

**Table 4.1 Headspace gas data**

Well	Sample Name	Upper Depth	Lower Depth	Sample Type	C1 PPM	C2 PPM	C3 PPM	iC4 PPM	nC4 PPM	C5+ PPM
34/7-29S	98017-56	2210.0	2210.0	Cuttings	5314.8	682.5	478.3	73.1	122.6	54.1
34/7-29S	98017-57	2230.0	2230.0	Cuttings	4591.2	534.4	353.7	45.4	86.8	35.1
34/7-29S	98017-58	2250.0	2250.0	Cuttings	3453.8	402.9	315.7	47.0	94.7	46.4
34/7-29S	98017-59	2270.0	2270.0	Cuttings	3601.8	337.6	260.1	41.4	93.8	48.5
34/7-29S	98017-60	2290.0	2290.0	Cuttings	3990.0	429.9	355.5	58.6	136.8	72.6
34/7-29S	98017-61	2300.0	2300.0	Cuttings	4931.3	559.3	459.7	77.8	175.9	95.3
34/7-29S	98017-62	2310.0	2310.0	Cuttings	4716.1	469.2	392.2	72.7	156.2	92.3
34/7-29S	98017-63	2320.0	2320.0	Cuttings	11176.3	1003.7	514.1	145.6	172.4	129.5
34/7-29S	98017-64	2340.0	2340.0	Cuttings	7234.1	576.2	372.7	132.6	161.1	142.5
34/7-29S	98017-65	2360.0	2360.0	Cuttings	3970.4	350.4	278.6	51.0	114.4	105.1
34/7-29S	98017-66	2380.0	2380.0	Cuttings	4778.9	598.8	679.3	176.0	387.5	645.9
34/7-29S	98017-67	2390.0	2390.0	Cuttings	4234.6	942.0	1628.1	615.0	1245.6	1943.1
34/7-29S	98017-68	2400.0	2400.0	Cuttings	4161.6	739.4	1103.4	323.8	684.1	975.3
34/7-29S	98017-69	2420.0	2420.0	Cuttings	5225.5	1133.9	1404.5	338.0	714.1	870.8
34/7-29S	98017-70	2440.0	2440.0	Cuttings	4022.4	909.7	1103.6	239.8	505.0	559.4
34/7-29S	98017-71	2460.0	2460.0	Cuttings	5127.7	1170.6	1182.5	223.8	447.0	419.2
34/7-29S	98017-72	2480.0	2480.0	Cuttings	7227.4	1438.6	1224.3	225.2	423.1	403.3
34/7-29S	98017-73	2500.0	2500.0	Cuttings	3583.5	824.5	732.5	106.6	197.9	167.7
34/7-29S	98017-74	2520.0	2520.0	Cuttings	3908.7	885.9	837.3	131.7	232.1	190.2
34/7-29S	98017-75	2540.0	2540.0	Cuttings	4712.1	974.6	817.6	111.4	174.8	173.8
34/7-29S	98017-76	2550.0	2550.0	Cuttings	4677.1	1106.7	850.7	108.8	164.6	183.0
34/7-29S	98017-77	2560.0	2560.0	Cuttings	1166.0	132.0	87.2	11.3	28.3	40.3
34/7-29S	98017-78	2570.0	2570.0	Cuttings	5041.5	754.5	584.1	77.5	133.1	129.4
34/7-29S	98017-79	2580.0	2580.0	Cuttings	696.4	245.0	316.7	32.5	65.4	95.3
34/7-29S	98017-80	2590.0	2590.0	Cuttings	4793.8	2804.3	2165.3	280.0	367.5	312.0
34/7-29S	98017-81	2600.0	2600.0	Cuttings	781.1	477.4	676.2	85.0	153.2	178.9
34/7-29S	98017-82	2609.0	2609.0	Cuttings	3888.8	1359.9	1232.8	149.2	251.3	211.2
34/7-29S	98017-83	2618.0	2618.0	Cuttings	4810.3	2010.1	1752.9	250.9	389.7	228.7
34/7-29S	98017-84	2627.0	2627.0	Cuttings	7156.7	2169.4	1946.1	312.2	558.3	342.7
34/7-29S	98017-85	2636.0	2636.0	Cuttings	2379.2	1039.7	1164.0	165.6	440.8	274.5
34/7-29S	98017-86	2654.0	2654.0	Cuttings	869.8	242.0	305.1	37.2	97.5	79.9
34/7-29S	98017-87	2672.0	2672.0	Cuttings	1277.8	293.9	350.2	41.6	127.8	142.3
34/7-29S	98017-88	2681.0	2681.0	Cuttings	1200.3	314.0	413.0	53.5	190.6	217.2
34/7-29S	98017-89	2690.0	2690.0	Cuttings	1114.2	515.0	877.6	125.5	419.7	514.1
34/7-29S	98017-90	2699.0	2699.0	Cuttings	7313.4	7273.7	10481.3	4027.7	7231.4	9548.8
34/7-29S	98017-91	2708.0	2708.0	Cuttings	2882.1	4343.0	6877.9	2155.8	4616.2	5716.6
34/7-29S	98017-92	2717.0	2717.0	Cuttings	721.4	931.6	3561.4	1303.7	3049.4	4370.4
34/7-29S	98017-93	2726.0	2726.0	Cuttings	184.5	202.9	628.1	131.2	388.6	600.7
34/7-29S	98017-94	2735.0	2735.0	Cuttings	7510.2	4994.0	3643.2	454.3	1081.0	738.8
34/7-29S	98017-95	2753.0	2753.0	Cuttings	14924.5	5938.9	3334.1	491.4	726.6	708.2
34/7-29S	98017-96	2780.0	2780.0	Cuttings	13840.2	4383.3	1861.1	319.9	348.5	548.6
34/7-29S	98017-97	2798.0	2798.0	Cuttings	8519.9	2982.6	1327.2	177.3	263.6	397.2
34/7-29S	98017-98	2807.0	2807.0	Cuttings	9968.5	3431.8	1510.0	227.9	327.5	508.7
34/7-29S	98017-99	2816.0	2816.0	Cuttings	11138.6	4072.2	1887.6	295.5	437.7	664.2
34/7-29S	98017-100	2825.0	2825.0	Cuttings	10453.3	3669.6	1604.3	219.5	319.9	486.5
34/7-29S	98017-101	2843.0	2843.0	Cuttings	9689.2	3335.3	1605.6	254.2	355.3	582.8
34/7-29S	98017-102	2861.0	2861.0	Cuttings	3394.3	1526.7	757.5	111.7	138.3	218.6
34/7-29S	98017-103	2870.0	2870.0	Cuttings	4626.7	1661.5	801.3	123.5	139.5	213.6
34/7-29S	98017-104	2888.0	2888.0	Cuttings	5661.6	2048.8	1087.1	177.7	189.4	195.8
34/7-29S	98017-105	2906.0	2906.0	Cuttings	10807.9	3212.9	1458.1	215.0	243.6	253.9
34/7-29S	98017-106	2915.0	2915.0	Cuttings	8141.4	3401.9	1760.2	297.0	333.4	347.0
34/7-29S	98017-107	2924.0	2924.0	Cuttings	6534.7	2003.7	877.6	106.5	138.1	163.6

**Table 4.2 Occluded gas data**

Well Name	Sample Name	Upper Depth	Lower Depth	Sample Type	C1	C2	C3	iC4	nC4	C5+	
					uL/Kg rock	uL/Kg rock	uL/Kg rock	uL/Kg rock	uL/Kg rock	uL/Kg rock	
34/7-29S	98017-1	1200.0	1200.0	Cuttings	EMPTY CAN						
34/7-29S	98017-2	1220.0	1220.0	Cuttings	25.93	2.04	11.33	0.88	3.40	95.76	
34/7-29S	98017-3	1240.0	1240.0	Cuttings	9.82	2.50				30.18	
34/7-29S	98017-4	1260.0	1260.0	Cuttings	17.09	4.07	2.13			25.77	
34/7-29S	98017-5	1280.0	1280.0	Cuttings	8.69	0.41	0.43	0.55	0.48	7.08	
34/7-29S	98017-6	1300.0	1300.0	Cuttings	11.03	2.99	3.74			22.75	
34/7-29S	98017-7	1320.0	1320.0	Cuttings	6.38					6.70	
34/7-29S	98017-8	1340.0	1340.0	Cuttings	6.48					12.47	
34/7-29S	98017-9	1360.0	1360.0	Cuttings	6.70					15.83	
34/7-29S	98017-10	1380.0	1380.0	Cuttings	12.59	6.28	3.29			28.93	
34/7-29S	98017-11	1400.0	1400.0	Cuttings	6.96					18.93	
34/7-29S	98017-12	1420.0	1420.0	Cuttings	15.51	5.56	6.30			34.22	
34/7-29S	98017-13	1440.0	1440.0	Cuttings	15.50					21.56	
34/7-29S	98017-14	1460.0	1460.0	Cuttings	9.42	2.32	2.34			32.63	
34/7-29S	98017-15	1480.0	1480.0	Cuttings	7.94					19.88	
34/7-29S	98017-16	1500.0	1500.0	Cuttings	12.58	4.80	3.32			38.74	
34/7-29S	98017-17	1520.0	1520.0	Cuttings	7.22					65.92	
34/7-29S	98017-18	1540.0	1540.0	Cuttings	14.60	2.07	1.47			27.88	
34/7-29S	98017-19	1560.0	1560.0	Cuttings	9.51	2.31	4.00	1.31	2.48	35.97	
34/7-29S	98017-20	1580.0	1580.0	Cuttings	6.07	0.79				23.40	
34/7-29S	98017-21	1600.0	1600.0	Cuttings	10.23	2.98	2.20			32.35	
34/7-29S	98017-22	1620.0	1620.0	Cuttings	8.84	1.60	3.89			17.78	
34/7-29S	98017-23	1640.0	1640.0	Cuttings	7.27					7.38	
34/7-29S	98017-24	1660.0	1660.0	Cuttings	16.86	7.82				25.40	
34/7-29S	98017-25	1680.0	1680.0	Cuttings	13.56	0.68	2.77	12.08	7.25	49.35	
34/7-29S	98017-26	1700.0	1700.0	Cuttings	18.58	4.89	3.69		2.00	41.69	
34/7-29S	98017-27	1720.0	1720.0	Cuttings	8.02					9.05	
34/7-29S	98017-28	1740.0	1740.0	Cuttings	21.12	7.29	6.67			68.66	
34/7-29S	98017-29	1760.0	1760.0	Cuttings	5.69					40.51	
34/7-29S	98017-30	1780.0	1780.0	Cuttings	35.70	3.87	2.93	10.01	7.73	580.72	
34/7-29S	98017-31	1800.0	1800.0	Cuttings	7.08					12.15	
34/7-29S	98017-32	1820.0	1820.0	Cuttings	18.33	8.70	7.48	28.01	16.05	551.87	
34/7-29S	98017-33	1840.0	1840.0	Cuttings	12.49	0.85	0.27			18.65	
34/7-29S	98017-34	1860.0	1860.0	Cuttings	22.60	5.36	3.10	0.44	1.77	44.21	
34/7-29S	98017-35	1880.0	1880.0	Cuttings	14.28		0.42			13.22	
34/7-29S	98017-36	1900.0	1900.0	Cuttings	20.40	2.77	2.03	0.46	1.27	29.12	
34/7-29S	98017-37	1920.0	1920.0	Cuttings	13.26	0.66	1.56	0.91	0.60	21.42	
34/7-29S	98017-38	1930.0	1930.0	Cuttings	17.24	3.98	3.44	1.22	1.91	34.15	
34/7-29S	98017-39	1940.0	1940.0	Cuttings	19.21	2.48	4.57	4.65	2.60	33.46	
34/7-29S	98017-40	1950.0	1950.0	Cuttings	26.14	4.45	4.39	3.03	2.77	36.47	
34/7-29S	98017-41	1960.0	1960.0	Cuttings	19.11	1.56	2.63	3.34	1.86	38.50	
34/7-29S	98017-42	1970.0	1970.0	Cuttings	23.61	4.56	5.84	4.67	3.20	48.88	
34/7-29S	98017-43	1980.0	1980.0	Cuttings	16.30	1.06	2.28	2.93	1.73	51.29	
34/7-29S	98017-44	1990.0	1990.0	Cuttings	21.68	3.08	2.39	1.44	1.59	23.64	
34/7-29S	98017-45	2010.0	2010.0	Cuttings	16.77	0.77	1.34	1.46	0.94	29.17	
34/7-29S	98017-46	2030.0	2030.0	Cuttings	26.68	4.46	3.67	1.34	1.94	34.93	
34/7-29S	98017-47	2050.0	2050.0	Cuttings	19.75	1.08	1.96	1.54	1.30	31.12	
34/7-29S	98017-48	2060.0	2060.0	Cuttings	28.56	4.04	3.15	2.20	2.35	112.53	
34/7-29S	98017-49	2070.0	2070.0	Cuttings	17.40	0.81	1.50	1.06	1.00	40.25	
34/7-29S	98017-50	2090.0	2090.0	Cuttings	31.87	5.77	6.65	2.91	4.50	54.51	
34/7-29S	98017-51	2110.0	2110.0	Cuttings	20.90	1.38	4.66	2.85	3.41	53.45	
34/7-29S	98017-52	2130.0	2130.0	Cuttings	39.53	6.80	8.26	2.42	5.32	56.90	
34/7-29S	98017-53	2150.0	2150.0	Cuttings	26.37	4.41	15.70	5.22	11.18	61.25	
34/7-29S	98017-54	2170.0	2170.0	Cuttings	48.77	9.57	22.40	6.95	16.55	60.91	

**Table 4.2 Occluded gas data**

Well Name	Sample Name	Upper Depth	Lower Depth	Sample Type	C1 uL/Kg rock	C2 uL/Kg rock	C3 uL/Kg rock	iC4 uL/Kg rock	nC4 uL/Kg rock	C5+ uL/Kg rock
34/7-29S	98017-55	2190.0	2190.0	Cuttings	26.48	1.78	11.03	4.14	11.18	42.10
34/7-29S	98017-56	2210.0	2210.0	Cuttings	54.86	6.54	15.12	4.68	15.50	46.83
34/7-29S	98017-57	2230.0	2230.0	Cuttings	28.31	3.45	16.99	5.08	18.27	48.87
34/7-29S	98017-58	2250.0	2250.0	Cuttings	41.60	5.08	12.58	3.80	15.61	40.55
34/7-29S	98017-59	2270.0	2270.0	Cuttings	13.38	0.36	1.86	0.29	1.52	17.54
34/7-29S	98017-60	2290.0	2290.0	Cuttings	36.11	4.50	9.18	2.76	14.09	51.03
34/7-29S	98017-61	2300.0	2300.0	Cuttings	15.43	0.59	6.21	2.23	10.04	46.80
34/7-29S	98017-62	2310.0	2310.0	Cuttings	32.73	8.51	13.34	3.22	16.01	81.65
34/7-29S	98017-63	2320.0	2320.0	Cuttings	17.29	0.91	3.75	1.76	4.20	32.38
34/7-29S	98017-64	2340.0	2340.0	Cuttings	29.69	3.59	5.18	2.45	7.35	56.94
34/7-29S	98017-65	2360.0	2360.0	Cuttings	26.10	0.50	3.08	1.33	4.86	55.84
34/7-29S	98017-66	2380.0	2380.0	Cuttings	58.96	7.79	12.09	5.54	22.09	273.65
34/7-29S	98017-67	2390.0	2390.0	Cuttings	11.59	0.74	1.15	0.70	3.24	39.18
34/7-29S	98017-68	2400.0	2400.0	Cuttings	66.87	8.01	25.44	14.29	66.47	638.21
34/7-29S	98017-69	2420.0	2420.0	Cuttings	17.20	5.25	35.51	12.90	56.48	388.67
34/7-29S	98017-70	2440.0	2440.0	Cuttings	41.48	8.95	43.76	13.93	69.14	323.95
34/7-29S	98017-71	2460.0	2460.0	Cuttings	19.21	5.70	38.55	10.80	45.52	174.66
34/7-29S	98017-72	2480.0	2480.0	Cuttings	66.00	14.27	50.90	14.38	58.27	267.19
34/7-29S	98017-73	2500.0	2500.0	Cuttings	23.68	7.61	48.15	13.15	48.35	201.41
34/7-29S	98017-74	2520.0	2520.0	Cuttings	49.60	11.43	55.20	15.08	56.49	199.61
34/7-29S	98017-75	2540.0	2540.0	Cuttings	19.33	5.87	40.12	10.30	32.75	172.52
34/7-29S	98017-76	2550.0	2550.0	Cuttings	19.76	7.01	35.69	8.19	25.35	141.87
34/7-29S	98017-77	2560.0	2560.0	Cuttings	17.75	1.09	3.89	1.93	4.79	58.24
34/7-29S	98017-78	2570.0	2570.0	Cuttings	78.97	4.24	10.65	3.50	10.31	175.63
34/7-29S	98017-79	2580.0	2580.0	Cuttings	21.36	1.14	7.09	2.06	7.34	92.13
34/7-29S	98017-80	2590.0	2590.0	Cuttings	18.78	24.85	107.53	18.26	52.77	221.68
34/7-29S	98017-81	2600.0	2600.0	Cuttings	28.19	1.94	23.39	4.74	28.32	203.17
34/7-29S	98017-82	2609.0	2609.0	Cuttings	31.28	9.72	49.30	9.07	40.08	220.87
34/7-29S	98017-83	2618.0	2618.0	Cuttings	15.20	7.29	36.33	7.43	30.23	119.87
34/7-29S	98017-84	2627.0	2627.0	Cuttings	18.27	7.75	33.18	6.63	29.49	143.53
34/7-29S	98017-85	2636.0	2636.0	Cuttings	20.42	4.20	24.07	4.36	33.24	131.07
34/7-29S	98017-86	2654.0	2654.0	Cuttings	15.38	0.77	8.79	1.87	12.72	89.51
34/7-29S	98017-87	2672.0	2672.0	Cuttings	14.20	0.73	7.13	1.86	9.97	77.74
34/7-29S	98017-88	2681.0	2681.0	Cuttings	32.70	5.32	19.02	4.39	37.93	281.24
34/7-29S	98017-89	2690.0	2690.0	Cuttings	16.11	1.50	17.91	5.56	34.84	285.68
34/7-29S	98017-90	2699.0	2699.0	Cuttings	1.30	3.67	75.38	40.30	139.20	504.11
34/7-29S	98017-91	2708.0	2708.0	Cuttings	16.33	2.10	161.28	175.36	613.89	2742.63
34/7-29S	98017-92	2717.0	2717.0	Cuttings	7.39	1.50	41.31	43.19	154.54	1165.22
34/7-29S	98017-93	2726.0	2726.0	Cuttings	4.21	0.39	3.05	5.85	25.11	534.71
34/7-29S	98017-94	2735.0	2735.0	Cuttings	80.40	566.04	2040.40	365.05	1203.07	3381.26
34/7-29S	98017-95	2753.0	2753.0	Cuttings	583.66	1318.85	1373.57	177.17	415.80	1193.94
34/7-29S	98017-96	2780.0	2780.0	Cuttings	650.60	1177.82	788.97	125.52	230.26	943.51
34/7-29S	98017-97	2798.0	2798.0	Cuttings	57.95	136.17	174.93	37.24	82.27	516.43
34/7-29S	98017-98	2807.0	2807.0	Cuttings	124.85	300.80	408.15	94.87	206.67	831.66
34/7-29S	98017-99	2816.0	2816.0	Cuttings	211.08	526.75	675.72	142.20	292.72	929.11
34/7-29S	98017-100	2825.0	2825.0	Cuttings	327.67	981.28	1558.41	362.77	730.74	1681.02
34/7-29S	98017-101	2843.0	2843.0	Cuttings	92.40	257.63	566.06	155.49	341.99	1459.60
34/7-29S	98017-102	2861.0	2861.0	Cuttings	91.57	162.26	564.74	152.40	360.27	1653.97
34/7-29S	98017-103	2870.0	2870.0	Cuttings	35.90	159.22	297.31	67.36	113.80	368.65
34/7-29S	98017-104	2888.0	2888.0	Cuttings	80.18	369.97	789.07	175.78	318.27	661.57
34/7-29S	98017-105	2906.0	2906.0	Cuttings	161.23	269.10	377.73	84.25	161.55	417.01
34/7-29S	98017-106	2915.0	2915.0	Cuttings	129.24	336.00	581.44	131.21	255.69	605.13
34/7-29S	98017-107	2924.0	2924.0	Cuttings	77.15	83.12	120.44	21.39	53.08	266.03

**Table 4.3 ISOTOPIC COMPOSITION OF GAS SAMPLES FROM WELL 34/7-29S**

Sample	IFE no GEO	Depth m md RKB	C1 del 13C PDB	C2 del 13C PDB	C3 del 13C PDB	iC4 del 13C PDB	C4 del 13C PDB	iC5 del 13C PDB	C5 del 13C PDB	C02 del 13C PDB
98017-61	980832	2300	-45.2	-29.8	-30.0	-34.2	-31.0	-	-	-16.0
98017-67	980833	2390	-43.6	-29.1	-28.4	-30.3	-28.3	-29.0	-28.7	-20.1
98017-81	980834	2600	-48.2	-29.4	-29.5	-34.9	-31.5	-	-	-15.7
98017-106	980835	2915	-41.6	-30.5	-30.5	-31.5	-31.7	-	-	-19.6

**Table 4.4 VOLUME COMPOSITION OF GAS SAMPLES (PPM) FROM WELL 34/7-29S**

Sample	IFE no GEO	Depth m md RKB	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	C5+ ppm
98017-61	980832	2300	4931	559	459	77	175	95
98017-67	980833	2390	4234	942	1628	615	1245	1943
98017-81	980834	2600	781	477	676	85	153	178
98017-106	980835	2915	8141	3401	1760	297	333	347

**Table 4.5 Extraction and Iatroscan fractionation data**

Well Name	Nation	Sample Name	Upper Depth	Lower Depth	Sample Type	Rock Wt (Gm)	Extract Yield (mg/g)	Sats (mg/g)	Aroms (mg/g)	Polar (mg/g)	Extract Yield (mg)
34/7-29S	NOR	98017-25	1680.00	1680.00	Cuttings	2.0	1.7	0.1	0.1	1.6	3.4
34/7-29S	NOR	98017-32	1820.00	1820.00	Cuttings	2.0	2.0	0.1	0.1	1.8	3.9
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	2.0	1.4	0.1	0.1	1.3	2.8
34/7-29S	NOR	98017-62	2310.00	2310.00	Cuttings	2.0	3.6	0.1	0.1	3.4	7.1
34/7-29S	NOR	98017-69	2420.00	2420.00	Cuttings	2.0	1.8	0.1	0.1	1.7	3.6
34/7-29S	NOR	98017-71	2460.00	2460.00	Cuttings	2.0	0.2	0.0	0.0	0.2	0.4
34/7-29S	NOR	98017-76	2550.00	2550.00	Cuttings	2.0	2.4	0.1	0.1	2.1	4.7
34/7-29S	NOR	98017-80	2590.00	2590.00	Cuttings	2.0	2.2	0.1	0.1	1.9	4.3
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	2.0	0.9	0.1	0.0	0.7	1.8
34/7-29S	NOR	98017-108	2701.05	2701.05	Core	2.0	1.4	0.6	0.3	0.5	2.7
34/7-29S	NOR	98017-109	2702.08	2702.08	Core	2.0	6.9	4.5	1.3	1.0	13.8
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	2.0	18.2	11.8	4.6	1.8	36.3
34/7-29S	NOR	98017-111	2703.20	2703.20	Core	2.0	18.1	11.8	4.6	1.7	36.2
34/7-29S	NOR	98017-112	2703.95	2703.95	Core	2.0	24.9	16.1	6.4	2.4	49.7
34/7-29S	NOR	98017-113	2704.20	2704.20	Core	2.0	22.1	14.5	5.7	1.9	44.2
34/7-29S	NOR	98017-114	2705.30	2705.30	Core	2.0	22.2	14.5	5.4	2.3	44.4
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	2.0	26.6	17.7	6.1	2.8	53.2
34/7-29S	NOR	98017-116	2707.02	2707.02	Core	2.0	23.6	15.6	5.9	2.1	47.1
34/7-29S	NOR	98017-117	2707.45	2707.45	Core	2.0	20.9	14.1	4.9	1.9	41.7
34/7-29S	NOR	98017-118	2708.75	2708.75	Core	2.0	24.0	15.3	6.0	2.6	47.9
34/7-29S	NOR	98017-119	2709.40	2709.40	Core	2.0	22.0	14.2	5.4	2.3	43.9
34/7-29S	NOR	98017-120	2710.05	2710.05	Core	2.0	25.6	16.9	6.2	2.4	51.1
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	2.0	21.9	14.3	5.5	2.1	43.8
34/7-29S	NOR	98017-122	2711.50	2711.50	Core	2.0	23.3	15.0	5.7	2.5	46.5

**Table 4.5 Extraction and Iatroscan fractionation data**

Well Name	Nation	Sample Name	Upper Depth	Lower Depth	Sample Type	Rock Wt (Gm)	Extract Yield (mg/g)	Sats (mg/g)	Aroms (mg/g)	Polar (mg/g)	Extract Yield (mg)
34/7-29S	NOR	98017-123	2712.20	2712.20	Core	2.0	20.3	13.4	4.4	2.4	40.5
34/7-29S	NOR	98017-124	2713.05	2713.05	Core	2.0	22.1	14.6	5.4	2.1	44.1
34/7-29S	NOR	98017-125	2713.70	2713.70	Core	2.0	17.7	11.2	3.8	2.7	35.4
34/7-29S	NOR	98017-126	2714.30	2714.30	Core	2.0	16.6	11.1	3.6	1.9	33.2
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	2.0	13.7	8.9	2.9	1.9	27.3
34/7-29S	NOR	98017-128	2716.80	2716.80	Core	2.0	13.2	8.1	2.8	2.3	26.4
34/7-29S	NOR	98017-129	2718.10	2718.10	Core	2.0	12.6	6.5	2.4	3.7	25.2
34/7-29S	NOR	98017-130	2719.55	2719.55	Core	2.0	14.8	8.7	3.8	2.3	29.6
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	2.0	15.0	9.0	4.0	2.0	30.0
34/7-29S	NOR	98017-132	2720.75	2720.75	Core	2.0	18.9	11.0	5.1	2.8	37.8
34/7-29S	NOR	98017-94	2735.00	2735.00	Cuttings	2.0	8.5	0.8	0.6	7.0	16.9
34/7-29S	NOR	98017-100	2825.00	2825.00	Cuttings	2.0	8.7	0.5	0.4	7.8	17.3
34/7-29S	NOR	98017-104	2888.00	2888.00	Cuttings	2.0	7.4	0.5	0.3	6.6	14.8

**Table 4.7 Saturate GC peak height data**

Well Name	Nation	Sample Name	Upper Depth	Lower Depth	Sample Type	n_C10 mV	n_C17 mV	n_C18 mV	n_C22 mV	n_C27 mV	n_C32 mV	i_C18 mV	Pristane mV	Phytane mV	CPI1 mV	CPI2 mV
34/7-29S	NOR	98017-25	1680.00	1680.00	Cuttings	-	30541	36478	11075	3179	804	7731	11094	11250	1.82	1.98
34/7-29S	NOR	98017-32	1820.00	1820.00	Cuttings	-	40379	42007	6874	5133	2045	5033	17861	28128	1.39	1.45
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	-	47972	70275	27841	11804	1205	8281	20794	24909	1.78	2.27
34/7-29S	NOR	98017-62	2310.00	2310.00	Cuttings	-	18987	11174	3450	4752	763	3488	5428	3782	2.38	2.92
34/7-29S	NOR	98017-69	2420.00	2420.00	Cuttings	-	23766	14769	3633	3260	931	5095	13103	7402	1.90	2.54
34/7-29S	NOR	98017-71	2460.00	2460.00	Cuttings	-	19228	14743	3148	3904	1021	2952	11975	7366	2.42	3.20
34/7-29S	NOR	98017-80	2590.00	2590.00	Cuttings	-	15856	8218	3311	4976	1520	2883	11422	4585	1.85	2.47
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	-	12685	14602	25972	4392	606	2454	4941	5102	1.21	1.30
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	-	82174	84774	66833	38323	18551	31483	64651	49925	1.03	1.08
34/7-29S	NOR	98017-111	2703.20	2703.20	Core	-	51808	57600	54551	30563	17985	19904	45654	38568	0.97	1.05
34/7-29S	NOR	98017-113	2704.20	2704.20	Core	-	74506	75441	57650	32459	14254	26667	55392	40930	1.01	1.01
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	-	77173	77852	63830	32310	14645	26865	57425	42391	1.01	1.03
34/7-29S	NOR	98017-117	2707.45	2707.45	Core	-	72521	74427	63116	35313	15469	24775	54450	42344	1.04	1.08
34/7-29S	NOR	98017-119	2709.40	2709.40	Core	-	66105	69486	57969	34963	15766	22529	49382	40114	1.04	1.14
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	-	65013	66933	53096	32393	15405	23988	52758	41191	1.02	1.03
34/7-29S	NOR	98017-123	2712.20	2712.20	Core	-	98331	98600	78959	40344	18425	35132	75700	54672	1.00	1.07
34/7-29S	NOR	98017-125	2713.70	2713.70	Core	-	50340	55521	48515	29115	13065	19493	41776	32768	1.01	1.04
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	-	55657	57056	44155	23765	10942	20267	42467	31576	1.01	1.04
34/7-29S	NOR	98017-129	2718.10	2718.10	Core	-	85241	75787	55911	31745	14844	34621	65131	44831	1.03	1.02
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	-	77837	72676	52166	30844	13683	27672	54851	39139	1.04	1.08
34/7-29S	NOR	98017-94	2735.00	2735.00	Cuttings	-	61095	44697	24303	36148	9861	28097	91183	82178	1.36	1.60
34/7-29S	NOR	98017-100	2825.00	2825.00	Cuttings	-	24677	15242	7819	13331	4113	7311	28263	11976	1.62	1.90
34/7-29S	NOR	98017-104	2888.00	2888.00	Cuttings	-	75988	53170	31914	42260	8652	17845	63328	24333	1.72	1.67
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	-	80503	72754	50314	26058	11895	27760	54671	36911	1.02	1.02
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	-	112556	102341	69172	37237	16968	40570	75506	54178	1.01	1.00



**Table 4.8 Aromatic GC peak height data**

Well Name	Nation	Sample Name	Upper Depth	Lower Depth	Sample Type	2MN	1MN	BPh	2EN	1EN	2,6 +2,7 DMN	1,5 DMN	1,3,7 TMN	2,3,6 TMN	1,3,6 TMN	1,3,5 + 1,4,6 TMN	P	3MP	2MP	9MP	1MP
34/7-29S	NOR	98017-25	1680.00	1680.00	Cuttings	Aromatics too small to quantify															
34/7-29S	NOR	98017-32	1820.00	1820.00	Cuttings								570	596	816	974	2727	1237	893	1651	1349
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings											32	472	198	163	245	209
34/7-29S	NOR	98017-62	2310.00	2310.00	Cuttings	Aromatics too small to quantify															
34/7-29S	NOR	98017-69	2420.00	2420.00	Cuttings												591	217	206	313	266
34/7-29S	NOR	98017-71	2460.00	2460.00	Cuttings												661	295	353	351	366
34/7-29S	NOR	98017-80	2590.00	2590.00	Cuttings												476	246	286	377	343
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings												358	137	115	174	173
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	110	219	302	365	379	2933	1308	2612	2044	3412	4074	3426	2511	1391	3253	2442
34/7-29S	NOR	98017-111	2703.20	2703.20	Core				14	22	238	146	463	340	593	744	1033	1021	544	1456	1082
34/7-29S	NOR	98017-113	2704.20	2704.20	Core		50	91	124	145	1277	666	1716	1356	2128	2476	2763	2604	1961	3042	2626
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	50	144	267	286	332	2582	1315	2976	2306	3802	4720	3888	3058	1800	3706	2996
34/7-29S	NOR	98017-117	2707.45	2707.45	Core			33	77	80	708	398	1002	715	1227	1589	1596	1421	856	1814	1434
34/7-29S	NOR	98017-119	2709.40	2709.40	Core			21	34	41	330	189	524	381	661	870	1204	1171	744	1682	1343
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	8	57	119	147	147	1225	633	1398	1302	1848	2614	3573	3146	1927	4275	3248
34/7-29S	NOR	98017-123	2712.20	2712.20	Core	254	430	363	387	360	3055	1413	2408	1914	3020	3670	3075	2319	1435	3182	2299
34/7-29S	NOR	98017-125	2713.70	2713.70	Core	258	397	365	417	383	2963	1356	2117	1748	2740	3389	3315	2516	1450	3421	2605
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	399	599	480	526	478	3463	1533	2199	1793	2847	3398	2846	2196	1401	3052	2290
34/7-29S	NOR	98017-129	2718.10	2718.10	Core	602	833	605	707	572	4426	1843	2864	2276	3583	4035	3443	2270	1485	3024	2338
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	1481	1698	967	986	797	6016	2610	3187	2647	4346	4924	4839	3296	2142	4451	3298
34/7-29S	NOR	98017-94	2735.00	2735.00	Cuttings	2262	2823	722	2415	2426	5149	2614	4893	1606	2751	2553	4281	2877	865	3713	1670
34/7-29S	NOR	98017-100	2825.00	2825.00	Cuttings				69	103	354	218	762	239	627	449	1215	534	218	817	474
34/7-29S	NOR	98017-104	2888.00	2888.00	Cuttings						112	88	300	93	202	167	771	243	184	357	261
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	2085	2343	1133	1303	1026	7451	3167	3866	2961	5045	5755	3730	2871	1701	3447	2771
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	4811	4798	2323	2512	1953	13244	6150	6715	5541	9080	9961	6498	4813	2606	6106	4481

**Table 4.9 Stable carbon isotope data**

Well	Test	IFE no GEO	Sat del 13C PDB	Aro del 13C PDB
34/7-29S	MDT GA 131	980657	-30.1	-29.3
34/7-29S	MDT GA 143	980658	-30	-29.2

**Table 4.10 Alkane GC/MS - Peak Height Data**

						25nor28ab	25nor30ab	23/3	25/3	24/4	26/3	27dbR	27aaS	27bbR + 29dbS	29dbR
								P	R	S	T	B	G	H	K
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	-	-	1139	274	254	338	264	221	274	176
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	-	-	812	285	235	420	292	220	402	152
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	-	-	4116	1888	1336	3145	6571	6600	12438	3936
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	-	-	4947	1851	1582	3255	6878	7512	14417	4552
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	-	-	4630	1789	1232	3057	6908	6690	13818	4344
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	-	-	4855	1848	1501	3186	6959	6663	14386	4784
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	-	-	5299	2145	1528	3504	7151	7419	13852	4840
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	-	-	4787	1774	1487	3197	6610	6620	13065	4384
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	-	-	4128	1525	1028	2555	6218	5927	11168	3408

**Table 4.10 Alkane GC/MS - Peak Height Data**

						31abS	31abR	32abS	32abR	33abS	33abR	34abS	34abR	35abS	35abR	31ba
						G1	G2	J1	J2	K1	K2	L1	L2	M1	M2	I
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	1272	7780	301	859	191	184	-	-	-	-	755
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	1390	1293	243	380	-	-	-	-	-	-	176
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	15478	10496	9936	6869	6950	4663	4072	2390	2704	1712	1930
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	17996	12186	11345	7889	7968	5246	4344	2888	2952	1798	2123
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	17096	11829	1104	7377	8288	5688	4252	2584	3592	2080	2006
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	17953	11216	11245	7565	8115	5089	4136	2729	3328	1946	2063
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	18614	12096	11304	7648	8624	5600	4489	2760	3240	1848	2168
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	17568	11136	10730	7296	7776	5051	3895	2631	3016	1812	1954
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	14602	9031	8672	5808	5888	3936	3082	1920	2200	1383	1667

**Table 4.10 Alkane GC/MS - Peak Height Data**

					24/3	27 Ts	27Tm	28ab	29ab	29Ts	30d	29ba	30ab	30ba	
					Q	A	B	Z	C	C,	X	D	E	F	
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	720	235	2044	210	2497	203	-	2064	5192	4441
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	448	288	1195	184	1817	231	-	800	2392	1103
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	3466	7530	5282	9538	15632	6048	3535	1392	38720	3648
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	3960	8624	6236	10631	17664	7232	4074	1842	46784	4074
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	3693	8155	6040	10273	16576	7048	3790	1584	43008	4005
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	3823	8720	6373	11121	16160	7040	3925	1598	44736	4172
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	4346	9409	6694	11382	16992	7696	4008	1642	48896	4444
34/7-29S	NOR	98017-142	MDT GA13	MDT GA13	Oil	3809	8008	6080	9778	15760	6752	3591	1624	42432	3888
34/7-29S	NOR	98017-143	MDT GA14	MDT GA14	Oil	3370	6598	5134	8880	13552	5616	3288	1288	36224	3464

**Table 4.10 Alkane GC/MS - Peak Height Data**

						27db	27aa	29aa	29bb	29bb	29aa	27bb	28bb	29bb
						A	J	Q	R	S	T	B	D	F
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	349	352	120	231	87	436	225	181	224
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	402	184	73	144	124	206	303	179	266
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	9999	5276	3896	6752	5020	6328	11494	6720	10592
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	11375	6008	4671	7573	5906	6541	12806	7568	12096
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	11109	5704	4318	7573	5481	6090	12669	7472	11520
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	11506	5976	4288	7696	5704	6441	12957	7448	11520
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	12107	6558	4659	7776	6072	6414	13641	7600	12885
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	10536	5968	4214	7008	5184	6048	12144	7607	11134
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	9373	4552	3646	6440	4792	5284	9656	6206	9354

**Table 4.11 AROMATIC GC/MS - peak height data**

Well name	Nation	Sample name	Upper depth	Lower depth	Sample type	253 Ion									231 Ion						
						Al(H)	B1	C1	D1	E1	F1	G1	H1(P)	I1(R)	a1	b1	c1	d1	e1	f1	g1
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	591	568	503	622	2209	370	2700	1635	872	1122	765	702	2140	809	1330	627
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	271	206	215	204	738	284	576	934	662	709	463	484	1527	395	930	369
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	2094	1122	963	1150	1700	331	2018	1340	843	8672	9049	5770	18624	10794	9913	8251
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	2791	1426	1102	1480	1947	327	1988	1394	857	9536	10818	6297	17260	11383	10416	8672
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	2820	1468	1538	1993	2441	574	2842	1919	1024	10136	10773	6423	19952	12305	10747	9390
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	4033	2530	2036	2798	3676	672	3692	2564	1669	13003	15984	7806	24204	15265	14043	11839
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	3741	1950	1672	2136	2955	558	3113	2928	2422	14176	13474	8149	22979	14828	14192	11741
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	2376	1245	1271	1671	2137	414	2270	1230	705	7928	8478	4248	14494	8387	8400	6787
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	3364	1783	1962	2282	3038	502	3243	1730	819	10320	11453	6125	18904	11738	10988	8877

**Table 4.11 AROMATIC GC/MS - peak height data**

Well name	Nation	Sample name	Upper depth	Lower depth	Sample type	192 Ion					184 Ion	198 Ion		
						P	3 MP	2 MP	9 MP	1 MP	DBT	4 MDBT	3&2 MDBT	1 MDBT
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	69179	29920	38080	60352	43072	8875	27731	9521	3770
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	19040	8559	10767	12396	9500	2267	4296	1832	1037
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	125696	64000	61696	106624	82304	51968	61440	25568	19116
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	139509	56093	75816	124616	89811	47488	69883	27812	23581
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	113052	66816	74240	103552	77696	51200	57976	26568	21036
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	258816	94464	108928	203776	150272	83456	120184	44437	37273
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	253233	131840	136704	208896	157952	121472	117251	51379	39494
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	142336	53888	67712	110720	80256	51351	68333	25755	21494
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	194798	68992	86272	149248	106752	64256	90999	34767	28930



**Table 4.11 Aromatic GC/MS - Peak Weight Data**

Well name	Nation	Sample name	Upper depth	Lower depth	Sample type	198 Ion			
						DBT	4 MDBT	3&2 MDBT	1 MDBT
34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	8875	27731	9521	3770
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	2267	4296	1832	1037
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	51968	61440	25568	19116
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	47488	69883	27812	23581
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	51200	57976	26568	21036
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	83456	120184	44437	37273
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	121472	117251	51379	39494
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	51351	68333	25755	21494
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	64256	90999	34767	28930

**Table 4.12 Alkane GC/MS - Calculated Ratios from peak heights**

Hop/Ster %TS %ZvsC %HOP35vs34 %HOP32S/S+R %TriHop %DiaSt27

34/7-29S	NOR	98017-56	2210.00	2210.00	Cuttings	43.29	10.31	7.76	ND	25.95	12.18	49.79
34/7-29S	NOR	98017-86	2654.00	2654.00	Cuttings	14.82	19.42	9.20	ND	39.00	15.77	37.78
34/7-29S	NOR	98017-110	2702.95	2702.95	Core	5.10	58.77	37.89	40.59569774	59.13	8.22	31.46
34/7-29S	NOR	98017-115	2706.30	2706.30	Core	5.25	58.03	37.57	39.64279753	58.98	7.80	31.93
34/7-29S	NOR	98017-121	2710.70	2710.70	Core	4.85	57.45	38.26	45.34697793	13.02	7.91	31.05
34/7-29S	NOR	98017-127	2715.60	2715.60	Core	5.21	57.78	40.76	43.44674191	59.78	7.87	31.56
34/7-29S	NOR	98017-131	2720.02	2720.02	Core	5.15	58.43	40.11	41.24179298	59.65	8.16	32.47
34/7-29S	NOR	98017-142	MDT GA131	MDT GA131	Oil	5.13	56.84	38.29	42.52245905	59.53	8.24	32.95
34/7-29S	NOR	98017-143	MDT GA143	MDT GA143	Oil	5.22	56.24	39.59	41.73558532	59.89	8.51	32.04

- Hop/Ster =  $27Ts+27Tm+28ab+29ab+29ba+30ab+30ba+homohopanES/27bbS+28bbS+29bbS$
- %TS =  $100*27Ts/(27Ts+27Tm)$
- %ZvsC =  $100*28ab/(28ab+29ab)$
- %HOP35vs34 =  $100*(35abS+35abR)/(34abS+34abR+35abS+35abR)$
- %Hop32S/S+R =  $100*32abS/(32abS+32abR)$
- %TriHop =  $100*24/3 / (24/3+30ab)$
- %DiaSt27 =  $100*27dbS/(27dbS+27bbS)$