 - continued

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
1635-50	Cuttings	100% medium grey mudstone, micaceous.
1650-65	Cuttings	100% medium grey mudstone, slightly calcareous.
1665-80	Cuttings	100% medium/light grey mudstone, slightly calcareous.
1680-95	Cuttings	60% medium/light grey mudstone, 40% medium grey siltstone.
1695-1710	Cuttings	100% dark grey/medium grey mudstone, calcareous.
1710-25	Cuttings	100% dark grey/medium grey mudstone, calcareous.
1725-40	Cuttings	100% dark grey/medium grey mudstone, calcareous, micaceous.
1740-55	Cuttings	100% dark grey/light grey mudstone.
1755-70	Cuttings	100% dark grey/medium grey mudstone.
1775-90	Cuttings	100% dark grey/medium grey mudstone.
1790-1805	Cuttings	100% dark grey/medium grey mudstone.
1805-20	Cuttings	100% medium/dark grey mudstone.
1820-35	Cuttings	100% medium/dark grey mudstone.
1835-50	Cuttings	100% medium/dark grey shale.
1850-65	Cuttings	100% medium/dark grey shale - dolomitic

Table 1 - continued



LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
1865-80	Cuttings	100% medium grey shale, micaceous.
1880-95	Cuttings	60% dark grey - light grey mudstone, 40% red siltstone.
1895-1900	Cuttings	60% dark grey - light grey siltstone, 40% red siltstone.
1900-15	Cuttings	60% dark grey - light grey siltstone, 40% red siltstone.
1915-30	Cuttings	80% dark grey siltstone 20% red siltstone.
1930-45	Cuttings	100% dark grey/black shale.
1945-60	Cuttings	100% dark grey/black shale.
1960-75	Cuttings	100% dark grey/black shale.
1975-90	Cuttings	70% sandstone, brown, 30% shale, black.
1990-2005	Cuttings	90% Sandstone, buff/ brown, 10% Claystone, med. grey.
2005-20	Cuttings	90% Sandstone, buff/ brown, 10% Claystone, med. grey.
2020-35	Cuttings	50% Sand, buff/brown, 50% Claystone, dark grey.
2035-50	Cuttings	90% Claystone, med./dk. grey, 10% Sand, buff.
2050-65	Cuttings	90% Claystone, b/k, 10% Sandstone, buff.
2065-80	Cuttings	60% Claystone, b/k, 40% Sandstone, buff.

Table 1 \_ continued

PALEOCHEM  
Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
2080-95	Cuttings	80% Sandstone, buff, 20% Claystone, dk. brown
2095-2110	Cuttings	60% Sandstone, buff, 40% Claystone, dk. brown.
2110-25	Cuttings	90% Sandstone, buff, 10% Claystone, dk. brown.
2125-40	Cuttings	90% Sandstone, buff, 10% Claystone, tr. coal.
2140-55	Cuttings	100% Sandstone, buff, tr. coal.
2155-70	Cuttings	100% Sandstone, buff, tr. coal.
2170-85	Cuttings	100% Sandstone, buff, tr. coal.
2185-2200	Cuttings	100% Sandstone, buff, tr. coal.
2200-15	Cuttings	90% Sandstone, buff, 10% Claystone, grey/green
2215-30	Cuttings	90% Sandstone, buff, 10% Claystone, grey/green.
2230-45	Cuttings	50% Sandstone, buff, 50% Claystone, grey/green.
2245-60	Cuttings	70% Claystone, grey/green, 30% Sandstone, buff.
2260-75	Cuttings	70% Sandstone, buff, 30% Claystone, grey/green.
2275-90	Cuttings	100% Sandstone, buff, trace coal/claystone.

Table 1 - continued

Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
2290-2305	Cuttings	100% Claystone, light/ med. grey, tr. Sandstone.
2305-20	Cuttings	100% Claystone, light/ med. grey, tr. Sandstone.
2320-35	Cuttings	100% Claystone, med./ dk. grey, tr. Sandstone.
2335-50	Cuttings	100% Claystone, med./ dk. grey, tr. Sandstone.
2350-65	Cuttings	80% Sandstone, brown, 20% Claystone, med./ dk. grey.
2365-80	Cuttings	80% Sandstone, brown, 20% Claystone, med./ dk. grey.
2380-95	Cuttings	70% Sandstone, brown, 30% Claystone, med./ dk. grey
2395-2410	Cuttings	70% Sandstone, brown, 30% Claystone, med./ dk. grey.
2410-25	Cuttings	100% Sandstone, brown, tr. Coal.
2425-40	Cuttings	100% Sandstone, white, slightly calc.
2440-55	Cuttings	100% silty Sandstone, white.
2455-70	Cuttings	100% Sandstone, light grey/white, tr. Claystone, med. grey.
2470-85	Cuttings	100% Sandstone, light grey/white, tr. Claystone, med. grey.

Table 1 - continued

Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
2485-2500	Cuttings	50% Sandstone, light grey/white, 50% Claystone, dk. grey.
2500-15	Cuttings	70% Siltstone, dk. grey, 30% Sandstone, light grey/white.
2530-45	Cuttings	100% Siltstone, med. grey, tr. Sandstone, light grey.
2560-75	Cuttings	90% Siltstone, med. grey, 10% Sandstone, light grey.
2590-2605	Cuttings	95% Sandstone, light grey/white, 5% Siltstone, med. grey.
2605-20	Cuttings	95% Sandstone, light grey/white, 5% Siltstone, med. grey.
2620-35	Cuttings	95% Sandstone, light grey/white, 5% Siltstone, med. grey.
2635-50	Cuttings	95% Sandstone, light grey/white, 5% Siltstone, red/brown.
2650-65	Cuttings	95% Sandstone, light grey/white, 5% Siltstone, red/brown, - med. grey.
2665-80	Cuttings	95% Claystone, red/brown/med. grey, 5% silty Sandstone.
2680-95	Cuttings	100% Claystone, red/brown/med. grey.
2695-2710	Cuttings	100% Claystone, red/brown.

Table 1 - continued

Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
2717	Cuttings	100% Claystone, red/brown
2734	Cuttings	100% Claystone, red/brown
2740-55	Cuttings	100% Claystone, red/brown.
2755-70	Cuttings	90% Claystone, red/brown, 10% Sandstone, red.
2770-85	Cuttings	90% Sandstone, red, 10% Claystone, red/ brown.
2785-2800	Cuttings	90% Claystone, red/ brown, grey/green, 10% Sandstone.
2800-15	Cuttings	100% Claystone, red/brown-grey/green.
2829	SWC	100% Siltstone, light grey-green.
2856.5	SWC	100% Sandstone, light grey/green.
2888	SWC	100% Siltstone, light grey/green.
2949	SWC	100% Sandstone, light grey.
2995	SWC	100% silty Sandstone, light grey.
3000.25	SWC	100% silty Sandstone, light grey.
3052	SWC	100% Sandstone, light grey.
3106	SWC	100% Siltstone, med. grey.

Table 1 - continued

- PALEOCHEM

Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Typ	Lithological Description
3162	SWC	100% Sandstone, light grey.
3200	SWC	100% silty Claystone, med./dk. grey.
3248	SWC	100% Sandstone, light grey.
3298	SWC	100% silty Sandstone, light grey.
3342	SWC	100% Sandstone, light grey.
3399	SWC	100% Claystone, dk. grey.
3435.5	SWC	100% Sandstone, breccia light grey.
3511	SWC	100% Siltstone, dk. grey, calcareous.
3520.35	SWC	100% Siltstone, dk. grey, calcareous.
3562.5	SWC	100% Claystone, med. grey.
3511	SWC	100% Sandstone, light grey.
3562.5	SWC	100% Claystone, med. grey.
3625	SWC	100% Claystone, dk. grey, trace lignite.
3665	SWC	50% Claystone, 50% Siltstone, med. grey.
3716	SWC	100% Claystone, med. grey.
3765	SWC	100% Claystone, dk. grey.

Table 1 - continued

## PALEOCHEM

Well: 7120/9-2

LITHOLOGY DESCRIPTION

Depth Metres	Sample Type	Lithological Description
3798	SWC	100% Claystone, dk. grey.
3860	SWC	100% Claystone, dk. grey.
3922	SWC	100% Claystone, dk. grey.
3966	SWC	100% Claystone, silty dk. grey/brown, calc.
4020	SWC	100% Siltstone, dk. grey/brown.
4076	SWC	100% Claystone, silty, med. grey, calcareous.
4122	SWC	100% Claystone, med. grey, tr. lignite.
4177	SWC	100% Siltstone, sandy, mid grey.
4248	SWC	100% Siltstone, mid grey, trace lignite.
4804.5	SWC	100% Claystone, dk. grey, calcareous.
4822	SWC	100% Siltstone, light - dk. grey, calcareous.
4834.5	SWC	100% Siltstone, med. grey, calcareous.
4856	SWC	100% Claystone, dk. grey, calcareous.
4868	SWC	100% Siltstone, med. grey, calcareous.
4875.5	SWC	100% Siltstone, med. grey, calcareous.
4887	SWC	100% Siltstone, med. grey, calcareous.
4894	SWC	100% Siltstone, med. grey, calcareous.

Table 1 - continued

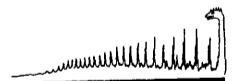
## PALEOCHEM

Well: 7120/9-2

LITHOLOGY DESCRIPTIONS

Depth Metres	Sample Type	Lithological Description
4911	SWC	100% Siltstone, med. grey, calcareous.
4927	SWC	100% Siltstone, med. grey, calcareous.
4938	SWC	100% Siltstone, med. grey, calcareous.
4954	SWC	100% Claystone, dk./ med. grey, calcareous.
4974	SWC	100% Limestone, dk.- light grey, calcareous.
4995	SWC	100% Claystone, dk. grey, calcareous.
5029.5	SWC	100% Claystone, dk. grey, calcareous.
5045.5	SWC	100% Claystone, dk. grey, calcareous.
5055.5	SWC	100% Limestone, light grey/white.

Table 1 - continued





Well: 7120/9-2

HEADSPACE GAS ANALYSIS  
CONCENTRATION PPM BY VOLUME (IN HEADSPACE)

Depth	Methane C <sub>1</sub> (ppm)	Ethane C <sub>2</sub> (ppm)	Propane C <sub>3</sub> (ppm)	Isobutane iC <sub>4</sub> (ppm)	Butane nC <sub>4</sub> (ppm)	Gas Wetness %
1945-60	77074	25832	14716	1805	4903	38.0
1960-75	78680	15956	8016	1000	2756	26.1
1975-90	33720	8816	8874	1207	2744	39.1
1990-2005	31151	7646	9006	2439	5415	44.0
2005-20	-	-	-	-	-	-
2020-35	5106	1509	1136	248	585	40.5
2035-50	7225	1591	1064	-	-	26.9
2050-65	16763	5693	7103	1951	3659	52.3
2065-80	20424	11829	10556	2195	4244	58.5
2080-95	48492	8125	3614	768	1280	22.1
2095-2110	51704	10447	8409	2158	3842	32.4
2110-25	26141	8263	8767	2415	3952	47.2
2125-40	23636	5804	2424	878	1170	30.3
2140-55	18369	6439	6119	1610	2378	47.4
2155-70	6686	4974	4628	998	1610	39.8

PALEOCHEM

Table 2

Well: 7120/9-2

HEADSPACE GAS ANALYSIS  
CONCENTRATION PPM BY VOLUME (IN HEADSPACE)

Depth	Methane C <sub>1</sub> (ppm)	Ethane C <sub>2</sub> (ppm)	Propane C <sub>3</sub> (ppm)	Isobutane iC <sub>4</sub> (ppm)	Butane nC <sub>4</sub> (ppm)	Gas Wetness %
2170-85	20039	5859	4723	1024	1610	39.8
2185-2200	15479	3841	2129	-	658	<b>30.0</b>
2200-15	-	-	-	-	-	-
2215-30	29224	4781	2004	292	548	<b>20.7</b>
2230-45	13359	3322	1538	-	355	<b>28.1</b>
2245-60	10405	2837	<del>1574</del> 146		292	<b>69.2</b>
2260-75	9227	2940	1324	219	329	<b>34.3</b>
2275-90	38698	5638	1729	-	219	<b>16.4</b>
2290-2305	19846	1893	993	-	-	12.7
2305-20	19782	7738	662	-	-	29.8
2320-35	-	-	-	-	-	-
2335-50	1830	630	608	263	146	<b>47.4</b>
2350-65	3934	1365	1163	-	-	39.1
2365-80	106620	8429	2044	-	-	8.9

PALEOCHEM

Table 2 - continued

Well: 7120/9-2

HEADSPACE GAS ANALYSIS  
CONCENTRATION PPM BY VOLUME (IN HEADSPACE)

Depth	Methane C <sub>1</sub> (ppm)	Ethane C <sub>2</sub> (ppm)	Propane C <sub>3</sub> (ppm)	Isobutane iC <sub>4</sub> (ppm)	Butane nC <sub>4</sub> (ppm)	Gas Wetness %
2380-95	14258	2564	339	-	-	16.9
2395-2410	19204	2293	984	-	-	14.5
2410-25	18305	2487	1010	-	-	16.0
2425-40	23250	2682	1204	-	-	14.3
2440-55	8189	1625	805	-	-	22.9
2455-70	13516	1663	849	-	-	15.6
2470-85	4528	768	536	-	-	22.3
2485-2500	15543	1569	733	-	-	12.9
2500-15	4640	1094	626	-	-	27.0
2515-30	2504	840	501	-	-	34.9
2530-45	886	243	-	-	-	21.5
2545-60	1201	232	277	-	-	29.8
2560-75	947	226	196	-	-	30.8
2575-90	4335	530	384	-	-	17.4
2950-65	18241	2763	<b>1842</b>	219	219	21.7

PALEOCHEM

Table 2 - continued

Well: 7120/9-2

HEADSPACE GAS ANALYSIS  
CONCENTRATION PPM BY VOLUME (IN HEADSPACE)

Depth	Methane C <sub>1</sub> (ppm)	Ethane C <sub>2</sub> (ppm)	Propane C <sub>3</sub> (ppm)	Isobutane iC <sub>4</sub> (ppm)	Butane nC <sub>4</sub> (ppm)	Gas Wetness %
2965-80	3420	431	384	-	-	19.2
3040-55	6711	961	849	951	658	33.8
3520-35	3111	928	527	-	-	31.9

Table 2 - continued

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Well: 7120/9-2

## VITRINITE REFLECTANCE DATA

Depth (m)	Lithology	Special Mineralogy	Bitumen		Phytoclasts	Fluorescence	Vitrinite
			Form	Content			
1000	<b>Calc. Shale</b>	Glauconite	Wisps+ Staining	Low	Inert > Rew > Vit.	Sp/Mod/YO-MO	0.38 <sub>(6)</sub> 0.57 <sub>(6)</sub> 1.12 <sub>(1)</sub>
1245-60	Shale	Glauconite	Wisps+ Staining	Mod.	Inert > Vit.	Sp/Low/YO-MO	0.45 <sub>(12)</sub>
1500-15	Shale	-	Wisps+ Staining	Strong	Inert > Vit.	Sp/Low/MO	0.55 <sub>(22)</sub>
1740-55	<b>Limestone+</b> Shale	-	Wisps+ Staining	Mod.	Inert > Vit.	Sp/Low/MO	0.63 <sub>(10)</sub>
2200-15	Shale + Siltstone	-	<b>Wisps+</b> Staining	Strong	Inert > Vit.	Sp/Low/MO	0.60 <sub>(22)</sub>
2395-2410	<b>Silty Shale</b>	-	Wisps+ Staining	Mod.	Inert > Vit.	Sp/Low/MO	0.69 <sub>(22)</sub>
2575-90	Shale	-	<b>Wisps+</b> Staining	Mod.	Inert > Vit.	Sp/Low/MO	0.72 <sub>(10)</sub>
2717	Silty Shale	Haematite	Wisps	Tr.	Inert > Rew > Vit.	Hs/Low/Y-Y/O	0.40 <sub>(4)</sub>
2829	Siltstone	-	Wisps	Low	Inert = Vit.	Hs/Tr/Y/O	0.80 <sub>(4)</sub>
2902	Coal	-	-	-	Inert < Vit.	Sp/Tr/DO	0.72 <sub>(21)</sub>
2949	Sandstone	Iron Oxides	Wisps	Low	Inert = Vit.	Hs/Tr/GY	0.69 <sub>(2)</sub>

Table 3

Well: 7120/9-2

VITRINITE REFLECTANCE DATA

Depth (m)	Lithology	Special Mineralogy	Bitumen Content	Phytoclasts Inert/Rew/Vit.	Fluorescence Typ/Cont/Col.	Vitrinite Ro <sub>Av</sub> (Points)
3162	Siltstone	Iron Oxides	Wisps Low	Inert > Vit.	-	0.55 <sub>(8)</sub>
3248	Siltstone+ Shale	Iron Oxides	<b>Wisps</b> Low	Inert > Vit.	Hs/Tr/MO	0.81 <sub>(10)</sub>
3435.5	Siltstone	Iron Oxides	Wisps Mod.	Inert > Vit.	-	0.84 <sub>(20)</sub>
3562.5	Shale	-	Staining Mod. + Wisps	Inert > Vit.	Hs/Tr/DO	1.12 <sub>(17)</sub>
3665	Shale	-	Staining Mod. + Wisps	Inert > Vit.	-	1.33 <sub>(12)</sub>
3765	Shale	-	Staining Strong + Wisps	Inert > Vit.	-	1.28 <sub>(22)</sub>
3798	Shale	-	Staining Mod. + Wisps	Inert > Vit.	-	1.34 <sub>(24)</sub>
3860	Shale	-	Staining Mod.	Inert > Vit.	-	1.61 <sub>(21)</sub>
3966	<b>Calc. Shale</b>	-	Staining Strong	Inert = Vit.	Carb/Tr/DO	1.64 <sub>(22)</sub>
4076	<b>Silty Shale</b>	Iron Oxides	Staining Mod. + Wisps	Inert = Vit.	Hs/Low/YO	1.72 <sub>(20)</sub>

7-14E09METS

Table 3 - continued

Well No: 7120/9-2

VITRINITE REFLECTANCE DATA

Depth (m)	Lithology	Special Mineralogy	Bitumen		Phytoclasts Inert/Rew/Vit.	Fluorescence Typ/Cont/Col.	Vitrinite Ro <sub>Av</sub> (Points)
			Form	Content			
4177	Siltstone	Iron Oxides	Wisps	Low	Inert > Vit.	Hs/Low/LO	1.83 <sub>(22)</sub>
4248	Shale	-	Wisps	Tr.	Inert = Vit.	Carb/Ab/MO	1.74 <sub>(6)</sub>
4330	Shale	Pyrite	Wisps+ Staining	Mod.	Inert > Vit.	-	1.89 <sub>(4)</sub>
4505	Shale	Pyrite	Wisps+ Staining	Mod.	Inert > Vit.	-	2.05 <sub>(2)</sub>
4600.5	Shale	Pyrite	Wisps+ Staining	Mod.	Inert > Vit.	-	2.13 <sub>(6)</sub>
4774.5	Shale	Pyrite	<b>Wisps+</b> Staining	High	Inert > Vit.	-	2.12 <sub>(11)</sub>
4822	<b>Silty</b> Shale	Pyrite	<b>Wisps+</b> Staining	Mod.	Inert > Vit.	-	2.15 <sub>(3)</sub>
4927	Shale	Pyrite	Wisps+ Staining	Mod.	Inert > Vit.	-	1.86 <sub>(1)</sub>
5029.5	Shale	Pyrite	<b>Wisps+</b> Staining	Mod.	Inert > Vit.	-	2.33 <sub>(8)</sub>

Tr.	= Trace	Y	= Yellow	Typ	= Type
Sp	= Spore	O	= Orange	Cont.	= Content
Mod.	= Moderate	L.O.	= Light Orange	Col.	= Colour
Carb.	= Carbonate	NDP	= No determination possible	Rew	= Reworked
Calc.	= Calcareous	Inert	= Inertinite	Ab.	= Abundant

Table 3 - continued

Well No: 7120/9-2

VISUAL KEROGEN DATA

Depth	Palynomorphs + Miospores	Cuticles	Brown Wood	Black Wood	Amorphous	Colour Maturation Rating
1245-60	Trace/Common <sup>o</sup> *	Trace	Common	Common	Trace	2/3
1500-15	Common <sup>n</sup> *	Trace	Common	Common	Trace	2/3
1725-40	Common <sup>o</sup> *	Trace	Abundant	Common	Trace	3
1755-70	Trace*	-	Common/Abund.	Trace/Common	Trace/common	3/4
1790-1805	Common*	Trace	Abundant	Trace/Common	Trace/common	3/4
1820-25	Trace/Common*	-	Abundant	Trace/Common	Trace/common	3/4
1850-65	Trace*	-	Trace	Trace	Common	3/4?
1880-95	Trace*	-	Trace	Trace	Common	3/4?
1900-15	Trace* <sup>o</sup>	-	Trace	Trace	Common	3/4?
1930-45	Trace* <sup>o</sup>	-	Trace	Trace	Abundant	3/4?
1960-75	Trace* <sup>o</sup>	-	Trace	Trace	Abundant	4?
1990-2005	Trace*	-	Trace	Trace	Abundant	4
2020-35	Trace*	Trace	Trace	Trace	Abundant	4?
2050-65	Trace*	-	Trace/ Common	Trace/common	Trace/common	4?

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Table 4



Well No: 7120/9-2

VISUAL KEROGEN DATA

Depth	Palynomorphs + Miospores	Cuticles	Brown Wood	Black Wood	Amorphous	Colour Maturation Rating
2080-95	Trace*	-	Trace	Trace	Common	NDP
2110-25	<b>Trace/Common*</b>	Trace	<b>Comm./Abund.</b>	<b>Trace/common</b>	<b>Trace/common</b>	4
2140-55	Trace*	-	<b>Comm./Abund.</b>	Common	Trace	3/4
2170-85	Trace	-	Trace	Trace	Trace	3/4?
2230-45	Trace*	-	Trace/common	<b>Trace/common</b>	Common	4?
2260-75	Trace*	-	Trace	Trace	Trace	4
2290-2305	Common*	-	Common	Common	Common	4
2320-35	Trace*	-	Trace	Trace	Trace	4?
2350-65	Trace*	-	Trace	Common	Trace	4
2380-95	Common* <sup>o</sup>	-	Common	Common	Common	4
2410-25	<b>Trace/Common</b>	-	Common	Common	Trace	4
2440-55	Common	Trace	Common	Trace/common	Trace	4
2470-85	Trace/Common	Trace	Trace/common	Trace/common	<b>Trace/common</b>	4
2500-15	Common	Trace	Common	Common	Trace	4

PALEOHEM

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Table 4 - continued

Well No: 7120/9-2

VISUAL KEROGEN DATA

PALEOCHEM

Depth	Palynomorphs + Miospores	Cuticles	Brown Wood	Black Wood	Amorphous	Colour Maturation Rating
2575-90	Common <sup>o</sup>	-	Common	Common	Trace	4
3562.5	Common	-	Trace/common	Common	Trace	5
3665	Trace	-	Trace	Common	-	5/6?
3765	Trace	-	Trace	Trace	-	5/6
4076	-	-	Trace	Trace	-	NDP
4177	-	-	Trace	Trace	-	NDP
4148	Trace	-	Trace	Trace	-	6?
4354.5	Trace	-	Trace	Trace	-	6/7?
4560	Trace	-	Trace	Trace	-	6/7?
4642	Trace	-	Trace	Trace	-	6/7?
4774	Trace	-	Trace	Trace	-	6/7?

\* = Dinoflagellates

<sup>1</sup> = Acritarchs

NDP = No determination possible.

Table 4 - continued

PALEOCHEM

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
1140-70	0.72				
1185-1200	0.86				
1200-15	<b>1.12</b>	1.1	1.2	107	0.47
1215-35	0.97				
1230-45	0.98 (1.0R)				
1245-60	0.97				
1260-75	<b>0.96</b>	0.6	0.8	83	0.42
1275-90	0.93				
1290-1305	0.72				
1305-20	0.66				
1320-35	<b>0.71</b>	0.4	0.3	42	0.57
1335-50	0.74				
1350-65	0.69 (0.54R)				
1365-80	0.67				
1380-95	<b>1.13</b>	0.3	0.7	62	0.27
1395-1410	1.19				
1410-25	0.95				
1425-40	1.12				
1440-55	1.0	0.4	0.8	80	0.33
1455-70	1.15				
1470-85	0.91				
1485-1500	0.96				
1500-1515	<b>1.09</b>	0.5	0.7	64	0.41

Table 5

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
1515-30	1.04				
1530-45	1.04				
1545-60	1.1				
1560-75	1.01	0.5	0.8	79	0.38
1575-90	1.01				
1590-1605	1.23 (1.01R)				
1605-1620	1.05				
1620-35	0.93				
1635-50	0.88 (0.78R)				
1650-65	1.2	0.3	0.6	50	0.33
1665-80	0.89				
1680-95	0.71	0.9	0.5	70	0.56
1695-1710	0.81				
1710-25	1.58	0.4	1.6	101	0.20
1725-40	2.6	0.6	1.6	61	0.27
1740-55	2.37	0.7	2.4	101	0.22
1755-70	2.75				
1775-90	2.49	0.3	2.6	104	0.10
1790-1805	2.42				
1805-20	2.24	0.6	2.5	111	0.19
1820-35	2.45				
1835-50	2.49 (2.16R)	1.2	2.6	104	0.31

Table 5 - continued

## PALEOCHEM

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
1850-65	2.33	1.8	3.8	163	0.32
1865-80	2.09	1.3	5.6	268	0.19
1880-1895	3.11	0.5	1.6	51	0.23
1895-1900	1.15				
1900-15	2.38	1.6	9.1	382	0.14
1915-30	4.50	0.2	22.8	507	0.01
1930-45	5.63				
1945-60	11.53	5.9	40.4	350	0.13
1960-75	13.22	2.4	22.7	171	0.10
1975-1990	0.96 (0.88R)	0.2	0.4	42	0.33
1990-2005	5.16	0.4	22.2	430	0.02
2005-20	6.38	0.1	11.5	180	0.01
2020-35	1.57				
2035-50	5.67	0.1	10.3	181	0.01
2050-65	0.85				
2065-80	3.75	0.1	6.4	170	0.02
2080-95	0.92				
2095-2110	1.92	1.0	2.4	125	0.29
2110-25	3.69	0.1	3.1	84	0.03
2125-40	15.78				
2140-55	6.74	0.2	9.0	134	0.02
2155-70	4.23 (4.24R)				
2170-85	6.0	0.2	7.7	128	0.03

Table 5 - continued

PALEOCHEM

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

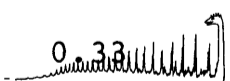
Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
2185-2200	6.25				
2200-15	2.32	4.3	10.3	444	0.29
2215-30	2.42				
2230-45	<b>3.71</b>	1.4	4.4	119	0.24
2245-60	2.69				
2260-75	<b>3.19</b>	0.8	2.0	62	0.28
2275-90	7.64				
2290-2305	<b>4.21</b>	1.2	4.3	102	0.21
2305-20	0.98				
2320-35	<b>0.77</b>	0.4	0.7	91	0.36
2335-50	0.92				
2350-65	<b>0.91</b>	0.6	0.6	66	0.50
2365-80	1.1				
2380-95	<b>2.48</b>	1.2	2.7	109	0.31
2395-2410	3.53 (3.63R)				
2410-25	<b>3.38</b>	0.7	4.4	130	0.14
2425-40	3.67				
2440-55	<b>2.66</b>	0.8	4.1	154	0.16
2455-70	2.44				
2470-85	<b>2.15</b>	0.6	1.9	88	0.24
2485-2500	2.06				
2500-15	<b>1.49</b>	0.4	1.1	74	0.26
2530-45	<b>0.72</b>	0.3	0.5	69	0.38
2560-75	<b>1.22</b>	0.5	1.0	82	0.33 

Table 5 - continued

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen	Production
		P1 Peak	P2 Peak	Index	Index
2590-2605	<b>1.93</b>	0.4	0.9	47	<b>0.31</b>
2605-20	0.95				
2620-35	<b>0.98</b>	0.4	0.7	71	<b>0.36</b>
2635-50	0.85				
2650-65	<b>0.89</b>	0.5	0.7	78	<b>0.42</b>
2665-80	0.93				
2680-95	0.86				
2695-2710	0.54				
2717	<b>0.21</b>	0.2	0.1	48	<b>0.66</b>
2734	0.27				
2740-55	0.45				
2755-70	0.48				
2770-85	<b>0.72</b>	0.5	0.6	83	<b>0.45</b>
2785-2800	0.31				
2800-15	0.57				
2829	<b>1.32</b>	0.6	0.5	38	<b>0.54</b>
2856.5	0.16				
2888	0.40 (0.42R)				
2949	<b>0.37</b>	0.1	0.1	27	<b>0.50</b>
2995	0.22				
3000-25	<b>0.84</b>	0.3	0.8	95	<b>0.27</b>
3052	0.33				
3106	<b>0.97</b>	0.4	0.8	82	<b>0.33</b>

Table 5 - continued

• PALEOCHEM

Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
3162	0.83	<0.1	0.8	96	-
3200	1.21	0.4	0.9	74	0.30
3248	0.45				
3298	0.79	<0.1	0.4	50	-
3342	0.2	<0.1	0.2	100	-
3399	1.11				
3435.5	1.14 (1.1R)	<0.1	0.9	78	-
3511	1.22	0.4	0.7	57	0.36
3520-35					
3562.5	1.23	0.4	0.6	49	0.40
3625	1.27	0.3	0.6	47	0.33
3665	0.71	0.2	0.3	42	0.40
3716	0.95				
3765	0.97	0.5	0.6	61	0.45
3798	1.06	<0.1	0.6	56	-
3860	0.77	0.5	0.5	65	0.50
3922	0.76	0.4	0.4	52	0.50
3966	2.05 (2.03R)	<0.1	1.0	48	-
4020	1.36	<0.1	0.6	44	-
4076	0.5	0.3	0.4	80	0.42
4122	1.05	0.3	0.4	38	0.42
4177	0.37				
4248	0.16	0.2	0.2	125	0.50

Table 5 - continued



PALEOCHEM

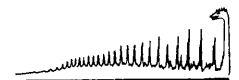
Well No: 7120/9-2

T.O.C. AND PYROLYSIS DATA

Depth	TOC	Yield (kg./tonne)		Hydrogen Index	Production Index
		P1 Peak	P2 Peak		
4804.5	1.65	0.5	0.3	18	0.62
4822	0.45				
4834.5	0.46				
4856A	0.59	0.3	0.1	17	0.75
4856B	0.46				
4868	0.58	0.2	0.1	17	0.67
4875.5	0.53	0.2	0.2	38	0.50
4887	0.49				
4894	0.54	0.2	0.1	19	0.67
4911	0.46				
4927	0.60				
4938	0.48				
4954	0.57	0.1	0.1	18	-
4974	0.23				
4995	0.64	0.1	0.1	16	0.50
5029.5	0.50	0.2	0.1	20	0.66
5045.5	0.52	0.2	0.2	38	0.50
5055.5	0.18				

R = Repeat Value

Table 5 - continued



Well: 7120/9-2

% COMPOSITION OF KEROGEN BREAKDOWN  
PRODUCTS AND GAS/OIL RATIO FROM  
EXTENDED PYROLYSIS.

Depth	Wet Gases	Gasoline	Kerosine	Gas Oil	Wax Distillate	Gas/Oil Ratio
1850-65	17.0	19.7	19.4	23.2	20.7	0.20
1865-80	34.7	24.1	12.7	15.0	13.4	0.53
1900-15	21.5	20.2	19.1	21.8	17.5	0.27
1915-30	22.2	18.2	18.6	24.6	16.3	0.29
1945-60	17.8	22.0	16.0	23.6	20.5	0.21
1960-75	23.4	18.5	16.3	26.6	15.1	0.30
1990-2005	26.7	19.9	15.0	20.5	17.9	0.36
2110-25	39.7	19.4	13.7	15.2	12.0	0.66
2140-55	31.2	15.4	14.8	23.7	15.0	0.45
2170-85	25.4	19.6	16.2	24.9	13.8	0.60
2200-15	22.4	22.4	17.5	25.6	12.2	0.28
2230-45	15.2	21.7	20.6	25.2	17.1	0.18
2290-2305	35.8	19.5	14.1	17.9	13.0	0.55
2410-25	37.5	20.7	13.5	17.6	10.7	0.60
2440-55	38.9	19.2	12.1	14.3	15.5	0.64

PALEOCHEM

Table 6

Well: 7120/9-2

SOLUBLE EXTRACT DATA

Sample Depth	Total Soluble Extract % Wt.	Saturate Alkane Content	Aromatics	Residue
1850-1865	0.143	49 .6	31.2	19 .2
1865-1880	0.330	24 .5	38.3	37.3
1900-1915	0.212	38.3	29.3	32.5
1945-1960	0.683	34.2	48.2	17.4
1960-1975	0.653	23.6	54.4	22.0
2290-2305	0.111	14.9	50.6	34.5
2380-2395	0.121	51.0	28.3	19.7
2440-2455	0.057	24.7	34.2	41.0
2500-2515	0.020	30.0	30.0	40.0
2620-2635	0.052	28.9	61.3	9.7
2740-2755	0.036	60.0	20.0	20.0
3200	0.080	39.1	39.1	21.7
3435.5	0.087	59.3	29.7	11.2

PALEOCHEM

Table 7

Well: 7120/9-2

SOLUBLE EXTRACT DATA

Sample Depth	Total Soluble Extract % Wt.	Saturate Alkane - Content	Aromatics	Residue
3625	0.030	59.0	29.4	11.9
3860	0.039	16.7	50.0	33.4
3966	0.037	42.8	28.6	28.6

Table 7 - continued

PALEOHEM