TABLE 7
COMPOSITION (NORMALISED %) OF C_{15+} SATURATE (PARAFFIN – NAPHTHENE) HYDROCARBONS

GEOCHEM SAMPLE NUMBER	004A	006A	009A	010A	013A
DEPTH	4136.6	4148.7	4172.3	4206.6	4247.2
SAMPLE TYPE					
nC15	.63	.60	.55	.47	.36
nC16	.42	.69	.71	1.23	.82
nC17	1.88	1.45	1.26	3.48	1.79
nC18	3.40	3.48	1.75	3.81	2.41
nC19	4.86	4.22	1.47	2.88	2.79
nC20	3.65	4.02	2.50	2.91	2.66
nC21	3.38	3.48	1.58	2.25	2.41
nC22	3.40	3.78	2.15	2.41	3.05
nC23	3.75	3.97	2.61	3.02	3.27
nC24	5.31	5.47	4.09	5.03	4.81
nC25	7.95	8.02	6.92	8.53	7.60
nC26	9.67	9.57	9.98	10.75	9.83
nC27	11.17	10.65	12.27	12.19	11.19
nC28	10.52	9.87	12.82	10.79	10.40
nC29	9.69	9.18	11.80	9.89	10.00
nC30	7.18	6.93	10.48	7.76	8.39
nC31	5.48	5.59	7.23	5.40	6.59
nC32	3.22	3.54	5.37	3.23	4.51
nC33	2.20	2.67	2.39	2.08	2.92
nC34	1.13	1.60	1.45	1.19	2.30
nC35	1.12	1.20	.60	.69	1.91
Paraffin	46.09	36.03	54.29	54.77	41.79
Isoprenoid	1.75	1.11	.89	1.93	1.03
Naphthene	52.16	62.86	44.82	43.30	57.17
CPI 1 Index	1.05	1.03	1.03	1.06	1.04
CPI 2 Index	1.08	1.08	1.01	1.08	1.06
CPI 3 Index	1.11	1.10	1.08	1.13	1.11
Prist/Phytane	.97	.73	.71	1.45	.93
Prist/nC17	1.00	.89	.54	.60	.66
Phytane/nC18	.57	.51	.55	.38	.53

$$\text{C.P.I. } 1 = \frac{1}{2}\left(\frac{C21+C23+C25+C27}{C20+C22+C24+C26} + \frac{C21+C23+C25+C27}{C22+C24+C26+C28}\right)$$

Job Number : 1474

$$\text{C.P.I. } 2 = \frac{1}{2}\left(\frac{C25+C27+C29+C31}{C24+C26+C28+C30} + \frac{C25+C27+C29+C31}{C26+C28+C30+C32}\right)$$

$$\text{C.P.I. } 3 = \frac{2x\ (C27)}{C26+C28}$$

CT – ditch cuttings **CO**– core **SWC** – sidewall core

NBS 22 STANDARD	

TABLE 8
CARBON ISOTOPE COMPOSITIONS ($^{o}/_{oo}$, PDB)

GEOCHEM SAMPLE NUMBER	DEPTH	TOTAL EXTRACT WHOLE OIL	SATURATES	AROMATICS	NSO	ASPHALTENES	KEROGEN	PYROLYSATE S2
34/10-23								
1189-156B	3865-3880		-31.03	-30.22	-30.04	-29.96	-29.11	
1189-159	3910-3925		-30.26	-29.34	-29.18	-28.98	-28.54	
1474-019	3955-3970	-29.23	-29.95	-28.81	-28.56	-28.36		
1474-027	3970-3985						-27.39	-30.88
1474-020	3985-4000							
1474-021	4000-4015						-26.48	-30.39
1474-029	4015-4030							-28.75
1189-166A	4015-4030		-27.86	-26.36	-27.56	-26.39	-26.14	
1474-022	4030-4045							
1474-028	4045-4060						-26.54	-27.03
1474-023	4060-4075	-28.23	-29.54	-27.47	-27.86	-27.06	-26.03	-30.18
1189-001 DTS 1	4085-4095	-28.05	-29.30	-26.05	-27.91	-28.23		
1474-001A	4106.80						-24.65	-25.13
1474-002A	4110.10						-25.89	-25.38
1474-003A	4121.50						-25.17	-25.11
1474-004A	4136.60	-27.11	-28.20	-26.26	-27.26	-27.82		
1474-005A	4143.15						-25.52	-24.94
1474-006A	4148.70	-27.59	-29.30	-26.94	-28.64	-30.88		
1474-007A	4154.60						-25.33	-27.37
1474-008A	4164.10						-25.46	-25.36
1474-009A	4172.25	-26.61	-28.97	-25.90	-26.82	-26.29		
1474-010A	4206.65	-27.22	-27.62	-26.82	-27.73	-26.31		

NBS 22 STANDARD	

TABLE 8
CARBON ISOTOPE COMPOSITIONS ($^{o}/_{oo}$, PDB)

GEOCHEM SAMPLE NUMBER	DEPTH	TOTAL EXTRACT WHOLE OIL	SATURATES	AROMATICS	NSO	ASPHALTENES	KEROGEN	PYROLYSATE S2
1189-181	4212-4225		-29.12	-26.63	-27.44	-26.41	-26.59	
1474-011A	4220.00						-25.36	-25.32
1474-012A	4235.60						-26.15	-25.92
1474-013A	4247.20	-28.87	-28.38	-27.36	-29.41	-27.71		
1474-024	4360-4375						-28.28	-31.82
1474-025	4390-4405						-27.19	-29.39
1474-026	4465-4480	-29.63	-30.07	-28.85	-29.06	-28.62	-27.12	-32.10
1189-196	4480-4495		-29.38	-28.04	-28.65	-27.91	-27.26	

NBS 22 STANDARD	

TABLE 8
CARBON ISOTOPE COMPOSITIONS ($^{o}/_{oo}$, PDB)

GEOCHEM SAMPLE NUMBER	DEPTH	TOTAL EXTRACT WHOLE OIL	SATURATES	AROMATICS	NSO	ASPHALTENES	KEROGEN	PYROLYSATE S2
34/10-21								
972-126	2920-2935m						-28.67	
972-127A	2935-2950m			-28.88				
972-128	2950-2965m						-25.44	
972-131A	2995-3010m		-30.13	-27.83				
972-134A	3040-3055m		-29.25	-27.36				
972-135	3055-3070m						-25.20	
972-139A	3115-3130m		-26.75*	-26.78				
972-142	3160-3175m		-28.46	-27.23				
972-146A	3205-3219m		-27.05	-24.70				
972-150A	3264-3279m		-28.10	-26.36				
972-153A	3399-3414m		-27.38	-25.36			-25.20	
972-169A	3639-3654m		-29.89	-28.59				
972-182A	3834-3849m			-25.79				
972-188A	3924-3939m		-29.30*	-26.50				

* Extremely small sample size, treat data with caution

NBS 22 STANDARD	

TABLE 8
CARBON ISOTOPE COMPOSITIONS ($^{o}/_{oo}$, PDB)

GEOCHEM SAMPLE NUMBER	DEPTH	TOTAL EXTRACT WHOLE OIL	SATURATES	AROMATICS	NSO	ASPHALTENES	KEROGEN	PYROLYSATE S2
34/10-30								
1474-014A	2942.65						-26.36	-25.42
1474-015A	2945.00	-26.22	-27.47	-26.15	-26.66	-25.59	-26.19	-26.23
1474-016A	3178.24						-24.67	-24.51
1474-017A	3178.30						-25.32	-26.60
1474-017B	3178.30	-27.20	-28.65	-26.04	-26.56	-26.06	-24.74	-24.97
1474-018A							-25.26	-24.84

TABLE 9
BIOMARKER MOLECULAR RATIOS

GEOCHEM SAMPLE NUMBER	SAMPLE DEPTH/ IDENTITY	SAMPLE TYPE	STERANES (m/z 217, 218)				TERPANES (m/z 191, 177)					
			$C_{29}\ \frac{\alpha\alpha\alpha\ 20S\ [Q]}{\alpha\alpha\alpha\ 20R\ [T]}$	$C_{29}\ \frac{\alpha\beta\beta\ 20R\ [R]}{\alpha\alpha\alpha\ 20R\ [T]}$	$C_{27}\ \frac{20SDIAST\ [A]}{20RDIAST\ [B]}$	$\frac{C_{27}\ \beta\beta}{C_{29}\ \beta\beta}\ (218)$	$\frac{Tm\ [B]}{Ts\ [A]}$	$\frac{C_{29}\ 17\alpha\text{-NH}\ [C]}{[C] + C_{30}\ 17\alpha\text{-H}\ [E]}$	$\frac{C_{29}\ NM\ [D]}{[D] + NH\ [C]}$	$\frac{28,30\text{-BNH}\ [Z]}{[Z] + C_{29}\ 17\text{-NH}\ [C]}$	$\frac{28,30\text{-BNH}\ [Z]}{[Z] + 25,28,30\text{-TNH}\ (177)}$	$C_{31}\ \frac{20S\ [G]}{[G] + 20R\ [H]}\ \%$
34/10-23												
1474-019	3955-3970m		1.11	0.72	1.61	1.39	0.31	0.26	0.18	0.07		0.40
1474-023	4060-4075m		1.62	1.99	1.57	1.01	0.20	0.25	0.07	0.14		0.26
1474-026	4465-4480m		1.43	2.03	1.54	1.28	0.15	0.26	0.03	0.25		0.55
34/10-30												
1474-015	2945.0m		0.44	0.24	2.00	0.68	10.9	0.41	0.21	0.007		0.63
1474-017	3178.3m		0.85	0.57	1.64	0.78 0.82	5.99	0.47	0.13	0.003		0.59

[A] etc. REFERS TO IDENTIFICATION ON APPROPRIATE MASS FRAGMENTOGRAM **DIAST** – DIASTERANES **H** – HOPANE **NH** – NORHOPANE **BNH** – BISNORHOPANE

CT – ditch cuttings **CO** – core **SWC** – sidewall core **TNH** – TRISNORHOPANE **NM** – NORMORETANE

TABLE 10a

PEAK HEIGHTS - STERANES AND TERPANES

	MZ 217					MZ 218					MZ 191				
	A	B	Q	R	T	A&B	E&F	A	B	C	D	E	Z	G	H
1474-019	120	70	38	33	37	60&42	36&35	41	18	41	8	123	5	47	71
1474-017	59	32	88	61	115	120&83	120&200	14	54	105	24	131	2	58	44
1474-015	20	10	53	30	130	46&15	55&42	8	44	98	32	130	3	66	47
1474-023	116	69	28	50	28	107&77	86&76	72	12	36	4	103	6	43	124
1474-026	117	71	22	43	19	96&68	62&53	60	9	40	2	120	10	42	35

TABLE 10b

PEAK AREAS - STERANES & TERPANES

	MZ 217					MZ 218		MZ 191							
SAMPLE NO	A	B	Q	R	T	A&B	E&F	A	B	C	D	E	Z	G	H
1474-019	413.6	256.1	189.8	123.5	170.8	402.1	289.7	444.8	139.7	436.6	93.7	1267.7	32.6	716.8	619.5
1474-017	539.2	327.7	1201.7	816.0	1718.3	1165.4 109.3	1411.9 1392.3	869.6	5205.2	12911.7	1939.7	14643.8	37.3	5252.6	3688.5
1474-015	459.4	228.1	1592.3	877.8	3632.5	940.7	1380.5	302.9	3305.0	8426.6	2191.3	11966.6	57.8	5008.7	2929
1474-023	640.2	406.9	294.6	361	181.8	738.7	731.6	660.7	131.2	729	55.1	2180.8	116.4	857.5	2487
1474-026	1212	788.9	398	565.2	278.4	1329.3	1039.8	1239	183.6	1009.2	34.3	2889.0	342.6	878.8	726