

Well: 2/4-16

Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
910504						/		/					SPUD MUD
910505						/		/					SPUD MUD
910506						/		/					SPUD MUD
910507	36"		1.05			/		/					SPUD MUD
910508	36"		1.05			/		/					SPUD MUD
910509	9 7/8"		1.05			/		/					SPUD MUD
910510	30"	424.0	1.05			/		/					SPUD MUD
910511	30"	424.0	1.05			/		/					SPUD MUD
910512	30"	424.0	1.20	9.0	19.0	20/35	10.0	.5/1.2	80	1000	.3	8.0	GEL MUD
910513	9 7/8"	431.0	1.27	11.0	41.0	44/62	10.0	.1/.6	40	1800	1.5	10.0	GEL MUD
910514	9 7/8"	770.0	1.27	4.0	46.0	42/76	8.9	/.3	40	2000	.3	13.0	GEL MUD
910515	9 7/8"	951.0	1.25	17.0	21.0	15/65	9.7	.2/.7	40	1700	.3	12.0	GEL MUD
910516	9 7/8"	951.0	1.25	20.0	21.0	20/77	9.5	.1/.5	40	1800	.5	12.0	GEL MUD
910517	9 7/8"	951.0	1.25	14.0	25.0	35/77	8.9	.1/1.0	80	2800	.3	12.0	GEL MUD
910518	9 7/8"	951.0	1.25	16.0	18.0	23/57	9.8	.3/1.2	40	8000	.3	12.0	GEL MUD
910519	9 7/8"	951.0	1.25	15.0	15.0	17/46	9.5	.1/.7	40	8000	.3	12.0	KCL MUD
910520	24"	951.0	1.40			/		/					KCL MUD
910521	24"	968.0	1.40	31.0	28.0	2/3	8.7	/1.7	240	46000			KCL MUD
910522	17 1/2"	1330.0	1.60	33.0	24.0	6/40	8.0	/1.5	360	47000			KCL MUD
910523	17 1/2"	1335.0	1.60	31.0	14.0	4/28	8.1	/1.6	400	47000	.5	23.0	KCL MUD
910524	17 1/2"	1427.0	1.70	39.0	14.0	3/20	7.9	/1.4	400	69000	.5	27.0	KCL MUD
910525	17 1/2"	1703.0	1.72	63.0	21.0	5/32	8.2	.1/2.1	320	70000	.5	28.0	KCL MUD
910526	17 1/2"	1991.0	1.72	49.0	20.0	4/23	7.9	.1/2.0	400	66000	.5	28.0	KCL MUD
910527	17 1/2"	2164.0	1.72	66.0	14.0	5/34	8.2	.1/1.6	360	67000	.5	28.0	KCL MUD
910528	17 1/2"	2212.0	1.72	47.0	28.0	6/28	7.9	/1.8	240	66000		27.0	KCL MUD
910529	17 1/2"	2488.0	1.72	52.0	24.0	6/32	7.8	/1.5	360	67000	1.2	27.0	KCL MUD
910530	17 1/2"	2674.0	1.72	47.0	18.0	4/17	7.8	/1.4	360	67000	.8	27.0	KCL MUD

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Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
910531	17 1/2"	2871.0	1.72	65.0	23.0	5/34	8.0	/1.6	320	69000	.5	27.0	KCL MUD
910601	17 1/2"	2912.0	1.72	51.0	23.0	5/28	8.0	/1.5	280	66000	.5	27.0	KCL MUD
910602	17 1/2"	2912.0	1.72	41.0	16.0	3/17	7.9	/1.6	320	66000	.5	27.0	KCL MUD
910603	17 1/2"	2912.0	1.72	40.0	15.0	3/18	7.8	/1.5	320	67000	.5	27.0	KCL MUD
910604	17 1/2"	2912.0	1.72	42.0	16.0	4/19	7.8	/1.7	320	67000	.5	27.0	KCL MUD
910605	12.6"	2912.0	1.72	36.0	17.0	4/27	8.7	.1/2.4	440	59000	.5	27.0	KCL MUD
910606	12.6"	2897.0	1.72	40.0	21.0	4/27	8.6	.1/2.2	440	58000	.3	27.0	KCL MUD
910607	12.6"	2927.0	1.72	40.0	21.0	4/27	8.6	.1/2.1	440	58000	.3	27.0	KCL MUD
910608	12.6"	2933.0	1.72	44.0	21.0	4/25	8.5	.1/2.6	520	57000	.3	27.0	KCL MUD
910609	12.6"	2897.0	1.72	40.0	21.0	4/27	8.6	.1/2.1	440	58000	.3	27.0	KCL MUD
910610	12.6"	2897.0	1.72	48.0	24.0	3/20	8.6	.1/2.4	340	54000	.3	27.0	KCL MUD
910611	12.6"	2897.0	1.72	43.0	22.0	3/21	8.2	/1.5	360	52500	.2	27.0	KCL MUD
910612	12.6"	2897.0	1.72	42.0	23.0	3/21	8.1	/1.5	400	49000	.2	27.0	KCL MUD
910613	12.6"	2897.0	1.72	41.0	23.0	3/20	8.2	/1.4	360	48000	.2	27.0	KCL MUD
910614	12.6"	2897.0	1.70	37.0	16.0	3/12	8.1	/1.3	360	48000	.1	27.0	KCL MUD
910615	12.6"	2897.0	1.70	34.0	17.0	2/13	8.0	/1.3	360	51000	.1	27.0	KCL MUD
910616	12.6"	2897.0	1.68	35.0	14.0	2/12	8.0	/1.2	400	50000	.1	26.0	KCL MUD
910617	12.6"	2897.0	1.68	35.0	17.0	3/15	8.0	/1.2	400	50500	.1	26.0	KCL MUD
910618	12.6"	2897.0	1.68	28.0	10.0	2/16	9.2	.2/2.8	520	47000	.1	26.0	KCL MUD
910619	12.6"	2897.0	1.68	28.0	13.0	3/30	9.2	.2/2.9	560	47000	.1	26.0	KCL MUD
910620	12.6"	2897.0	1.68	24.0	15.0	3/27	9.3	.2/3.0	600	51000		26.0	KCL MUD
910621	12.6"	2897.0	1.68	26.0	15.0	3/28	9.2	.2/3.0	600	51000		26.0	KCL MUD
910622	12.6"	2897.0	1.68	21.0	10.0	2/25	9.6	.3/2.9	640	50000		26.0	KCL MUD
910623	12.6"	2897.0	1.68	25.0	10.0	2/28	9.5	.2/2.8	640	51000		27.0	KCL MUD
910624	12.6"	2897.0	1.68	24.0	12.0	3/36	10.0	.3/3.8	680	52000		27.0	KCL MUD
910625	12.6"	2897.0	1.68	25.0	16.0	6/44	10.0	.3/3.7	600	52000		27.0	KCL MUD
910626	12.6"	4089.0	1.68	24.0	11.0	4/43	10.5	.4/3.6	640	50000		27.0	KCL MUD

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Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
910627	12.6"	4089.0	1.68	23.0	9.0	3/37	10.9	.7/4.7	520	48000		27.0	KCL MUD
910628	12.6"	4127.0	1.68	25.0	8.0	3/26	11.0	.7/5.1	600	47000		27.0	KCL MUD
910629	12.6"	4155.0	1.68	25.0	9.0	3/24	11.1	.8/5.2	640	47000		26.0	KCL MUD
910630	12.6"	4188.0	1.68	22.0	8.0	2/28	11.1	.7/4.9	760	45000		26.0	KCL MUD
910701	12.6"	4205.0	1.68	24.0	9.0	2/27	10.8	.5/4.7	600	44000		26.0	KCL MUD
910702	12.6"	4288.0	1.68	22.0	8.0	2/23	11.4	1.3/4.9	440	44000		26.0	KCL MUD
910703	12.6"	4305.0	1.68	23.0	9.0	2/23	11.3	1.3/5.2	400	44000		26.0	KCL MUD
910704	12.6"	4354.0	1.68	24.0	9.0	2/22	11.4	1.7/6.2	400	43000		26.0	KCL MUD
910705	12.6"	4427.0	1.68	25.0	10.0	2/26	11.4	1.7/6.2	400	43000		26.0	KCL MUD
910706	12.6"	4441.0	1.68	25.0	11.0	2/27	11.4	1.6/5.9	400	43000		26.0	KCL MUD
910707	12.6"	4428.0	1.68	25.0	10.0	2/25	11.3	1.7/6.0	400	43000		26.0	KCL MUD
910708	12.6"	4428.0	1.68	25.0	9.0	2/25	11.4	1.7/6.5	380	44000		26.0	KCL MUD
910709	12.6"	4473.0	1.68	25.0	8.0	2/25	11.6	1.8/6.4	300	42000		26.0	KCL MUD
910710	12.6"	4491.0	1.72	33.0	11.0	3/39	11.3	1.2/5.8	400	44000		28.0	KCL MUD
910711	12.6"	4512.0	1.75	35.0	12.0	5/48	11.0	.9/5.4	400	43000		29.0	KCL MUD
910712	12.6"	4547.0	1.75	28.0	7.0	2/26	11.2	1.1/6.4	440	45500		29.0	KCL MUD
910713	12.6"	4547.0	1.75	25.0	6.0	2/23	11.2	.9/5.9	400	45000		29.0	KCL MUD
910714	12.6"	4583.0	1.75	27.0	10.0	2/28	11.1	.9/6.1	480	43000		29.0	KCL MUD
910715	12.6"	4594.0	1.80	29.0	8.0	3/32	11.1	.8/6.0	520	43000		29.0	KCL MUD
910716	12.6"	4594.0	1.80	29.0	10.0	3/34	10.9	.7/6.1	560	44000		30.0	KCL MUD
910717	12.6"	4646.0	1.85	33.0	13.0	4/38	11.0	.7/6.0	560	45000		31.0	KCL MUD
910718	12.6"	4650.0	1.87	40.0	13.0	4/46	11.1	.9/5.7	560	47000		31.0	KCL MUD
910719	12.6"	4650.0	1.85	30.0	6.0	3/34	10.9	.8/5.8	560	46000		31.0	KCL MUD
910720	12.6"	4650.0	1.85	30.0	6.0	3/34	10.9	.8/5.8	560	46000		31.0	KCL MUD
910721	12.6"	4650.0	1.85	29.0	7.0	3/27	11.2	.9/6.0	560	45000		31.0	KCL MUD
910722	12.6"	4650.0	1.85	31.0	10.0	3/40	11.1	.9/6.0	560	45000		31.0	KCL MUD
910723	12.6"	4650.0	1.85	26.0	5.0	3/26	11.0	.6/4.5	440	44000		31.0	KCL MUD

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Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
910724	12.6"	4650.0	1.85	27.0	5.0	3/28	10.8	.6/4.7	440	44000		31.0	KCL MUD
910725	12.6"	4650.0	1.85	28.0	9.0	4/36	10.5	.5/4.3	440	44000		31.0	KCL MUD
910726	12.6"	4650.0	1.85	32.0	8.0	5/43	10.0	.5/4.0	440	44000		31.0	KCL MUD
910727	9.4"	4650.0	1.85	23.0	4.0	1/16	10.8	.5/4.0	440	42000		31.0	KCL MUD
910728	9.4"	4650.0	1.85	24.0	2.0	1/15	10.5	.5/3.7	800	41000		31.0	KCL MUD
910729	9.4"	4655.0	2.00	28.0	3.0	2/21	10.5	.4/3.5	840	41000			KCL MUD
910730	9.4"	4697.0	2.03	31.0	6.0	1/14	11.7	1.5/6.3	440	34000		37.0	KCL MUD
910731	9.4"	4726.0	2.06	34.0	4.0	1/6	12.5	6.8/**	240	33000		38.0	KCL MUD
910801	9.4"	4726.0	2.06	29.0	10.0	4/38	10.0	.6/9.8	680	23000		38.0	KCL MUD
910802	9.4"	4726.0	2.06	29.0	9.0	4/35	9.9	.5/9.9	640	23000		38.0	KCL MUD
910803	9.4"	4726.0	2.06	28.0	9.0	4/30	9.8	.5/9.9	620	23000		38.0	KCL MUD
910804	9.4"	4726.0	2.06	25.0	7.0	3/39	10.5	.7/8.4	520	24000		38.0	KCL MUD
910805	9.4"	4727.0	2.06	26.0	8.0	3/35	10.5	.6/8.8	480	22000		38.0	WATER BASED
910806	9.4"	4742.0	2.10	25.0	7.0	3/34	10.5	.7/9.1	320	23000		39.0	WATER BASED
910807	9.4"	4754.0	2.12	28.0	7.0	3/34	10.5	.9/8.0	280	22000		40.0	WATER BASED
910808	9.4"	4771.0	2.13	23.0	7.0	4/38	10.7	1.2/8.8	240	22000		40.0	WATER BASED
910809	9.4"	4803.0	2.13	24.0	12.0	4/38	10.5	1.0/8.8	240	22000		40.0	WATER BASED
910810	9.4"	4838.0	2.13	22.0	16.0	7/42	10.4	.9/6.4	320	20000		40.0	WATER BASED
910811	9.4"	4893.0	2.13	24.0	12.0	13/45	10.6	1.1/6.6	320	20000		40.0	WATER BASED
910812	9.4"	4910.0	2.13	21.0	6.0	2/27	10.5	.9/6.1	320	19000		40.0	WATER BASED
910813	9.4"	4910.0	2.13	19.0	8.0	4/27	10.6	.9/6.3	360	19000		40.0	WATER BASED
910814	9.4"	4910.0	2.13	20.0	11.0	6/31	10.4	.9/6.6	320	19000		40.0	WATER BASED
910815	9.4"	4910.0	2.13	19.0	13.0	6/33	10.4	.6/6.7	320	19000		40.0	WATER BASED
910816	9.4"	4632.0	2.13	19.0	12.0	7/32	10.3	.8/6.7	320	18000		40.0	WATER BASED
910817	9.4"	4632.0	2.13	19.0	15.0	9/34	10.2	.8/6.7	300	18000		40.0	WATER BASED
910818	9.4"	4910.0	2.13	19.0	12.0	9/32	10.3	.8/6.7	300	17000		40.0	WATER BASED
910819	9.4"	4910.0	2.13	19.0	6.0	5/25	10.7	.8/6.6	360	16000		40.0	WATER BASED

Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
910820	9.4"	4910.0	2.13	19.0	7.0	6/27	10.4	.8/6.6	360	16000		40.0	WATER BASED
910821	9.4"	4910.0	2.13	19.0	11.0	11/35	9.6	.7/6.7	280	16000		40.0	HI TEMP POLYMER
910822	9.4"	4910.0	2.13	18.0	10.0	10/31	9.6	.7/6.7	300	16000		40.0	HI TEMP POLYMER
910823	9.4"	4910.0	2.12	18.0	14.0	12/34	9.5	.7/6.8	300	16000		40.0	HI TEMP POLYMER
910824	9.4"	4910.0	2.13	18.0	15.0	13/34	9.5	.5/6.6	280	16000		40.0	HI TEMP POLYMER
910825	9.4"	4910.0	2.13	18.0	16.0	15/34	9.3	.5/6.6	280	16000		40.0	HI TEMP POLYMER
910826	9.4"	4910.0	2.13	18.0	22.0	20/48	9.8	.5/6.6	320	16000		40.0	HI TEMP POLYMER
910827	9.4"	4910.0	2.13	19.0	2.0	2/34	11.0	.8/6.0	120	15000		40.0	HI TEMP POLYMER
910828	6"	4910.0	2.13	19.0	2.0	2/30	11.1	1.0/6.0	80	14000		40.0	HI TEMP POLYMER
910829	6"	4914.0	2.13	18.0	2.0	2/26	11.4	1.0/6.6	160	14000		40.0	HI TEMP POLYMER
910830	6"	4917.0	2.13	18.0	3.0	2/24	11.3	.9/7.0	520	14000		40.0	HI TEMP POLYMER
910831	6"	4951.0	2.13	29.0	5.0	3/40	11.5	1.1/7.0	520	14000		40.0	HI TEMP POLYMER
910901	6"	4951.0	2.13	25.0	3.0	3/54	12.4	2.2/7.5	440	13000		40.0	HI TEMP POLYMER
910902	6"	4996.0	2.13	25.0	3.0	3/42	12.6	2.7/8.6	440	13000		40.0	HI TEMP POLYMER
910903	6"	4996.0	2.13	22.0	4.0	2/22	10.8	.7/4.6	440	10000		39.0	HI TEMP POLYMER
910904	6"	4996.0	2.13	24.0	6.0	3/42	11.2	.9/4.8	200	21000		39.0	HI TEMP POLYMER
910905	6"	4996.0	2.13	24.0	5.0	3/38	11.0	.8/4.6	220	21000		39.0	HI TEMP POLYMER
910906	6"	4996.0	2.13	23.0	6.0	3/39	10.9	.7/4.5	200	20000		39.0	HI TEMP POLYMER
910907	6"	4996.0	2.13	23.0	7.0	3/41	10.8	.6/4.2	200	20000		39.0	HI TEMP POLYMER
910908	6"	4996.0	2.15	51.0	17.0	7/18	10.8	.6/3.8	220	1500		38.0	HI TEMP POLYMER
910909	6"	4996.0	2.15	51.0	17.0	7/18	10.8	.6/3.8	220	1500		38.0	HI TEMP POLYMER
910910	6"	4996.0	2.15	51.0	17.0	7/18	10.8	.6/3.8	220	1500		38.0	HI TEMP POLYMER
910911	6"	4996.0	2.15	52.0	20.0	8/19	10.5	.6/3.4	220	1500		38.0	HI TEMP POLYMER
910912	6"	4996.0	2.15	52.0	20.0	8/19	10.5	.6/3.4	220	1500		38.0	HI TEMP POLYMER
910913	6"	4996.0	2.15	52.0	20.0	8/19	10.5	.6/3.4	220	1500		38.0	HI TEMP POLYMER
910914	6"	4996.0	2.15	52.0	20.0	8/19	10.5	.6/3.4	220	1500		38.0	HI TEMP POLYMER
910915	6"	4996.0	2.15	53.0	19.0	8/17	10.3	.6/3.5	220	1800		38.0	HI TEMP POLYMER

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910916	6"	4996.0	2.15	53.0	19.0	8/17	10.3	.6/3.5	220	1800		38.0	HI TEMP POLYMER
910917	6"	4996.0	2.20	67.0	22.0	8/15	10.6	.6/3.5	240	2000		39.0	HI TEMP POLYMER
910918	6"	4996.0	2.20	56.0	17.0	6/19	10.6	.9/4.9	200	1500		39.0	HI TEMP POLYMER
910919	6"	4996.0	2.20	52.0	16.0	6/18	10.5	.9/4.9	200	1500		39.0	HI TEMP POLYMER
910920	6"	4996.0	2.20	52.0	18.0	7/19	10.3	.9/4.9	200	1500		39.0	HI TEMP POLYMER
910921	6"	4996.0	2.20	46.0	10.0	5/10	10.1	1.5/7.1	240	2000		39.0	HI TEMP POLYMER
910922	6"	4996.0	2.20	45.0	9.0	5/10	10.4	1.7/7.5	200	3000		39.0	HI TEMP POLYMER
910923	6"	4996.0	2.20	45.0	9.0	5/10	10.3	1.6/7.5	200	3000		39.0	HI TEMP POLYMER
910924	6"	4996.0	2.20	47.0	11.0	5/11	10.2	1.5/7.4	200	3000		39.0	HI TEMP POLYMER
910925	6"	4996.0	2.18	51.0	12.0	6/13	10.3	1.7/7.6	240	3000		38.0	HI TEMP POLYMER
910927	6"	4996.0	2.16	47.0	10.0	5/16	10.6	2.5/8.6	160	4000		38.0	HI TEMP POLYMER
910928	6"	4996.0	2.16	48.0	12.0	6/19	10.3	2.5/8.6	160	4000		38.0	HI TEMP POLYMER
910929	6"	4996.0	2.16	55.0	19.0	8/48	10.7	2.1/7.2	160	5000		38.0	HI TEMP POLYMER
910930	6"	4996.0	2.16	43.0	8.0	4/12	10.3	1.7/5.8	280	4500		38.0	HI TEMP POLYMER
911001	6"	4996.0	2.20	44.0	11.0	5/15	11.0	1.2/5.2	300	5200		39.0	HI TEMP POLYMER
911002	6"	4996.0	2.20	52.0	8.0	5/18	11.0	1.4/5.4	300	5200		39.0	HI TEMP POLYMER
911003	6"	4996.0	2.20	51.0	10.0	5/13	10.7	1.7/5.1	360	5800		40.0	HI TEMP POLYMER
911004	6"	4996.0	2.20	43.0	14.0	5/33	10.7	.8/4.3	360	5400		39.0	HI TEMP POLYMER
911005	6"	4996.0	2.20	40.0	6.0	3/30	10.9	.9/4.1	320	5000		39.0	HI TEMP POLYMER
911006	6"	4935.0	2.20	39.0	5.0	3/29	10.8	.8/4.2	320	5000		39.0	HI TEMP POLYMER
911007	6"	4935.0	2.20	39.0	6.0	3/31	10.7	.7/4.1	320	4900		39.0	HI TEMP POLYMER
911008	6"	4935.0	2.20	38.0	8.0	3/30	10.7	.7/4.1	320	4900		39.0	HI TEMP POLYMER
911009	6"	4935.0	2.20	38.0	8.0	3/29	10.6	.7/4.2	320	4900		39.0	HI TEMP POLYMER
911010	6"	4935.0	2.20	32.0	7.0	3/18	10.3	.5/3.8	280	5000		39.0	HI TEMP POLYMER
911011	6"	4935.0	2.20	33.0	9.0	3/25	10.3	.5/3.8	280	5000		39.0	HI TEMP POLYMER
911012	6"	4935.0	2.20	33.0	9.0	3/25	10.3	.5/3.8	280	5000		39.0	HI TEMP POLYMER
911013	6"	4935.0	2.20	32.0	8.0	3/20	10.0	.4/3.2	240	4200		40.0	HI TEMP POLYMER

Well: 2/4-16

Date	Hole size	Hole depth	Mud weight	PV	YP	Gel strength	pH	Alkalinity Pf /Mf	Ca++ mg/l	Cl- mg/l	Sand %	Solids %	Mudtype
911014	6"	4935.0	2.20	43.0	10.0	3/14	10.3	.5/3.4	240	3700		40.0	HI TEMP POLYMER
911015	6"	4924.0	2.20	43.0	9.0	3/15	10.4	.5/4.3	240	3800		40.0	HI TEMP POLYMER
911016	6"	4924.0	2.20	48.0	13.0	6/64	10.9	.6/2.6	240	4800		40.0	HI TEMP POLYMER
911017	6"	4924.0	2.20	39.0	6.0	4/25	10.9	.3/2.4	200	1800		40.0	HI TEMP POLYMER
911018	6"	4996.0	2.20	39.0	6.0	4/25	10.8	.3/2.4	200	4800		40.0	HI TEMP POLYMER
911019	6"	4996.0	2.20	39.0	6.0	4/25	10.8	.3/2.4	200	4800		40.0	HI TEMP POLYMER
911020	6"	4996.0	2.20	39.0	6.0	4/25	10.8	.3/2.4	200	4800		40.0	HI TEMP POLYMER
911021	6"	4996.0	2.20	42.0	7.0	4/15	10.2	.6/3.5	240	4000		40.0	HI TEMP POLYMER
911022	6"	4996.0	2.20	38.0	6.0	3/23	10.2	.6/3.1	200	4200		40.0	HI TEMP POLYMER
911023	6"	4996.0	2.20	37.0	5.0	3/29	10.0	.5/3.2	400	4600		40.0	HI TEMP POLYMER
911024	6"	4996.0	2.20	39.0	6.0	4/37	10.1	.3/3.7	400	5000		40.0	HI TEMP POLYMER
911025	6"	4996.0	2.20	47.0	8.0	5/59	10.0	.5/7.4	800	5200		40.0	HI TEMP POLYMER
911026	6"	4996.0	2.20	41.0	5.0	3/35	10.0	.5/6.4	800	4400		40.0	HI TEMP POLYMER
911027	6"	4996.0	2.20	31.0	15.0	5/29	9.6	.3/4.0	600	3400		30.0	HI TEMP POLYMER
911028	6"	4996.0	2.20	33.0	10.0	4/29	10.7	.3/5.4	500	5000		30.0	HI TEMP POLYMER
911029	6"	4996.0	2.20	47.0	10.0	4/47	10.7	1.0/5.4	500	5000		40.0	HI TEMP POLYMER
911030	6"	4996.0	2.20	45.0	10.0	4/45	10.6	.9/5.5	500	5000		40.0	HI TEMP POLYMER
911031	6"	4996.0	2.20	45.0	10.0	4/45	10.6	.9/5.5	500	5000		40.0	HI TEMP POLYMER
911101	6"	4996.0	2.20	35.0	10.0	2/15	11.3	.9/5.5	650	5000		40.0	HI TEMP POLYMER
911102	6"	4996.0	2.20	35.0	10.0	2/15	11.3	.9/5.5	650	5000		40.0	HI TEMP POLYMER
911103	P&A	4996.0	2.20	35.0	10.0	2/15	11.3	.9/4.2	650	5000		40.0	HI TEMP POLYMER
911104	P&A	4996.0	2.20	35.0	10.0	2/15	11.3	.9/4.2	650	5000		40.0	HI TEMP POLYMER
911105	P&A					/		/					HI TEMP POLYMER

# Final Well Report 2/4-16

Material	Unit	36" hole	28" hole	24" hole	17 1/2" hole	12.6" hole	9.4" hole	6" hole	TOTAL
AGIPAC LV	KG				34800	4050			38850
AGIPAC REG	KG				5250	3000			8250
BACBAN III	KG				30	60	85	85	260
BARITE	MT		73	207	1739	1480	986	3124	7609
BENTONITE	MT	18	48	42	9	32	7	62	218
BORREWELL	KG			5350					5350
CAUSTIC	KG	75	175	2450		3825	3500	5300	15325
CITRIC ACID	KG				150	875	1950	1000	3975
CONQOR 404	KG				418	2496		418	3328
DESCO CF	KG	147	305		669	11803	3032	453	16409
GYPSUM	KG					1040		550	1590
HEC	KG							75	75
KCL BRINE	BBL				5535	2528			8063
KCL POWDER	KG				9800	7250			17050
KOH	KG						2000		2000
LAMPAC REG	KG					1025			1025
LIME	KG					14800	4000	3340	21940
M-I LUBE	KG					2080			2080
MPOC	KG							1873	1873
OS-1L	KG				208	2288		208	2704
PERF.SEAL	KG					815			815
POLUPLUS	KG				5425	1800			7225
POLYDRILL	KG					29125	6000	20425	55550
POLYSAL	KG			4575					4575
POT.BCARB	KG				575	1850		225	2450
RESINEX	KG					38749	8365	20152	67266
RESINEX 1	KG							16290	16290
SIL.DEFOAM	KG					4600	2400	800	7800
SOD.BICARB	KG						1250	1425	2675
SODA ASH	KG	75	150	200	1825	525		25	2800
TACKLE+	KG					17100	7825	20675	45700
XANTHAN	KG							125	125
XANVIS	KG				200				200
XC POLYMER	KG				300		425	800	1525
XP-20	KG					8082	11326	46580	65988

Table 6.2.2 Mud Materials Used



BA-92-1801-1

02 SEPT 1992

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## Geochemical Report for Well NOCS 2/4-16

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## Chapter 1

# INTRODUCTION

Well NOCS 2/4-16 was analysed on behalf of Saga Petroleum. It is located in the Central Graben in the Norwegian sector of the North Sea at 56°40'37.20" N, 3°09'01.50" E and drilled to a total depth of 4996 m. The water depth was 67.5 m and KB elevation 26 m. All depths in this report are relative to KB, except if specified otherwise.

Both screening and follow-up analyses were performed on samples supplied by Saga Petroleum. Two sections of the well were analysed (430 - 890 m and 4560 - 4995 m) according to the analytical program formulated by Saga. The results are presented in the relevant stratigraphic sections in the report.

### 1.1 General Comments

The cuttings samples were supplied unwashed in cans. The samples were analysed for headspace and occluded gas, washed and described at Geolab Nor and the samples normally picked before analyses commenced.

The analytical program was decided in detail by Saga Petroleum a.s.

## 1.2 Analytical Program

In accordance with specifications from Saga Petroleum, the following analytical program was performed for well NOCS 2/4-16 in the sections from 430 m to 890 m and from 4560 m to 4995 m.

<u>Analysis type</u>	<u>No of sample</u>	<u>Figures</u>	<u>Tables</u>
Headspace and Occluded Gas	76	2a-f	1
Isotope analysis of Headspace Gas	12	3a-d	2
Lithology description	73	4	3
TOC	18	4	3,4
Rock-Eval pyrolysis	18	5,6,7	4
Soxhlet Extraction of organic matter	25		
MPLC/HPLC separation	12		6a-e
Whole Extract GC	3	8a-b	
Saturated hydrocarbon GC	9	9a-b	7
Aromatic hydrocarbon GC	9	10a-c	8
Vitrinite reflectance	17	11	9
Isotope composition C <sub>15+</sub> fractions	8	12,13	10
GC - MS of saturated and aromatic HC	9	14a-e	11a-i

# Appendix 1

## Tables

- 1-

Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu$ l gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
430.00	3413	7	1	-	-	2	3421	8	0.2	-
440.00	472	1	-	-	-	11	473	1	0.2	-
450.00	-	-	-	-	-	-	-	-	-	-
460.00	-	-	-	-	-	-	-	-	-	-
470.00	-	-	-	-	-	-	-	-	-	-
480.00	19005	69	4	-	1	2	19079	74	0.4	-
490.00	-	-	-	-	-	-	-	-	-	-
500.00	15	1	-	1	1	25	18	3	16.7	1.00
510.00	42390	221	22	8	1	13	42642	252	0.6	8.00
520.00	-	-	-	-	-	-	-	-	-	-
530.00	184697	842	37	14	3	5	185593	896	0.5	4.67
540.00	-	-	-	-	-	-	-	-	-	-
550.00	317934	3739	866	352	96	4360	322987	5053	1.6	3.67
560.00	26	-	-	-	-	-	26	-	-	-
570.00	436534	1154	102	23	3	8	437816	1282	0.3	7.67
580.00	7927	-	-	-	-	-	7927	-	-	-
590.00	29804	245	35	11	5	2	30100	296	1.0	2.20
600.00	1521	25	36	15	11	-	1608	87	5.4	1.36
610.00	6653	59	56	28	20	53	6816	163	2.4	1.40
620.00	763	-	-	-	-	-	763	-	-	-
630.00	275	12	23	8	17	14	335	60	17.9	0.47
640.00	256443	969	835	578	338	377	259163	2720	1.1	1.71
650.00	450200	1756	1535	946	575	1138	455012	4812	1.1	1.65

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Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum	sum	%wet ness	iC4
							C1-C4	C2-C4		nC4
660.00	80542	734	912	535	317	18	83040	2498	3.0	1.69
670.00	190	3	4	6	6	15	209	19	9.1	1.00
680.00	107227	132	85	66	35	-	107545	318	0.3	1.89
690.00	40302	133	137	123	25	56	40720	418	1.0	4.92
700.00	436	1	-	-	-	-	437	1	0.2	-
710.00	184	4	3	3	3	4	197	13	6.6	1.00
720.00	-	-	-	-	-	-	-	-	-	-
730.00	153	-	-	-	-	27	153	-	-	-
740.00	-	-	-	-	-	-	-	-	-	-
750.00	9721	23	9	11	2	1	9766	45	0.5	5.50
760.00	356	5	4	5	3	-	373	17	4.6	1.67
770.00	1329	5	2	3	3	19	1342	13	1.0	1.00
780.00	3	-	-	-	-	-	3	-	-	-
790.00	1835	6	1	-	1	-	1843	8	0.4	-
800.00	-	-	-	-	-	-	-	-	-	-
810.00	9	1	-	-	-	2	10	1	10.0	-
820.00	162	-	-	-	-	-	162	-	-	-
830.00	27	-	-	-	-	-	27	-	-	-
840.00	-	-	-	-	-	-	-	-	-	-
850.00	46	1	-	1	1	48	49	3	6.1	1.00
860.00	50	-	-	-	-	-	50	-	-	-
870.00	124	-	-	1	-	-	125	1	0.8	-
880.00	31	-	-	-	-	-	31	-	-	-

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Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
890.00	29	2	-	2	-	1	33	4	12.1	-
4560.00	1	-	-	-	-	-	1	-	-	-
4580.00	50	5	6	2	4	3	67	17	25.4	0.50
4600.00	3	-	-	-	-	-	3	-	-	-
4620.00	493	122	147	76	239	1075	1077	584	54.2	0.32
4640.00	153	43	100	39	127	513	462	309	66.9	0.31
4660.00	692	616	2067	592	1783	1757	5750	5058	88.0	0.33
4680.00	68	24	48	24	81	813	245	177	72.2	0.30
4700.00	327	114	205	108	343	1870	1097	770	70.2	0.31
4720.00	69	43	209	158	473	1151	952	883	92.8	0.33
4746.00	608	1630	2586	711	1687	3185	7222	6614	91.6	0.42
4773.00	25	18	16	104	309	769	472	447	94.7	0.34
4782.00	9	17	44	22	58	341	150	141	94.0	0.38
4800.00	10	22	193	120	324	697	669	659	98.5	0.37
4818.00	196	442	610	130	308	197	1686	1490	88.4	0.42
4836.00	17	16	72	62	173	648	340	323	95.0	0.36
4854.00	2058	6032	9185	2098	4901	4635	24274	22216	91.5	0.43
4881.00	16	4	91	113	343	1230	567	551	97.2	0.33
4899.00	18	43	52	10	24	44	147	129	87.8	0.42
4908.00	1475	2034	1950	349	764	354	6572	5097	77.6	0.46
4917.00	20	45	326	151	361	715	903	883	97.8	0.42
4926.00	31	7	14	7	16	76	75	44	58.7	0.44
4935.00	1302	322	199	43	87	369	1953	651	33.3	0.49

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Table 1a: C1 to C7 hydrocarbons in HEADSPACE gas  
( $\mu$ l gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 nC4
4944.00	4984	1307	776	157	308	834	7532	2548	33.8	0.51
4953.00	181	29	17	4	9	23	240	59	24.6	0.44
4962.00	632	101	70	19	39	191	861	229	26.6	0.49
4971.00	93	26	22	6	13	70	160	67	41.9	0.46
4980.00	380	135	168	66	139	591	888	508	57.2	0.47
4989.00	186	134	69	19	39	435	447	261	58.4	0.49
4995.00	628	116	89	29	62	259	924	296	32.0	0.47



- 1-

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
430.00	110	-	-	-	-	95	110	-	-	-
440.00	27	-	-	-	-	1	27	-	-	-
450.00	12	-	-	-	-	-	12	-	-	-
460.00	25	-	-	-	-	-	25	-	-	-
470.00	18	-	-	-	-	-	18	-	-	-
480.00	42	-	-	-	-	5	42	-	-	-
490.00	57	-	-	-	-	-	57	-	-	-
500.00	9	-	-	-	-	-	9	-	-	-
510.00	183	-	-	-	-	-	183	-	-	-
520.00	-	-	-	-	-	-	-	-	-	-
530.00	122	1	-	-	-	-	123	1	0.8	-
540.00	20	1	-	-	-	-	21	1	4.8	-
550.00	212	6	2	-	1	1	221	9	4.1	-
560.00	22	-	-	-	-	-	22	-	-	-
570.00	115	1	-	-	-	-	116	1	0.9	-
580.00	19	1	-	-	-	-	20	1	5.0	-
590.00	71	1	-	-	-	5	72	1	1.4	-
600.00	29	1	-	-	-	-	30	1	3.3	-
610.00	27	1	-	-	-	-	28	1	3.6	-
620.00	45	1	-	-	-	1	46	1	2.2	-
630.00	110	2	1	-	-	1	113	3	2.7	-
640.00	137	3	1	-	-	-	141	4	2.8	-
650.00	84	2	1	-	-	-	87	3	3.5	-

- 2-

Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu$ l gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
660.00	180	3	1	-	-	-	184	4	2.2	-
670.00	161	3	1	-	-	2	165	4	2.4	-
680.00	225	7	2	1	1	1	236	11	4.7	1.00
690.00	74	1	-	-	-	-	75	1	1.3	-
700.00	52	1	-	-	-	-	53	1	1.9	-
710.00	149	3	1	-	1	-	154	5	3.3	-
720.00	51	2	-	-	-	-	53	2	3.8	-
730.00	75	2	-	-	-	-	77	2	2.6	-
740.00	-	-	-	-	-	-	-	-	-	-
750.00	193	3	1	-	-	1	197	4	2.0	-
760.00	80	1	-	-	-	-	81	1	1.2	-
770.00	88	1	-	-	-	2	89	1	1.1	-
780.00	25	1	-	-	-	-	26	1	3.9	-
790.00	54	1	-	-	-	1	55	1	1.8	-
800.00	23	1	-	-	-	-	24	1	4.2	-
810.00	20	-	-	-	-	-	20	-	-	-
820.00	16	1	-	-	-	-	17	1	5.9	-
830.00	30	1	-	-	-	-	31	1	3.2	-
840.00	59	2	1	-	-	1	62	3	4.8	-
850.00	36	13	63	36	82	314	230	194	84.4	0.44
860.00	152	4	1	-	-	1	157	5	3.2	-
870.00	122	3	1	-	-	1	126	4	3.2	-
880.00	114	4	1	-	-	1	119	5	4.2	-

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Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet- ness	iC4 --- nC4
890.00	56	2	1	1	2	26	62	6	9.7	0.50
4560.00	114	7	3	1	2	192	127	13	10.2	0.50
4580.00	115	7	3	1	2	44	128	13	10.2	0.50
4600.00	166	16	25	33	108	1304	348	182	52.3	0.31
4620.00	314	27	26	28	107	2114	502	188	37.5	0.26
4640.00	204	19	23	16	67	1062	329	125	38.0	0.24
4660.00	263	84	535	412	1458	7731	2752	2489	90.4	0.28
4680.00	102	14	38	41	163	1788	358	256	71.5	0.25
4700.00	100	12	16	20	74	2665	222	122	55.0	0.27
4720.00	270	34	81	123	414	5121	922	652	70.7	0.30
4746.00	646	56	85	35	29	801	851	205	24.1	1.21
4773.00	362	86	723	840	2932	16671	4943	4581	92.7	0.29
4782.00	226	220	1656	1155	3340	5113	6597	6371	96.6	0.35
4800.00	240	61	770	970	2915	11366	4956	4716	95.2	0.33
4818.00	408	721	2880	1348	3845	5761	9202	8794	95.6	0.35
4836.00	297	375	1836	1337	3779	11537	7624	7327	96.1	0.35
4854.00	312	763	3322	1675	4809	5906	10881	10569	97.1	0.35
4881.00	278	38	156	425	1304	9037	2201	1923	87.4	0.33
4899.00	402	1111	4626	2217	6348	13148	14704	14302	97.3	0.35
4908.00	474	2041	5953	2277	6000	12689	16745	16271	97.2	0.38
4917.00	289	121	1986	1957	4748	11607	9101	8812	96.8	0.41
4926.00	25	4	27	13	37	215	106	81	76.4	0.35
4935.00	112	22	56	29	108	457	327	215	65.8	0.27

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Table 1b: C1 to C7 hydrocarbons in CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum	sum	%wet	iC4
							C1-C4	C2-C4		ness
4944.00	90	15	24	9	25	177	163	73	44.8	0.36
4953.00	73	21	37	14	43	512	188	115	61.2	0.33
4962.00	36465	378	250	102	317	4757	37512	1047	2.8	0.32
4971.00	9642	254	444	191	491	3645	11022	1380	12.5	0.39
4980.00	13544	325	194	120	387	3886	14570	1026	7.0	0.31
4989.00	4108	218	298	149	454	5317	5227	1119	21.4	0.33
4995.00	1245	227	1279	209	839	1851	3799	2554	67.2	0.25

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Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 ---- nC4
430.00	3523	7	1	-	-	97	3531	8	0.2	-
440.00	499	1	-	-	-	12	500	1	0.2	-
450.00	12	-	-	-	-	-	12	-	-	-
460.00	25	-	-	-	-	-	25	-	-	-
470.00	18	-	-	-	-	-	18	-	-	-
480.00	19047	69	4	-	1	7	19121	74	0.4	-
490.00	57	-	-	-	-	-	57	-	-	-
500.00	24	1	-	1	1	25	27	3	11.1	1.00
510.00	42573	221	22	8	1	13	42825	252	0.6	8.00
520.00	-	-	-	-	-	-	-	-	-	-
530.00	184819	843	37	14	3	5	185716	897	0.5	4.67
540.00	20	1	-	-	-	-	21	1	4.8	-
550.00	318146	3745	868	352	97	4361	323208	5062	1.6	3.63
560.00	48	-	-	-	-	-	48	-	-	-
570.00	436649	1155	102	23	3	8	437932	1283	0.3	7.67
580.00	7946	1	-	-	-	-	7947	1	-	-
590.00	29875	246	35	11	5	7	30172	297	1.0	2.20
600.00	1550	26	36	15	11	-	1638	88	5.4	1.36
610.00	6680	60	56	28	20	53	6844	164	2.4	1.40
620.00	808	1	-	-	-	1	809	1	0.1	-
630.00	385	14	24	8	17	15	448	63	14.1	0.47
640.00	256580	972	836	578	338	377	259304	2724	1.1	1.71

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Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
650.00	450284	1758	1536	946	575	1138	455099	4815	1.1	1.65
660.00	80722	737	913	535	317	18	83224	2502	3.0	1.69
670.00	351	6	5	6	6	17	374	23	6.2	1.00
680.00	107452	139	87	67	36	1	107781	329	0.3	1.86
690.00	40376	134	137	123	25	56	40795	419	1.0	4.92
700.00	488	2	-	-	-	-	490	2	0.4	-
710.00	333	7	4	3	4	4	351	18	5.1	0.75
720.00	51	2	-	-	-	-	53	2	3.8	-
730.00	228	2	-	-	-	27	230	2	0.9	-
740.00	-	-	-	-	-	-	-	-	-	-
750.00	9914	26	10	11	2	2	9963	49	0.5	5.50
760.00	436	6	4	5	3	-	454	18	4.0	1.67
770.00	1417	6	2	3	3	21	1431	14	1.0	1.00
780.00	28	1	-	-	-	-	29	1	3.5	-
790.00	1889	7	1	-	1	1	1898	9	0.5	-
800.00	23	1	-	-	-	-	24	1	4.2	-
810.00	29	1	-	-	-	2	30	1	3.3	-
820.00	178	1	-	-	-	-	179	1	0.6	-
830.00	57	1	-	-	-	-	58	1	1.7	-
840.00	59	2	1	-	-	1	62	3	4.8	-
850.00	82	14	63	37	83	362	279	197	70.6	0.45
860.00	202	4	1	-	-	1	207	5	2.4	-

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Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
870.00	246	3	1	1	-	1	251	5	2.0	-
880.00	145	4	1	-	-	1	150	5	3.3	-
890.00	85	4	1	3	2	27	95	10	10.5	1.50
4560.00	115	7	3	1	2	192	128	13	10.2	0.50
4580.00	165	12	9	3	6	47	195	30	15.4	0.50
4600.00	169	16	25	33	108	1304	351	182	51.9	0.31
4620.00	807	149	173	104	346	3189	1579	772	48.9	0.30
4640.00	357	62	123	55	194	1575	791	434	54.9	0.28
4660.00	955	700	2602	1004	3241	9488	8502	7547	88.8	0.31
4680.00	170	38	86	65	244	2601	603	433	71.8	0.27
4700.00	427	126	221	128	417	4535	1319	892	67.6	0.31
4720.00	339	77	290	281	887	6272	1874	1535	81.9	0.32
4746.00	1254	1686	2671	746	1716	3986	8073	6819	84.5	0.43
4773.00	387	104	739	944	3241	17440	5415	5028	92.9	0.29
4782.00	235	237	1700	1177	3398	5454	6747	6512	96.5	0.35
4800.00	250	83	963	1090	3239	12063	5625	5375	95.6	0.34
4818.00	604	1163	3490	1478	4153	5958	10888	10284	94.5	0.36
4836.00	314	391	1908	1399	3952	12185	7964	7650	96.1	0.35
4854.00	2370	6795	12507	3773	9710	10541	35155	32785	93.3	0.39
4881.00	294	42	247	538	1647	10267	2768	2474	89.4	0.33
4899.00	420	1154	4678	2227	6372	13192	14851	14431	97.2	0.35
4908.00	1949	4075	7903	2626	6764	13043	23317	21368	91.6	0.39

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Table 1c: C1 to C7 hydrocarbons in HEADSPACE and CUTTINGS gas  
( $\mu\text{l}$  gas/kg rock)

Project: 2/4-16

Well: NOCS 2/4-16

Depth unit of measure: m

\* Indicated values in ml gas/kg source rock

Depth	C1	C2	C3	iC4	nC4	C5+	sum C1-C4	sum C2-C4	%wet ness	iC4 --- nC4
4917.00	309	166	2312	2108	5109	12322	10004	9695	96.9	0.41
4926.00	56	11	41	20	53	291	181	125	69.1	0.38
4935.00	1414	344	255	72	195	826	2280	866	38.0	0.37
4944.00	5074	1322	800	166	333	1011	7695	2621	34.1	0.50
4953.00	254	50	54	18	52	535	428	174	40.7	0.35
4962.00	37097	479	320	121	356	4948	38373	1276	3.3	0.34
4971.00	9735	280	466	197	504	3715	11182	1447	12.9	0.39
4980.00	13924	460	362	186	526	4477	15458	1534	9.9	0.35
4989.00	4294	352	367	168	493	5752	5674	1380	24.3	0.34
4995.00	1873	343	1368	238	901	2110	4723	2850	60.3	0.26



Table 2: Isotope Composition of Light Hydrocarbons, well NOCS 2/4-16

Depth	$\delta D$ SMOW	$\delta C1$ ppb	$\delta C2$ ppb	$\delta C3$ ppb	$\delta iC4$ ppb	$\delta nC4$ ppb
520		-44.5	-32.0	nd	nd	nd
550	nd	-38.3	-22.0	nd	nd	nd
650	-161	-36.5	-38.3	-24.9	-29.8	-26.0
740	nd	too little material				
830		too little material				
840		too little material				
850		too little material				
4746	nd	-35.7	-24.4	-24.6	-28.2	-25.4
4773	nd	nd	nd	-20.4	-27.5	-24.7
4881	nd	nd	nd	-20.0	-28.2	-22.6
4899	nd	-36.2	-27.7	-27.3	-31.4	-27.8
4962		-40.6	-27.0	-25.5	-26.8	-25.8
4971		-42.2	-28.6	-32.3	-27.5	-27.7
4980		-44.4	-28.4	-27.9	-24.8	-27.2
4989		-39.5	-27.1	-25.6	-26.2	-26.0
4995		-43.2	-28.2	-29.7	-27.9	-27.0

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
430.00			0053
	90	Sh/Clst:	y gy to lt gy, calc, pyr, slt, mic, fos
	5	Sltst	: lt gy, cly, mic
	5	Cont	: prp
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l
			0053-1L
			0053-2L
			0053-3L
			0053-4L
440.00			0054
	85	Sh/Clst:	lt gy to pl ol to y gy, calc, slt, mic, fos
	10	Sltst	: y gy to lt gy, calc, mic
	5	Cont	: prp
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l
			0054-1L
			0054-2L
			0054-3L
			0054-4L
450.00			0096
	45	Sh/Clst:	lt gn gy, calc, slt
	45	Sltst	: lt gy to y gy, calc, cly, mic
	10	Other	: lt gy w to w, calc, fos
	tr	Sh/Clst:	m brn, fe
			0096-1L
			0096-2L
			0096-3L
			0096-4L
460.00			0097
	40	Sh/Clst:	lt gn gy, calc, slt
	35	Sltst	: lt gy to y gy to or gy, calc, cly, mic
	10	Other	: lt gy w to w, calc, fos
	10	Other	: dsk y brn to gy brn, carb
	5	Sh/Clst:	m brn to lt brn, slt, fe
			0097-1L
			0097-2L
			0097-3L
			0097-4L
			0097-5L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
470.00				0098
		40 Marl : lt gn gy, slt		0098-1L
		20 Sltst : lt gy to y gy to or gy, calc, cly, mic		0098-2L
		20 Sh/Clst: m brn to lt brn, slt, fos, fe		0098-3L
		10 Other : dsk y brn to gy brn, carb		0098-4L
		10 Other : lt gy w to w, fos		0098-5L
480.00				0055
		60 Sh/Clst: lt gy to y gy, calc, pyr, slt, mic, fos		0055-1L
		35 Sltst : y gy, calc, cly, mic		0055-2L
		5 Cont : prp		0055-3L
		tr S/Sst : lt gy w to dsk y, crs, rnd, l		0055-4L
490.00				0099
		65 Marl : lt gn gy, slt		0099-1L
		20 Sltst : lt gy to y gy to or gy, calc, cly, mic		0099-2L
		10 Other : lt gy w to w, fos		0099-3L
		5 Sh/Clst: lt brn to m brn, slt, fe		0099-4L
		tr Cont : prp		0099-5L
500.00				0056
		60 Sh/Clst: dsk y to ol gy to lt gy, calc, pyr, slt, fos		0056-1L
		25 Sltst : lt gy to y gy, calc, cly, mic		0056-2L
		15 Cont : prp		0056-3L
		tr S/Sst : lt gy w to dsk y, crs, rnd, l		0056-4L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
510.00			0057
	60	Sh/Clst:	lt gy, calc, pyr, slt, fos 0057-1L
	30	Sltst	: lt gy to y gy, calc, cly 0057-2L
	5	Other	: gy blk, pyr 0057-3L
	5	Cont	: prp 0057-4L
	tr	S/Sst	: lt gy w, crs, rnd, l 0057-5L
530.00			0058
	55	Sh/Clst:	lt gy to y gy, calc, slt, fos 0058-1L
	30	Other	: gy blk, pyr 0058-2L
	10	Cont	: prp 0058-3L
	5	S/Sst	: lt gy w, f, crs, rnd, l 0058-4L
540.00			0100
	40	Marl	: lt gn gy, slt 0100-1L
	35	Sh/Clst:	lt brn to m brn, slt, fe 0100-2L
	10	Other	: w to lt gy w, fos 0100-3L
	10	Sltst	: lt gn gy to y gy, cly, mic 0100-4L
	5	Sltst	: gy blk, hd 0100-5L
	tr	Cont	: prp 0100-6L
550.00			0118
	100	S/Sst	: w, f, l 0118-1L
	tr	Sh/Clst:	lt gy 0118-2L
	tr	Cont	: Mica-ad, prp 0118-3L
560.00			0101
	40	Marl	: lt gn gy, slt 0101-1L
	30	Sh/Clst:	lt brn to m brn, slt, fe 0101-2L
	10	Other	: w to lt gy w, fos 0101-3L
	10	Sltst	: lt gn gy to y gy, cly, mic 0101-4L
	5	Sltst	: gy blk, hd 0101-5L
	5	Cont	: w, f, bar 0101-6L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
570.00			0059
		80	Sh/Clst: lt gy, calc, slt, fos
		15	Other : gy blk, pyr
		5	Cont : prp
		tr	S/Sst : lt gy w, crs, rnd, l
			0059-1L
			0059-2L
			0059-3L
			0059-4L
580.00			0102
		40	Marl : lt gn gy, slt
		40	Sh/Clst: lt brn to m brn, slt, fe
		10	Other : w to lt gy w, fos
		5	Sltst : lt gn gy to y gy, cly, mic
		5	Sltst : gy blk, hd
		tr	Cont : w, f, bar
			0102-1L
			0102-2L
			0102-3L
			0102-4L
			0102-5L
			0102-6L
590.00			0060
		45	Sh/Clst: lt gy, calc, slt, mic, fos
		30	Sltst : y gy, calc, cly, mic
		15	S/Sst : lt gy w, f, rnd, l
		10	Cont : prp
		tr	Other : gy blk, pyr
			0060-1L
			0060-2L
			0060-3L
			0060-4L
			0060-5L
600.00			0103
		65	Marl : lt gn gy, slt
		20	Other : w to lt gy w, fos
		10	Sltst : lt gn gy to y gy, cly, mic
		5	Sltst : gy blk, hd
		tr	Cont : w, f, bar
			0103-1L
			0103-2L
			0103-3L
			0103-4L
			0103-5L
610.00			0061
		80	Sh/Clst: lt gy, calc, pyr, slt, fos
		10	S/Sst : lt gy w, f, l
		5	Sltst : y gy, calc, mic
		5	Cont : prp
			0061-1L
			0061-2L
			0061-3L
			0061-4L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
620.00			0104
	40	Marl	: lt gn gy, slt 0104-1L
	30	Sh/Clst:	lt brn to m brn, slt, fe 0104-2L
	20	Sltst	: gy blk, hd 0104-3L
	10	Other	: lt gy w to w, fos 0104-4L
	tr	Coal	: blk 0104-5L
	tr	Cont	: f, bar 0104-6L
	tr	Cont	: prp 0104-7L
630.00			0062
	40	Sh/Clst:	brn red to y gy, slt, fe 0062-1L
	30	Other	: pyr 0062-2L
	10	Sh/Clst:	lt gy, calc, slt, fos 0062-3L
	10	Coal	: blk, f 0062-4L
	10	S/Sst	: lt gy w, crs, rnd, l 0062-5L
	tr	Cont	: prp 0062-6L
640.00			0116
	45	Sh/Clst:	lt gn gy, slt, mic 0116-1L
	30	Coal	: blk 0116-2L
	15	S/Sst	: w, crs, l 0116-3L
	10	Other	: w, calc, fos 0116-4L
650.00			0119
	20	S/Sst	: w, f, l 0119-1L
	20	Sltst	: or gy 0119-2L
	20	Coal	: blk 0119-3L
	20	Other	: fos 0119-4L
cvd	20	Sh/Clst:	ol gy to m gy 0119-5L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample	
Int Cvd	TOC%	%	Lithology description	
660.00			0105	
	35	Sltst	: gy blk, pyr, hd	0105-1L
	25	Sh/Clst:	lt gn gy, calc, slt	0105-2L
	15	Other	: lt gy w to w, fos	0105-3L
	10	Other	: pyr	0105-4L
	10	Cont	: w, f, bar	0105-5L
	5	Cont	: prp	0105-6L
	tr	Cont	: ns	0105-7L
670.00			0063	
	40	S/Sst	: lt gy w, crs, rnd, l	0063-1L
	30	Other	: pyr	0063-2L
	10	Sh/Clst:	brn red to or, slt, fe	0063-3L
	10	Sh/Clst:	lt gy, calc, slt, fos	0063-4L
	10	Coal	: blk to brn blk	0063-5L
680.00			0106	
	45	Sltst	: gy blk, pyr, hd	0106-1L
	15	Sh/Clst:	lt gy to lt gn gy, calc, slt	0106-2L
	15	S/Sst	: w, crs, l	0106-3L
	10	Other	: lt gy w to w, fos	0106-4L
	10	Other	: pyr	0106-5L
	5	Cont	: w, f, bar	0106-6L
690.00			0064	
	40	S/Sst	: lt gy w, crs, rnd, l	0064-1L
	20	Coal	: blk	0064-2L
	20	Other	: pyr	0064-3L
	10	Sh/Clst:	lt gy, calc, slt, fos	0064-4L
	5	Sltst	: lt gy to y gy, calc, cly	0064-5L
	5	Sh/Clst:	brn red to or, slt, fe	0064-6L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
700.00			0107
	45		Sh/Clst: lt gy to lt gn gy, calc, slt
	40		Sh/Clst: lt brn to m brn, slt, fe
	10		Sltst : gy blk, pyr, hd
	5		Other : lt gy w, fos
710.00			0065
	35		Coal : gy blk to brn blk
	30		S/Sst : lt gy w, crs, rnd, l
	20		Sh/Clst: brn red to or, slt, fe
	10		Sh/Clst: lt gy to y gy, calc, slt, fos
	5		Other : pyr
720.00			0108
	35		Sh/Clst: lt gy to lt gn gy, calc, slt
	35		Sh/Clst: lt brn to m brn, slt, fe
	10		Sltst : gy blk, pyr, hd
	10		Other : pyr
	10		Other : lt gy w to w, fos
	tr		Cont : f, bar
730.00			0066
	40		S/Sst : lt gy w, f, crs, l
	35		Sh/Clst: or to brn red to lt gy, slt, fe
	10		Other : pyr
	10		Sh/Clst: lt gy to y gy, calc, slt, fos
	5		Coal : blk
750.00			0067
	70		S/Sst : lt gy w, f, crs, l
	10		Sh/Clst: or to brn red to lt gy, slt, fe
	10		Coal : blk to gy blk
	10		Sh/Clst: lt gy to y gy, calc, slt, fos
	tr		Cont : prp



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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
760.00			0109
		50 Sh/Clst:	lt gy to lt gn gy, calc, pyr, slt 0109-1L
		25 Sh/Clst:	lt brn to m brn, slt, fe 0109-2L
		15 Sltst :	gy blk, pyr, hd 0109-3L
		5 Other :	pyr 0109-4L
		5 Other :	lt gy w to w, fos 0109-5L
		tr Cont :	f, bar 0109-6L
770.00			0068
		35 Sh/Clst:	lt gy to y gy, calc, slt, fos 0068-1L
		30 Sh/Clst:	brn red to or to dsk y, slt, fe 0068-2L
		20 S/Sst :	lt gy w, f, crs, l 0068-3L
		10 Coal :	gy blk to blk 0068-4L
		5 Other :	pyr 0068-5L
		tr Cont :	prp 0068-6L
780.00			0110
		45 Sh/Clst:	lt gy to lt gn gy, calc, pyr, slt 0110-1L
		25 Sh/Clst:	lt brn to m brn, slt, fe 0110-2L
		20 Sltst :	lt gn gy to y gy, mic 0110-3L
		5 Other :	w, calc, fos 0110-4L
		5 Sltst :	gy blk, hd 0110-5L
		tr Cont :	fib 0110-6L
790.00			0069
		45 Sh/Clst:	lt gy to y gy to lt brn gy, calc, slt, fos 0069-1L
		30 Sh/Clst:	brn red to or to y gy, slt, fos, fe 0069-2L
		10 Sltst :	lt gy to y gy, mic 0069-3L
		10 Coal :	blk 0069-4L
		5 S/Sst :	lt gy w, f, l 0069-5L
		tr Cont :	prp 0069-6L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
800.00			0111
		60	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		35	Sh/Clst: lt brn to m brn, slt, fe
		5	Other : w, calc, fos
		tr	Cont : fib
			0111-1L
			0111-2L
			0111-3L
			0111-4L
810.00			0070
		45	Sh/Clst: brn red to or to red brn, slt, fe
		30	Sh/Clst: lt gy to y gy, calc, pyr, slt, fos
		20	Sltst : y gy, cly
		5	Other : blk, pyr
			0070-1L
			0070-2L
			0070-3L
			0070-4L
820.00			0112
		55	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		35	Sh/Clst: lt brn to m brn, slt, fe
		5	Other : w, calc, fos
		5	Sltst : gy blk, hd
		tr	Cont : bar
			0112-1L
			0112-2L
			0112-3L
			0112-4L
			0112-5L
830.00			0071
		50	Sh/Clst: brn red to or to red brn, slt, fe
		25	Other : gy blk to lt brn gy, pyr
		20	Sh/Clst: lt gy to y gy, calc, slt, fos
		5	S/Sst : lt gy w, f, l
			0071-1L
			0071-2L
			0071-3L
			0071-4L
840.00			0113
		55	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		25	Sh/Clst: lt brn to m brn, slt, fe
		10	Sltst : gy blk, hd
		10	Other : w, calc, fos
			0113-1L
			0113-2L
			0113-3L
			0113-4L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample	
Int	Cvd	TOC%	%	Lithology description	
860.00				0114	
			55	Sh/Clst: lt brn to m brn, slt, fe	0114-1L
			20	Sltst : lt gn gy to lt gy, cly, mic	0114-2L
			10	Other : w, calc, fos	0114-3L
			10	Sltst : gy blk, hd	0114-4L
			5	Cont : w, f, bar	0114-5L
870.00				0072	
			90	S/Sst : lt gy w, f, l	0072-1L
			5	Sltst : y gy to lt gy, calc, cly, fos	0072-2L
			5	Sh/Clst: red brn to brn red to or, slt, fe	0072-3L
			tr	Other : pyr	0072-4L
880.00				0115	
			50	Sltst : lt gn gy to lt gy, cly, mic	0115-1L
			40	Sh/Clst: lt brn to m brn, slt, fe	0115-2L
			10	Other : w, calc, fos	0115-3L
			tr	Cont : w, f, bar	0115-4L
			tr	Cont : prp	0115-5L
890.00				0073	
			90	Sltst : lt brn gy to m y brn, pyr, mic, fos	0073-1L
			10	Sh/Clst: brn red to or, slt, fe	0073-2L
			tr	S/Sst : lt gy w, f, l	0073-3L
4560.00				0074	
			100	Ca : lt gy w to brn to lt gy, glauc, f, st, chk	0074-1L
			tr	Marl : lt gy to m gy	0074-2L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
4580.00			0075
	90 Ca		: lt gy w to brn to blk, glauc, f, st, chk
	10 Marl		: lt gy to m gy
	tr Sltst		: drk gy
			0075-1L
			0075-2L
			0075-3L
4600.00			0076
	75 Ca		: lt gy w to gy pi, glauc, f, st, chk
	25 Sh/Clst		: drk gy to gy blk, pyr, slt
	tr Cont		: prp
			0076-1L
			0076-2L
			0076-3L
4620.00			0077
	95 Ca		: lt gy w to gy pi to lt brn gy, dol, glauc, f, st, chk
	5 Sh/Clst		: gy blk to drk gy, slt
			0077-1L
			0077-2L
4640.00			0078
	90 Ca		: lt gy w to gy pi to lt brn gy, dol, glauc, f, st, chk
	10 Sh/Clst		: gy blk to blk to drk gy, slt
	tr Cont		: prp
			0078-1L
			0078-2L
			0078-3L
4660.00			0079
	40 Ca		: lt brn gy, dol, glauc
	20 Sltst		: m y brn, st
	15 Cont		: w, fib
	15 Cont		: prp
	5 Sh/Clst		: gy blk, slt
	5 Sh/Clst		: lt gy, slt
			0079-1L
			0079-2L
			0079-3L
			0079-4L
			0079-5L
			0079-6L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4680.00				0080
		60 Cont : prp		0080-1L
		15 Ca : lt gy to lt brn gy, dol, glauc		0080-2L
		15 Sh/Clst: drk gy to gy blk, slt		0080-3L
		10 Sltst : m y brn, st		0080-4L
		tr Cont : w, fib		0080-5L
4700.00				0081
	0.53	35 Sh/Clst: lt brn gy, calc		0081-1L
		30 Ca : lt gy to lt brn gy, dol		0081-2L
		20 Sltst : m y brn, st		0081-3L
		10 Coal : blk		0081-4L
		5 Cont : prp		0081-5L
4720.00				0082
		70 Ca : lt gy pi to brn blk, dol, st, trbofgs		0082-1L
		20 Sh/Clst: m gy, hd		0082-2L
		5 Sh/Clst: blk to drk gy		0082-3L
		5 Cont : prp		0082-4L
4739.00				0089
	1.90	50 Sh/Clst: drk gy to gy blk		0089-1L
	0.25	50 Sh/Clst: m gy to lt ol gy to m ol gy, wx, calc		0089-2L
4746.00				0094
	0.29	60 Sh/Clst: lt gy to m gy to lt brn gy, st		0094-1L
		35 Sh/Clst: dsk y brn to gy blk, carb, slt		0094-2L
		5 S/Sst : w to lt gy, pyr, f, st		0094-3L
		tr Cont : prp		0094-4L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4773.00				0095
	5.77	55 Sh/Clst: dsk y brn to gy blk, carb, slt, st, trbofgs		0095-1L
		40 Sh/Clst: lt gy to lt brn gy to brn gy, pyr, st		0095-2L
		5 Other : w to lt brn w, f		0095-3L
		tr Cont : prp		0095-4L
		tr Cont : m brn, fib		0095-5L
4782.00				0083
	0.26	60 Sh/Clst: gy brn to lt gy, hd, st		0083-1L
	3.51	40 Sh/Clst: gy blk to blk, st		0083-2L
		tr Cont : prp		0083-3L
4800.00				0084
	0.29	70 Sh/Clst: lt gy to brn gy		0084-1L
		30 Sh/Clst: gy blk to blk, slt		0084-2L
		tr Cont : prp		0084-3L
		tr Ca : m gy, dol		0084-4L
4818.00				0085
	0.28	50 Sh/Clst: lt gy to brn gy, pyr		0085-1L
	2.39	50 Sh/Clst: gy blk to blk, slt, st		0085-2L
		tr Cont : prp		0085-3L
		tr Ca : m gy, dol		0085-4L
4836.00				0086
	0.31	50 Sh/Clst: lt gy to brn gy, pyr		0086-1L
	2.89	50 Sh/Clst: gy blk to blk, slt, st		0086-2L
		tr Cont : prp		0086-3L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4854.00				0087
	2.85	60 Sh/Clst: gy blk to blk, slt, st		0087-1L
	0.29	40 Sh/Clst: lt gy to brn gy to drk gy, pyr, st		0087-2L
		tr Ca : m gy to lt gy w, dol, glauc		0087-3L
4908.00				0088
	2.84	55 Sh/Clst: gy blk to blk, slt, st		0088-1L
		30 Sh/Clst: lt gy to brn gy to drk gy, pyr, st		0088-2L
		10 Cont : prp		0088-3L
		5 S/Sst : lt gy to m gy, glauc, f		0088-4L
4916.00				0003
		35 Sh/Clst: dsk brn to drk gy, pyr, st		0003-1L
		35 Sltst : pl brn, calc, st, lam		0003-2L
		20 S/Sst : brn gy, glauc, f, crs, st		0003-3L
		10 Cont : prp		0003-4L
		tr Sh/Clst: m gy		0003-5L
4917.00			trb	0043
		90 Sh/Clst: drk gy to gy blk to dsk brn, pyr, mic, st		0043-1L
		5 S/Sst : m gy to brn gy to pl brn, crs		0043-2L
		5 Cont : prp, dd		0043-3L
		tr S/Sst : gy w, crs		0043-4L
		tr Cont : blk, Coal-ad		0043-5L
		tr Sh/Clst: gn gy, mic		0043-6L

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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
4926.00		trb	0044
			50 S/Sst : m y brn to pl brn, st
			25 S/Sst : dsk y brn, crs, st
			15 Cont : prp
			10 Sh/Clst: gy blk to dsk brn
			0044-1L
			0044-2L
			0044-3L
			0044-4L
4935.00		trb	0045
			40 Cont : prp
			20 S/Sst : pl brn, calc, f, st
			20 S/Sst : brn gy to lt brn gy, crs, st
			20 Cont : gy blk, Coal-ad
			0045-1L
			0045-2L
			0045-3L
			0045-4L
4944.00		trb	0046
			60 Cont : prp
			15 S/Sst : pl brn, f, st
			15 S/Sst : brn gy to lt brn gy, glauc, crs, st
			10 Cont : blk, Coal-ad
			0046-1L
			0046-2L
			0046-3L
			0046-4L
4953.00		trb	0047
			40 Cont : prp
			40 Cont : bar
			10 Cont : blk, Coal-ad
			5 S/Sst : pl brn, f, st
			5 S/Sst : brn gy to lt brn gy, crs, st
			0047-1L
			0047-2L
			0047-3L
			0047-4L
			0047-5L
4962.00		trb	0048
0.45			75 Sh/Clst: drk gy, slt, st
			20 Cont : prp
			5 Sh/Clst: gy pi
			tr S/Sst : pl brn, f
			tr S/Sst : brn gy to lt brn gy to gy w, pyr, crs
			0048-1L
			0048-2L
			0048-3L
			0048-4L
			0048-5L



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Table 2 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4971.00			trb	0049
	0.63	80 Sh/Clst: drk gy, slt, st		0049-1L
		15 Cont : prp		0049-2L
		5 Sh/Clst: pl brn		0049-3L
		tr S/Sst : crs		0049-4L
		tr Cont : blk, Coal-ad		0049-5L
4980.00			trb	0050
		60 Sh/Clst: drk gy, slt		0050-1L
		30 Cont : prp		0050-2L
		5 Sh/Clst: lt brn gy to drk brn gy, calc, slt, mic		0050-3L
		5 Cont : blk, Coal-ad		0050-4L
		tr Sh/Clst: pl brn		0050-5L
		tr Cont : bar		0050-6L
4989.00			trb	0051
	1.33	30 Sh/Clst: gy brn to pl brn, calc, slt, mic, st		0051-1L
		30 Cont : prp		0051-2L
		30 Cont : gy blk, Coal-ad		0051-3L
		10 Sh/Clst: drk gy, slt		0051-4L
4995.00			trb	0052
		35 Cont : prp, fib		0052-1L
		35 Cont : gy blk, Coal-ad		0052-2L
		20 Sh/Clst: drk gy, slt		0052-3L
		5 Sh/Clst: pl brn		0052-4L
		5 Sh/Clst: lt brn gy, slt		0052-5L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
430.00			0053
	90	Sh/Clst:	y gy to lt gy, calc, pyr, slt, mic, fos
	5	Sltst	: lt gy, cly, mic
	5	Cont	: prp
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l
			0053-1L
			0053-2L
			0053-3L
			0053-4L
440.00			0054
	85	Sh/Clst:	lt gy to pl ol to y gy, calc, slt, mic, fos
	10	Sltst	: y gy to lt gy, calc, mic
	5	Cont	: prp
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l
			0054-1L
			0054-2L
			0054-3L
			0054-4L
450.00			0096
	45	Sh/Clst:	lt gn gy, calc, slt
	45	Sltst	: lt gy to y gy, calc, cly, mic
	10	Other	: lt gy w to w, calc, fos
	tr	Sh/Clst:	m brn, fe
			0096-1L
			0096-2L
			0096-3L
			0096-4L
460.00			0097
	40	Sh/Clst:	lt gn gy, calc, slt
	35	Sltst	: lt gy to y gy to or gy, calc, cly, mic
	10	Other	: lt gy w to w, calc, fos
	10	Other	: dsk y brn to gy brn, carb
	5	Sh/Clst:	m brn to lt brn, slt, fe
			0097-1L
			0097-2L
			0097-3L
			0097-4L
			0097-5L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
470.00			0098
	40	Marl	: lt gn gy, slt 0098-1L
	20	Sltst	: lt gy to y gy to or gy, calc, cly, mic 0098-2L
	20	Sh/Clst:	m brn to lt brn, slt, fos, fe 0098-3L
	10	Other	: dsk y brn to gy brn, carb 0098-4L
	10	Other	: lt gy w to w, fos 0098-5L
480.00			0055
	60	Sh/Clst:	lt gy to y gy, calc, pyr, slt, mic, fos 0055-1L
	35	Sltst	: y gy, calc, cly, mic 0055-2L
	5	Cont	: prp 0055-3L
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l 0055-4L
490.00			0099
	65	Marl	: lt gn gy, slt 0099-1L
	20	Sltst	: lt gy to y gy to or gy, calc, cly, mic 0099-2L
	10	Other	: lt gy w to w, fos 0099-3L
	5	Sh/Clst:	lt brn to m brn, slt, fe 0099-4L
	tr	Cont	: prp 0099-5L
500.00			0056
	60	Sh/Clst:	dsk y to ol gy to lt gy, calc, pyr, slt, fos 0056-1L
	25	Sltst	: lt gy to y gy, calc, cly, mic 0056-2L
	15	Cont	: prp 0056-3L
	tr	S/Sst	: lt gy w to dsk y, crs, rnd, l 0056-4L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample	
Int Cvd	TOC%	%	Lithology description	
510.00			0057	
	60	Sh/Clst:	lt gy, calc, pyr, slt, fos	0057-1L
	30	Slstst	: lt gy to y gy, calc, cly	0057-2L
	5	Other	: gy blk, pyr	0057-3L
	5	Cont	: prp	0057-4L
	tr	S/Sst	: lt gy w, crs, rnd, l	0057-5L
530.00			0058	
	55	Sh/Clst:	lt gy to y gy, calc, slt, fos	0058-1L
	30	Other	: gy blk, pyr	0058-2L
	10	Cont	: prp	0058-3L
	5	S/Sst	: lt gy w, f, crs, rnd, l	0058-4L
540.00			0100	
	40	Marl	: lt gn gy, slt	0100-1L
	35	Sh/Clst:	lt brn to m brn, slt, fe	0100-2L
	10	Other	: w to lt gy w, fos	0100-3L
	10	Slstst	: lt gn gy to y gy, cly, mic	0100-4L
	5	Slstst	: gy blk, hd	0100-5L
	tr	Cont	: prp	0100-6L
550.00			0118	
	100	S/Sst	: w, f, l	0118-1L
	tr	Sh/Clst:	lt gy	0118-2L
	tr	Cont	: Mica-ad, prp	0118-3L
560.00			0101	
	40	Marl	: lt gn gy, slt	0101-1L
	30	Sh/Clst:	lt brn to m brn, slt, fe	0101-2L
	10	Other	: w to lt gy w, fos	0101-3L
	10	Slstst	: lt gn gy to y gy, cly, mic	0101-4L
	5	Slstst	: gy blk, hd	0101-5L
	5	Cont	: w, f, bar	0101-6L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	%		
Lithology description				
570.00				0059
		80 Sh/Clst: lt gy, calc, slt, fos		0059-1L
		15 Other : gy blk, pyr		0059-2L
		5 Cont : prp		0059-3L
		tr S/Sst : lt gy w, crs, rnd, l		0059-4L
580.00				0102
		40 Marl : lt gn gy, slt		0102-1L
		40 Sh/Clst: lt brn to m brn, slt, fe		0102-2L
		10 Other : w to lt gy w, fos		0102-3L
		5 Sltst : lt gn gy to y gy, cly, mic		0102-4L
		5 Sltst : gy blk, hd		0102-5L
		tr Cont : w, f, bar		0102-6L
590.00				0060
		45 Sh/Clst: lt gy, calc, slt, mic, fos		0060-1L
		30 Sltst : y gy, calc, cly, mic		0060-2L
		15 S/Sst : lt gy w, f, rnd, l		0060-3L
		10 Cont : prp		0060-4L
		tr Other : gy blk, pyr		0060-5L
600.00				0103
		65 Marl : lt gn gy, slt		0103-1L
		20 Other : w to lt gy w, fos		0103-2L
		10 Sltst : lt gn gy to y gy, cly, mic		0103-3L
		5 Sltst : gy blk, hd		0103-4L
		tr Cont : w, f, bar		0103-5L
610.00				0061
		80 Sh/Clst: lt gy, calc, pyr, slt, fos		0061-1L
		10 S/Sst : lt gy w, f, l		0061-2L
		5 Sltst : y gy, calc, mic		0061-3L
		5 Cont : prp		0061-4L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample	
Int Cvd	TOC%	%	Lithology description	
620.00			0104	
	40	Marl	: lt gn gy, slt	0104-1L
	30	Sh/Clst:	lt brn to m brn, slt, fe	0104-2L
	20	Sltst	: gy blk, hd	0104-3L
	10	Other	: lt gy w to w, fos	0104-4L
	tr	Coal	: blk	0104-5L
	tr	Cont	: f, bar	0104-6L
	tr	Cont	: prp	0104-7L
630.00			0062	
	40	Sh/Clst:	brn red to y gy, slt, fe	0062-1L
	30	Other	: pyr	0062-2L
	10	Sh/Clst:	lt gy, calc, slt, fos	0062-3L
	10	Coal	: blk, f	0062-4L
	10	S/Sst	: lt gy w, crs, rnd, l	0062-5L
	tr	Cont	: prp	0062-6L
640.00			0116	
	45	Sh/Clst:	lt gn gy, slt, mic	0116-1L
	30	Coal	: blk	0116-2L
	15	S/Sst	: w, crs, l	0116-3L
	10	Other	: w, calc, fos	0116-4L
650.00			0119	
	20	S/Sst	: w, f, l	0119-1L
	20	Sltst	: or gy	0119-2L
	20	Coal	: blk	0119-3L
	20	Other	: fos	0119-4L
cvd	20	Sh/Clst:	ol gy to m gy	0119-5L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
660.00				0105
		35 Sltst : gy blk, pyr, hd		0105-1L
		25 Sh/Clst: lt gn gy, calc, slt		0105-2L
		15 Other : lt gy w to w, fos		0105-3L
		10 Other : pyr		0105-4L
		10 Cont : w, f, bar		0105-5L
		5 Cont : prp		0105-6L
		tr Cont : ns		0105-7L
670.00				0063
		40 S/Sst : lt gy w, crs, rnd, l		0063-1L
		30 Other : pyr		0063-2L
		10 Sh/Clst: brn red to or, slt, fe		0063-3L
		10 Sh/Clst: lt gy, calc, slt, fos		0063-4L
		10 Coal : blk to brn blk		0063-5L
680.00				0106
		45 sltst : gy blk, pyr, hd		0106-1L
		15 Sh/Clst: lt gy to lt gn gy, calc, slt		0106-2L
		15 S/Sst : w, crs, l		0106-3L
		10 Other : lt gy w to w, fos		0106-4L
		10 Other : pyr		0106-5L
		5 Cont : w, f, bar		0106-6L
690.00				0064
		40 S/Sst : lt gy w, crs, rnd, l		0064-1L
		20 Coal : blk		0064-2L
		20 Other : pyr		0064-3L
		10 Sh/Clst: lt gy, calc, slt, fos		0064-4L
		5 Sltst : lt gy to y gy, calc, cly		0064-5L
		5 Sh/Clst: brn red to or, slt, fe		0064-6L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
700.00				0107
		45 Sh/Clst: lt gy to lt gn gy, calc, slt		0107-1L
		40 Sh/Clst: lt brn to m brn, slt, fe		0107-2L
		10 Sltst : gy blk, pyr, hd		0107-3L
		5 Other : lt gy w, fos		0107-4L
710.00				0065
		35 Coal : gy blk to brn blk		0065-1L
		30 S/Sst : lt gy w, crs, rnd, l		0065-2L
		20 Sh/Clst: brn red to or, slt, fe		0065-3L
		10 Sh/Clst: lt gy to y gy, calc, slt, fos		0065-4L
		5 Other : pyr		0065-5L
720.00				0108
		35 Sh/Clst: lt gy to lt gn gy, calc, slt		0108-1L
		35 Sh/Clst: lt brn to m brn, slt, fe		0108-2L
		10 Sltst : gy blk, pyr, hd		0108-3L
		10 Other : pyr		0108-4L
		10 Other : lt gy w to w, fos		0108-5L
		tr Cont : f, bar		0108-6L
730.00				0066
		40 S/Sst : lt gy w, f, crs, l		0066-1L
		35 Sh/Clst: or to brn red to lt gy, slt, fe		0066-2L
		10 Other : pyr		0066-3L
		10 Sh/Clst: lt gy to y gy, calc, slt, fos		0066-4L
		5 Coal : blk		0066-5L
750.00				0067
		70 S/Sst : lt gy w, f, crs, l		0067-1L
		10 Sh/Clst: or to brn red to lt gy, slt, fe		0067-2L
		10 Coal : blk to gy blk		0067-3L
		10 Sh/Clst: lt gy to y gy, calc, slt, fos		0067-4L
		tr Cont : prp		0067-5L



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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
760.00			0109
		50 Sh/Clst:	lt gy to lt gn gy, calc, pyr, slt 0109-1L
		25 Sh/Clst:	lt brn to m brn, slt, fe 0109-2L
		15 Sltst :	gy blk, pyr, hd 0109-3L
		5 Other :	pyr 0109-4L
		5 Other :	lt gy w to w, fos 0109-5L
		tr Cont :	f, bar 0109-6L
770.00			0068
		35 Sh/Clst:	lt gy to y gy, calc, slt, fos 0068-1L
		30 Sh/Clst:	brn red to or to dsk y, slt, fe 0068-2L
		20 S/Sst :	lt gy w, f, crs, l 0068-3L
		10 Coal :	gy blk to blk 0068-4L
		5 Other :	pyr 0068-5L
		tr Cont :	prp 0068-6L
780.00			0110
		45 Sh/Clst:	lt gy to lt gn gy, calc, pyr, slt 0110-1L
		25 Sh/Clst:	lt brn to m brn, slt, fe 0110-2L
		20 Sltst :	lt gn gy to y gy, mic 0110-3L
		5 Other :	w, calc, fos 0110-4L
		5 Sltst :	gy blk, hd 0110-5L
		tr Cont :	fib 0110-6L
790.00			0069
		45 Sh/Clst:	lt gy to y gy to lt brn gy, calc, slt, fos 0069-1L
		30 Sh/Clst:	brn red to or to y gy, slt, fos, fe 0069-2L
		10 Sltst :	lt gy to y gy, mic 0069-3L
		10 Coal :	blk 0069-4L
		5 S/Sst :	lt gy w, f, l 0069-5L
		tr Cont :	prp 0069-6L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
800.00			0111
		60	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		35	Sh/Clst: lt brn to m brn, slt, fe
		5	Other : w, calc, fos
		tr	Cont : fib
			0111-1L
			0111-2L
			0111-3L
			0111-4L
810.00			0070
		45	Sh/Clst: brn red to or to red brn, slt, fe
		30	Sh/Clst: lt gy to y gy, calc, pyr, slt, fos
		20	Sltst : y gy, cly
		5	Other : blk, pyr
			0070-1L
			0070-2L
			0070-3L
			0070-4L
820.00			0112
		55	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		35	Sh/Clst: lt brn to m brn, slt, fe
		5	Other : w, calc, fos
		5	Sltst : gy blk, hd
		tr	Cont : bar
			0112-1L
			0112-2L
			0112-3L
			0112-4L
			0112-5L
830.00			0071
		50	Sh/Clst: brn red to or to red brn, slt, fe
		25	Other : gy blk to lt brn gy, pyr
		20	Sh/Clst: lt gy to y gy, calc, slt, fos
		5	S/Sst : lt gy w, f, l
			0071-1L
			0071-2L
			0071-3L
			0071-4L
840.00			0113
		55	Sh/Clst: lt gy to lt gn gy, calc, pyr, slt
		25	Sh/Clst: lt brn to m brn, slt, fe
		10	Sltst : gy blk, hd
		10	Other : w, calc, fos
			0113-1L
			0113-2L
			0113-3L
			0113-4L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type	Trb	Sample
Int Cvd	TOC%	%	Lithology description
860.00			0114
	55	Sh/Clst:	lt brn to m brn, slt, fe 0114-1L
	20	Sltst	: lt gn gy to lt gy, cly, mic 0114-2L
	10	Other	: w, calc, fos 0114-3L
	10	Sltst	: gy blk, hd 0114-4L
	5	Cont	: w, f, bar 0114-5L
870.00			0072
	90	S/Sst	: lt gy w, f, l 0072-1L
	5	Sltst	: y gy to lt gy, calc, cly, fos 0072-2L
	5	Sh/Clst:	red brn to brn red to or, slt, fe 0072-3L
	tr	Other	: pyr 0072-4L
880.00			0115
	50	Sltst	: lt gn gy to lt gy, cly, mic 0115-1L
	40	Sh/Clst:	lt brn to m brn, slt, fe 0115-2L
	10	Other	: w, calc, fos 0115-3L
	tr	Cont	: w, f, bar 0115-4L
	tr	Cont	: prp 0115-5L
890.00			0073
	90	Sltst	: lt brn gy to m y brn, pyr, mic, fos 0073-1L
	10	Sh/Clst:	brn red to or, slt, fe 0073-2L
	tr	S/Sst	: lt gy w, f, l 0073-3L
4560.00			0074
	100	Ca	: lt gy w to brn to lt gy, glauc, f, st, chk 0074-1L
	tr	Marl	: lt gy to m gy 0074-2L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4580.00				0075
		90 Ca : lt gy w to brn to blk, glauc, f, st, chk		0075-1L
		10 Marl : lt gy to m gy		0075-2L
		tr Sltst : drk gy		0075-3L
4600.00				0076
		75 Ca : lt gy w to gy pi, glauc, f, st, chk		0076-1L
		25 Sh/Clst: drk gy to gy blk, pyr, slt		0076-2L
		tr Cont : prp		0076-3L
4620.00				0077
		95 Ca : lt gy w to gy pi to lt brn gy, dol, glauc, f, st, chk		0077-1L
		5 Sh/Clst: gy blk to drk gy, slt		0077-2L
4640.00				0078
		90 Ca : lt gy w to gy pi to lt brn gy, dol, glauc, f, st, chk		0078-1L
		10 Sh/Clst: gy blk to blk to drk gy, slt		0078-2L
		tr Cont : prp		0078-3L
4660.00				0079
		40 Ca : lt brn gy, dol, glauc		0079-1L
		20 Sltst : m y brn, st		0079-2L
		15 Cont : w, fib		0079-3L
		15 Cont : prp		0079-4L
		5 Sh/Clst: gy blk, slt		0079-5L
		5 Sh/Clst: lt gy, slt		0079-6L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int	Cvd	TOC%	%	Lithology description
4680.00				0080
			60	Cont : prp 0080-1L
			15	Ca : lt gy to lt brn gy, dol, glauc 0080-2L
			15	Sh/Clst: drk gy to gy blk, slt 0080-3L
			10	Sltst : m y brn, st 0080-4L
			tr	Cont : w, fib 0080-5L
4700.00				0081
	0.53		35	Sh/Clst: lt brn gy, calc 0081-1L
			30	Ca : lt gy to lt brn gy, dol 0081-2L
			20	Sltst : m y brn, st 0081-3L
			10	Coal : blk 0081-4L
			5	Cont : prp 0081-5L
4720.00				0082
			70	Ca : lt gy pi to brn blk, dol, st, 0082-1L trbofgs
			20	Sh/Clst: m gy, hd 0082-2L
			5	Sh/Clst: blk to drk gy 0082-3L
			5	Cont : prp 0082-4L
4739.00				0089
	1.90		50	Sh/Clst: drk gy to gy blk 0089-1L
	0.25		50	Sh/Clst: m gy to lt ol gy to m ol gy, wx, 0089-2L calc
4746.00				0094
	0.29		60	Sh/Clst: lt gy to m gy to lt brn gy, st 0094-1L
			35	Sh/Clst: dsk y brn to gy blk, carb, slt 0094-2L
			5	S/Sst : w to lt gy, pyr, f, st 0094-3L
			tr	Cont : prp 0094-4L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4773.00				0095
	5.77	55 Sh/Clst: dsk y brn to gy blk, carb, slt, st, trbofgs		0095-1L
		40 Sh/Clst: lt gy to lt brn gy to brn gy, pyr, st		0095-2L
		5 Other : w to lt brn w, f		0095-3L
		tr Cont : prp		0095-4L
		tr Cont : m brn, fib		0095-5L
4782.00				0083
	0.26	60 Sh/Clst: gy brn to lt gy, hd, st		0083-1L
	3.51	40 Sh/Clst: gy blk to blk, st		0083-2L
		tr Cont : prp		0083-3L
4800.00				0084
	0.29	70 Sh/Clst: lt gy to brn gy		0084-1L
		30 Sh/Clst: gy blk to blk, slt		0084-2L
		tr Cont : prp		0084-3L
		tr Ca : m gy, dol		0084-4L
4818.00				0085
	0.28	50 Sh/Clst: lt gy to brn gy, pyr		0085-1L
	2.39	50 Sh/Clst: gy blk to blk, slt, st		0085-2L
		tr Cont : prp		0085-3L
		tr Ca : m gy, dol		0085-4L
4836.00				0086
	0.31	50 Sh/Clst: lt gy to brn gy, pyr		0086-1L
	2.89	50 Sh/Clst: gy blk to blk, slt, st		0086-2L
		tr Cont : prp		0086-3L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4854.00				0087
	2.85	60 Sh/Clst: gy blk to blk, slt, st		0087-1L
	0.29	40 Sh/Clst: lt gy to brn gy to drk gy, pyr, st		0087-2L
		tr Ca : m gy to lt gy w, dol, glauc		0087-3L
4908.00				0088
	2.84	55 Sh/Clst: gy blk to blk, slt, st		0088-1L
		30 Sh/Clst: lt gy to brn gy to drk gy, pyr, st		0088-2L
		10 Cont : prp		0088-3L
		5 S/Sst : lt gy to m gy, glauc, f		0088-4L
4916.00				0003
		35 Sh/Clst: dsk brn to drk gy, pyr, st		0003-1L
		35 Sltst : pl brn, calc, st, lam		0003-2L
		20 S/Sst : brn gy, glauc, f, crs, st		0003-3L
		10 Cont : prp		0003-4L
		tr Sh/Clst: m gy		0003-5L
4917.00			trb	0043
		90 Sh/Clst: drk gy to gy blk to dsk brn, pyr, mic, st		0043-1L
		5 S/Sst : m gy to brn gy to pl brn, crs		0043-2L
		5 Cont : prp, dd		0043-3L
		tr S/Sst : gy w, crs		0043-4L
		tr Cont : blk, Coal-ad		0043-5L
		tr Sh/Clst: gn gy, mic		0043-6L

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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4926.00			trb	0044
		50 S/Sst : m y brn to pl brn, st		0044-1L
		25 S/Sst : dsk y brn, crs, st		0044-2L
		15 Cont : prp		0044-3L
		10 Sh/Clst: gy blk to dsk brn		0044-4L
4935.00			trb	0045
		40 Cont : prp		0045-1L
		20 S/Sst : pl brn, calc, f, st		0045-2L
		20 S/Sst : brn gy to lt brn gy, crs, st		0045-3L
		20 Cont : gy blk, Coal-ad		0045-4L
4944.00			trb	0046
		60 Cont : prp		0046-1L
		15 S/Sst : pl brn, f, st		0046-2L
		15 S/Sst : brn gy to lt brn gy, glauc, crs, st		0046-3L
		10 Cont : blk, Coal-ad		0046-4L
4953.00			trb	0047
		40 Cont : prp		0047-1L
		40 Cont : bar		0047-2L
		10 Cont : blk, Coal-ad		0047-3L
		5 S/Sst : pl brn, f, st		0047-4L
		5 S/Sst : brn gy to lt brn gy, crs, st		0047-5L
4962.00			trb	0048
	0.45	75 Sh/Clst: drk gy, slt, st		0048-1L
		20 Cont : prp		0048-2L
		5 Sh/Clst: gy pi		0048-3L
		tr S/Sst : pl brn, f		0048-4L
		tr S/Sst : brn gy to lt brn gy to gy w, pyr, crs		0048-5L



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Table 3 : Lithology description for well NOCS 2/4-16

Depth unit of measure: m

Depth	Type		Trb	Sample
Int Cvd	TOC%	% Lithology description		
4971.00			trb	0049
	0.63	80 Sh/Clst: drk gy, slt, st 15 Cont : prp 5 Sh/Clst: pl brn tr S/Sst : crs tr Cont : blk, Coal-ad		0049-1L 0049-2L 0049-3L 0049-4L 0049-5L
4980.00			trb	0050
		60 Sh/Clst: drk gy, slt 30 Cont : prp 5 Sh/Clst: lt brn gy to drk brn gy, calc, slt, mic 5 Cont : blk, Coal-ad tr Sh/Clst: pl brn tr Cont : bar		0050-1L 0050-2L 0050-3L 0050-4L 0050-5L 0050-6L
4989.00			trb	0051
	1.33	30 Sh/Clst: gy brn to pl brn, calc, slt, mic, st 30 Cont : prp 30 Cont : gy blk, Coal-ad 10 Sh/Clst: drk gy, slt		0051-1L 0051-2L 0051-3L 0051-4L
4995.00			trb	0052
		35 Cont : prp, fib 35 Cont : gy blk, Coal-ad 20 Sh/Clst: drk gy, slt 5 Sh/Clst: pl brn 5 Sh/Clst: lt brn gy, slt		0052-1L 0052-2L 0052-3L 0052-4L 0052-5L

Table 4 : Rock-Eval table for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4700.00	cut	Sh/Clst: lt brn gy	0.49	0.29	0.93	0.31	0.53	55	175	0.8	0.63	408	0081-1L
4739.00	cut	Sh/Clst: drk gy to gy blk	1.76	1.45	0.32	4.53	1.90	76	17	3.2	0.55	451	0089-1L
4739.00	cut	Sh/Clst: m gy to lt ol gy to m ol gy	0.15	0.07	0.32	0.22	0.25	28	128	0.2	0.68	412	0089-2L
4746.00	cut	Sh/Clst: lt gy to m gy to lt brn gy	0.12	0.06	0.26	0.23	0.29	21	90	0.2	0.67	387	0094-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	5.98	4.75	0.92	5.16	5.77	82	16	10.7	0.56	447	0095-1L
4782.00	cut	Sh/Clst: gy brn to lt gy	0.36	0.14	0.26	0.54	0.26	54	100	0.5	0.72	394	0083-1L
4782.00	cut	Sh/Clst: gy blk to blk	3.12	3.04	0.32	9.50	3.51	87	9	6.2	0.51	455	0083-2L
4800.00	cut	Sh/Clst: lt gy to brn gy	0.33	0.20	0.52	0.38	0.29	69	179	0.5	0.62	387	0084-1L
4818.00	cut	Sh/Clst: lt gy to brn gy	0.07	0.12	0.37	0.32	0.28	43	132	0.2	0.37	369	0085-1L
4818.00	cut	Sh/Clst: gy blk to blk	2.08	1.63	0.24	6.79	2.39	68	10	3.7	0.56	447	0085-2L
4836.00	cut	Sh/Clst: lt gy to brn gy	0.18	0.14	0.44	0.32	0.31	45	142	0.3	0.56	417	0086-1L
4836.00	cut	Sh/Clst: gy blk to blk	2.89	2.40	0.28	8.57	2.89	83	10	5.3	0.55	452	0086-2L
4854.00	cut	Sh/Clst: gy blk to blk	2.78	2.11	0.21	10.05	2.85	74	7	4.9	0.57	456	0087-1L
4854.00	cut	Sh/Clst: lt gy to brn gy to drk gy	0.10	0.15	0.33	0.45	0.29	52	114	0.3	0.40	351	0087-2L

Table 4 : Rock-Eval table for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4908.00	cut	Sh/Clst: gy blk to blk	2.55	2.40	0.20	12.00	2.84	85	7	5.0	0.52	448	0088-1L
4962.00	cut	Sh/Clst: drk gy	0.11	0.01	0.16	0.06	0.45	2	36	0.1	0.92	455	0048-1L
4971.00	cut	Sh/Clst: drk gy	0.23	0.14	0.55	0.25	0.63	22	87	0.4	0.62	401	0049-1L
4989.00	cut	Sh/Clst: gy brn to pl brn	0.32	0.71	2.26	0.31	1.33	53	170	1.0	0.31	410	0051-1L

Table 6 a: Weight of EOM and Chromatographic Fraction for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
430.00	cut	bulk	5.0	2.1	-	-	-	-	-	-	0.46	0053-0B
500.00	cut	bulk	8.5	2.1	-	-	-	-	-	-	0.58	0056-0B
550.00	cut	bulk	10.3	2.4	-	-	-	-	-	-	0.28	0118-0B
590.00	cut	bulk	1.2	1.5	-	-	-	-	-	-	0.37	0060-0B
630.00	cut	bulk	7.4	2.6	-	-	-	-	-	-	0.53	0062-0B
650.00	cut	bulk	6.2	2.1	-	-	-	-	-	-	0.44	0119-0B
4620.00	cut	bulk	7.3	2.3	-	-	-	-	-	-	0.20	0077-0B
4660.00	cut	bulk	9.4	27.1	19.0	3.7	1.2	3.2	22.7	4.4	0.97	0079-0B
4700.00	cut	Sh/Clst: lt brn gy	1.1	2.2	-	-	-	-	-	-	0.67	0081-1L
4720.00	cut	Ca : lt gy pi to brn blk	4.1	5.5	3.0	0.8	0.6	1.1	3.8	1.7	0.54	0082-1L
4739.00	cut	Sh/Clst: drk gy to gy blk	9.0	32.9	21.6	5.0	1.8	4.5	26.6	6.3	2.29	0089-1L
4746.00	cut	Sh/Clst: lt gy to m gy to lt brn gy	8.9	2.6	-	-	-	-	-	-	0.29	0094-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	4.8	38.3	26.4	5.7	2.0	4.2	32.1	6.2	5.77	0095-1L

Table 6 a: Weight of EOM and Chromatographic Fraction for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
4782.00	cut	Sh/Clst: gy blk to blk	5.1	26.7	17.3	4.5	1.7	3.2	21.8	4.9	3.29	0083-2L
4800.00	cut	Sh/Clst: lt gy to brn gy	6.1	1.5	-	-	-	-	-	-	0.38	0084-1L
4818.00	cut	Sh/Clst: gy blk to blk	6.3	27.3	19.2	3.9	1.3	2.9	23.1	4.2	2.56	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	8.9	41.1	29.1	5.3	2.5	4.2	34.4	6.7	2.69	0086-2L
4854.00	cut	Sh/Clst: gy blk to blk	7.6	29.1	19.7	4.2	1.6	3.6	23.9	5.2	2.54	0087-1L
4908.00	cut	Sh/Clst: gy blk to blk	6.9	36.1	25.9	4.8	2.3	3.1	30.7	5.4	2.93	0088-1L
4916.00	cut	bulk	5.6	7.9	2.4	0.9	0.6	4.0	3.3	4.6	-	0003-0B
4926.00	cut	bulk	5.3	4.8	2.3	0.6	0.3	1.6	2.9	1.9	1.56	0044-0B
4935.00	cut	bulk	1.3	2.1	-	-	-	-	-	-	1.38	0045-0B
4962.00	cut	Sh/Clst: drk gy	4.9	1.4	-	-	-	-	-	-	0.52	0048-1L
4971.00	cut	Sh/Clst: drk gy	2.1	1.7	-	-	-	-	-	-	0.66	0049-1L
4989.00	cut	Sh/Clst: gy brn to pl brn	2.5	2.3	0.6	0.3	0.6	0.8	0.9	1.4	1.31	0051-1L

Table 6 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
430.00	cut bulk	420	-	-	-	-	-	-	0053-0B
500.00	cut bulk	247	-	-	-	-	-	-	0056-0B
550.00	cut bulk	233	-	-	-	-	-	-	0118-0B
590.00	cut bulk	1239	-	-	-	-	-	-	0060-0B
630.00	cut bulk	349	-	-	-	-	-	-	0062-0B
650.00	cut bulk	339	-	-	-	-	-	-	0119-0B
4620.00	cut bulk	313	-	-	-	-	-	-	0077-0B
4660.00	cut bulk	2892	2027	394	128	341	2422	469	0079-0B
4700.00	cut Sh/Clst: lt brn gy	1913	-	-	-	-	-	-	0081-1L
4720.00	cut Ca : lt gy pi to brn blk	1331	726	193	145	266	920	411	0082-1L
4739.00	cut Sh/Clst: drk gy to gy blk	3655	2400	555	199	500	2955	700	0089-1L
4746.00	cut Sh/Clst: lt gy to m gy to lt brn gy	293	-	-	-	-	-	-	0094-1L
4773.00	cut Sh/Clst: dsk y brn to gy blk	8063	5557	1199	421	884	6757	1305	0095-1L

Table 6 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4782.00	cut	Sh/Clst: gy blk to blk	5245	3398	884	333	628	4282	962	0083-2L
4800.00	cut	Sh/Clst: lt gy to brn gy	245	-	-	-	-	-	-	084-1L
4818.00	cut	Sh/Clst: gy blk to blk	4347	3057	621	207	461	3678	668	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	4623	3273	596	281	472	3869	753	0086-2L
4854.00	cut	Sh/Clst: gy blk to blk	3813	2581	550	209	471	3132	681	0087-1L
4908.00	cut	Sh/Clst: gy blk to blk	5239	3759	696	333	449	4455	783	0088-1L
4916.00	cut	bulk	1403	426	159	106	710	586	817	0003-0B
4926.00	cut	bulk	910	436	113	56	303	550	360	0044-0B
4935.00	cut	bulk	1590	-	-	-	-	-	-	0045-0B
4962.00	cut	Sh/Clst: drk gy	286	-	-	-	-	-	-	0048-1L
4971.00	cut	Sh/Clst: drk gy	805	-	-	-	-	-	-	0049-1L
4989.00	cut	Sh/Clst: gy brn to pl brn	905	236	118	236	314	354	551	0051-1L

Table 6 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
430.00	cut	bulk	91.49	-	-	-	-	-	-	0053-0B
500.00	cut	bulk	42.65	-	-	-	-	-	-	0056-0B
550.00	cut	bulk	83.22	-	-	-	-	-	-	0118-0B
590.00	cut	bulk	335.05	-	-	-	-	-	-	0060-0B
630.00	cut	bulk	65.94	-	-	-	-	-	-	0062-0B
650.00	cut	bulk	77.10	-	-	-	-	-	-	0119-0B
4620.00	cut	bulk	156.89	-	-	-	-	-	-	0077-0B
4660.00	cut	bulk	298.17	209.05	40.71	13.20	35.21	249.76	48.41	0079-0B
4700.00	cut	Sh/Clst: lt brn gy	285.53	-	-	-	-	-	-	0081-1L
4720.00	cut	Ca : lt gy pi to brn blk	246.61	134.52	35.87	26.90	49.32	170.39	76.23	0082-1L
4739.00	cut	Sh/Clst: drk gy to gy blk	159.63	104.80	24.26	8.73	21.83	129.06	30.57	0089-1L
4746.00	cut	Sh/Clst: lt gy to m gy to lt brn gy	101.31	-	-	-	-	-	-	0094-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	139.74	96.32	20.80	7.30	15.32	117.12	22.62	0095-1L



Table 6 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4782.00	cut	Sh/Clst: gy blk to blk	159.44	103.31	26.87	10.15	19.11	130.18	29.26	0083-2L
4800.00	cut	Sh/Clst: lt gy to brn gy	64.61	-	-	-	-	-	-	0084-1L
4818.00	cut	Sh/Clst: gy blk to blk	169.81	119.43	24.26	8.09	18.04	143.69	26.12	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	171.87	121.69	22.16	10.45	17.56	143.85	28.02	0086-2L
4854.00	cut	Sh/Clst: gy blk to blk	150.15	101.65	21.67	8.26	18.58	123.32	26.83	0087-1L
4908.00	cut	Sh/Clst: gy blk to blk	178.82	128.30	23.78	11.39	15.36	152.07	26.75	0088-1L
4916.00	cut	bulk	-	-	-	-	-	-	-	0003-0B
4926.00	cut	bulk	58.39	27.98	7.30	3.65	19.46	35.27	23.11	0044-0B
4935.00	cut	bulk	115.28	-	-	-	-	-	-	0045-0B
4962.00	cut	Sh/Clst: drk gy	55.06	-	-	-	-	-	-	0048-1L
4971.00	cut	Sh/Clst: drk gy	122.07	-	-	-	-	-	-	0049-1L
4989.00	cut	Sh/Clst: gy brn to pl brn	69.12	18.03	9.02	18.03	24.04	27.05	42.07	0051-1L

Table 6 d: Composition of material extracted from the rock (%) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	EOM	Aro	
430.00	cut	bulk	-	-	-	-	-	-	-	-	0053-0B
500.00	cut	bulk	-	-	-	-	-	-	-	-	0056-0B
550.00	cut	bulk	-	-	-	-	-	-	-	-	0118-0B
590.00	cut	bulk	-	-	-	-	-	-	-	-	0060-0B
630.00	cut	bulk	-	-	-	-	-	-	-	-	0062-0B
650.00	cut	bulk	-	-	-	-	-	-	-	-	0119-0B
4620.00	cut	bulk	-	-	-	-	-	-	-	-	0077-0B
4660.00	cut	bulk	70.11	13.65	4.43	11.81	83.76	16.24	513.51	515.91	0079-0B
4700.00	cut	Sh/Clst: lt brn gy	-	-	-	-	-	-	-	-	0081-1L
4720.00	cut	Ca : lt gy pi to brn blk	54.55	14.55	10.91	20.00	69.09	30.91	375.00	223.53	0082-1L
4739.00	cut	Sh/Clst: drk gy to gy blk	65.65	15.20	5.47	13.68	80.85	19.15	432.00	422.22	0089-1L
4746.00	cut	Sh/Clst: lt gy to m gy to lt brn gy	-	-	-	-	-	-	-	-	0094-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	68.93	14.88	5.22	10.97	83.81	16.19	463.16	517.74	0095-1L

Table 6 d: Composition of material extracted from the rock (%) for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	EOM	Aro	
4782.00	cut	Sh/Clst: gy blk to blk	64.79	16.85	6.37	11.99	81.65	18.35	384.44	444.90	0083-2L
4800.00	cut	Sh/Clst: lt gy to brn gy	-	-	-	-	-	-	-	-	0084-1L
4818.00	cut	Sh/Clst: gy blk to blk	70.33	14.29	4.76	10.62	84.62	15.38	492.31	550.00	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	70.80	12.90	6.08	10.22	83.70	16.30	549.06	513.43	0086-2L
4854.00	cut	Sh/Clst: gy blk to blk	67.70	14.43	5.50	12.37	82.13	17.87	469.05	459.62	0087-1L
4908.00	cut	Sh/Clst: gy blk to blk	71.75	13.30	6.37	8.59	85.04	14.96	539.58	568.52	0088-1L
4916.00	cut	bulk	30.38	11.39	7.59	50.63	41.77	58.23	266.67	71.74	0003-0B
4926.00	cut	bulk	47.92	12.50	6.25	33.33	60.42	39.58	383.33	152.63	0044-0B
4935.00	cut	bulk	-	-	-	-	-	-	-	-	0045-0B
4962.00	cut	Sh/Clst: drk gy	-	-	-	-	-	-	-	-	0048-1L
4971.00	cut	Sh/Clst: drk gy	-	-	-	-	-	-	-	-	0049-1L
4989.00	cut	Sh/Clst: gy brn to pl brn	26.09	13.04	26.09	34.78	39.13	60.87	200.00	64.29	0051-1L

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
4660.00	cut	bulk	0.62	1.31	0.59	0.55	1.04	0079-0B
4739.00	cut	Sh/Clst: drk gy to gy blk	0.40	1.41	0.36	0.32	1.09	0089-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	0.41	1.55	0.37	0.31	1.06	0095-1L
4782.00	cut	Sh/Clst: gy blk to blk	0.42	1.52	0.38	0.33	1.04	0083-2L
4818.00	cut	Sh/Clst: gy blk to blk	0.38	1.44	0.34	0.29	1.06	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	0.34	1.46	0.30	0.26	1.06	0086-2L
4908.00	cut	Sh/Clst: gy blk to blk	0.34	1.52	0.30	0.25	1.07	0088-1L
4916.00	cut	bulk	0.37	1.89	0.33	0.27	1.12	0003-0B
4926.00	cut	bulk	0.46	1.48	0.41	0.36	1.23	0044-0B

Table 8 : Aromatic Hydrocarbon Ratios for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
4660.00	cut	bulk	1.54	-	0.38	1.67	1.34	1.40	1.20	0.32	10.31	2.22	0079-0B
4739.00	cut	Sh/Clst: drk gy to gy blk	1.84	-	0.15	1.07	0.95	1.02	0.97	-	-	-	0089-1L
4773.00	cut	Sh/Clst: dsk y brn to gy blk	1.90	-	0.15	1.23	1.05	1.10	1.03	-	-	-	0095-1L
4782.00	cut	Sh/Clst: gy blk to blk	2.00	-	0.11	1.26	1.10	1.20	1.06	-	-	-	0083-2L
4818.00	cut	Sh/Clst: gy blk to blk	1.85	-	0.13	1.16	1.02	1.08	1.01	-	-	-	0085-2L
4836.00	cut	Sh/Clst: gy blk to blk	1.92	-	0.15	1.29	1.08	1.22	1.05	-	-	-	0086-2L
4908.00	cut	Sh/Clst: gy blk to blk	1.94	-	0.15	1.23	1.07	1.13	1.04	-	-	-	0088-1L
4916.00	cut	bulk	-	2.41	-	1.11	0.84	0.74	0.90	0.15	-	-	0003-0B
4926.00	cut	bulk	-	-	-	1.55	1.32	1.31	1.19	-	-	-	0044-0B

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
1100.00	cut	bulk	NDP	-	-	-	-	-	0120-0B
1300.00	cut	bulk	0.19	3	0.01	-	-	-	0121-0B
1500.00	cut	bulk	0.37	3	0.02	-	-	-	0122-0B
1700.00	cut	bulk	NDP	-	-	-	-	-	0123-0B
1900.00	cut	bulk	0.22	3	0.03	-	-	-	0124-0B
2100.00	cut	bulk	0.25	2	0.00	-	-	-	0125-0B
2300.00	cut	bulk	0.38	4	0.05	-	-	-	0126-0B
2500.00	cut	bulk	0.41	3	0.03	-	-	-	0127-0B
2700.00	cut	bulk	0.47	3	0.03	-	-	-	0128-0B
2900.00	cut	bulk	0.25	5	0.02	-	-	-	0129-0B
3000.00	cut	bulk	NDP	-	-	-	-	-	0130-0B
3100.00	cut	bulk	NDP	-	-	-	-	-	0131-0B
3200.00	cut	bulk	NDP	-	-	-	-	-	0132-0B
4759.00	swc	bulk	1.00	7	0.11	-	-	-	0090-0B

Table 9 : Thermal Maturity Data for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
4808.00	swc	bulk	NDP	-	-	-	-	-	0091-0B
4870.00	swc	bulk	1.00	9	0.05	-	-	-	0092-0B
4898.00	swc	bulk	1.02	12	0.07	-	-	-	0093-0B

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
4660.00	cut		-	-27.15	-26.04	-27.34	-27.30	-	0079-0B
4739.00	cut		-	-28.68	-27.26	-28.00	-27.91	-	0089-1L
4773.00	cut		-	-26.51	-25.21	-26.27	-26.08	-	0095-1L
4782.00	cut		-	-27.12	-26.20	-27.31	-27.38	-	0083-2L
4818.00	cut		-	-28.19	-26.76	-27.73	-27.82	-	0085-2L
4836.00	cut		-	-27.98	-26.40	-27.26	-27.27	-	0086-2L
4908.00	cut		-	-28.17	-26.68	-27.54	-27.35	-	0088-1L
4926.00	cut		-	-27.98	-28.42	-27.61	-28.12	-	0044-0B

\* Too little material for rerun.



Table 10B: Tabulation of cv values from carbon isotope data for well NOCS 2/4-16

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Sample
4660.00	cut		-27.15	-26.04	-0.77	0079-0B
4739.00	cut		-28.68	-27.26	0.39	0089-1L
4773.00	cut		-26.51	-25.21	-0.55	0095-1L
4782.00	cut		-27.12	-26.20	-1.20	0083-2L
4818.00	cut		-28.19	-26.76	0.26	0085-2L
4836.00	cut		-27.98	-26.40	0.53	0086-2L
4908.00	cut		-28.17	-26.68	0.39	0088-1L
4926.00	cut		-27.98	-28.42	-3.95	0044-0B

Depth unit of measure: m

Depth	Lithology	B/A	B			C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D		J1	Sample
			B/B+A	B+E+F										D+F/C+E	J1+J2%		
4660.00	bulk	0.41	0.29	0.19	0.73	0.42	0.16	-	-	-	0.28	0.91	0.45	0.14	59.01	0079-0	
4739.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0089-1	
4773.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0095-1	
4782.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0083-2	
4818.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0085-2	
4836.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0086-2	
4908.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0088-1	
4916.00	bulk	1.23	0.55	0.19	0.91	0.48	0.04	0.08	0.09	0.07	0.13	0.90	0.48	0.12	59.43	0003-0	
4926.00	bulk	1.07	0.52	0.23	1.07	0.52	0.04	0.08	0.08	0.08	0.19	0.91	0.52	0.11	57.72	0044-0	

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
4660.00	bulk	0.81	-	81.96	1.73	1.00	0.51	0.34	0.69	-	2.27	0079-0
4739.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0089-1
4773.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0095-1
4782.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0083-2
4818.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0085-2
4836.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0086-2
4908.00	Sh/Clst	-	-	-	-	-	-	-	-	-	-	0088-1
4916.00	bulk	0.61	39.66	75.12	0.84	0.79	0.25	0.17	0.60	0.66	2.50	0003-0
4926.00	bulk	0.68	44.56	74.63	1.15	0.77	0.39	0.27	0.60	0.80	2.65	0044-0

Ratio1:  $a / a + j$   
 Ratio2:  $q / q + t * 100\%$   
 Ratio3:  $2(r + s) / (q + t + 2(r + s)) * 100\%$   
 Ratio4:  $a + b + c + d / h + k + l + n$   
 Ratio5:  $r + s / r + s + q$

Ratio6:  $u + v / u + v + q + r + s + t$   
 Ratio7:  $u + v / u + v + i + m + n + q + r + s + t$   
 Ratio8:  $r + s / q + r + s + t$   
 Ratio9:  $q / t$   
 Ratio10:  $r + s / t$

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
4660.00	bulk	0.97	0.94	0.91	0.92	0.96	0079-0
4739.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0089-1
4773.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0095-1
4782.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0083-2
4818.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0085-2
4836.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0086-2
4908.00	Sh/Clst	1.00	1.00	1.00	1.00	1.00	0088-1
4916.00	bulk	-	-	-	-	-	0003-0
4926.00	bulk	0.64	0.57	0.35	0.37	0.46	0044-0

Ratio1:  $a1 / a1 + g1$ Ratio2:  $b1 / b1 + g1$ Ratio3:  $a1 + b1 / a1 + b1 + c1 + d1 + e1 + f1 + g1$ Ratio4:  $a1 / a1 + e1 + f1 + g1$ Ratio5:  $a1 / a1 + d1$

Table 11D: Variation in Monoaromatic Sterane Distribution for Well NOCS 2/4-16

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Ratio3</u>	<u>Ratio4</u>	<u>Sample</u>
4660.00	bulk	0.49	0.19	0.33	0.24	0079-0
4739.00	Sh/Clst	0.80	0.82	0.40	0.44	0089-1
4773.00	Sh/Clst	0.75	0.62	0.30	0.30	0095-1
4782.00	Sh/Clst	0.77	0.76	0.50	0.49	0083-2
4818.00	Sh/Clst	0.75	0.66	0.45	0.38	0085-2
4836.00	Sh/Clst	0.81	0.80	0.47	0.38	0086-2
4908.00	Sh/Clst	0.63	0.68	0.34	0.37	0088-1
4916.00	bulk	0.26	0.19	0.15	0.14	0003-0
4926.00	bulk	0.25	0.16	0.15	0.13	0044-0

Ratio1: A1 / A1 + E1

Ratio2: B1 / B1 + E1

Ratio3: A1 / A1 + E1 + G1

Ratio4: A1+B1 / A1+B1+Cl+D1+E1+F1+G1+H1+I1

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Sample</u>
4660.00	bulk	0.78	1.00	0079-0
4739.00	Sh/Clst	1.00	-	0089-1
4773.00	Sh/Clst	1.00	-	0095-1
4782.00	Sh/Clst	1.00	-	0083-2
4818.00	Sh/Clst	1.00	-	0085-2
4836.00	Sh/Clst	1.00	-	0086-2
4908.00	Sh/Clst	1.00	-	0088-1
4916.00	bulk	1.00	-	0003-0
4926.00	bulk	0.86	0.47	0044-0

Ratio1:  $\frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$

Ratio2:  $g1 / g1 + I1$

Depth unit of measure: m

Depth	Lithology	p		q		r		s		t		a		b		z		c		Sample
		x		d		e		f		g		h		i		j1				
		j2		k1		k2		l1		l2		m1		m2						
4660.00	bulk	13573.0	5685.6	3334.8	5863.5	2643.2	12715.6	5251.2	0.0	15085.8	0079-0									
		3388.6	3054.0	20595.3	2025.4	7701.7	6470.2	0.0	4653.0											
		3232.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
4739.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0089-1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4773.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0095-1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4782.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0083-2	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
4818.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0085-2	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

Depth unit of measure: m

Depth	Lithology	p		q		r		s		t		a		b		z		c	Sample
		x		d		e		f		g		h		i		j1			
		j2		k1		k2		l1		l2		m1		m2					
4836.00	Sh/Clst	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0086-2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4908.00	Sh/Clst	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0088-1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4916.00	bulk	1280.4		487.8		465.1		552.1		211.7		823.7		1017.1		292.8		3436.2	0003-0
			158.1		455.4		3761.6		441.0		1930.4		1575.4		244.2		1199.6		
		819.0		838.4		538.5		457.1		288.5		375.8		238.2					
4926.00	bulk	135721.1		70066.2		40585.0		82846.6		19791.1		108758.5		116292.6		30116.0		387468.1	0044-0
			12771.2		43462.9		362429.9		37366.1		161859.3		143296.0		16846.5		104036.0		
		76207.1		53887.0		35417.3		22334.7		14590.4		22266.1		11772.4					



Table 11G: Raw GCMS sterane data (peak height) SIR for Well NOCS 2/4-16

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample	
		h	i	j	k	l	m	n	o			
		p	q	r	s	t						
4660.00	bulk	6211.5	2528.0	13956.3	8256.4	4435.2	3733.0	5483.1	3850.3	3042.9	0079-0	
		6089.3	3168.3	3269.5	6036.2	2445.8	1978.2	3015.3	2531.1			
		1901.7	0.0	3829.3	2112.5	2616.0						
4739.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0089-1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4773.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0095-1	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4782.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0083-2	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
4818.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0085-2	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
4836.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0086-2
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4908.00	Sh/Clst	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0088-1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4916.00	bulk	522.1	201.8	716.0	464.4	160.8	190.0	331.9	232.4	452.2	0003-0
		757.7	539.1	462.4	455.5	146.8	257.7	463.0	508.4		
		255.1	340.9	708.2	589.0	518.5					
4926.00	bulk	87581.1	44484.0	112993.3	73710.5	25613.1	26251.2	44209.6	30091.4	52080.2	0044-0
		87146.5	69330.4	53417.6	49609.5	20575.1	29815.1	49550.5	49746.0		
		24783.2	37632.0	65002.1	59232.5	46820.0					

Table 11H: Raw GCMS triaromatic sterane data (peak height) for Well NOCS 2/4-16

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
4660.00	bulk	434508.7	190788.6	8430.4	19989.3	11604.8	12048.0	12235.4	0079-0
4739.00	Sh/Clst	109360.0	50831.6	0.0	0.0	0.0	0.0	0.0	0089-1
4773.00	Sh/Clst	80254.3	47324.0	0.0	0.0	0.0	0.0	0.0	0095-1
4782.00	Sh/Clst	71312.0	19234.3	0.0	0.0	0.0	0.0	0.0	0083-2
4818.00	Sh/Clst	68339.8	16971.0	0.0	0.0	0.0	0.0	0.0	0085-2
4836.00	Sh/Clst	93621.3	36320.0	0.0	0.0	0.0	0.0	0.0	0086-2
4908.00	Sh/Clst	127634.5	28096.0	0.0	0.0	0.0	0.0	0.0	0088-1
4916.00	bulk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0003-0
4926.00	bulk	75892.7	55827.0	19922.0	90676.9	46864.0	41072.0	42232.0	0044-0

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
4660.00	bulk	57704.0	14073.5	27982.1	27925.3	60660.8	19624.0	58227.7	28192.2	0.0	0079-0
4739.00	Sh/Clst	13067.4	14357.4	2309.3	0.0	3181.8	13213.3	16162.6	0.0	0.0	0089-1
4773.00	Sh/Clst	9938.6	5459.4	0.0	0.0	3352.8	12291.0	20371.8	0.0	0.0	0095-1
4782.00	Sh/Clst	8975.0	8877.5	1472.0	0.0	2729.2	8031.1	6253.7	0.0	0.0	0083-2
4818.00	Sh/Clst	12304.7	8016.7	2950.7	3324.7	4150.3	11873.1	10820.8	0.0	0.0	0085-2
4836.00	Sh/Clst	12101.0	11402.7	2375.4	3686.0	2911.5	11911.9	10853.3	3600.6	3428.0	0086-2
4908.00	Sh/Clst	15271.0	19017.1	4456.0	0.0	9069.3	19095.5	20188.5	4958.4	0.0	0088-1
4916.00	bulk	212.4	143.6	299.5	269.8	595.9	111.5	563.5	276.9	68.2	0003-0
4926.00	bulk	145338.1	80402.3	212874.0	202242.5	430569.8	64462.5	391024.3	189850.7	48153.5	0044-0