Geochemical data for the NPRA wells; which includes an HC-Show (Hydrocarbon-Show) Evaluation for:

Husky NPR Operations Inc. South Meade No. 1 from cuttings (5,660'-5,690'; 5,910'-5,940'; and 7,870'-7,910'),
Husky NPR Operations Inc. South Simpson No. 1 from cuttings (6,520'-6,570') and from core (3,030'),
Husky NPR Operations Inc. East Topagoruk No. 1 from core (2,240', and 2,249'), and
Husky NPR Operations Inc. Meade No. 1 from core (2,959'); and

which was also for Source-Rock evaluation for:

Husky NPR Operations Inc. Ikpikpuk No. 1 from cuttings (8,910'-9,760'),
Husky NPR Operations Inc. North Inigok No. 1 from cuttings (9,800'-10,010'),
Husky NPR Operations Inc. Inigok No. 1 from cuttings (11,960'-12,160'), and
Husky NPR Operations Inc. Tunalik No. 1 from cuttings (13,990'-14,250').

Received 30 January 2006

Total of 129 pages in report

Alaska Geologic Materials Center Data Report No. 325

ConocoPhillips

December 13, 2005

The enclosed data transmittal contains one copy of the HC-show evaluation for the following samples:

Well Name,	Well Depth (ft)
S. Meade #1,	5660' - 5690'
S. Meade #1,	5910' – 5940'
S. Meade #1,	7870' – 7910'
S. Simpson #1,	6520' – 6570'
E. Topagoruk #1,	2240'
E. Topagoruk #1,	2249'
S. Simpson #1	3030'
Meade #1,	2959'

The enclosed data transmittal also contains one copy of the source-rock evaluation for the following intervals:

Well Name,	Well Depth (ft)
Ikpikpuk #1,	8910' - 9760'
North Inigok #1,	9800' – 10010'
Inigok #1,	11960' – 12160'
Tunalik #1,	13990' – 14250'

Regards,

Bradley J. Huizinga

CONTENTS

HC-Show Evaluation of Samples from the Northwest NPR-A, Alaska

Sample ID	Well	Top Depth	Bot Depth	Mean_Depth	Units	Sample Type
US132257	S. Meade #1	5660	5690	5675	F	Cuttings
US132258	S. Meade #1	5910	5940	5925	F	Cuttings
US132259	S. Meade #1	7870	7910	7890	F	Cuttings
US132264	S. Simpson #1	6520	6570	6545	F	Cuttings
US134003	E. Topagoruk #1	2240	2240	2240	F	Core
US134004	E. Topagoruk #1	2249	2249	2249	F	Core
US134005	S. Simpson #1	3030	3030	3030	F	Cuttings
US134517	Meade #1	2959	2959	2959	F	Core

BASELINE DGSI
ANALYTICAL LABORATORIES

SOXHLET

Company: CONOCOPHILLIPS **Project #: 03-473-A**

Client ID	Lab ID	Rock Weight (g)	Net Extract Weight (g)	% Extract	EOM (ppm)
US132257	CP218040	11.0212	0.0017	0.02	154
US132258	CP218041	1.9043	0.0010	0.05	525
US132259	CP218042	0.5725	0.0005	0.09	873
US132264	CP218047	7.4827	0.0027	0.04	361
US134003	CP272548	22.8777	0.0052	0.02	227
US134004	CP272549	34.4861	0.0160	0.05	464
US134005	CP272550	0.2661	0.0022	0.83	8268
US134517	CP273047	37.1012	0.0317	0.09	854

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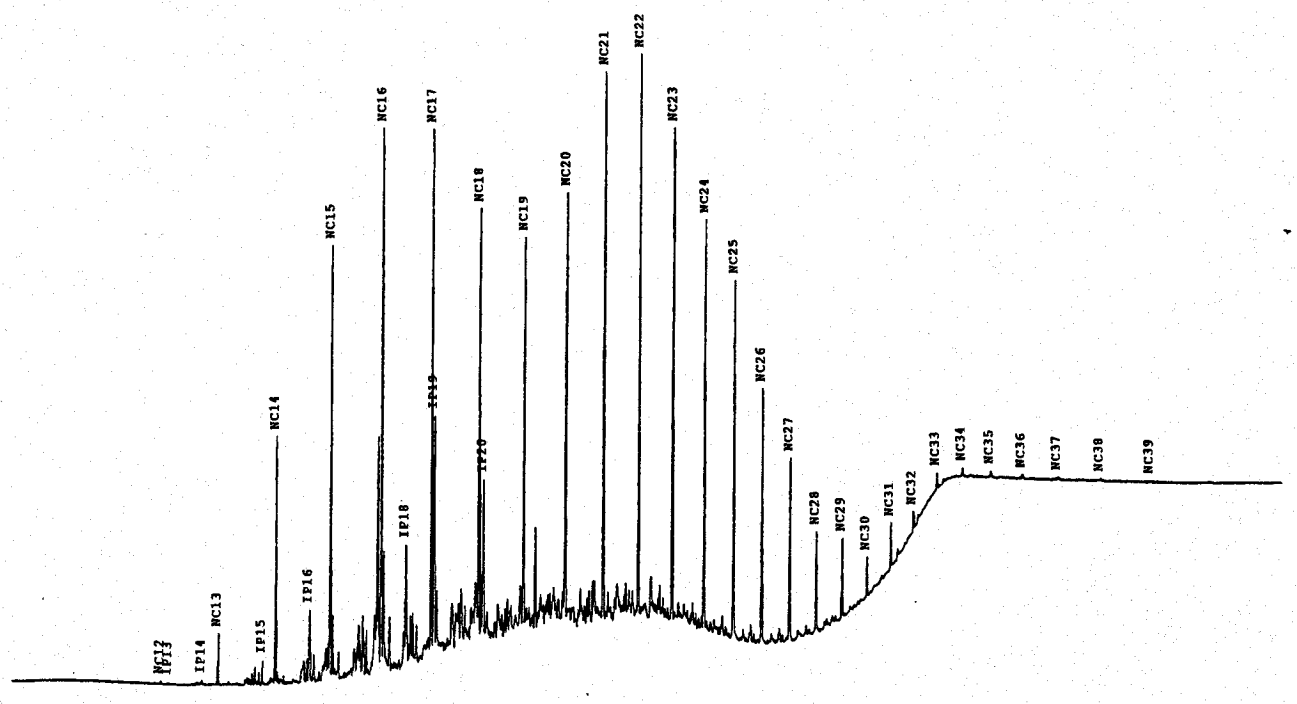
BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132257
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218040
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5660 FT
Longitude:		**Bottom Depth:**	5690 FT

Saturate GC Trace G6030173.D



SGC parameters	
Ratios	
Pristane/Phytane	1.49
Pristane/*n* C_{17}	0.65
Phytane/*n* C_{18}	0.52
n C_{18}/*n* C_{19}	1.14
n C_{17}/*n* C_{29}	6.56
CPI Marzi[4]	1.07

SGC parameters	
Resolved Components (%)	
Normal Paraffins	43.7
Isoprenoids	6.3
Resolved unknowns	50.0

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG:20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**G6030173.D**

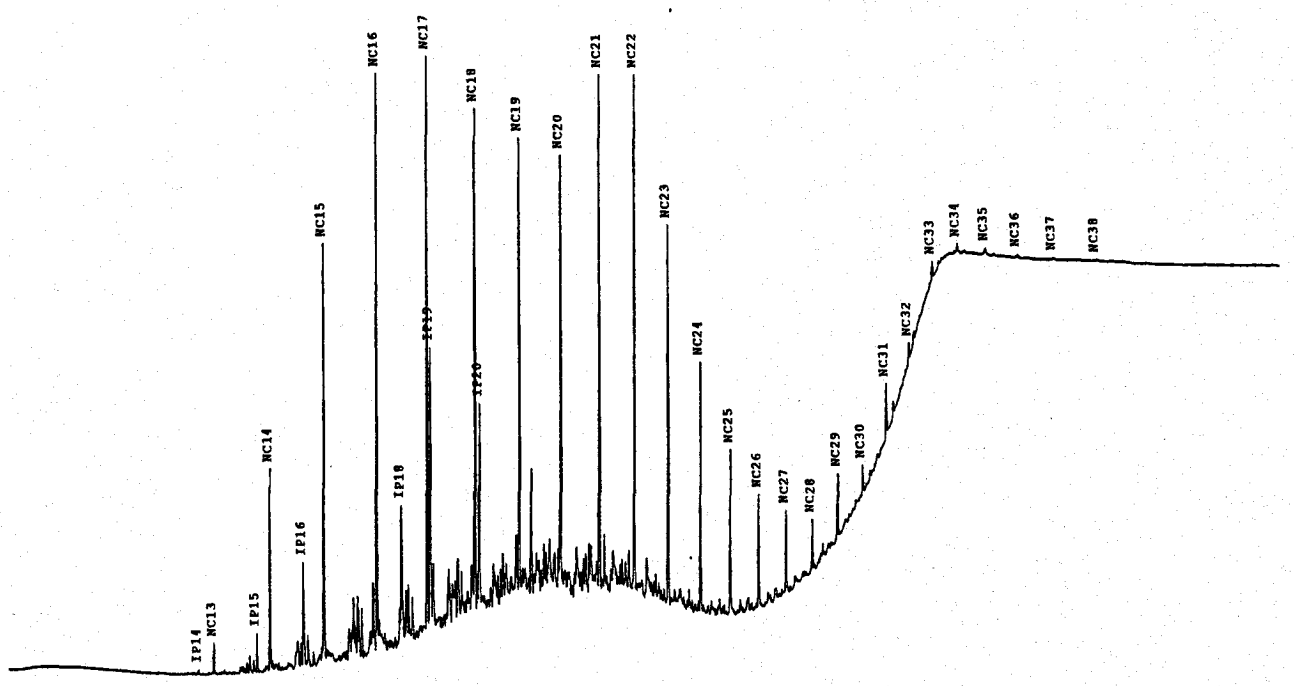
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12	10.050	124	43	0.02	0.03
IP13	Isoprenoid C13	10.422	51	15	0.01	0.01
IP14	Isoprenoid C14	12.001	167	61	0.03	0.04
NC13	Normal Alkane C13	12.730	1687	687	0.34	0.42
IP15	Isoprenoid C15	14.790	796	322	0.16	0.20
NC14	Normal Alkane C14	15.400	8161	3337	1.64	2.05
IP16	Isoprenoid C16	17.027	3593	964	0.72	0.59
NC15	Normal Alkane C15	17.991	15299	5862	3.08	3.59
NC16	Normal Alkane C16	20.477	19718	7321	3.96	4.49
IP18	Isoprenoid C18	21.647	6196	1625	1.25	1.00
NC17	Normal Alkane C17	22.845	18820	7116	3.78	4.36
IP19	Isoprenoid C19 (Pristane)	22.985	12326	3223	2.48	1.98
NC18	Normal Alkane C18	25.105	15834	5854	3.18	3.59
IP20	Isoprenoid C20 (Phytane)	25.322	8247	2174	1.66	1.33
NC19	Normal Alkane C19	27.202	13856	5351	2.79	3.28
NC20	Normal Alkane C20	29.130	15700	5857	3.16	3.59
NC21	Normal Alkane C21	30.920	19067	7417	3.83	4.55
NC22	Normal Alkane C22	32.592	19030	7620	3.83	4.67
NC23	Normal Alkane C23	34.168	16289	6650	3.28	4.08
NC24	Normal Alkane C24	35.663	13889	5524	2.79	3.39
NC25	Normal Alkane C25	37.087	12039	4834	2.42	2.96
NC26	Normal Alkane C26	38.450	8841	3433	1.78	2.10
NC27	Normal Alkane C27	39.758	6476	2465	1.30	1.51
NC28	Normal Alkane C28	41.015	3465	1371	0.70	0.84
NC29	Normal Alkane C29	42.227	2870	1071	0.58	0.66
NC30	Normal Alkane C30	43.399	1377	536	0.28	0.33
NC31	Normal Alkane C31	44.530	1519	605	0.31	0.37
NC32	Normal Alkane C32	45.627	577	239	0.12	0.15
NC33	Normal Alkane C33	46.719	815	232	0.16	0.14
NC34	Normal Alkane C34	47.907	566	128	0.11	0.08
NC35	Normal Alkane C35	49.237	583	95	0.12	0.06
NC36	Normal Alkane C36	50.745	285	63	0.06	0.04
NC37	Normal Alkane C37	52.465	226	41	0.05	0.03
NC38	Normal Alkane C38	54.464	184	29	0.04	0.02
NC39	Normal Alkane C39	56.808	199	25	0.04	0.02
NC40	Normal Alkane C40					

BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132258
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218041
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5910 FT
Longitude:		**Bottom Depth:**	5940 FT

Saturate GC Trace G6030174.D



SGC parameters	
Ratios	
Pristane/Phytane	1.34
Pristane/$n C_{17}$	0.69
Phytane/$n C_{18}$	0.56
$n C_{18}/n C_{19}$	1.20
$n C_{17}/n C_{29}$	8.60
CPI Marzi[4]	1.18

SGC parameters	
Resolved Components (%)	
Normal Paraffins	39.7
Isoprenoids	7.8
Resolved unknowns	52.5

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993;OrgG;20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**G6030174.D**

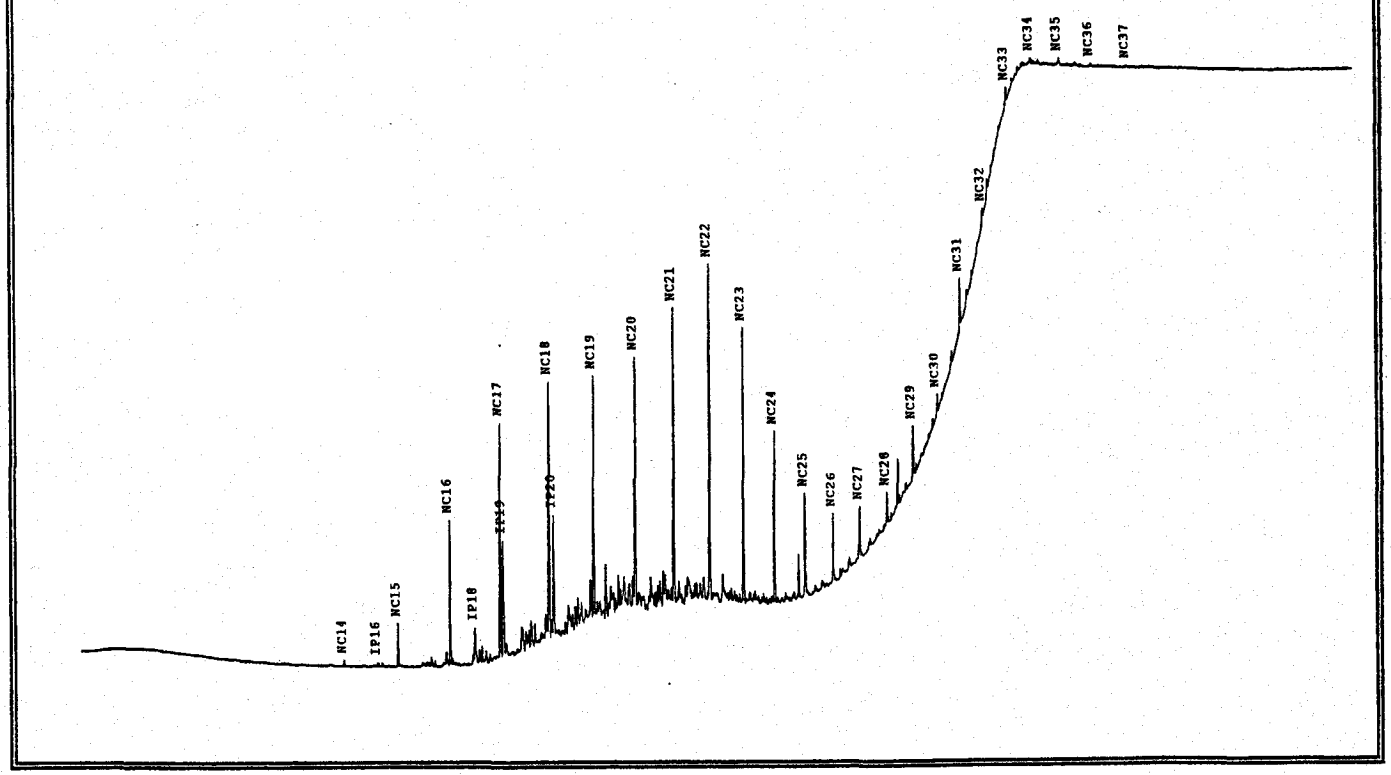
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12					
IP13	Isoprenoid C13					
IP14	Isoprenoid C14					
NC13	Normal Alkane C13	11.985	95	37	0.04	0.05
IP15	Isoprenoid C15	12.714	530	216	0.21	0.27
NC14	Normal Alkane C14	14.774	692	270	0.28	0.34
IP16	Isoprenoid C16	15.384	3454	1386	1.38	1.72
NC15	Normal Alkane C15	17.008	2474	713	0.99	0.89
NC16	Normal Alkane C16	17.972	7506	2891	3.01	3.59
IP18	Isoprenoid C18	20.455	10428	4000	4.18	4.97
NC17	Normal Alkane C17	21.628	3614	959	1.45	1.19
IP19	Isoprenoid C19 (Pristane)	22.823	10502	3956	4.21	4.92
NC18	Normal Alkane C18	22.968	7194	1952	2.88	2.43
IP20	Isoprenoid C20 (Phytane)	25.084	9584	3454	3.84	4.29
NC19	Normal Alkane C19	25.305	5368	1416	2.15	1.76
NC20	Normal Alkane C20	27.184	8016	3149	3.21	3.91
NC21	Normal Alkane C21	29.113	8277	3000	3.32	3.73
NC22	Normal Alkane C22	30.902	9008	3558	3.61	4.42
NC23	Normal Alkane C23	32.575	8922	3560	3.58	4.43
NC24	Normal Alkane C24	34.153	6342	2591	2.54	3.22
NC25	Normal Alkane C25	35.647	4208	1718	1.69	2.14
NC26	Normal Alkane C26	37.071	3152	1133	1.26	1.41
NC27	Normal Alkane C27	38.436	1976	777	0.79	0.97
NC28	Normal Alkane C28	39.746	1513	570	0.61	0.71
NC29	Normal Alkane C29	41.003	969	358	0.39	0.45
NC30	Normal Alkane C30	42.218	1221	448	0.49	0.56
NC31	Normal Alkane C31	43.393	489	197	0.20	0.24
NC32	Normal Alkane C32	44.522	890	353	0.36	0.44
NC33	Normal Alkane C33	45.616	290	118	0.12	0.15
NC34	Normal Alkane C34	46.706	586	157	0.23	0.20
NC35	Normal Alkane C35	47.897	299	73	0.12	0.09
NC36	Normal Alkane C36	49.237	348	55	0.14	0.07
NC37	Normal Alkane C37	50.731	162	31	0.07	0.04
NC38	Normal Alkane C38	52.437	160	21	0.06	0.03
NC39	Normal Alkane C39	54.443	100	17	0.04	0.02
NC40	Normal Alkane C40					

BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132259
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218042
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	7870 FT
Longitude:		**Bottom Depth:**	7910 FT

Saturate GC Trace G6030175.D



SGC parameters	
Ratios	
Pristane/Phytane	0.91
Pristane/n C_{17}	0.68
Phytane/n C_{18}	0.65
n C_{18}/n C_{19}	1.08
n C_{17}/n C_{29}	4.63
CPI Marzi[4]	1.17

SGC parameters	
Resolved Components (%)	
Normal Paraffins	33.0
Isoprenoids	4.8
Resolved unknowns	62.2

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG:20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**G6030175.D**

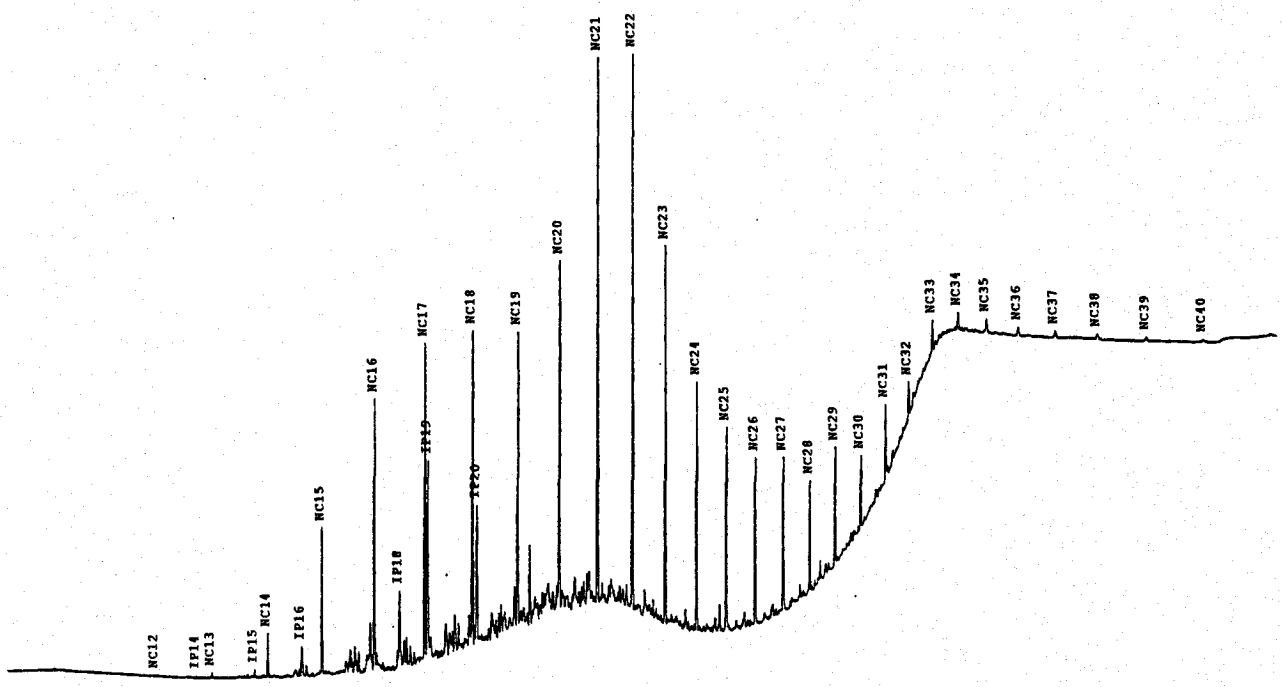
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12					
IP13	Isoprenoid C13					
IP14	Isoprenoid C14					
NC13	Normal Alkane C13					
IP15	Isoprenoid C15					
NC14	Normal Alkane C14	15.377	95	32	0.09	0.10
IP16	Isoprenoid C16	16.997	97	24	0.09	0.07
NC15	Normal Alkane C15	17.968	549	210	0.53	0.65
NC16	Normal Alkane C16	20.450	1825	696	1.77	2.16
IP18	Isoprenoid C18	21.623	677	176	0.66	0.55
NC17	Normal Alkane C17	22.817	2920	1122	2.84	3.48
IP19	Isoprenoid C19 (Pristane)	22.961	1997	559	1.94	1.73
NC18	Normal Alkane C18	25.076	3350	1223	3.26	3.79
IP20	Isoprenoid C20 (Phytane)	25.295	2192	582	2.13	1.80
NC19	Normal Alkane C19	27.178	3093	1169	3.01	3.62
NC20	Normal Alkane C20	29.107	3320	1210	3.23	3.75
NC21	Normal Alkane C21	30.896	3697	1414	3.59	4.38
NC22	Normal Alkane C22	32.570	4012	1602	3.90	4.97
NC23	Normal Alkane C23	34.147	3124	1305	3.04	4.05
NC24	Normal Alkane C24	35.642	2013	819	1.96	2.54
NC25	Normal Alkane C25	37.068	1352	491	1.31	1.52
NC26	Normal Alkane C26	38.433	871	329	0.85	1.02
NC27	Normal Alkane C27	39.740	639	245	0.62	0.76
NC28	Normal Alkane C28	40.999	431	156	0.42	0.48
NC29	Normal Alkane C29	42.212	630	242	0.61	0.75
NC30	Normal Alkane C30	43.385	226	92	0.22	0.29
NC31	Normal Alkane C31	44.518	435	233	0.42	0.72
NC32	Normal Alkane C32	45.614	87	55	0.08	0.17
NC33	Normal Alkane C33	46.704	786	81	0.76	0.25
NC34	Normal Alkane C34	47.889	146	38	0.14	0.12
NC35	Normal Alkane C35	49.214	200	43	0.19	0.13
NC36	Normal Alkane C36	50.733	81	21	0.08	0.07
NC37	Normal Alkane C37	52.439	79	17	0.08	0.05
NC38	Normal Alkane C38					
NC39	Normal Alkane C39					
NC40	Normal Alkane C40					

BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132264
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218047
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH SIMPSON #1	**Geologic Age:**	
Latitude:		**Top Depth:**	6520 FT
Longitude:		**Bottom Depth:**	6570 FT

Saturate GC Trace G6030177.D



SGC parameters	
Ratios	
Pristane/Phytane	1.43
Pristane/*n* C_{17}	0.82
Phytane/*n* C_{18}	0.58
n C_{18}/*n* C_{19}	1.10
n C_{17}/*n* C_{29}	2.86
CPI Marzi[4]	1.15

SGC parameters	
Resolved Components (%)	
Normal Paraffins	44.9
Isoprenoids	6.3
Resolved unknowns	48.8

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG:20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**G6030177.D**

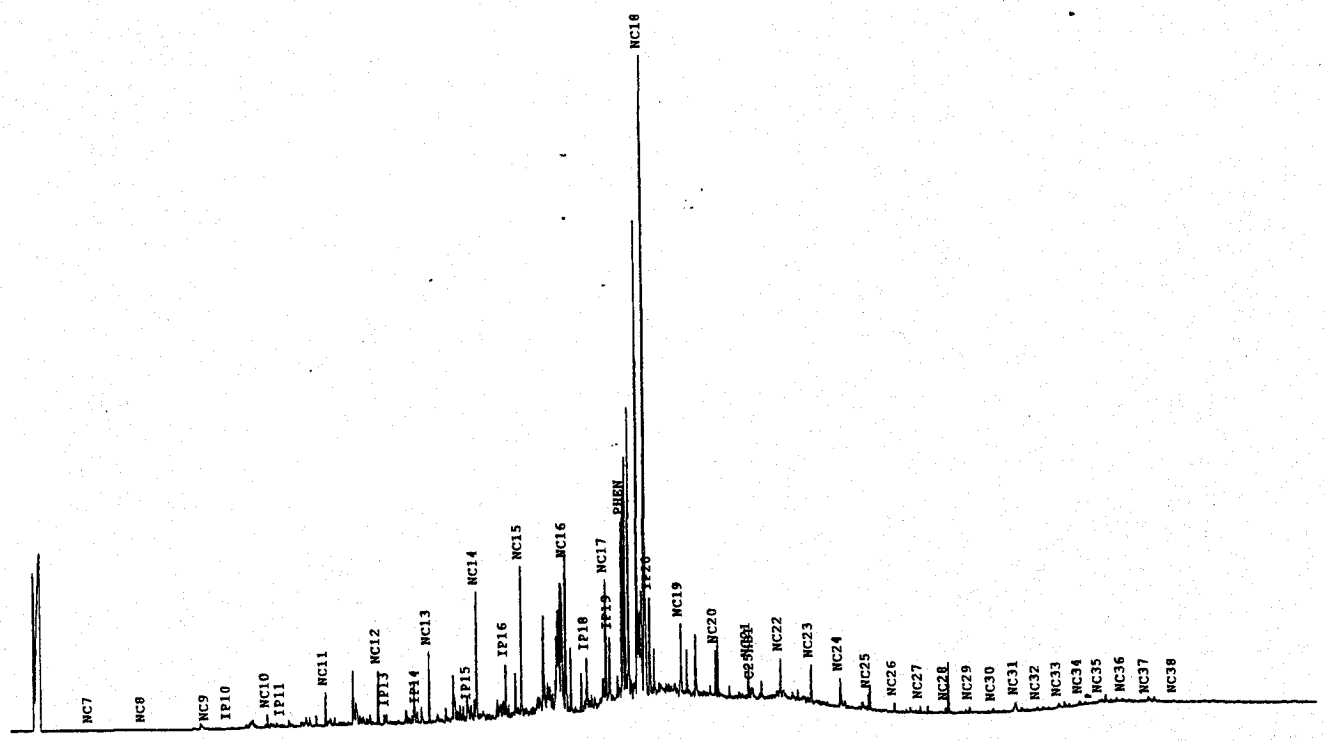
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12	10.033	38	12	0.02	0.02
IP13	Isoprenoid C13					
IP14	Isoprenoid C14	11.977	25	13	0.01	0.02
NC13	Normal Alkane C13	12.702	132	48	0.06	0.07
IP15	Isoprenoid C15	14.758	197	70	0.09	0.10
NC14	Normal Alkane C14	15.371	1017	378	0.46	0.52
IP16	Isoprenoid C16	16.996	968	262	0.43	0.36
NC15	Normal Alkane C15	17.958	3311	1263	1.49	1.73
NC16	Normal Alkane C16	20.441	6089	2315	2.73	3.18
IP18	Isoprenoid C18	21.618	2526	663	1.13	0.91
NC17	Normal Alkane C17	22.810	7311	2701	3.28	3.71
IP19	Isoprenoid C19 (Pristane)	22.955	6017	1696	2.70	2.33
NC18	Normal Alkane C18	25.069	7232	2679	3.24	3.68
IP20	Isoprenoid C20 (Phytane)	25.288	4220	1172	1.89	1.61
NC19	Normal Alkane C19	27.171	6545	2525	2.94	3.47
NC20	Normal Alkane C20	29.102	8114	3000	3.64	4.12
NC21	Normal Alkane C21	30.891	11768	4626	5.28	6.35
NC22	Normal Alkane C22	32.563	11805	4724	5.29	6.49
NC23	Normal Alkane C23	34.140	7874	3195	3.53	4.39
NC24	Normal Alkane C24	35.636	5208	2116	2.34	2.90
NC25	Normal Alkane C25	37.061	4312	1726	1.93	2.37
NC26	Normal Alkane C26	38.425	3511	1415	1.57	1.94
NC27	Normal Alkane C27	39.734	3303	1305	1.48	1.79
NC28	Normal Alkane C28	40.991	2468	942	1.11	1.29
NC29	Normal Alkane C29	42.204	2552	987	1.14	1.35
NC30	Normal Alkane C30	43.378	1517	608	0.68	0.83
NC31	Normal Alkane C31	44.512	1736	630	0.78	0.86
NC32	Normal Alkane C32	45.606	739	301	0.33	0.41
NC33	Normal Alkane C33	46.696	877	301	0.39	0.41
NC34	Normal Alkane C34	47.877	605	163	0.27	0.22
NC35	Normal Alkane C35	49.207	585	127	0.26	0.17
NC36	Normal Alkane C36	50.715	384	80	0.17	0.11
NC37	Normal Alkane C37	52.431	342	63	0.15	0.09
NC38	Normal Alkane C38	54.443	272	49	0.12	0.07
NC39	Normal Alkane C39	56.789	271	41	0.12	0.06
NC40	Normal Alkane C40	59.517	233	29	0.10	0.04

BASELINE DGSI
ANALYTICAL LABORATORIES

WHOLE OIL GC

Company:	CONOCOPHILLIPS	**Client ID:**	US134003
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:		**Lab ID:**	CP272548
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	EAST TOPAGORUK-1	**Geologic Age:**	
Latitude:		**Top Depth:**	2240 FT
Longitude:		**Bottom Depth:**	FT

Whole Oil GC Trace G2040228.D



WGC parameters	
Pristane/Phytane	0.83
Pristane/$n C_{17}$	0.78
Phytane/$n C_{18}$	0.13
$n C_{18}/n C_{19}$	13.05
$n C_{17}/n C_{29}$	21.18
CPI Marzi[4]	0.92
Normal Paraffins	20.4
Isoprenoids	4.5
Cycloparaffins	
Branched (iso-) Paraffins	
BTX aromatics	
Resolved unknowns	73.1

Thompson[1]	
A. BZ/$n C_6$	
B. TOL/$n C_7$	
C. $(n C_6+n C_7)/(CH+MCH)$	
I. Isoheptane Value	
F. $n C_7$/MCH	
U. CH/MCP	
R. $n C_7$/2MH	
S. $n C_6$/22DMB	
H. Heptane Value	100.00
MCH/$n C_7$	
mpXYL/$n C_8$	

Mango[2]	
P_1	100.00
P_2	
P_3	
$5N_1$	
N_2	
$6N_1$	
K_1	
K_2	
$5N_1/6N_1$	
P_3/N_2	
ln(24DMP/23DMP)	

Halpern[3]
Tr_1
Tr_2
Tr_3
Tr_4
Tr_5
Tr_7
Tr_8
C_1
C_2
C_3
C_4
C_5

[1]Thompson, K.F.M.,1983,GCA:V.47, p.303. [2]Mango, F.D.,1994,GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG:20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134003**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2240 - FT**	**Lab ID:**	**CP272548**
Sampling Point:		**File Name:**	**G2040228.D**

Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
IC4	Iso-alkane C4					
NC4	Normal Alkane C4					
IC5	Iso-alkane C5					
NC5	Normal Alkane C5					
22DMB	2,2-Dimethylbutane					
CP	Cyclopentane					
23DMB	2,3-Dimethylbutane					
2MP	2-Methylpentane					
3MP	3-Methylpentane					
NC6	Normal Alkane C6					
22DMP	2,2-Dimethylpentane					
MCP	Methylcyclopentane					
24DMP	2,4-Dimethylpentane					
223TMB	2,2,3-Trimethylbutane					
BZ	Benzene					
33DMP	3,3-Dimethylpentane					
CH	Cyclohexane					
2MH	2-Methylhexane					
23DMP	2,3-Dimethylpentane					
11DMCP	1,1-Dimethylcyclopentane					
3MH	3-Methylhexane					
1C3DMCP	1-cis-3-Dimethylcyclopentane					
1T3DMCP	1-trans-3-Dimethylcyclopentane					
3EP	3-Ethylpentane					
1T2DMCP	1-trans-2-Dimethylcyclopentane					
NC7	Normal Alkane C7	10.174	66	22		
ISTD	Internal Standard					
MCH	Methylcyclohexane					
113TMCP	1,1,3,-Trimethylcyclopentane					
ECP	Ethylcyclopentane					
124TMCP	1,2,4-Trimethylcyclopentane					
123TMCP	1,2,3-Trimethylcyclopentane					
TOL	Toluene					
NC8	Normal Alkane C8	15.063	185	29		
IP9	Isoprenoid C9					
MXYL	m-Xylene					
PXYL	p-Xylene					
OXYL	o-Xylene					
NC9	Normal Alkane C9	20.970	1105	219		
IP10	Isoprenoid C10	22.967	1191	185		
NC10	Normal Alkane C10	26.526	6760	2140		
IP11	Isoprenoid C11	27.819	1934	533		
NC11	Normal Alkane C11	31.759	16658	5554		
NC12	Normal Alkane C12	36.661	26851	8921		
IP13	Isoprenoid C13	37.396	7093	1695		
IP14	Isoprenoid C14	40.142	7712	1986		
NC13	Normal Alkane C13	41.253	36501	11794		
IP15	Isoprenoid C15	44.625	9198	2227		
NC14	Normal Alkane C14	45.578	71647	21359		
IP16	Isoprenoid C16	48.222	37812	8882		
NC15	Normal Alkane C15	49.647	86112	24908		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134003**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2240 - FT**	**Lab ID:**	**CP272548**
Sampling Point:		**File Name:**	**G2040228.D**

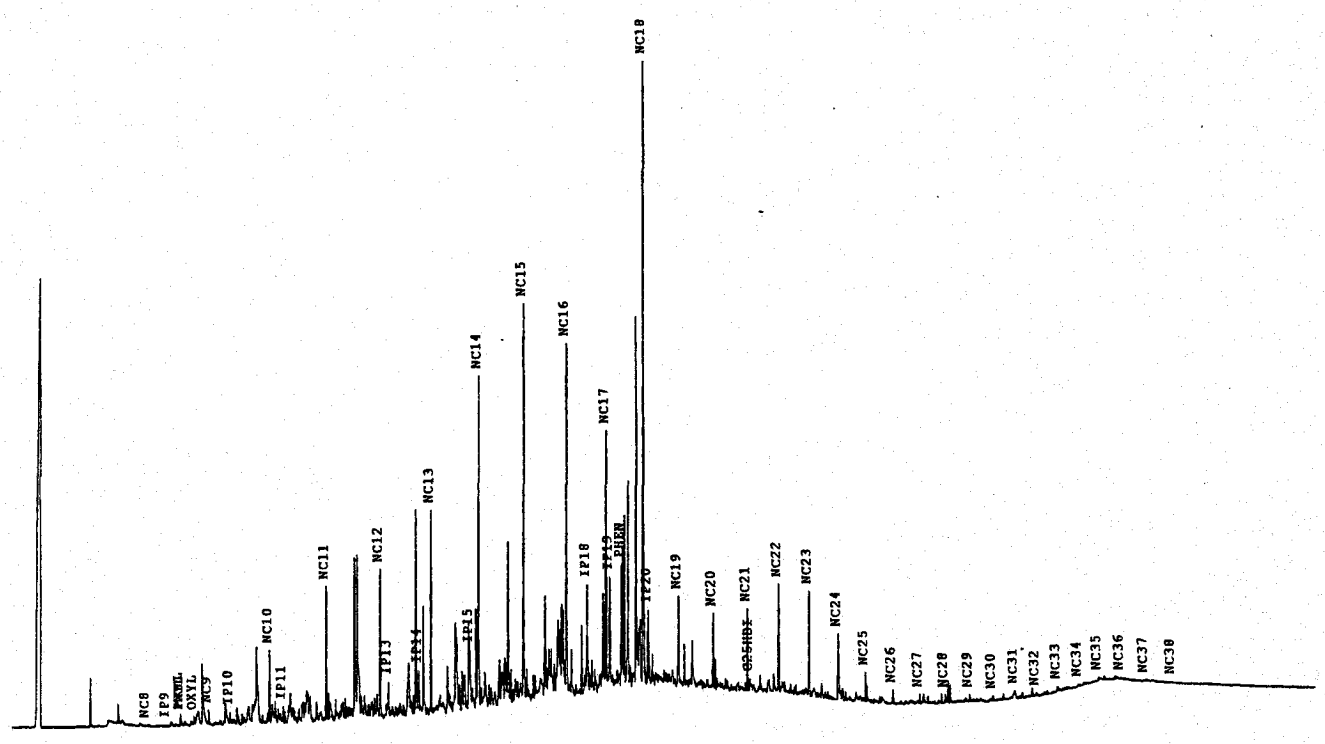
Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
NC16	Normal Alkane C16	53.520	69660	24638		
IP18	Isoprenoid C18	55.421	45563	8715		
NC17	Normal Alkane C17	57.147	79465	20976		
IP19	Isoprenoid C19 (Pristane)	57.501	61591	11324		
PHEN	Phenanthrene	58.599	119033	29836		
NC18	Normal Alkane C18	60.681	564600	105866		
IP20	Isoprenoid C20 (Phytane)	61.110	74360	16325		
NC19	Normal Alkane C19	63.910	43260	11957		
NC20	Normal Alkane C20	67.045	31445	7883		
NC21	Normal Alkane C21	70.050	21685	5857		
C25HBI	Highly Branch Isoprenoid C25	70.300	13125	2152		
NC22	Normal Alkane C22	72.925	25941	6775		
NC23	Normal Alkane C23	75.681	22967	6373		
NC24	Normal Alkane C24	78.322	19400	4799		
NC25	Normal Alkane C25	80.862	8931	2479		
NC26	Normal Alkane C26	83.308	6145	1537		
NC27	Normal Alkane C27	85.664	4581	1136		
NC28	Normal Alkane C28	87.945	3552	902		
NC29	Normal Alkane C29	90.141	3752	961		
NC30	Normal Alkane C30	92.270	2763	633		
NC31	Normal Alkane C31	94.320	9613	1463		
NC32	Normal Alkane C32	96.318	2393	495		
NC33	Normal Alkane C33	98.261	4102	686		
NC34	Normal Alkane C34	100.188	4323	667		
NC35	Normal Alkane C35	101.976	3027	445		
NC36	Normal Alkane C36	103.951	5595	450		
NC37	Normal Alkane C37	106.023	1254	207		
NC38	Normal Alkane C38	108.632	1847	218		
NC39	Normal Alkane C39					
NC40	Normal Alkane C40					
NC41	Normal Alkane C41					

BASELINE DGSI
ANALYTICAL LABORATORIES

WHOLE OIL GC

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:		**Lab ID:**	CP272549
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	EAST TOPAGORUK-1	**Geologic Age:**	
Latitude:		**Top Depth:**	2249 FT
Longitude:		**Bottom Depth:**	FT

Whole Oil GC Trace G2040226.D



WGC parameters	
Pristane/Phytane	1.62
Pristane/$n C_{17}$	0.69
Phytane/$n C_{18}$	0.15
$n C_{18}/n C_{19}$	7.48
$n C_{17}/n C_{29}$	27.59
CPI Marzi[4]	0.91
Normal Paraffins	20.5
Isoprenoids	4.1
Cycloparaffins	
Branched (iso-) Paraffins	
BTX aromatics	0.1
Resolved unknowns	74.3

Thompson[1]	
A. BZ/$n C_6$	
B. TOL/$n C_7$	
C. $(n C_6+n C_7)/(CH+MCH)$	
I. Isoheptane Value	
F. $n C_7$/MCH	
U. CH/MCP	
R. $n C_7$/2MH	
S. $n C_6$/22DMB	
H. Heptane Value	
MCH/$n C_7$	
mpXYL/$n C_8$	7.52

Mango[2]	
P_1	
P_2	
P_3	
$5N_1$	
N_2	
$6N_1$	
K_1	
K_2	
$5N_1/6N_1$	
P_3/N_2	
ln(24DMP/23DMP)	

Halpern[3]	
Tr_1	
Tr_2	
Tr_3	
Tr_4	
Tr_5	
Tr_7	
Tr_8	
C_1	
C_2	
C_3	
C_4	
C_5	

GMC DATA REPORT 3 2 5

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG;20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**G2040226.D**

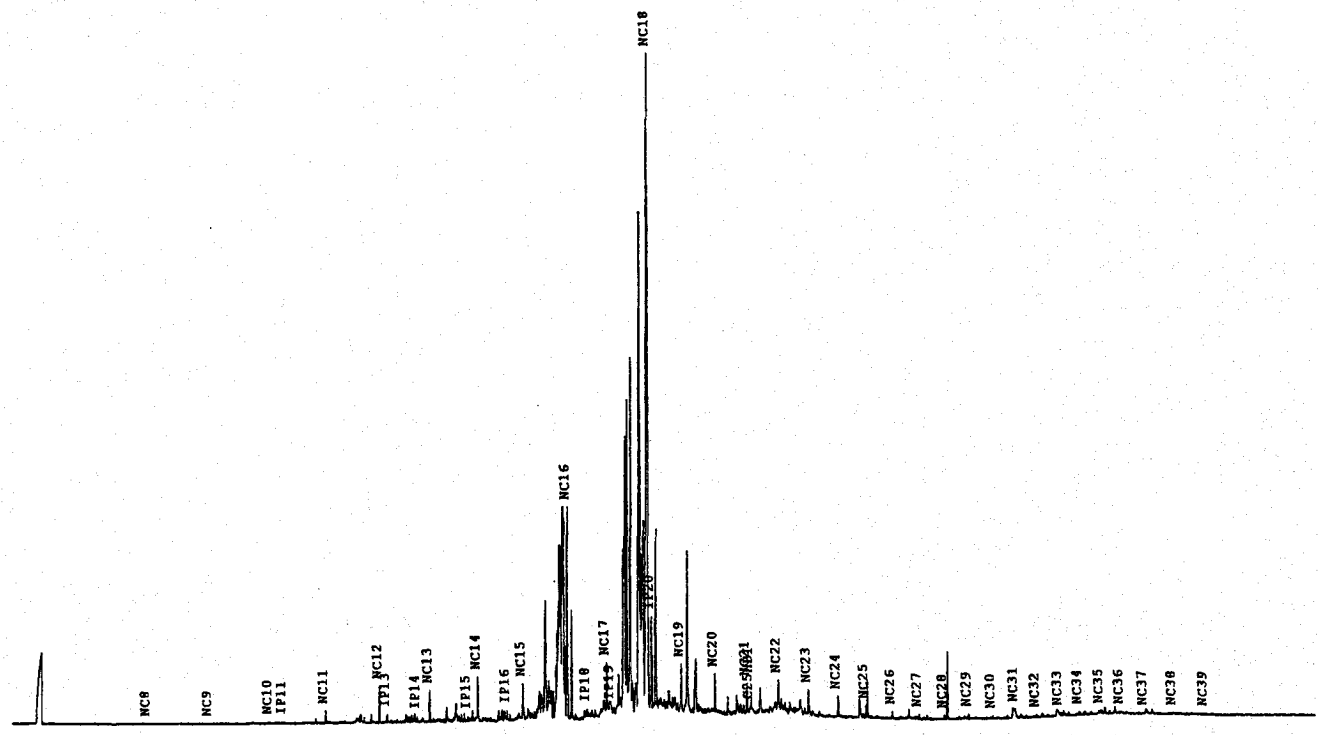
Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
IC4	Iso-alkane C4					
NC4	Normal Alkane C4					
IC5	Iso-alkane C5					
NC5	Normal Alkane C5					
22DMB	2,2-Dimethylbutane					
CP	Cyclopentane					
23DMB	2,3-Dimethylbutane					
2MP	2-Methylpentane					
3MP	3-Methylpentane					
NC6	Normal Alkane C6					
22DMP	2,2-Dimethylpentane					
MCP	Methylcyclopentane					
24DMP	2,4-Dimethylpentane					
223TMB	2,2,3-Trimethylbutane					
BZ	Benzene					
33DMP	3,3-Dimethylpentane					
CH	Cyclohexane					
2MH	2-Methylhexane					
23DMP	2,3-Dimethylpentane					
11DMCP	1,1-Dimethylcyclopentane					
3MH	3-Methylhexane					
1C3DMCP	1-cis-3-Dimethylcyclopentane					
1T3DMCP	1-trans-3-Dimethylcyclopentane					
3EP	3-Ethylpentane					
1T2DMCP	1-trans-2-Dimethylcyclopentane					
NC7	Normal Alkane C7					
ISTD	Internal Standard					
MCH	Methylcyclohexane					
113TMCP	1,1,3,-Trimethylcyclopentane					
ECP	Ethylcyclopentane					
124TMCP	1,2,4-Trimethylcyclopentane					
123TMCP	1,2,3-Trimethylcyclopentane					
TOL	Toluene					
NC8	Normal Alkane C8	15.235	459	93		
IP9	Isoprenoid C9	17.084	207	62		
MXYL	m-Xylene	18.325	2373	723		
PXYL	p-Xylene	18.392	1078	333		
OXYL	o-Xylene	19.571	2456	535		
NC9	Normal Alkane C9	20.940	3346	984		
IP10	Isoprenoid C10	22.917	4104	798		
NC10	Normal Alkane C10	26.513	13704	4613		
IP11	Isoprenoid C11	27.809	3364	1021		
NC11	Normal Alkane C11	31.752	26246	8470		
NC12	Normal Alkane C12	36.656	28376	9293		
IP13	Isoprenoid C13	37.393	9230	2235		
IP14	Isoprenoid C14	40.141	10224	2827		
NC13	Normal Alkane C13	41.251	39945	12759		
IP15	Isoprenoid C15	44.615	14407	3742		
NC14	Normal Alkane C14	45.575	69371	20821		
IP16	Isoprenoid C16					
NC15	Normal Alkane C15	49.647	83477	24848		

BASELINE DGSI
ANALYTICAL LABORATORIES

WHOLE OIL GC

Company:	CONOCOPHILLIPS	**Client ID:**	US134005
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:		**Lab ID:**	CP272550
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	S. SIMPSON-1	**Geologic Age:**	
Latitude:		**Top Depth:**	3030 FT
Longitude:		**Bottom Depth:**	FT

Whole Oil GC Trace G2040229.D



WGC parameters
Pristane/Phytane
Pristane/n C_{17}
Phytane/n C_{18}
n C_{18}/n C_{19}
n C_{17}/n C_{29}
CPI Marzi[4]
Normal Paraffins
Isoprenoids
Cycloparaffins
Branched (iso-) Paraffins
BTX aromatics
Resolved unknowns

Thompson[1]	
A.	BZ/n C_6
B.	TOL/n C_7
C.	(n C_6+n C_7)/(CH+MCH)
I.	Isoheptane Value
F.	n C_7/MCH
U.	CH/MCP
R.	n C_7/2MH
S.	n C_6/22DMB
H.	Heptane Value
	MCH/n C_7
	mpXYL/n C_8

Mango[2]
P_1
P_2
P_3
$5N_1$
N_2
$6N_1$
K_1
K_2
$5N_1/6N_1$
P_3/N_2
In(24DMP/23DMP)

Halpern[3]
Tr_1
Tr_2
Tr_3
Tr_4
Tr_5
Tr_7
Tr_8
C_1
C_2
C_3
C_4
C_5

[1]Thompson, K.F.M.,1983,GCA:V.47, p.303. [2]Mango, F.D.,1994,GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG;20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134005**
Well Name:	**S. SIMPSON-1**	**Project #:**	**04-180-A**
Depth:	**3030 - FT**	**Lab ID:**	**CP272550**
Sampling Point:		**File Name:**	**G2040229.D**

Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
IC4	Iso-alkane C4					
NC4	Normal Alkane C4					
IC5	Iso-alkane C5					
NC5	Normal Alkane C5					
22DMB	2,2-Dimethylbutane					
CP	Cyclopentane					
23DMB	2,3-Dimethylbutane					
2MP	2-Methylpentane					
3MP	3-Methylpentane					
NC6	Normal Alkane C6					
22DMP	2,2-Dimethylpentane					
MCP	Methylcyclopentane					
24DMP	2,4-Dimethylpentane					
223TMB	2,2,3-Trimethylbutane					
BZ	Benzene					
33DMP	3,3-Dimethylpentane					
CH	Cyclohexane					
2MH	2-Methylhexane					
23DMP	2,3-Dimethylpentane					
11DMCP	1,1-Dimethylcyclopentane					
3MH	3-Methylhexane					
1C3DMCP	1-cis-3-Dimethylcyclopentane					
1T3DMCP	1-trans-3-Dimethylcyclopentane					
3EP	3-Ethylpentane					
1T2DMCP	1-trans-2-Dimethylcyclopentane					
NC7	Normal Alkane C7					
ISTD	Internal Standard					
MCH	Methylcyclohexane					
113TMCP	1,1,3,-Trimethylcyclopentane					
ECP	Ethylcyclopentane					
124TMCP	1,2,4-Trimethylcyclopentane					
123TMCP	1,2,3-Trimethylcyclopentane					
TOL	Toluene					
NC8	Normal Alkane C8	15.295	125	25		
IP9	Isoprenoid C9					
MXYL	m-Xylene					
PXYL	p-Xylene					
OXYL	o-Xylene					
NC9	Normal Alkane C9					
IP10	Isoprenoid C10					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12					
IP13	Isoprenoid C13					
IP14	Isoprenoid C14					
NC13	Normal Alkane C13					
IP15	Isoprenoid C15					
NC14	Normal Alkane C14					
IP16	Isoprenoid C16					
NC15	Normal Alkane C15					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134005**
Well Name:	**S. SIMPSON-1**	**Project #:**	**04-180-A**
Depth:	**3030 - FT**	**Lab ID:**	**CP272550**
Sampling Point:		**File Name:**	**G2040229.D**

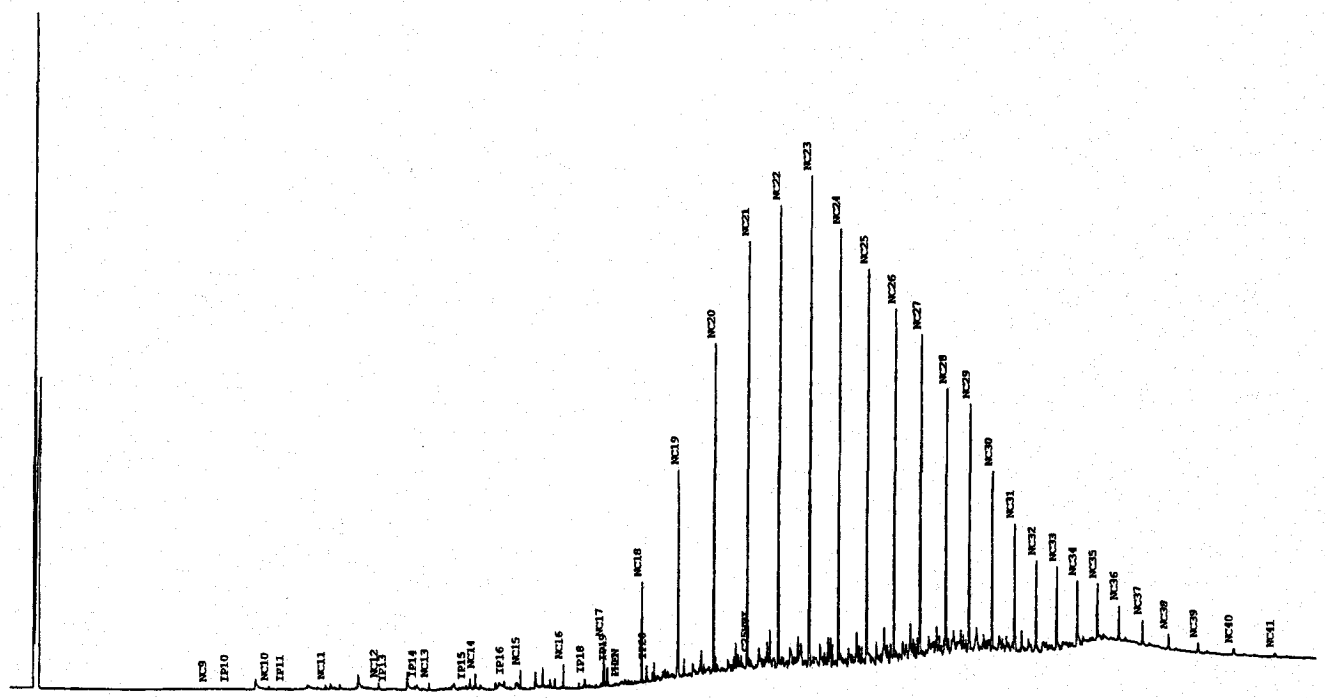
Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
NC16	Normal Alkane C16					
IP18	Isoprenoid C18					
NC17	Normal Alkane C17					
IP19	Isoprenoid C19 (Pristane)					
PHEN	Phenanthrene					
NC18	Normal Alkane C18					
IP20	Isoprenoid C20 (Phytane)					
NC19	Normal Alkane C19					
NC20	Normal Alkane C20					
NC21	Normal Alkane C21					
C25HBI	Highly Branch Isoprenoid C25					
NC22	Normal Alkane C22					
NC23	Normal Alkane C23					
NC24	Normal Alkane C24					
NC25	Normal Alkane C25					
NC26	Normal Alkane C26					
NC27	Normal Alkane C27					
NC28	Normal Alkane C28					
NC29	Normal Alkane C29					
NC30	Normal Alkane C30					
NC31	Normal Alkane C31					
NC32	Normal Alkane C32					
NC33	Normal Alkane C33					
NC34	Normal Alkane C34					
NC35	Normal Alkane C35					
NC36	Normal Alkane C36					
NC37	Normal Alkane C37					
NC38	Normal Alkane C38					
NC39	Normal Alkane C39					
NC40	Normal Alkane C40					
NC41	Normal Alkane C41					

BASELINE DGSI
ANALYTICAL LABORATORIES

WHOLE OIL GC

Company:	CONOCOPHILLIPS	**Client ID:**	US134517
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:	NORTH SLOPE	**Lab ID:**	CP273047
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	MEADE 1	**Geologic Age:**	
Latitude:		**Top Depth:**	2959 FT
Longitude:		**Bottom Depth:**	FT

Whole Oil GC Trace G2040343.D



WGC parameters	
Pristane/Phytane	0.90
Pristane/$n C_{17}$	0.69
Phytane/$n C_{18}$	0.34
$n C_{18}/n C_{19}$	0.49
$n C_{17}/n C_{29}$	0.15
CPI Marzi[4]	1.06
Normal Paraffins	49.9
Isoprenoids	1.2
Cycloparaffins	
Branched (iso-) Paraffins	
BTX aromatics	
Resolved unknowns	48.9

Thompson[1]	
A.	BZ/$n C_6$
B.	TOL/$n C_7$
C.	($n C_6$+$n C_7$)/(CH+MCH)
I.	Isoheptane Value
F.	$n C_7$/MCH
U.	CH/MCP
R.	$n C_7$/2MH
S.	$n C_6$/22DMB
H.	Heptane Value
	MCH/$n C_7$
	mpXYL/$n C_8$

Mango[2]	
P_1	
P_2	
P_3	
$5N_1$	
N_2	
$6N_1$	
K_1	
K_2	
$5N_1/6N_1$	
P_3/N_2	
ln(24DMP/23DMP)	

Halpern[3]	
Tr_1	
Tr_2	
Tr_3	
Tr_4	
Tr_5	
Tr_7	
Tr_8	
C_1	
C_2	
C_3	
C_4	
C_5	

[1]Thompson, K.F.M.,1983.GCA:V.47, p.303. [2]Mango, F.D.,1994.GCA: V.58, p.895. [3]Halpern,H.I.,1995,AAPG Bull.: V.79, p.801. [4]Marzi,1993,OrgG:20,1301.

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**G2040343.D**

Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
IC4	Iso-alkane C4					
NC4	Normal Alkane C4					
IC5	Iso-alkane C5					
NC5	Normal Alkane C5					
22DMB	2,2-Dimethylbutane					
CP	Cyclopentane					
23DMB	2,3-Dimethylbutane					
2MP	2-Methylpentane					
3MP	3-Methylpentane					
NC6	Normal Alkane C6					
22DMP	2,2-Dimethylpentane					
MCP	Methylcyclopentane					
24DMP	2,4-Dimethylpentane					
223TMB	2,2,3-Trimethylbutane					
BZ	Benzene					
33DMP	3,3-Dimethylpentane					
CH	Cyclohexane					
2MH	2-Methylhexane					
23DMP	2,3-Dimethylpentane					
11DMCP	1,1-Dimethylcyclopentane					
3MH	3-Methylhexane					
1C3DMCP	1-cis-3-Dimethylcyclopentane					
1T3DMCP	1-trans-3-Dimethylcyclopentane					
3EP	3-Ethylpentane					
1T2DMCP	1-trans-2-Dimethylcyclopentane					
NC7	Normal Alkane C7					
ISTD	Internal Standard					
MCH	Methylcyclohexane					
113TMCP	1,1,3,-Trimethylcyclopentane					
ECP	Ethylcyclopentane					
124TMCP	1,2,4-Trimethylcyclopentane					
123TMCP	1,2,3-Trimethylcyclopentane					
TOL	Toluene					
NC8	Normal Alkane C8					
IP9	Isoprenoid C9					
MXYL	m-Xylene					
PXYL	p-Xylene					
OXYL	o-Xylene					
NC9	Normal Alkane C9	20.882	576	85		
IP10	Isoprenoid C10	22.822	190	34		
NC10	Normal Alkane C10	26.436	676	174		
IP11	Isoprenoid C11	27.878	283	72		
NC11	Normal Alkane C11	31.661	1226	314		
NC12	Normal Alkane C12	36.551	1940	468		
IP13	Isoprenoid C13	37.291	290	71		
IP14	Isoprenoid C14	40.035	2579	420		
NC13	Normal Alkane C13	41.134	2059	546		
IP15	Isoprenoid C15	44.553	1286	296		
NC14	Normal Alkane C14	45.440	4575	1176		
IP16	Isoprenoid C16	48.083	3443	618		
NC15	Normal Alkane C15	49.499	5282	1390		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**G2040343.D**

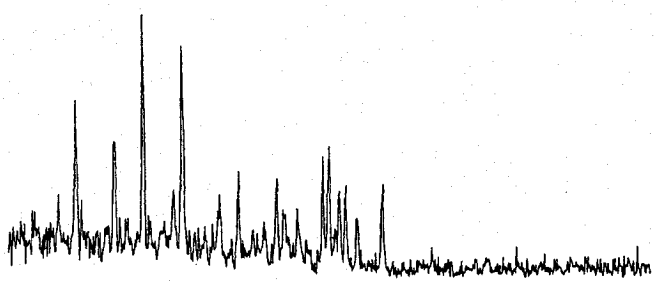
Peak Label	Compound Name	Ret. Time	Area	Height	ppt (Area)	ppt (Hght)
NC16	Normal Alkane C16	53.343	6153	1799		
IP18	Isoprenoid C18	55.271	3600	666		
NC17	Normal Alkane C17	56.983	11242	3417		
IP19	Isoprenoid C19 (Pristane)	57.330	7752	1442		
PHEN	Phenanthrene	58.452	566	191		
NC18	Normal Alkane C18	60.449	25228	7664		
IP20	Isoprenoid C20 (Phytane)	60.903	8593	1287		
NC19	Normal Alkane C19	63.755	51645	15780		
NC20	Normal Alkane C20	66.910	84795	24883		
NC21	Normal Alkane C21	69.925	113946	32268		
C25HBI	Highly Branch Isoprenoid C25	70.149	5367	912		
NC22	Normal Alkane C22	72.809	129408	34804		
NC23	Normal Alkane C23	75.566	136456	36989		
NC24	Normal Alkane C24	78.212	121710	32908		
NC25	Normal Alkane C25	80.755	115294	29864		
NC26	Normal Alkane C26	83.200	99813	26615		
NC27	Normal Alkane C27	85.558	95287	24468		
NC28	Normal Alkane C28	87.834	77593	20122		
NC29	Normal Alkane C29	90.030	74125	18773		
NC30	Normal Alkane C30	92.151	51864	13556		
NC31	Normal Alkane C31	94.207	38596	9699		
NC32	Normal Alkane C32	96.197	26867	6912		
NC33	Normal Alkane C33	98.131	27821	6359		
NC34	Normal Alkane C34	100.006	20821	4934		
NC35	Normal Alkane C35	101.829	17432	4290		
NC36	Normal Alkane C36	103.728	12865	2656		
NC37	Normal Alkane C37	105.841	10106	1929		
NC38	Normal Alkane C38	108.232	6958	1184		
NC39	Normal Alkane C39	110.961	5267	743		
NC40	Normal Alkane C40	114.136	4634	515		
NC41	Normal Alkane C41	117.797	2962	311		

BASELINE DGSI ANALYTICAL LABORATORIES

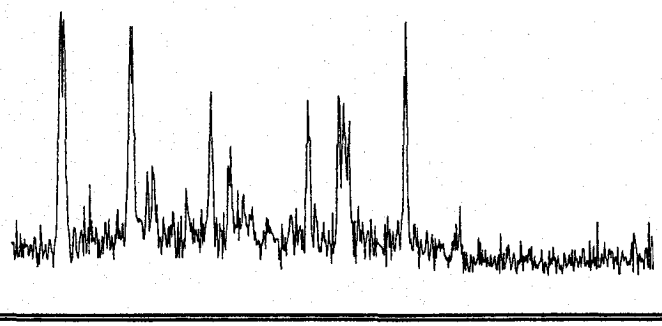
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218040
Basin:		**Client ID:**	US132257
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5660 FT
Longitude:		**Bottom Depth:**	5690 FT

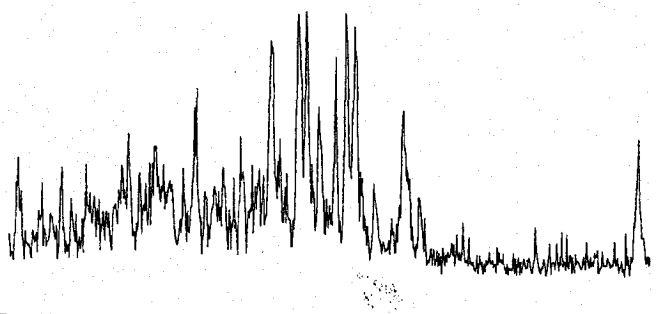
358->217: C26 Steranes MS030439.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	36.0	D	
%28 Steranes	25.5	D	
%29 Steranes	38.5	D	
%27 Diasteranes	42.4	D	
%28 Diasteranes	28.4	D	
%29 Diasteranes	29.3	D	
C30 Sterane Index	0.04	D	
C30 Iso/n-propyl sterane index		A	
C27 αββ/(ααα+αββ)	0.43	M	
C28 αββ/(ααα+αββ)	0.53	M	
C29 αββ/(ααα+αββ)	0.49	M	
C30 αββ/(ααα+αββ)	0.43	M	
C27 S/(S+R)	0.47	M	
C28 S/(S+R)	0.36	M	
C29 S/(S+R)	0.40	M	
C30 S/(S+R)	0.41	M	
Diasteranes/Steranes	1.10		
24-Nordiacholestane ratio (NDR)	0.38	A	
24-Norcholestane ratio (NCR)	0.54	A	
21-Norcholestane ratio	0.16	D/M	
Dinosterane ratio	0.54	A	
4-Methyl sterane ratio	0.08	A	
Terpane Ratios			
Oleanane Index (%)	11.7	A	
DesA Oleanane Index (%)	49.4	A	
Gammacerane Index (%)	4.5	D	
Bicadinane Index (%)		A/D	
DiaHopane Index (%)	5.6	D	
TPP	0.17	D	

[1] On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2] A=Source Age; D=Depositional environment; M= Maturity

[3] Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218040**
Top Depth:	**5660 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5690 FT**	**File Name:**	**MS030439.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane				
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.900	144117		
D26N24baR	13β,17α,24-nordiacholestane 20R	52.001	131634		
D26N27baS	13β,17α,27-nordiacholestane 20S	52.821	218458		
D26N24abS	13α,17β,24-nordiacholestane 20S	52.985	56093		
D26N24abR	13α,17β,24-nordiacholestane 20R	53.664	86106		
D26N27baR	13β,17α,27-nordiacholestane 20R	53.899	222525		
D26N27abS	13α,17β,27-nordiacholestane 20S	54.953	91431		
D26N27abR	13α,17β,27-nordiacholestane 20R	55.492	82079		
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.569	86015		
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.733	89729		
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.131	73879		
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.858	97494		
S26N21	21-norcholestane	58.045	118168		
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.209	52202		
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.326	75542		
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.513	75210		
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.544	59398		
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.544	84440		
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.929	2649236		
D27baR	13β,17α-diacholestane 20R	56.241	1629361		
D27abS	13α,17β-diacholestane 20S	57.225	694079		
D27abR	13α,17β-diacholestane 20R	57.904	695269		
S27aaaS	5α,14α,17α-cholestane 20S	60.575	876668		
S27abbR	5α,14β,17β-cholestane 20R	60.903	758248		
S27abbS	5α,14β,17β-cholestane 20S	61.184	677153		
S27aaaR	5α,14α,17α-cholestane 20R	61.980	989292		
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.068	848665		
D28baSB	13β,17α-diaergostane 20S (24S)	58.279	842682		
D28baRA	13β,17α-diaergostane 20R (24R)	59.521	538908		
D28baRB	13β,17α-diaergostane 20R (24R)	59.661	634282		
D28abS	13α,17β-diaergostane 20S	60.458	480334		
D28abRA	13α,17β-diaergostane 20R	61.348	271028		
D28abRB	13α,17β-diaergostane 20R	61.442	308943		
C28UNK9	C28 Unknown 9	62.215	320471		
S28aaaSA	5α,14α,17α-ergostane 20S	63.925	187458		
S28aaaSB	5α,14α,17α-ergostane 20S	64.042	210889		
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.417	755480		
S28abbS	5α,14β,17β-ergostane 20S	64.698	470816		
S28N21	21-norstigmastane	65.143	128371		
S28aaaR	5α,14α,17α-ergostane 20R	65.658	709723		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218040**
Top Depth:	**5660 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5690 FT**	**File Name:**	**MS030439.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.903	1707525		
D29baR	13β,17α-diastigmastane 20R	62.472	1251101		
D29abS	13α,17β-diastigmastane 20S	63.105	406012		
D29abR	13α,17β-diastigmastane 20R	64.276	594274		
C29UNK5	C29 Unknown 5	65.002	579467		
S29aaaS	5α,14α,17α-stigmastane 20S	66.736	732277		
S29abbR	5α,14β,17β-stigmastane 20R	67.321	737756		
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.509	978458		
S29aaaR	5α,14α,17α-stigmastane 20R	68.750	1079531		
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.175	136036		
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.245	109782		
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.862	177553		
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	65.213	36795		
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.330	50291		
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.665	95448		
DC30UNK7	dia-C30 Unknown 7	67.157	67686		
DC30UNK8	dia-C30 Unknown 8	67.321	23978		
DC30UNK8A	dia-C30 Unknown 8A	67.462	52615		
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.938	91740		
C30UNK10	C30 Unknown 10	69.125	33401		
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.687	85207		
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.804	84803		
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	69.945	51172		
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.256	130300		
C30UNK14	C30 Unknown 14				
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R				
C30UNK16	C30 Unknown 16				
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.429	68813		
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.834	93093		
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.052	157229		
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.317	73447		
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.098	114440		
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.496	113903		
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.777	116291		
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.292	82563		
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.433	120527		
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.526	97161		
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.737	110884		
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.674	112409		
XS28aaaR	5α,14α,17α-ergostane 20R				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218040**
Top Depth:	**5660 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5690 FT**	**File Name:**	**MS030439.D**

Acquisition Parameters: SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2: C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S				
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S				
DC29UNK27	dia-C29 Unknown 27				
DC29UNK28	dia-C29 Unknown 28				
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R				
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R				
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S				
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S				
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R				
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R				
D294MabS	4α-Methyl-13α,17β-diaergostane 20S				
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R				
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R				
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S				
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.963	68636		
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.197	79779		
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.548	60740		
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.689	61890		
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.900	113314		
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.181	198084		
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.258	143727		
XS29aaaR	5α,14α,17α-stigmastane 20R	68.727	50648		
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.907	45106		
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.165	153485		
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.375	46137		
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.539	34927		
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.797	164845		
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.984	136708		
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.289	95329		
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.687	85887		
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.921	151482		
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.132	140398		
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane	70.577	49029		
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane	71.186	27400		
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.280	88228		
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane	71.373	49839		
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane	71.631	39870		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218040**
Top Depth:	**5660 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5690 FT**	**File Name:**	**MS030439.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3βpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	70.062	16785		
PP1	Tetracyclic polyprenoid	70.226	74846		
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.366	68347		
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.647	29272		
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.420	38625		
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.854	93150		
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.064	93786		
TRITERP14	C30 unknown triterpane				
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid	68.001	98236		
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.399	107639		
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.797	152284		
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.406	289639		
TRITERP18	C30 unknown triterpane				
OL18a	18α Oleanane	71.022	412792		
OL18b	18β Oleanane	71.139	231505		
H30ab	17α, 21β-Hopane	71.420	4856438		
H30N30	30-Norhomohopane	71.701	355503		
H30TS	18α,17β-Neohopane	72.053	244646		
H30aa	17α, 21α-Hopane	72.334	209286		
H30ba	17β, 21α-Hopane (Moretane)	72.615	426263		
GamA	Gammacerane-A	75.285	189515		
GamB	Gammacerane-B	75.449	40488		
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)				
B30T1	Bicadinane T1				
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	30.357	146895		
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	30.942	153124		
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	31.996	372857		
NORPREG10	Norpregnane-10	32.301	139650		
NORPREG11	Norpregnane-11	33.003	147167		
NORPREG12	Norpregnane-12				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218040**
Top Depth:	**5660 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5690 FT**	**File Name:**	**MS030439.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

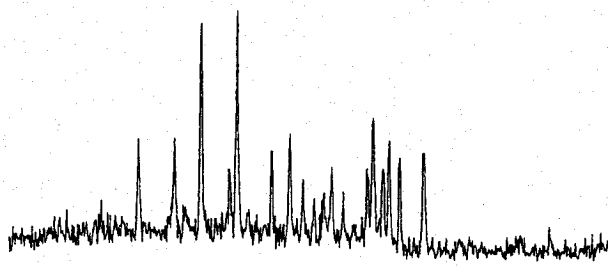
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.887	1222425		
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane	49.307	298451		
DesEHOP	Des-E-Hopane	50.689	1249904		
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
Bicadinene	Bicadinene				
OL1318ene	Olean-13(18)-ene				
OL12ene	Olean-12-ene				
OL18ene	Olean-18-ene				
OL12ene18a	18α-Olean-12-ene				
Unk_Peak1	Unknown peak 1				
426.4->205.2: C31 Pentacyclic Triterpenoids					
H312Mab	C31 2a-Methylhopane	71.654	277480		
H31abS	C31 22S 2α-Methylhopane	74.652	379941		
H31abR	C31 22R 2α-Methylhopane	75.027	312615		
H313Mab	C31 3β-Methylhopane	75.472	115194		

BASELINE DGSI ANALYTICAL LABORATORIES

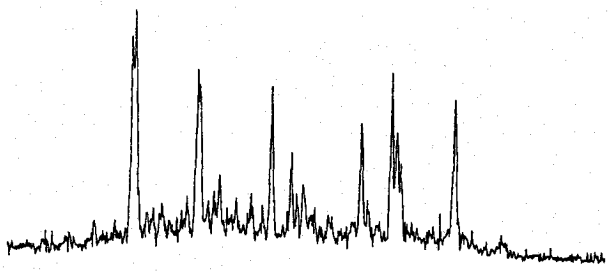
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218041
Basin:		**Client ID:**	US132258
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5910 FT
Longitude:		**Bottom Depth:**	5940 FT

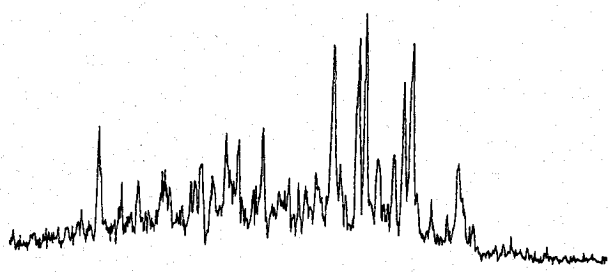
358->217: C26 Steranes MS030440.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	29.2	D	
%28 Steranes	25.3	D	
%29 Steranes	45.5	D	
%27 Diasteranes	31.2	D	
%28 Diasteranes	27.6	D	
%29 Diasteranes	41.2	D	
C30 Sterane Index	0.04	D	
C30 iso/n-propyl sterane index		A	
C27 αββ/(ααα+αββ)	0.41	M	
C28 αββ/(ααα+αββ)	0.49	M	
C29 αββ/(ααα+αββ)	0.47	M	
C30 αββ/(ααα+αββ)	0.48	M	
C27 S/(S+R)	0.44	M	
C28 S/(S+R)	0.32	M	
C29 S/(S+R)	0.41	M	
C30 S/(S+R)	0.46	M	
Diasteranes/Steranes	0.94		
24-Nordiacholestane ratio (NDR)	0.32	A	
24-Norcholestane ratio (NCR)	0.42	A	
21-Norcholestane ratio	0.18	D/M	
Dinosterane ratio	0.37	A	
4-Methyl sterane ratio	0.06	A	
Terpane Ratios			
Oleanane Index (%)	10.1	A	
DesA Oleanane Index (%)	36.6	A	
Gammacerane Index (%)	3.9	D	
Bicadinane Index (%)	0.9	A/D	
DiaHopane Index (%)	5.9	D	
TPP	0.24	D	

[1]On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	CONOCOPHILLIPS	**Client ID:**	US132258
Well Name:	SOUTH MEADE #1	**Lab ID:**	CP218041
Top Depth:	5910 FT	**Fraction:**	SATURATE
Bottom Depth:	5940 FT	**File Name:**	MS030440.D
Acquisition Parameters:	SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane				
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.900	11733		
D26N24baR	13β,17α,24-nordiacholestane 20R	52.001	13316		
D26N27baS	13β,17α,27-nordiacholestane 20S	52.821	26767		
D26N24abS	13α,17β,24-nordiacholestane 20S	53.102	2725		
D26N24abR	13α,17β,24-nordiacholestane 20R	53.641	8757		
D26N27baR	13β,17α,27-nordiacholestane 20R	53.899	26871		
D26N27abS	13α,17β,27-nordiacholestane 20S	54.953	9999		
D26N27abR	13α,17β,27-nordiacholestane 20R	55.492	14331		
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.546	8776		
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.780	10934		
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.131	6190		
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.634	10124		
S26N21	21-norcholestane	58.022	18752		
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.326	10829		
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.513	13349		
S26N27abbS	5α,14β,17β,27-norcholestane 20S	58.818	10412		
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.544	15430		
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.906	322713		
D27baR	13β,17α-diacholestane 20R	56.241	204034		
D27abS	13α,17β-diacholestane 20S	57.202	91873		
D27abR	13α,17β-diacholestane 20R	57.881	115271		
S27aaaS	5α,14α,17α-cholestane 20S	60.575	136721		
S27abbR	5α,14β,17β-cholestane 20R	60.879	110909		
S27abbS	5α,14β,17β-cholestane 20S	61.161	102370		
S27aaaR	5α,14α,17α-cholestane 20R	61.980	175110		
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.045	132390		
D28baSB	13β,17α-diaergostane 20S (24S)	58.256	139720		
D28baRA	13β,17α-diaergostane 20R (24R)	59.521	83037		
D28baRB	13β,17α-diaergostane 20R (24R)	59.638	111850		
D28abS	13α,17β-diaergostane 20S	60.411	84282		
D28abRA	13α,17β-diaergostane 20R	61.324	50019		
D28abRB	13α,17β-diaergostane 20R	61.442	45362		
C28UNK9	C28 Unknown 9	62.215	56495		
S28aaaSA	5α,14α,17α-ergostane 20S	63.925	31773		
S28aaaSB	5α,14α,17α-ergostane 20S	64.042	43811		
S28abbR	5β,14α,17α-ergostane 20R	64.417	135641		
S28baaR	5α,14β,17β-ergostane 20R				
S28abbS	5α,14β,17β-ergostane 20S	64.698	86987		
S28N21	21-norstigmastane	65.143	24376		
S28aaaR	5α,14α,17α-ergostane 20R	65.635	157156		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218041**
Top Depth:	**5910 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5940 FT**	**File Name:**	**MS030440.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.903	384389		
D29baR	13β,17α-diastigmastane 20R	62.449	310861		
D29abS	13α,17β-diastigmastane 20S	63.081	101157		
D29abR	13α,17β-diastigmastane 20R	64.276	155712		
C29UNK5	C29 Unknown 5	65.002	145048		
S29aaaS	5α,14α,17α-stigmastane 20S	66.736	178980		
S29abbR	5α,14β,17β-stigmastane 20R	67.298	177550		
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.509	202836		
S29aaaR	5α,14α,17α-stigmastane 20R	68.727	257969		
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.128	27811		
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.222	27930		
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.791	36832		
C30UNK4	13α,17β-dia-24-n-propylcholestane 20S				
C30UNK5	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabS	13α,17β-dia-24-n-propylcholestane 20R				
DC30UNK7	dia-C30 Unknown 7	67.157	11875		
DC30UNK8	dia-C30 Unknown 8	67.298	5488		
DC30UNK8A	dia-C30 Unknown 8A	67.462	10848		
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.938	18992		
C30UNK10	C30 Unknown 10	69.102	3201		
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.710	20546		
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.828	16851		
C30UNK13	5β,14α,17α-24-n-propylcholestane 20R				
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.233	21994		
C30UNK14	C30 Unknown 14				
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R				
C30UNK16	C30 Unknown 16				
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.429	12637		
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.787	11473		
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.029	23755		
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.341	11258		
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.098	21151		
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.472	23270		
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.777	24997		
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.269	11359		
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.433	16706		
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.526	20032		
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.714	13898		
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.574	14193		
XS28aaaR	5α,14α,17α-ergostane 20R				

Company:	CONOCOPHILLIPS	**Client ID:**	US132258
Well Name:	SOUTH MEADE #1	**Lab ID:**	CP218041
Top Depth:	5910 FT	**Fraction:**	SATURATE
Bottom Depth:	5940 FT	**File Name:**	MS030440.D
Acquisition Parameters:	SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2; C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S	59.474	8156		
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.685	6804		
DC29UNK27	dia-C29 Unknown 27				
DC29UNK28	dia-C29 Unknown 28				
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R				
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R				
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.098	9165		
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.285	12418		
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R				
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R				
D294MabS	4α-Methyl-13α,17β-diaergostane 20S				
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R				
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R				
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S				
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.939	16300		
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.220	17285		
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.572	7720		
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.689	12579		
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.876	23551		
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.157	33412		
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.305	29768		
XS29aaaR	5α,14α,17α-stigmastane 20R	68.727	8579		
414.4->231.2; C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.720	10645		
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.165	35887		
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.352	7630		
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.493	3122		
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.820	27820		
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.984	28704		
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.312	13781		
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.710	13846		
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.945	21320		
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.156	32841		
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane	70.624	4487		
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane	70.999	3539		
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.280	16867		
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane	71.373	6319		
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane	71.654	4747		

GMC DATA REPORT 3 2 5

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Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218041**
Top Depth:	**5910 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5940 FT**	**File Name:**	**MS030440.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

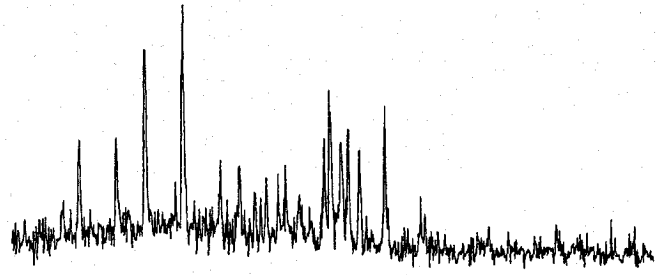
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3βpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	70.062	2903		
PP1	Tetracyclic polyprenoid	70.202	15923		
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.390	23887		
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.647	7153		
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.397	7338		
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.808	25201		
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.040	20019		
TRITERP14	C30 unknown triterpane	67.204	10178		
OLEANOID15A	Oleanoid	67.579	6952		
OLEANOID15	Oleanoid	67.696	8077		
OLEANOID16	Oleanoid	68.001	20678		
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.399	24716		
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.774	30607		
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.406	84284		
TRITERP18	C30 unknown triterpane	69.874	8702		
OL18a	18α Oleanane	70.999	108232		
OL18b	18β Oleanane	71.139	42747		
H30ab	17α, 21β-Hopane	71.397	1337337		
NOR30HOP	30-Norhomohopane				
C30TS	18α,17β-Neohopane				
C30UNK9	17α, 21α-Hopane				
M30	17β, 21α-Hopane (Moretane)				
GamA	Gammacerane-A	75.285	47549		
GamB	Gammacerane-B	75.449	7105		
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)	63.95	8851		
B30T1	Bicadinane T1	64.60	3688		
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4				
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6				
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	32.020	26831		
NORPREG10	Norpregnane-10	32.301	10359		
NORPREG11	Norpregnane-11	33.003	12811		
NORPREG12	Norpregnane-12				

BASELINE DGSI ANALYTICAL LABORATORIES

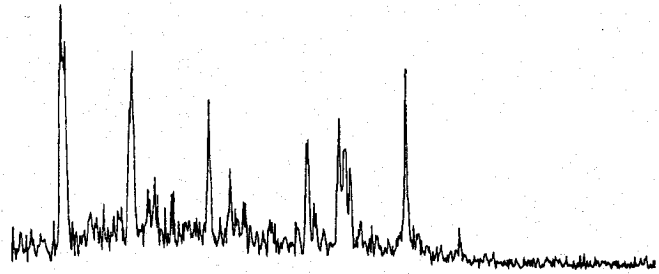
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218042
Basin:		**Client ID:**	US132259
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:	70.606200	**Top Depth:**	7870 FT
Longitude:	-156.876	**Bottom Depth:**	7910 FT

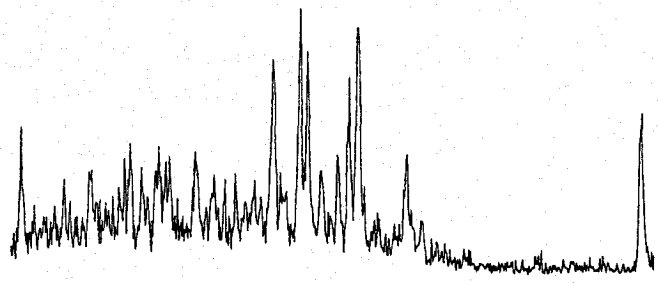
358->217: C26 Steranes MS030441.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]	Appl[2]	TEV[3]
Steranes		
%27 Steranes	D	
%28 Steranes	D	
%29 Steranes	D	
%27 Diasteranes	D	
%28 Diasteranes	D	
%29 Diasteranes	D	
C30 Sterane Index	D	
C30 iso/n-propyl sterane index	A	
C27 αββ/(ααα+αββ)	M	
C28 αββ/(ααα+αββ)	M	
C29 αββ/(ααα+αββ)	M	
C30 αββ/(ααα+αββ)	M	
C27 S/(S+R)	M	
C28 S/(S+R)	M	
C29 S/(S+R)	M	
C30 S/(S+R)	M	
Diasteranes/Steranes		
24-Nordiacholestane ratio (NDR)	A	
24-Norcholestane ratio (NCR)	A	
21-Norcholestane ratio	D/M	
Dinosterane ratio	A	
4-Methyl sterane ratio	A	
Terpane Ratios		
Oleanane Index (%)	A	
DesA Oleanane Index (%)	A	
Gammacerane Index (%)	D	
Bicadinane Index (%)	A/D	
DiaHopane Index (%)	D	
TPP	D	

[1]On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218042**
Top Depth:	**7870 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**7910 FT**	**File Name:**	**MS030441.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane				
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.924	6871		
D26N24baR	13β,17α,24-nordiacholestane 20R	51.978	7691		
D26N27baS	13β,17α,27-nordiacholestane 20S	52.798	15225		
D26N24abS	13α,17β,24-nordiacholestane 20S	52.938	2544		
D26N24abR	13α,17β,24-nordiacholestane 20R	53.664	4999		
D26N27baR	13β,17α,27-nordiacholestane 20R	53.899	16773		
D26N27abS	13α,17β,27-nordiacholestane 20S	54.953	4958		
D26N27abR	13α,17β,27-nordiacholestane 20R	55.492	7309		
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.546	4038		
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.757	7025		
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.155	5889		
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.858	7493		
S26N21	21-norcholestane	57.998	11217		
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.232	3217		
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.326	7763		
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.513	8236		
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.521	6600		
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.521	9850		
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.929	169434		
D27baR	13β,17α-diacholestane 20R	56.241	114197		
D27abS	13α,17β-diacholestane 20S	57.202	47807		
D27abR	13α,17β-diacholestane 20R	57.881	58204		
S27aaaS	5α,14α,17α-cholestane 20S	60.575	74628		
S27abbR	5α,14β,17β-cholestane 20R	60.879	66012		
S27abbS	5α,14β,17β-cholestane 20S	61.161	59795		
S27aaaR	5α,14α,17α-cholestane 20R	61.980	99956		
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.045	73302		
D28baSB	13β,17α-diaergostane 20S (24S)	58.256	80412		
D28baRA	13β,17α-diaergostane 20R (24R)	59.521	56307		
D28baRB	13β,17α-diaergostane 20R (24R)	59.638	56176		
D28abS	13α,17β-diaergostane 20S	60.434	45478		
D28abRA	13α,17β-diaergostane 20R	61.348	34915		
D28abRB	13α,17β-diaergostane 20R	61.418	23443		
C28UNK9	C28 Unknown 9	62.238	32341		
S28aaaSA	5α,14α,17α-ergostane 20S	63.925	20198		
S28aaaSB	5α,14α,17α-ergostane 20S	64.042	24794		
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.417	74620		
S28abbS	5α,14β,17β-ergostane 20S	64.698	49340		
S28N21	21-norstigmastane	65.143	14785		
S28aaaR	5α,14α,17α-ergostane 20R	65.658	98354		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218042**
Top Depth:	**7870 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**7910 FT**	**File Name:**	**MS030441.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.903	203310		
D29baR	13β,17α-diastigmastane 20R	62.449	158861		
D29abS	13α,17β-diastigmastane 20S	63.081	51302		
D29abR	13α,17β-diastigmastane 20R	64.276	79373		
C29UNK5	C29 Unknown 5	65.002	75641		
S29aaaS	5α,14α,17α-stigmastane 20S	66.712	105373		
S29abbR	5α,14β,17β-stigmastane 20R	67.298	98683		
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.509	110545		
S29aaaR	5α,14α,17α-stigmastane 20R	68.727	151920		
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.128	23572		
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.222	15264		
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.838	24808		
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	65.213	6159		
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.377	6526		
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.665	13454		
DC30UNK7	dia-C30 Unknown 7				
DC30UNK8	dia-C30 Unknown 8				
DC30UNK8A	dia-C30 Unknown 8A				
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.984	11480		
C30UNK10	C30 Unknown 10	69.125	4640		
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S	69.336	2291		
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.710	11238		
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.851	10315		
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	69.945	6092		
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R	70.179	3281		
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.233	14199		
C30UNK14	C30 Unknown 14	71.420	2161		
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R	71.537	2584		
C30UNK16	C30 Unknown 16				
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.405	8820		
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.858	7576		
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.005	15232		
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.294	5545		
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.098	10263		
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.472	12647		
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.777	12547		
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.292	8918		
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.433	11176		
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.503	9797		
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.714	7058		
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.674	10062		
XS28aaaR	5α,14α,17α-ergostane 20R	66.635	4044		

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218042**
Top Depth:	**7870 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**7910 FT**	**File Name:**	**MS030441.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2: C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S				
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S				
DC29UNK27	dia-C29 Unknown 27				
DC29UNK28	dia-C29 Unknown 28				
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R				
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R				
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.051	5697		
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.238	7761		
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.550	6104		
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.690	6485		
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.440	4427		
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.307	5089		
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.400	7085		
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.564	6321		
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.963	9917		
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.244	11206		
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.548	4485		
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.689	9840		
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.923	11796		
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.181	16979		
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.258	21452		
XS29aaaR	5α,14α,17α-stigmastane 20R	68.727	6654		
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.743	5137		
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.165	19867		
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.352	5999		
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.493	2621		
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.820	19852		
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.984	16316		
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.312	8008		
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.687	8079		
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.945	13771		
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.156	22848		
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.303	10773		
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218042**
Top Depth:	**7870 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**7910 FT**	**File Name:**	**MS030441.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3ββpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	70.109	3462		
PP1	Tetracyclic polyprenoid	70.202	9230		
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.390	13922		
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.647	3326		
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.397	4595		
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.854	11541		
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.040	13229		
TRITERP14	C30 unknown triterpane	67.204	6183		
OLEANOID15A	Oleanoid	67.556	4405		
OLEANOID15	Oleanoid	67.720	5456		
OLEANOID16	Oleanoid	68.001	14872		
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.375	17200		
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.774	21882		
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.406	43855		
TRITERP18	C30 unknown triterpane	69.851	6929		
OL18a	18α Oleanane	71.022	63139		
OL18b	18β Oleanane	71.116	39170		
H30ab	17α, 21β-Hopane	71.420	777522		
H30N30	30-Norhomohopane	71.701	38289		
H30TS	18α,17β-Neohopane	72.053	32221		
H30aa	17α, 21α-Hopane	72.310	33455		
H30ba	17β, 21α-Hopane (Moretane)	72.615	70005		
GamA	Gammacerane-A	75.285	29625		
GamB	Gammacerane-B	75.449	5443		
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)				
B30T1	Bicadinane T1				
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4				
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6				
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9				
NORPREG10	Norpregnane-10				
NORPREG11	Norpregnane-11				
NORPREG12	Norpregnane-12				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Lab ID:**	**CP218042**
Top Depth:	**7870 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**7910 FT**	**File Name:**	**MS030441.D**

Acquisition Parameters: SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25

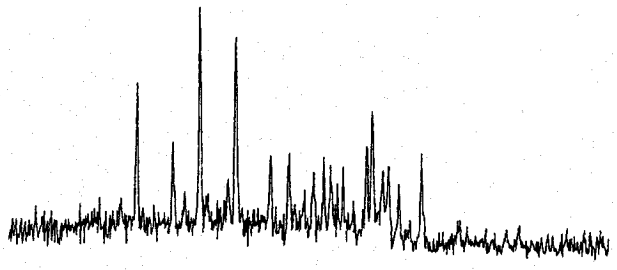
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.864	28769		
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane	49.284	13738		
DesEHOP	Des-E-Hopane	50.666	61362		
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
Bicadinene	Bicadinene				
OL1318ene	Olean-13(18)-ene				
OL12ene	Olean-12-ene				
OL18ene	Olean-18-ene				
OL12ene18a	18α-Olean-12-ene				
Unk_Peak1	Unknown peak 1				
426.4->205.2: C31 Pentacyclic Triterpenoids					
H312Mab	C31 2a-Methylhopane	71.654	36451		
H31abS	C31 22S 2α-Methylhopane	74.652	57774		
H31abR	C31 22R 2α-Methylhopane	75.027	45479		
H313Mab	C31 3β-Methylhopane	75.472	21767		

BASELINE DGSI
ANALYTICAL LABORATORIES

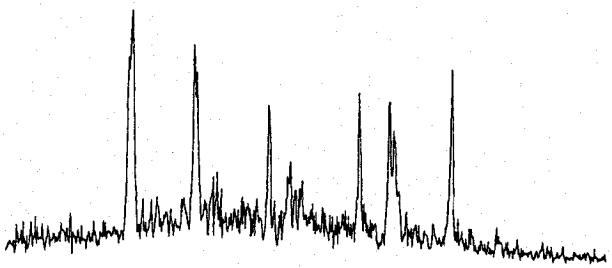
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218047
Basin:		**Client ID:**	US132264
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH SIMPSON #1	**Geologic Age:**	
Latitude:		**Top Depth:**	6520 FT
Longitude:		**Bottom Depth:**	6570 FT

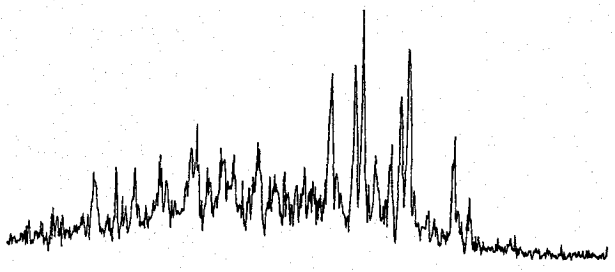
358->217: C26 Steranes MS030443.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	27.3	D	
%28 Steranes	24.0	D	
%29 Steranes	48.7	D	
%27 Diasteranes	27.4	D	
%28 Diasteranes	27.8	D	
%29 Diasteranes	44.8	D	
C30 Sterane Index	0.06	D	
C30 iso/n-propyl sterane index		A	
C27 αββ/(ααα+ββ)	0.46	M	
C28 αββ/(ααα+αββ)	0.52	M	
C29 αββ/(ααα+αββ)	0.49	M	
C30 αββ/(ααα+αββ)	0.46	M	
C27 S/(S+R)	0.46	M	
C28 S/(S+R)	0.38	M	
C29 S/(S+R)	0.42	M	
C30 S/(S+R)	0.45	M	
Diasteranes/Steranes	0.98		
24-Nordiacholestane ratio (NDR)	0.35	A	
24-Norcholestane ratio (NCR)	0.50	A	
21-Norcholestane ratio	0.17	D/M	
Dinosterane ratio		A	
4-Methyl sterane ratio	0.07	A	
Terpane Ratios			
Oleanane Index (%)	10.4	A	
DesA Oleanane Index (%)	44.0	A	
Gammacerane Index (%)	2.5	D	
Bicadinane Index (%)		A/D	
DiaHopane Index (%)	6.3	D	
TPP	0.19	D	

[1]On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Lab ID:**	**CP218047**
Top Depth:	**6520 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**6570 FT**	**File Name:**	**MS030443.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane				
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.863	12621		
D26N24baR	13β,17α,24-nordiacholestane 20R	51.940	10192		
D26N27baS	13β,17α,27-nordiacholestane 20S	52.736	21541		
D26N24abS	13α,17β,24-nordiacholestane 20S	52.994	5841		
D26N24abR	13α,17β,24-nordiacholestane 20R	53.603	8190		
D26N27baR	13β,17α,27-nordiacholestane 20R	53.837	21230		
D26N27abS	13α,17β,27-nordiacholestane 20S	54.867	10406		
D26N27abR	13α,17β,27-nordiacholestane 20R	55.429	9088		
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.483	7814		
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.694	8545		
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.068	6870		
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.794	10731		
S26N21	21-norcholestane	57.958	14055		
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.286	7764		
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.450	9818		
S26N27abbS	5α,14β,17β,27-norcholestane 20S	58.754	6705		
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.457	9739		
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.844	149726		
D27baR	13β,17α-diacholestane 20R	56.178	95447		
D27abS	13α,17β-diacholestane 20S	57.139	43855		
D27abR	13α,17β-diacholestane 20R	57.818	53945		
S27aaaS	5α,14α,17α-cholestane 20S	60.534	61555		
S27abbR	5α,14β,17β-cholestane 20R	60.815	60394		
S27abbS	5α,14β,17β-cholestane 20S	61.096	55758		
S27aaaR	5α,14α,17α-cholestane 20R	61.916	72906		
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	57.982	65758		
D28baSB	13β,17α-diaergostane 20S (24S)	58.192	81331		
D28baRA	13β,17α-diaergostane 20R (24R)	59.457	52303		
D28baRB	13β,17α-diaergostane 20R (24R)	59.574	49700		
D28abS	13α,17β-diaergostane 20S	60.370	40886		
D28abRA	13α,17β-diaergostane 20R	61.260	28906		
D28abRB	13α,17β-diaergostane 20R	61.377	27712		
C28UNK9	C28 Unknown 9	62.150	31187		
S28aaaSA	5α,14α,17α-ergostane 20S	63.859	22531		
S28aaaSB	5α,14α,17α-ergostane 20S	63.953	17859		
S28abbR	5β,14α,17α-ergostane 20R	64.328	70088		
S28baaR	5α,14β,17β-ergostane 20R				
S28abbS	5α,14β,17β-ergostane 20S	64.632	45394		
S28N21	21-norstigmastane	65.100	13499		
S28aaaR	5α,14α,17α-ergostane 20R	65.616	64547		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Lab ID:**	**CP218047**
Top Depth:	**6520 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**6570 FT**	**File Name:**	**MS030443.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.839	230937		
D29baR	13β,17α-diastigmastane 20R	62.384	170133		
D29abS	13α,17β-diastigmastane 20S	63.016	53851		
D29abR	13α,17β-diastigmastane 20R	64.234	95259		
C29UNK5	C29 Unknown 5	64.937	76512		
S29aaaS	5α,14α,17α-stigmastane 20S	66.646	96517		
S29abbR	5α,14β,17β-stigmastane 20R	67.231	110017		
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.419	109424		
S29aaaR	5α,14α,17α-stigmastane 20R	68.660	130601		
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.063	13835		
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.157	24299		
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.702	26577		
C30UNK4	13α,17β-dia-24-n-propylcholestane 20S				
C30UNK5	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabS	13α,17β-dia-24-n-propylcholestane 20R				
DC30UNK7	dia-C30 Unknown 7	67.114	9187		
DC30UNK8	dia-C30 Unknown 8	67.255	4941		
DC30UNK8A	dia-C30 Unknown 8A	67.419	7136		
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.871	13344		
C30UNK10	C30 Unknown 10				
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.644	13876		
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.737	11622		
C30UNK13	5β,14α,17α-24-n-propylcholestane 20R				
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.189	16475		
C30UNK14	C30 Unknown 14				
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R				
C30UNK16	C30 Unknown 16				
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.366	6589		
DC28UNK16	dia-C28 Unknown 16	57.115	6031		
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.747	5914		
DC28UNK3	dia-C28 Unknown 3	57.958	4328		
DC28UNK17	dia-C28 Unknown 17	58.497	4298		
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	58.965	15180		
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.253	5995		
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.033	12900		
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.407	11990		
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.665	13882		
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.227	9354		
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.391	10591		
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.438	9562		
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.672	8887		
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.562	8513		
XS28aaaR	5α,14α,17α-ergostane 20R				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Lab ID:**	**CP218047**
Top Depth:	**6520 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**6570 FT**	**File Name:**	**MS030443.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2: C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S	59.387	6176		
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.621	3808		
DC29UNK27	dia-C29 Unknown 27				
DC29UNK28	dia-C29 Unknown 28				
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R				
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R				
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.009	9913		
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.173	8410		
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.485	5103		
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.555	8848		
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.374	7385		
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R				
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R				
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S				
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.897	11028		
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.178	8427		
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.529	6359		
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.646	6720		
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.810	11312		
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.114	21279		
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.191	14400		
XS29aaaR	5α,14α,17α-stigmastane 20R	68.636	6466		
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S				
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.121	19084		
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)				
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S				
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.707	19074		
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.918	20769		
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.245	11620		
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.644	9383		
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.878	15467		
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.065	22977		
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.213	10219		
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Lab ID:**	**CP218047**
Top Depth:	**6520 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**6570 FT**	**File Name:**	**MS030443.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

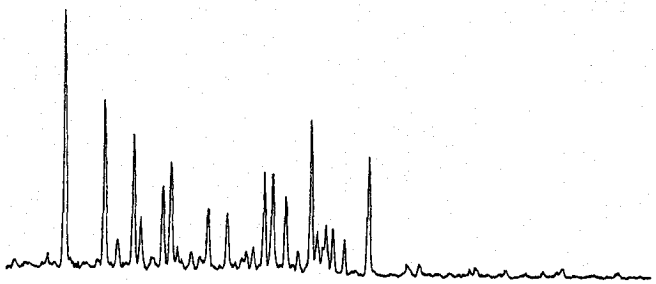
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3βpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	69.995	2857		
PP1	Tetracyclic polyprenoid	70.135	9126		
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.276	12250		
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.604	3177		
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.353	4237		
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.789	13584		
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.161	4819		
TRITERP14	C30 unknown triterpane				
OLEANOID15A	Oleanoid	67.536	3241		
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid	67.934	12322		
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.332	14780		
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.730	19721		
TRITERP17A	C30 plant terpane	69.035	5555		
DH30	Diahopane	69.339	46972		
TRITERP18	C30 unknown triterpane	69.831	5556		
OL18a	18α Oleanane	70.932	49215		
OL18b	18β Oleanane	71.049	31755		
H30ab	17α, 21β-Hopane	71.330	698403		
NOR30HOP	30-Norhomohopane				
C30TS	18α,17β-Neohopane				
C30UNK9	17α, 21α-Hopane				
M30	17β, 21α-Hopane (Moretane)				
GamA	Gammacerane-A	75.218	14590		
GamB	Gammacerane-B	75.382	3107		
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)				
B30T1	Bicadinane T1				
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	30.303	11246		
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	30.911	8873		
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	31.918	19358		
NORPREG10	Norpregnane-10	32.246	6501		
NORPREG11	Norpregnane-11	32.949	11098		
NORPREG12	Norpregnane-12				

BASELINE DGSI
ANALYTICAL LABORATORIES

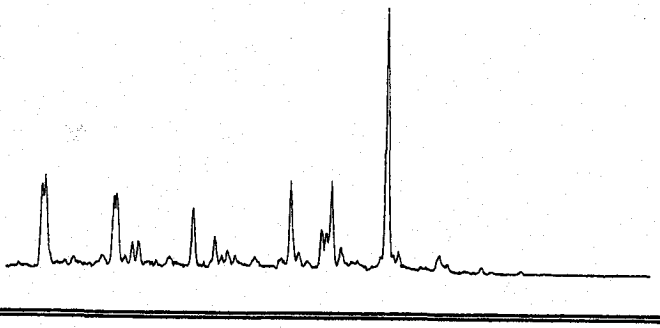
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	04-180-A
Country:	UNITED STATES	**Lab ID:**	CP272549
Basin:		**Client ID:**	US134004
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	EAST TOPAGORUK-1	**Geologic Age:**	
Latitude:		**Top Depth:**	2249 FT
Longitude:		**Bottom Depth:**	FT

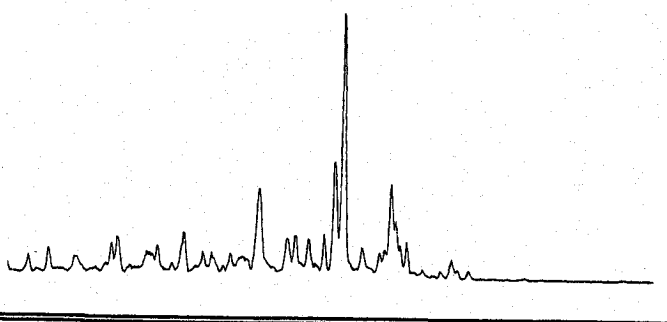
358->217: C26 Steranes MS040176.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	21.7	D	
%28 Steranes	27.5	D	
%29 Steranes	50.9	D	
%27 Diasteranes	32.9	D	
%28 Diasteranes	28.0	D	
%29 Diasteranes	39.1	D	
C30 Sterane Index	0.05	D	
C30 iso/n-propyl sterane index	0.07	A	
C27 αββ/(ααα+αββ)	0.45	M	
C28 αββ/(ααα+αββ)	0.55	M	
C29 αββ/(ααα+αββ)	0.45	M	
C30 αββ/(ααα+αββ)	0.23	M	
C27 S/(S+R)	0.43	M	
C28 S/(S+R)	0.29	M	
C29 S/(S+R)	0.25	M	
C30 S/(S+R)	0.21	M	
Diasteranes/Steranes	0.91		
24-Nordiacholestane ratio (NDR)	0.61	A	
24-Norcholestane ratio (NCR)	0.64	A	
21-Norcholestane ratio	0.07	D/M	
Dinosterane ratio	0.30	A	
4-Methyl sterane ratio	0.08	A	
Terpane Ratios			
Oleanane Index (%)	2.1	A	
DesA Oleanane Index (%)	62.7	A	
Gammacerane Index (%)	0.4	D	
Bicadinane Index (%)		A/D	
DiaHopane Index (%)	4.9	D	
TPP	0.08	D	

[1]On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Well Name:	EAST TOPAGORUK-1	**Lab ID:**	CP272549
Top Depth:	2249 FT	**Fraction:**	SATURATE
Bottom Depth:	FT	**File Name:**	MS040176.D
Acquisition Parameters:	SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane	49.518	3675841	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.619	327901	8.9	8.9
D26N24baR	13β,17α,24-nordiacholestane 20R	51.697	225007	6.1	6.1
D26N27baS	13β,17α,27-nordiacholestane 20S	52.517	187199	5.1	5.1
D26N24abS	13α,17β,24-nordiacholestane 20S	52.727	72425	2.0	2.0
D26N24abR	13α,17β,24-nordiacholestane 20R	53.360	129759	3.5	3.5
D26N27baR	13β,17α,27-nordiacholestane 20R	53.594	159890	4.4	4.4
D26N27abS	13α,17β,27-nordiacholestane 20S	54.625	90205	2.5	2.5
D26N27abR	13α,17β,27-nordiacholestane 20R	55.164	86821	2.4	2.4
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.241	125714	3.4	3.4
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.452	151548	4.1	4.1
S26N24abbS	5α,14β,17β,24-norcholestane 20S	56.803	102611	2.8	2.8
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.530	207542	5.6	5.6
S26N21	21-norcholestane	57.740	74003	2.0	2.0
S26N27baaR	5β,14α,17α,27-norcholestane 20S	57.881	31724	0.9	0.9
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	57.998	67756	1.8	1.8
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.186	64214	1.7	1.7
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.193	44390	1.2	1.2
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.193	157578	4.3	4.3
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.625	2667694	72.6	58.3
D27baR	13β,17α-diacholestane 20R	55.937	1688214	45.9	48.7
D27abS	13α,17β-diacholestane 20S	56.921	618665	16.8	11.8
D27abR	13α,17β-diacholestane 20R	57.576	757320	20.6	22.0
S27aaaS	5α,14α,17α-cholestane 20S	60.247	897304	24.4	18.4
S27abbR	5α,14β,17β-cholestane 20R	60.575	536914	14.6	18.3
S27abbS	5α,14β,17β-cholestane 20S	60.879	445506	12.1	16.1
S27aaaR	5α,14α,17α-cholestane 20R	61.652	1050548	28.6	24.4
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	57.764	1067860	29.1	25.7
D28baSB	13β,17α-diaergostane 20S (24S)	57.951	1022948	27.8	26.8
D28baRA	13β,17α-diaergostane 20R (24R)	59.216	712982	19.4	16.8
D28baRB	13β,17α-diaergostane 20R (24R)	59.357	802907	21.8	21.7
D28abS	13α,17β-diaergostane 20S	60.130	535111	14.6	14.6
D28abRA	13α,17β-diaergostane 20R	61.020	386387	10.5	10.5
D28abRB	13α,17β-diaergostane 20R	61.137	292891	8.0	8.0
C28UNK9	C28 Unknown 9	61.887	367874	10.0	10.0
S28aaaSA	5α,14α,17α-ergostane 20S	63.597	216087	5.9	6.0
S28aaaSB	5α,14α,17α-ergostane 20S	63.737	261514	7.1	6.5
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.089	930034	25.3	37.0
S28abbS	5α,14β,17β-ergostane 20S	64.393	433462	11.8	17.1
S28N21	21-norstigmastane	64.768	112136	3.1	3.1
S28aaaR	5α,14α,17α-ergostane 20R	65.377	1091339	29.7	31.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Lab ID:**	**CP272549**
Top Depth:	**2249 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040176.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.598	2973304	80.9	66.5
D29baR	13β,17α-diastigmastane 20R	62.144	2354116	64.0	60.9
D29abS	13α,17β-diastigmastane 20S	62.777	858770	23.4	23.4
D29abR	13α,17β-diastigmastane 20R	63.972	1192211	32.4	32.4
C29UNK5	C29 Unknown 5	64.838	901268	24.5	24.5
S29aaaS	5α,14α,17α-stigmastane 20S	66.408	946453	25.7	24.8
S29abbR	5α,14β,17β-stigmastane 20R	66.993	724133	19.7	24.7
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.157	1650432	44.9	57.3
S29aaaR	5α,14α,17α-stigmastane 20R	68.422	3378860	91.9	74.4
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	62.847	108439	3.0	3.0
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	62.917	126100	3.4	2.5
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.534	178742	4.9	5.5
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	64.909	32047	0.9	0.9
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.049	35624	1.0	1.0
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.361	86542	2.4	2.4
DC30UNK7	dia-C30 Unknown 7	66.853	43969	1.2	1.2
DC30UNK8	dia-C30 Unknown 8	67.017	15464	0.4	0.4
DC30UNK8A	dia-C30 Unknown 8A	67.157	30034	0.8	0.8
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.633	121328	3.3	3.2
C30UNK10	C30 Unknown 10	68.820	26542	0.7	0.7
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S	69.031	15911	0.4	0.4
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.383	64993	1.8	2.5
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.523	45012	1.2	1.9
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	69.640	121678	3.3	3.3
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R	69.851	38584	1.1	1.1
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	70.928	351523	9.6	11.6
C30UNK14	C30 Unknown 14	71.069	12694	0.3	0.3
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R	71.186	25827	0.7	0.7
C30UNK16	C30 Unknown 16	72.123	41048	1.117	1.117
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.124	47069	1.3	1.3
DC28UNK16	dia-C28 Unknown 16	56.897	28907	0.8	0.8
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.506	46488	1.3	1.3
DC28UNK3	dia-C28 Unknown 3	57.717	25376	0.7	0.7
DC28UNK17	dia-C28 Unknown 17	58.232	20962	0.6	0.6
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	58.724	159890	4.4	4.4
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.036	102495	2.8	2.8
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	61.793	90828	2.5	2.5
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.168	78757	2.1	2.1
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.449	84617	2.3	2.3
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	62.964	109245	3.0	3.0
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.128	92389	2.5	2.5
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.199	163902	4.5	4.5
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.409	104152	2.8	2.8
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.346	212492	5.8	5.8
XS28aaaR	5α,14α,17α-ergostane 20R	65.400	43014	1.2	1.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Lab ID:**	**CP272549**
Top Depth:	**2249 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040176.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2: C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S	59.169	19517	0.5	0.5
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.404	18284	0.5	0.5
DC29UNK27	dia-C29 Unknown 27	59.942	19455	0.5	0.5
DC29UNK28	dia-C29 Unknown 28	60.130	9587	0.3	0.3
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R	60.715	11538	0.3	0.3
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R	60.856	16260	0.4	0.4
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	61.793	84992	2.3	2.3
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	61.957	92871	2.5	2.5
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.245	57516	1.6	1.6
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.362	63753	1.7	1.7
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.136	65462	1.8	1.8
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.002	59708	1.6	1.6
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.096	80213	2.2	2.2
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.213	39369	1.1	1.1
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.635	33001	0.9	0.9
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	65.916	53953	1.5	1.5
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.244	53430	1.5	1.5
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.361	79474	2.2	2.2
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.595	146981	4.0	4.0
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	66.853	262938	7.2	7.2
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	67.954	288184	7.8	7.8
XS29aaaR	5α,14α,17α-stigmastane 20R	68.422	124063	3.4	3.4
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S				
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	67.860	301935	8.2	8.2
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)				
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S				
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.493	109904	3.0	3.0
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.68	101413	2.8	2.8
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	68.984	102430	2.8	2.8
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.383	85397	2.3	2.3
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.640	337684	9.2	9.2
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.828	675516	18.4	18.4
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane	70.273	76807	2.1	2.1
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane	70.694	44524	1.2	1.2
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	70.952	240273	6.5	6.5
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane	71.069	106216	2.9	2.9
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane	71.303	67163	1.8	1.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Lab ID:**	**CP272549**
Top Depth:	**2249 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040176.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3βpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	69.734	18702	0.5	0.5
PP1	Tetracyclic polyprenoid	69.921	27790	0.8	0.8
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.038	35757	1.0	1.0
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.343	12133	0.3	0.3
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.092	42061	1.1	1.1
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.503	111616	3.0	3.0
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	66.736	20007	0.5	0.5
TRITERP14	C30 unknown triterpane	66.900	32533	0.9	0.9
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid	67.649	24048	0.7	0.7
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.071	81831	2.2	2.2
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.469	57968	1.6	1.6
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.078	303763	8.3	8.3
TRITERP18	C30 unknown triterpane	69.547	29725	0.8	0.8
OL18a	18α Oleanane	70.694	75255	2.0	2.0
OL18b	18β Oleanane	70.788	53013	1.4	1.4
H30ab	17α, 21β-Hopane	71.092	4164547	113.3	160.0
H30N30	30-Norhomohopane	71.350	87263	2.4	2.4
H30TS	18α,17β-Neohopane	71.725	151675	4.1	4.1
H30aa	17α, 21α-Hopane	71.982	192532	5.2	5.2
H30ba	17β, 21α-Hopane (Moretane)	72.287	603951	16.4	35.3
GamA	Gammacerane-A	74.933	56405	1.5	0.5
GamB	Gammacerane-B	75.121	32463	0.9	0.2
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)				
B30T1	Bicadinane T1				
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	30.216	107747	2.9	2.9
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	30.802	90531	2.5	2.5
NORPREG7	Norpregnane-7	31.317	43967	1.2	1.2
NORPREG8_9	Norpregnane-8+Norpregnane-9	31.832	239185	6.5	6.5
NORPREG10	Norpregnane-10	32.137	64126	1.7	1.7
NORPREG11	Norpregnane-11	32.839	113070	3.1	3.1
NORPREG12	Norpregnane-12	33.636	21253	0.6	0.6

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Well Name:	EAST TOPAGORUK-1	**Lab ID:**	CP272549
Top Depth:	2249 FT	**Fraction:**	SATURATE
Bottom Depth:	FT	**File Name:**	MS040176.D
Acquisition Parameters:	SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25		

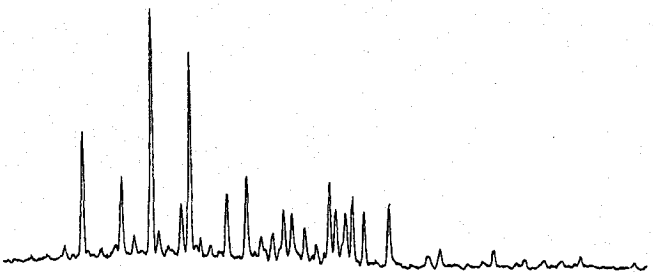
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.630	603363	16.4	16.4
DesALUP	Des-A-Lupane	45.747	47416	1.3	1.3
DesATARAX	Des-A-Taraxastane	49.003	150126	4.1	4.1
DesEHOP	Des-E-Hopane	50.385	358599	9.8	9.8
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
Bicadinene	Bicadinene				
OL1318ene	Olean-13(18)-ene				
OL12ene	Olean-12-ene				
OL18ene	Olean-18-ene				
OL12ene18a	18α-Olean-12-ene				
Unk_Peak1	Unknown peak 1				
426.4->205.2: C31 Pentacyclic Triterpenoids					
H312Mab	C31 2a-Methylhopane	71.327	96487	2.6	2.6
H31abS	C31 22S 2α-Methylhopane	74.324	377818	10.3	10.3
H31abR	C31 22R 2α-Methylhopane	74.699	445204	12.1	12.1
H313Mab	C31 3β-Methylhopane	75.121	58233	1.6	1.6

BASELINE DGSI
ANALYTICAL LABORATORIES

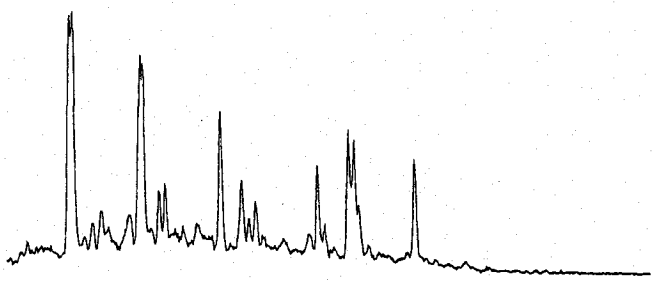
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	04-180-A
Country:	UNITED STATES	**Lab ID:**	CP273047
Basin:	NORTH SLOPE	**Client ID:**	US134517
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	MEADE 1	**Geologic Age:**	
Latitude:		**Top Depth:**	2959 FT
Longitude:		**Bottom Depth:**	FT

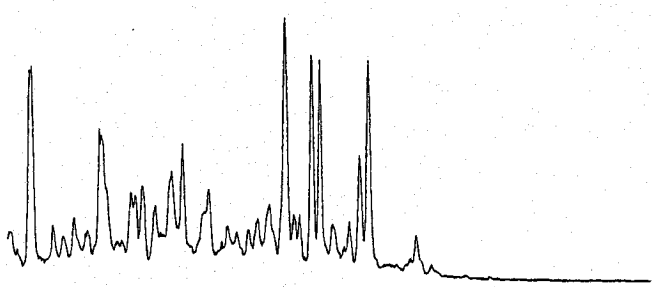
358->217: C26 Steranes MS040260.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	16.2	D	
%28 Steranes	22.8	D	
%29 Steranes	61.0	D	
%27 Diasteranes	16.4	D	
%28 Diasteranes	21.3	D	
%29 Diasteranes	62.3	D	
C30 Sterane Index	0.04	D	
C30 iso/n-propyl sterane Index	0.05	A	
C27 αββ/(ααα+αββ)	0.62	M	
C28 αββ/(ααα+αββ)	0.67	M	
C29 αββ/(ααα+αββ)	0.59	M	
C30 αββ/(ααα+αββ)	0.63	M	
C27 S/(S+R)	0.48	M	
C28 S/(S+R)	0.44	M	
C29 S/(S+R)	0.53	M	
C30 S/(S+R)	0.40	M	
Diasteranes/Steranes	1.53		
24-Nordiacholestane ratio (NDR)	0.32	A	
24-Norcholestane ratio (NCR)	0.51	A	
21-Norcholestane ratio	0.11	D/M	
Dinosterane ratio		A	
4-Methyl sterane ratio	0.03	A	
Terpane Ratios			
Oleanane Index (%)		A	
DesA Oleanane Index (%)	13.6	A	
Gammacerane Index (%)	0.3	D	
Bicadinane Index (%)	0.6	A/D	
DiaHopane Index (%)	8.4	D	
TPP	0.08	D	

[1]On response factored areas. Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	CONOCOPHILLIPS	**Client ID:**	US134517
Well Name:	MEADE 1	**Lab ID:**	CP273047
Top Depth:	2959 FT	**Fraction:**	SATURATE
Bottom Depth:	FT	**File Name:**	MS040260.D
Acquisition Parameters:	SAT 0.2UL 1000/1 RES 70EV 500UA 250C AR=4E-7MBAR CE=25		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->217.2: Internal Standard					
ISTD	5β-Cholane	49.050	861514	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.174	64254	7.5	7.5
D26N24baR	13β,17α,24-nordiacholestane 20R	51.252	42442	4.9	4.9
D26N27baS	13β,17α,27-nordiacholestane 20S	52.072	125369	14.6	14.6
D26N24abS	13α,17β,24-nordiacholestane 20S	52.282	15194	1.8	1.8
D26N24abR	13α,17β,24-nordiacholestane 20R	52.915	30890	3.6	3.6
D26N27baR	13β,17α,27-nordiacholestane 20R	53.149	99633	11.6	11.6
D26N27abS	13α,17β,27-nordiacholestane 20S	54.180	35184	4.1	4.1
D26N27abR	13α,17β,27-nordiacholestane 20R	54.742	44482	5.2	5.2
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	55.796	30710	3.6	3.6
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.030	30874	3.6	3.6
S26N24abbS	5α,14β,17β,24-norcholestane 20S	56.382	20822	2.4	2.4
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.108	46630	5.4	5.4
S26N21	21-norcholestane	57.295	30716	3.6	3.6
S26N27baaR	5β,14α,17α,27-norcholestane 20S	57.506	11457	1.3	1.3
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	57.553	28491	3.3	3.3
S26N27abbR	5α,14β,17β,27-norcholestane 20R	57.764	33607	3.9	3.9
S26N27abbS	5α,14β,17β,27-norcholestane 20S	58.771	26955	3.1	3.1
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	58.771	33832	3.9	3.9
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.180	1007381	116.9	83.3
D27baR	13β,17α-diacholestane 20R	55.515	648032	75.2	71.5
D27abS	13α,17β-diacholestane 20S	56.475	214250	24.9	14.7
D27abR	13α,17β-diacholestane 20R	57.155	302201	35.1	33.0
S27aaaS	5α,14α,17α-cholestane 20S	59.825	244285	28.4	18.3
S27abbR	5α,14β,17β-cholestane 20R	60.153	268088	31.1	33.3
S27abbS	5α,14β,17β-cholestane 20S	60.458	221490	25.7	28.6
S27aaaR	5α,14α,17α-cholestane 20R	61.231	240381	27.9	20.0
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	57.319	536404	62.3	56.4
D28baSB	13β,17α-diaergostane 20S (24S)	57.530	562547	65.3	61.3
D28baRA	13β,17α-diaergostane 20R (24R)	58.795	346837	40.3	34.4
D28baRB	13β,17α-diaergostane 20R (24R)	58.912	430980	50.0	49.2
D28abS	13α,17β-diaergostane 20S	59.708	263117	30.5	30.5
D28abRA	13α,17β-diaergostane 20R	60.598	206021	23.9	23.9
D28abRB	13α,17β-diaergostane 20R	60.715	141863	16.5	16.5
C28UNK9	C28 Unknown 9	61.488	187548	21.8	21.8
S28aaaSA	5α,14α,17α-ergostane 20S	63.175	84894	9.9	9.7
S28aaaSB	5α,14α,17α-ergostane 20S	63.292	110923	12.9	10.5
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	63.667	362858	42.1	56.4
S28abbS	5α,14β,17β-ergostane 20S	63.972	241300	28.0	37.7
S28N21	21-norstigmastane	64.417	58311	6.8	6.8
S28aaaR	5α,14α,17α-ergostane 20R	64.955	232580	27.0	26.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Lab ID:**	**CP273047**
Top Depth:	**2959 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040260.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 500UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->217.2: C29 Desmethylsteranes					
D29baS	13β,17α-diastigmastane 20S	60.200	2627151	304.9	318.1
D29baR	13β,17α-diastigmastane 20R	61.723	1864062	216.4	269.5
D29abS	13α,17β-diastigmastane 20S	62.355	615765	71.5	71.5
D29abR	13α,17β-diastigmastane 20R	63.550	798067	92.6	92.6
C29UNK5	C29 Unknown 5	64.276	622046	72.2	72.2
S29aaaS	5α,14α,17α-stigmastane 20S	65.986	647589	75.2	82.1
S29abbR	5α,14β,17β-stigmastane 20R	66.572	652825	75.8	110.7
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	66.783	638888	74.2	109.9
S29aaaR	5α,14α,17α-stigmastane 20R	67.977	641720	74.5	74.2
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	62.425	58356	6.8	9.7
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	62.496	64840	7.5	9.2
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.065	94084	10.9	18.4
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	64.487	15924	1.8	1.8
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	64.627	18149	2.1	2.1
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	65.939	38080	4.4	4.4
DC30UNK7	dia-C30 Unknown 7	66.431	22763	2.6	2.6
DC30UNK8	dia-C30 Unknown 8	66.595	8604	1.0	1.0
DC30UNK8A	dia-C30 Unknown 8A	66.736	13562	1.6	1.6
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.212	25458	3.0	4.0
C30UNK10	C30 Unknown 10	68.399	7735	0.9	0.9
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S	68.610	2991	0.3	0.3
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	68.961	38486	4.5	8.8
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.102	32584	3.8	8.2
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	69.195	11101	1.3	1.3
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R	69.406	5211	0.6	0.6
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	70.483	29458	3.4	6.0
C30UNK14	C30 Unknown 14	70.624	1927	0.2	0.2
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R	70.764	1964	0.2	0.2
C30UNK16	C30 Unknown 16	71.678	4476	0.52	0.52
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	55.702	44616	5.2	5.2
DC28UNK16	dia-C28 Unknown 16	56.475	14218	1.7	1.7
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.085	31856	3.7	3.7
DC28UNK3	dia-C28 Unknown 3	57.272	15120	1.8	1.8
DC28UNK17	dia-C28 Unknown 17	57.787	14714	1.7	1.7
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	58.279	65769	7.6	7.6
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	59.591	35192	4.1	4.1
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	61.371	41123	4.8	4.8
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	61.746	38390	4.5	4.5
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.027	43767	5.1	5.1
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	62.543	20706	2.4	2.4
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	62.707	27495	3.2	3.2
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	62.777	30743	3.6	3.6
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	62.988	24977	2.9	2.9
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	63.925	23262	2.7	2.7
XS28aaaR	5α,14α,17α-ergostane 20R	64.955	8435	1.0	1.0

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Lab ID:**	**CP273047**
Top Depth:	**2959 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040260.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 500UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
400.4->231.2: C29 Methylsteranes					
D293MbaSA	3β-Methyl-13β,17α-diaergostane 20S	58.771	26368	3.1	3.1
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	58.982	24647	2.9	2.9
DC29UNK27	dia-C29 Unknown 27	59.521	9434	1.1	1.1
DC29UNK28	dia-C29 Unknown 28	59.732	9008	1.0	1.0
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R	60.317	18903	2.2	2.2
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R	60.458	20428	2.4	2.4
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	61.348	30322	3.5	3.5
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	61.535	33166	3.9	3.9
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	62.800	18172	2.1	2.1
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	62.917	20427	2.4	2.4
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	63.714	18971	2.2	2.2
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	64.581	17388	2.0	2.0
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	64.698	27952	3.2	3.2
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	64.815	18793	2.2	2.2
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.237	31462	3.7	3.7
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	65.494	36773	4.3	4.3
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	65.822	11478	1.3	1.3
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	65.963	34515	4.0	4.0
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.150	31624	3.7	3.7
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	66.455	61539	7.1	7.1
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	67.579	23601	2.7	2.7
XS29aaaR	5α,14α,17α-stigmastane 20R	67.977	22509	2.6	2.6
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.064	35690	4.1	4.1
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	67.438	115348	13.4	13.4
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	67.626	19586	2.3	2.3
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	67.766	15447	1.8	1.8
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.048	86979	10.1	10.1
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.258	76636	8.9	8.9
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	68.563	24333	2.8	2.8
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	68.961	18459	2.1	2.1
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.195	48508	5.6	5.6
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.406	92272	10.7	10.7
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	70.507	16849	2.0	2.0
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Lab ID:**	**CP273047**
Top Depth:	**2959 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040260.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 500UA 250C AR=4E-7MBAR CE=25**		

Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
414.4->259.2: Tetracyclic polyprenoids and C30 3βpropylsteranes					
S303PaaaS	3β-Propyl-5α,14α,17α-cholestane 20S	69.336	3506	0.4	0.4
PP1	Tetracyclic polyprenoid	69.476	14238	1.7	1.7
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	69.640	18812	2.2	2.2
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	69.921	6895	0.8	0.8
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	70.671	6754	0.8	0.8
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.058	236476	27.4	27.4
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane				
TRITERP14	C30 unknown triterpane	66.478	21008	2.4	2.4
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid				
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	67.649	104250	12.1	12.1
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.024	25078	2.9	2.9
TRITERP17A	C30 plant terpane				
DH30	Diahopane	68.633	429239	49.8	49.8
TRITERP18	C30 unknown triterpane	69.125	31778	3.7	3.7
OL18a	18α Oleanane				
OL18b	18β Oleanane				
H30ab	17α, 21β-Hopane	70.647	2613965	303.4	546.2
H30N30	30-Norhomohopane	70.905	60259	7.0	7.0
H30TS	18α,17β-Neohopane	71.256	115081	13.4	13.4
H30aa	17α, 21α-Hopane	71.537	80834	9.4	9.4
H30ba	17β, 21α-Hopane (Moretane)	71.842	245041	28.4	67.4
GamA	Gammacerane-A	74.488	23737	2.8	1.0
GamB	Gammacerane-B	74.652	11550	1.3	0.4
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)	63.20	23722	2.754	2.8
B30T1	Bicadinane T1	63.85	7120	0.826	0.8
B30R	Bicadinane R	64.93	4918	0.571	0.6
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	29.724	12906	1.5	1.5
NORPREG5	Norpregnane-5	30.005	2916	0.3	0.3
NORPREG6	Norpregnane-6	30.286	14106	1.6	1.6
NORPREG7	Norpregnane-7	30.825	3996	0.5	0.5
NORPREG8_9	Norpregnane-8+Norpregnane-9	31.364	37806	4.4	4.4
NORPREG10	Norpregnane-10	31.621	10068	1.2	1.2
NORPREG11	Norpregnane-11	32.348	16255	1.9	1.9
NORPREG12	Norpregnane-12				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Lab ID:**	**CP273047**
Top Depth:	**2959 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**FT**	**File Name:**	**MS040260.D**

Acquisition Parameters: SAT 0.2UL 1000/1 RES 70EV 500UA 250C AR=4E-7MBAR CE=25

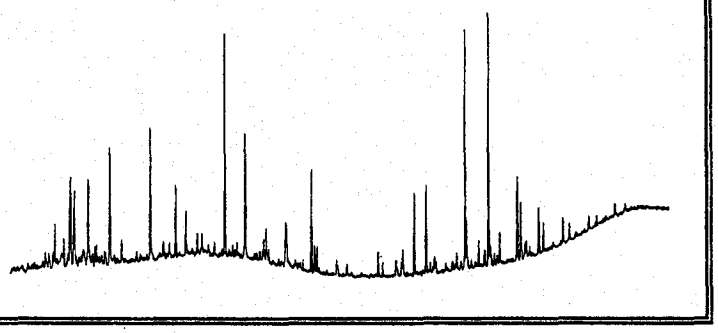
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.114	51130	5.9	5.9
DesALUP	Des-A-Lupane	45.231	10626	1.2	1.2
DesATARAX	Des-A-Taraxastane	48.511	29285	3.4	3.4
DesEHOP	Des-E-Hopane	49.893	323670	37.6	37.6
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
Bicadinene	Bicadinene				
OL1318ene	Olean-13(18)-ene				
OL12ene	Olean-12-ene				
OL18ene	Olean-18-ene				
OL12ene18a	18α-Olean-12-ene				
Unk_Peak1	Unknown peak 1				
426.4->205.2: C31 Pentacyclic Triterpenoids					
H312Mab	C31 2a-Methylhopane	70.882	92395	10.7	10.7
H31abS	C31 22S 2α-Methylhopane	73.856	221372	25.7	25.7
H31abR	C31 22R 2α-Methylhopane	74.231	160332	18.6	18.6
H313Mab	C31 3β-Methylhopane	74.652	31740	3.7	3.7

BASELINE DGSI
ANALYTICAL LABORATORIES

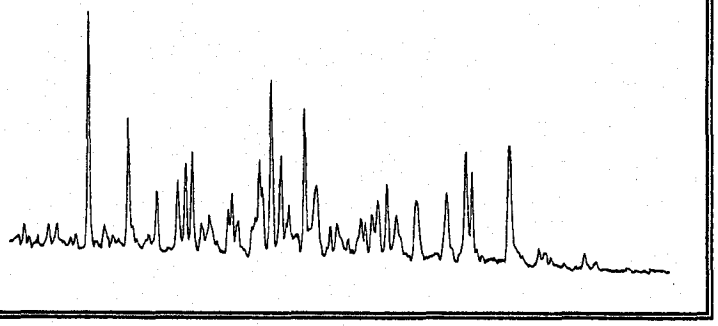
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132257
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218040
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5660 FT
Longitude:		**Bottom Depth:**	5690 FT

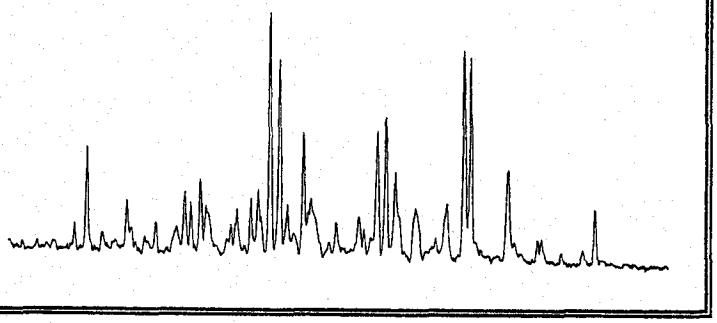
***m/z* 191: Tri- and Pentacyclics** M2031218.D



***m/z* 217: Steranes** M2031218.D



***m/z* 218: ββ Steranes** M2031218.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
%C_{27} αββS (218)	35.3	D	
%C_{28} αββS (218)	30.0	D	
%C_{29} αββS (218)	34.7	D	
%C_{27} aaaR (217)	33.7	D	
%C_{28} aaaR (217)	26.8	D	
%C_{29} aaaR (217)	39.5	D	
S/(S+R) (C_{29} aaa) (217)	0.40	M	0.55 (0.8%)
ββS/(ββS+aaR) (C29) (217)	0.31	M	0.70 (0.9%)
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.48		
C_{27}/C_{29} (αββS) (218)	1.02	D	
C_{28}/C_{29} (αββS) (218)	0.87	D	
Diaster/aaa Ster (C_{27}) (217)	1.53	M/D	1.00 (1.4%)
C30 Sterane Index (218)	4.93	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.09	D/A	
Gammacerane/Hopane	0.07	D	
Norhopane/Hopane	0.91	D	
Bisnorhopane/Hopane	0.07		
Diahopane/Hopane	0.04	M/D	
Moretane/Hopane	0.14	M	0.05 (0.7%)
25-nor-hopane/hopane	0.06	B	
Ts/(Ts+Tm) trisnorhopanes	0.48	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.24	M	
H32 S/(R+S) Homohopanes	0.58	M	0.60 (0.6%)
H35/H34 Homohopanes	1.18	D	
C24 Tetracyclic/Hopane	0.41	D	
C24 Tetracyclic/C26 Tricyclics	1.83	D	
C23/C24 Tricyclic terpanes	1.83	D	
C19/C23 Tricyclic terpanes	0.63	D	
C26/C25 Tricyclic terpanes	0.61	D	
(C28+C29 Tricyclics)/Ts	0.93	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.22	D	
Tricyclic terpanes/Hopanes	0.97	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	4.36	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M2031218.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*				0.0	0.0
125	H30_125	C30 17α(H)-hopane (125)	76.449	460	96		
125	GCAR	γ-carotane					
125	BCAR	β-carotane	87.954	403	38		
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.589	3087	508		
191	TR20	C20 tricyclic terpane	47.600	3143	679		
191	TR21	C21 tricyclic terpane	50.676	2939	773		
191	TR22	C22 tricyclic terpane	53.384	999	254		
191	TR23	C23 tricyclic terpane	56.385	4922	1290		
191	TR24	C24 tricyclic terpane	57.945	2685	720		
191	C24DEOL	C24 des-A-oleanane	59.549	824	198		
191	C24DELUP	C24 des-A-lupane	59.765	384	88		
191	TR25A	C25 tricyclic terpane (a)	61.022	1273	257		
191	TR25B	C25 tricyclic terpane (b)	61.087	801	237		
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.994	2309	603		
191	TR26A	C26 tricyclic terpane (a)	63.232	649	163		
191	TR26B	C26 tricyclic terpane (b)	63.427	612	155		
191	TR28A	C28 tricyclic terpane (a)	68.064	673	147		
191	TR28B	C28 tricyclic terpane (b)	68.410	335	85		
191	TR29A	C29 tricyclic terpane (a)	69.450	322	87		
191	TR29B	C29 tricyclic terpane (b)	69.841	391	83		
191	TS	Ts 18α(H)-trisnorhopane	70.816	1858	482		
191	TM	Tm 17α(H)-trisnorhopane	71.704	1977	516		
191	TR30A	C30 tricyclic terpane (a)	72.007	280	66		
191	TR30B	C30 tricyclic terpane (b)	72.462	385	68		
191	H28	C28 17α18α21β(H)-bisnorhopane	73.719	398	59		
191	NOR25H	C29 Nor-25-hopane	74.044	354	101		
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.672	5103	1387		
191	C29TS	C29 Ts 18α(H)-neohopane	74.802	1234	283		
191	DH30	C30 17α(H)-diahopane	75.149	202	52		
191	M29	C29 normoretane	75.712	603	155		
191	OL	oleanane	76.167	495	93		
191	H30	C30 17α(H)-hopane	76.449	5632	1473		
191	M30	C30 moretane	77.272	767	191		
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.529	1885	487		
191	H31R	C31 22R 17α(H) hopane	78.767	1467	334		
191	GAM	gammacerane	79.092	412	96		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M2031218.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.132	1082	274		
191	H32R	C32 22R 17α(H) hopane	80.479	771	176		
191	H33S	C33 22S 17α(H) hopane	81.996	645	154		
191	H33R	C33 22R 17α(H) hopane	82.473	497	111		
191	H34S	C34 22S 17α(H) hopane	83.924	373	82		
191	H34R	C34 22R 17α(H) hopane	84.509	255	62		
191	H35S	C35 22S 17α(H) hopane	85.918	394	76		
191	H35R	C35 22R 17α(H) hopane	86.698	348	54		
217	S21	C21 sterane	53.795	2593	501		
217	D|A27S	C27 βα 20S diasterane	65.659	1200	324		
217	C27R	C27 αα 20R sterane	70.274	785	199		
217	C28R	C28 αα 20R sterane	72.657	623	82		
217	C29S	C29 αα 20S sterane	73.307	602	91		
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.719	839	149		
217	C29BBS	C29 ββ 20S sterane	73.849	415	121		
217	C29R	C29 αα 20R sterane	74.607	919	159		
218	C27ABBR	C27 ββ 20R sterane	69.581	922	228		
218	C27ABBS	C27 ββ 20S sterane	69.776	741	184		
218	C28ABBR	C28 ββ 20R sterane	71.856	573	122		
218	C28ABBS	C28 ββ 20S sterane	72.051	629	135		
218	C29ABBR	C29 ββ 20R sterane	73.697	896	200		
218	C29ABBS	C29 ββ 20S sterane	73.849	727	194		
218	C30ABBR	C30 ββ 20R sterane	75.236	83	22		
218	C30ABBS	C30 ββ 20S sterane	75.322	88	23		
259	D27S	C27 βα 20S diasterane	65.659	672	170		
259	D27R	C27 βα 20R diasterane	66.504	439	105		
259	D28SA	C28 βα 20S diasterane a	67.739	285	69		
259	D28SB	C28 βα 20S diasterane b	67.869	303	66		
259	D28RA	C28 βα 20R diasterane a	68.649	215	49		
259	D28RB	C28 βα 20R diasterane b	68.735	177	47		
259	D29S	C29 βα 20S diasterane	69.581	476	96		
259	D29R	C29 βα 20R diasterane	70.534	390	50		
259	C30TP1	C30 tetracyclic polyprenoid	75.561	103	24		
259	C30TP2	C30 tetracyclic polyprenoid	75.647	87	27		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M2031218.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane					
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane					
135	2EAM	2-Ethyladamantane					
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane					
149	C14DMAM	1,4-Dimethyladamantane, cis					
149	T14DMAM	1,4-Dimethyladamantane, trans					
149	12DMAM	1,2-Dimethyladamantane					
149	1E3MAM	1-Ethyl-3-methyladamantane					
163	135TMAM	1,3,5-Trimethyladamantane					
163	136TMAM	1,3,6-Trimethyladamantane	15.888	19	8		
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.640	45	18		
163	T134TMAM	1,3,4-Trimethyladamantane, trans					
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.705	84	29		
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.870	44	17		
187	4MDI	4-Methyldiamantane	25.561	579	167		
187	1MDI	1-Methyldiamantane	27.044	597	143		
187	3MDI	3-Methyldiamantane	28.130	534	125		
188	DI	Diamantane	25.122	401	113		
201	49DMDI	4,9-Dimethyldiamantane	25.999	229	61		
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.148	350	92		
201	48DMDI	4,8-Dimethyldiamantane	27.378	399	100		
201	34DMDI	3,4-Dimethyldiamantane	28.611	628	136		
215	TMDI	Trimethyldiamantane	27.420	318	80		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M2031218.D**

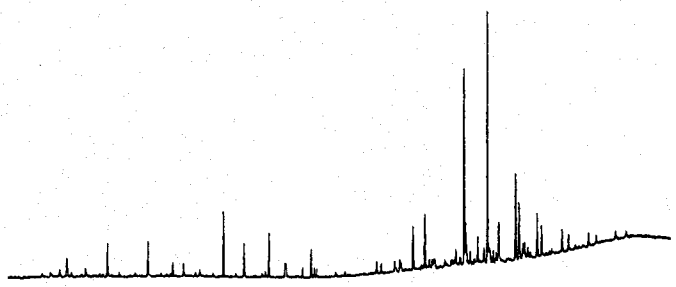
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	35.3	35.9
%C_{28} αββS (218)	30.0	26.3
%C_{29} αββS (218)	34.7	37.8
C_{27}/C_{29} (αββS) (218)	1.02	0.95
C_{28}/C_{29} (αββS) (218)	0.87	0.70
C_{29}/C_{27} (αββS) (218)	0.98	1.05
%C_{27} αααR (217)	33.7	45.2
%C_{28} αααR (217)	26.6	18.6
%C_{29} αααR (217)	39.5	36.1
S/R (C_{29} ααα) (217)	0.66	0.57
S/(S+R) (C_{29} ααα) (217)	0.40	0.36
ββ/(αα+ββ) (C_{29}) (217)	0.45	0.52
αββS/αααR (C_{29}) (217)	0.45	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.48	0.45
Diaster/ααα Ster (C_{27}) (217)	1.53	1.63
Terpenoids		
C19/C23 Tricyclic terpanes	0.63	0.39
C23/C24 Tricyclic terpanes	1.83	1.79
C26/C25 Tricyclic terpanes	0.61	0.64
C24 Tetracyclic/C26 Tricyclics	1.83	1.90
C24 Tetracyclic/Hopane	0.41	0.41
Ts/Tm trisnorhopanes	0.94	0.93
Ts/(Ts+Tm) trisnorhopanes	0.48	0.48
C29Ts/C29 Hopane	0.24	0.20
Bisnorhopane/Hopane	0.07	0.04
Norhopane/Hopane	0.91	0.94
Diahopane/Hopane	0.04	0.04
Oleanane/Hopane	0.09	0.06
Gammacerane/Hopane	0.07	0.07
Moretane/(Moretane+Hopane)	0.12	0.11
H32 S/(S+R) Homohopanes	0.58	0.61
H35/H34 Homohopanes	1.18	0.90
[Steranes]/[Hopanes]	0.22	0.19
[Tricyclic terpanes]/[Hopanes]	0.97	0.92
[Tricyclic terpanes]/[Steranes]	4.36	4.95
DIAMONDOID Ratios		
Methyl Adamantane Index		
Methyl Diamantane Index	0.34	0.38

BASELINE DGSI ANALYTICAL LABORATORIES

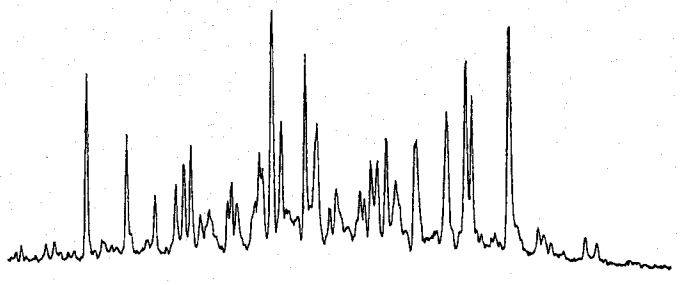
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132258
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218041
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5910 FT
Longitude:		**Bottom Depth:**	5940 FT

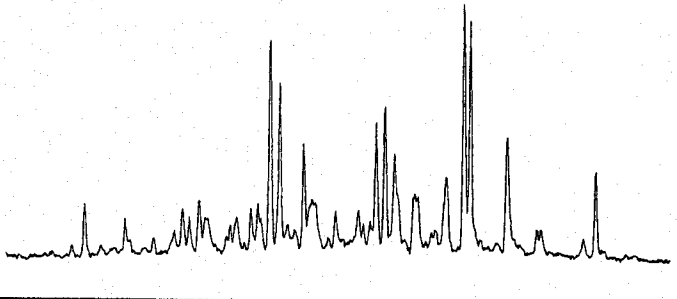
***m/z* 191: Tri- and Pentacyclics** M2031219.D



***m/z* 217: Steranes** M2031219.D



***m/z* 218: ββ Steranes** M2031219.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	30.2	D	
$\%C_{28}$ αββS (218)	28.0	D	
$\%C_{29}$ αββS (218)	41.8	D	
$\%C_{27}$ αααR (217)	28.1	D	
$\%C_{28}$ αααR (217)	27.9	D	
$\%C_{29}$ αααR (217)	44.0	D	
S/(S+R) (C_{29} ααα) (217)	0.40	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.31	M	0.70 (0.9%)
$(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29})$ (217)	0.16		
C_{27}/C_{29} (αββS) (218)	0.72	D	
C_{28}/C_{29} (αββS) (218)	0.67	D	
Diaster/ααα Ster (C_{27}) (217)	0.86	M/D	1.00 (1.4%)
C30 Sterane Index (218)	4.35	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.08	D/A	
Gammacerane/Hopane	0.06	D	
Norhopane/Hopane	0.71	D	
Bisnorhopane/Hopane	0.04		
Diahopane/Hopane	0.04	M/D	
Moretane/Hopane	0.16	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.05	B	
Ts/(Ts+Tm) trisnorhopanes	0.45	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.26	M	
H32 S/(R+S) Homohopanes	0.57	M	0.60 (0.6%)
H35/H34 Homohopanes	0.71	D	
C24 Tetracyclic/Hopane	0.10	D	
C24 Tetracyclic/C26 Tricyclics	1.46	D	
C23/C24 Tricyclic terpanes	1.92	D	
C19/C23 Tricyclic terpanes	0.45	D	
C26/C25 Tricyclic terpanes	0.67	D	
(C28+C29 Tricyclics)/Ts	1.04	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.19	D	
Tricyclic terpanes/Hopanes	0.34	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	1.79	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M2031219.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*				0.0	0.0
125	H30_125	C30 17α(H)-hopane (125)	76.448	801	153		
125	GCAR	γ-carotane					
125	BCAR	β-carotane	87.953	601	51		
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.525	1304	226		
191	TR20	C20 tricyclic terpane	47.601	1892	403		
191	TR21	C21 tricyclic terpane	50.655	1596	419		
191	TR22	C22 tricyclic terpane	53.363	613	153		
191	TR23	C23 tricyclic terpane	56.363	2882	790		
191	TR24	C24 tricyclic terpane	57.923	1500	402		
191	C24DEOL	C24 des-A-oleanane	59.548	216	65		
191	C24DELUP	C24 des-A-lupane	59.786	1985	532		
191	TR25A	C25 tricyclic terpane (a)	61.021	679	184		
191	TR25B	C25 tricyclic terpane (b)	61.086	484	169		
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.971	1335	347		
191	TR26A	C26 tricyclic terpane (a)	63.231	459	123		
191	TR26B	C26 tricyclic terpane (b)	63.404	458	108		
191	TR28A	C28 tricyclic terpane (a)	68.063	697	145		
191	TR28B	C28 tricyclic terpane (b)	68.410	449	121		
191	TR29A	C29 tricyclic terpane (a)	69.450	523	128		
191	TR29B	C29 tricyclic terpane (b)	69.840	581	140		
191	TS	Ts 18α(H)-trisnorhopane	70.815	2165	538		
191	TM	Tm 17α(H)-trisnorhopane	71.703	2605	661		
191	TR30A	C30 tricyclic terpane (a)	72.028	429	106		
191	TR30B	C30 tricyclic terpane (b)	72.461	666	116		
191	H28	C28 17α18α21β(H)-bisnorhopane	73.761	572	77		
191	NOR25H	C29 Nor-25-hopane	74.043	689	184		
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.671	9024	2372		
191	C29TS	C29 Ts 18α(H)-neomohopane	74.801	2334	510		
191	DH30	C30 17α(H)-diahopane	75.148	571	158		
191	M29	C29 normoretane	75.711	1314	328		
191	OL	oleanane	76.188	1006	187		
191	H30	C30 17α(H)-hopane	76.448	12717	3045		
191	M30	C30 moretane	77.272	2097	493		
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.528	4189	1039		
191	H31R	C31 22R 17α(H) hopane	78.767	3075	689		
191	GAM	gammacerane	79.092	815	185		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M2031219.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.132	2223	525		
191	H32R	C32 22R 17α(H) hopane	80.476	1667	374		
191	H33S	C33 22S 17α(H) hopane	81.995	1344	283		
191	H33R	C33 22R 17α(H) hopane	82.472	946	211		
191	H34S	C34 22S 17α(H) hopane	83.945	849	174		
191	H34R	C34 22R 17α(H) hopane	84.508	624	119		
191	H35S	C35 22S 17α(H) hopane	85.917	589	108		
191	H35R	C35 22R 17α(H) hopane	86.697	456	81		
217	S21	C21 sterane	53.774	1375	281		
217	DIA27S	C27 βα 20S diasterane	65.658	998	253		
217	C27R	C27 αα 20R sterane	70.273	1158	261		
217	C28R	C28 αα 20R sterane	72.678	1153	149		
217	C29S	C29 αα 20S sterane	73.306	1231	186		
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.718	1435	255		
217	C29BBS	C29 ββ 20S sterane	73.848	816	209		
217	C29R	C29 αα 20R sterane	74.628	1816	301		
218	C27ABBR	C27 ββ 20R sterane	69.580	1223	278		
218	C27ABBS	C27 ββ 20S sterane	69.775	944	222		
218	C28ABBR	C28 ββ 20R sterane	71.855	716	169		
218	C28ABBS	C28 ββ 20S sterane	72.050	874	190		
218	C29ABBR	C29 ββ 20R sterane	73.696	1495	330		
218	C29ABBS	C29 ββ 20S sterane	73.848	1307	308		
218	C30ABBR	C30 ββ 20R sterane	75.235	147	34		
218	C30ABBS	C30 ββ 20S sterane	75.321	142	33		
259	D27S	C27 βα 20S diasterane	65.658	601	145		
259	D27R	C27 βα 20R diasterane	66.503	420	102		
259	D28SA	C28 βα 20S diasterane a	67.738	299	68		
259	D28SB	C28 βα 20S diasterane b	67.868	335	76		
259	D28RA	C28 βα 20R diasterane a	68.648	226	49		
259	D28RB	C28 βα 20R diasterane b	68.735	159	49		
259	D29S	C29 βα 20S diasterane	69.580	757	153		
259	D29R	C29 βα 20R diasterane	70.533	666	93		
259	C30TP1	C30 tetracyclic polyprenoid	75.560	207	47		
259	C30TP2	C30 tetracyclic polyprenoid	75.646	209	56		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M2031219.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane					
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane					
135	2EAM	2-Ethyladamantane					
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane					
149	C14DMAM	1,4-Dimethyladamantane, cis					
149	T14DMAM	1,4-Dimethyladamantane, trans					
149	12DMAM	1,2-Dimethyladamantane					
149	1E3MAM	1-Ethyl-3-methyladamantane					
163	135TMAM	1,3,5-Trimethyladamantane					
163	136TMAM	1,3,6-Trimethyladamantane					
163	C134TMAM	1,3,4-Trimethyladamantane, cis					
163	T134TMAM	1,3,4-Trimethyladamantane, trans					
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane					
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane					
187	4MDI	4-Methyldiamantane	25.563	153	41		
187	1MDI	1-Methyldiamantane	27.047	137	33		
187	3MDI	3-Methyldiamantane	28.133	143	35		
188	DI	Diamantane	25.104	118	28		
201	49DMDI	4,9-Dimethyldiamantane	25.981	85	20		
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.151	99	23		
201	48DMDI	4,8-Dimethyldiamantane	27.360	122	30		
201	34DMDI	3,4-Dimethyldiamantane	28.614	211	44		
215	TMDI	Trimethyldiamantane	27.402	102	24		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M2031219.D**

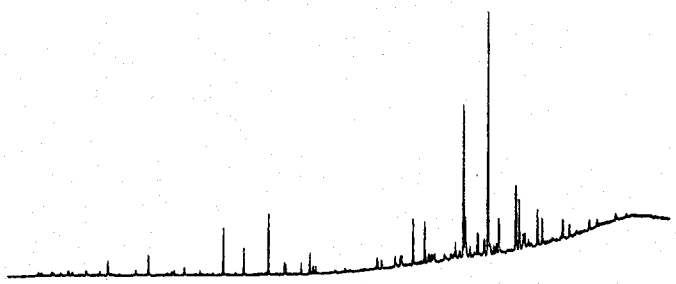
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	30.2	30.8
%C_{28} αββS (218)	28.0	26.4
%C_{29} αββS (218)	41.8	42.8
C_{27}/C_{29} (αββS) (218)	0.72	0.72
C_{28}/C_{29} (αββS) (218)	0.67	0.62
C_{29}/C_{27} (αββS) (218)	1.38	1.39
%C_{27} αααR (217)	28.1	36.7
%C_{28} αααR (217)	27.9	21.0
%C_{29} αααR (217)	44.0	42.3
S/R (C_{29} ααα) (217)	0.68	0.62
S/(S+R) (C_{29} ααα) (217)	0.40	0.38
ββ/(αα+ββ) (C_{29}) (217)	0.42	0.49
αββS/αααR (C_{29}) (217)	0.45	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.16	0.17
Diaster/ααα Ster (C_{27}) (217)	0.86	0.97
Terpenoids		
C19/C23 Tricyclic terpanes	0.45	0.29
C23/C24 Tricyclic terpanes	1.92	1.97
C26/C25 Tricyclic terpanes	0.67	0.65
C24 Tetracyclic/C26 Tricyclics	1.46	1.50
C24 Tetracyclic/Hopane	0.10	0.11
Ts/Tm trisnorhopanes	0.83	0.81
Ts/(Ts+Tm) trisnorhopanes	0.45	0.45
C29Ts/C29 Hopane	0.26	0.22
Bisnorhopane/Hopane	0.04	0.03
Norhopane/Hopane	0.71	0.78
Diahopane/Hopane	0.04	0.05
Oleanane/Hopane	0.08	0.06
Gammacerane/Hopane	0.06	0.06
Moretane/(Moretane+Hopane)	0.14	0.14
H32 S/(S+R) Homohopanes	0.57	0.58
H35/H34 Homohopanes	0.71	0.65
[Steranes]/[Hopanes]	0.19	0.15
[Tricyclic terpanes]/[Hopanes]	0.34	0.34
[Tricyclic terpanes]/[Steranes]	1.79	2.31
DIAMONDOID Ratios		
Methyl Adamantane Index		
Methyl Diamantane Index	0.35	0.38

BASELINE DGSI
ANALYTICAL LABORATORIES

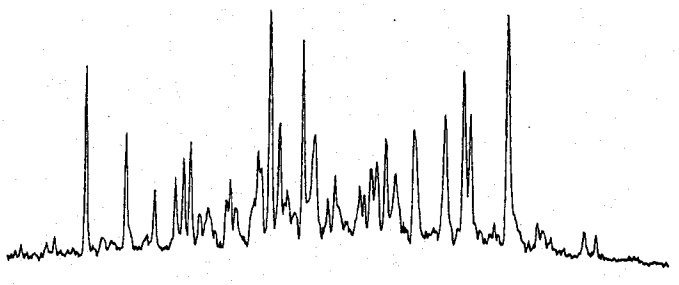
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132259
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218042
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	7870 FT
Longitude:		**Bottom Depth:**	7910 FT

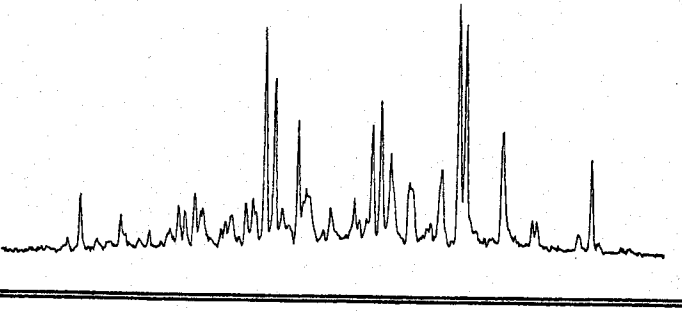
m/z 191: Tri- and Pentacyclics — M2031220.D



m/z 217: Steranes — M2031220.D



m/z 218: ββ Steranes — M2031220.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	31.8	D	
$\%C_{28}$ αββS (218)	27.5	D	
$\%C_{29}$ αββS (218)	40.7	D	
$\%C_{27}$ ααaR (217)	26.1	D	
$\%C_{28}$ ααaR (217)	29.8	D	
$\%C_{29}$ ααaR (217)	44.1	D	
S/(S+R) (C_{29} ααα) (217)	0.41	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.31	M	0.70 (0.9%)
(C_{27}+C_{28})/(C_{27}+C_{28}+C_{29}) (217)	0.11		
C_{27}/C_{29} (αββS) (218)	0.78	D	
C_{28}/C_{29} (αββS) (218)	0.68	D	
Diaster/ααα Ster (C_{27}) (217)	0.93	M/D	1.00 (1.4%)
C30 Sterane Index (218)	4.08	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.09	D/A	
Gammacerane/Hopane	0.07	D	
Normopane/Hopane	0.65	D	
Bisnorhopane/Hopane	0.04		
Diahopane/Hopane	0.05	M/D	
Moretane/Hopane	0.16	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.07	B	
Ts/(Ts+Tm) trisnorhopanes	0.52	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.33	M	
H32 S/(R+S) Homohopanes	0.55	M	0.60 (0.6%)
H35/H34 Homohopanes	0.69	D	
C24 Tetracyclic/Hopane	0.08	D	
C24 Tetracyclic/C26 Tricyclics	1.29	D	
C23/C24 Tricyclic terpanes	1.81	D	
C19/C23 Tricyclic terpanes	0.22	D	
C26/C25 Tricyclic terpanes	0.67	D	
(C28+C29 Tricyclics)/Ts	1.10	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.19	D	
Tricyclic terpanes/Hopanes	0.28	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	1.47	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M2031220.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5 β cholane (internal standard)*				0.0	0.0
125	H30_125	C30 17α(H)-hopane (125)	76.449	558	114		
125	GCAR	γ-carotane					
125	BCAR	β-carotane	87.954	321	27		
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.568	328	48		
191	TR20	C20 tricyclic terpane	47.579	623	132		
191	TR21	C21 tricyclic terpane	50.655	635	176		
191	TR22	C22 tricyclic terpane	53.363	296	72		
191	TR23	C23 tricyclic terpane	56.363	1493	408		
191	TR24	C24 tricyclic terpane	57.923	823	235		
191	C24DEOL	C24 des-A-oleanane	59.527	118	24		
191	C24DELUP	C24 des-A-lupane	59.787	1788	529		
191	TR25A	C25 tricyclic terpane (a)	61.022	462	105		
191	TR25B	C25 tricyclic terpane (b)	61.087	341	94		
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.972	699	182		
191	TR26A	C26 tricyclic terpane (a)	63.232	268	73		
191	TR26B	C26 tricyclic terpane (b)	63.405	274	68		
191	TR28A	C28 tricyclic terpane (a)	68.064	464	101		
191	TR28B	C28 tricyclic terpane (b)	68.410	363	79		
191	TR29A	C29 tricyclic terpane (a)	69.429	424	98		
191	TR29B	C29 tricyclic terpane (b)	69.819	443	92		
191	TS	Ts 18α(H)-trisnorhopane	70.815	1546	405		
191	TM	Tm 17α(H)-trisnorhopane	71.682	1399	356		
191	TR30A	C30 tricyclic terpane (a)	72.007	295	77		
191	TR30B	C30 tricyclic terpane (b)	72.441	429	79		
191	H28	C28 17α18α21β(H)-bisnorhopane	73.697	299	43		
191	NOR25H	C29 Nor-25-hopane	74.044	563	144		
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.672	5472	1328		
191	C29TS	C29 Ts 18α(H)-neohopane	74.802	1794	357		
191	DH30	C30 17α(H)-diahopane	75.149	413	99		
191	M29	C29 normoretane	75.691	919	206		
191	OL	oleanane	76.167	781	143		
191	H30	C30 17α(H)-hopane	76.449	8360	2127		
191	M30	C30 moretane	77.272	1342	305		
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.529	2360	556		
191	H31R	C31 22R 17α(H) hopane	78.767	1836	434		
191	GAM	gammacerane	79.071	602	127		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M2031220.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.132	1217	311		
191	H32R	C32 22R 17α(H) hopane	80.479	984	232		
191	H33S	C33 22S 17α(H) hopane	81.996	702	168		
191	H33R	C33 22R 17α(H) hopane	82.472	468	113		
191	H34S	C34 22S 17α(H) hopane	83.924	417	91		
191	H34R	C34 22R 17α(H) hopane	84.509	326	71		
191	H35S	C35 22S 17α(H) hopane	85.896	330	67		
191	H35R	C35 22R 17α(H) hopane	86.698	179	40		
217	S21	C21 sterane	53.774	586	125		
217	DIA27S	C27 βα 20S diasterane	65.659	640	165		
217	C27R	C27 αα 20R sterane	70.274	690	172		
217	C28R	C28 αα 20R sterane	72.636	788	100		
217	C29S	C29 αα 20S sterane	73.307	802	113		
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.697	810	151		
217	C29BBS	C29 ββ 20S sterane	73.849	523	114		
217	C29R	C29 αα 20R sterane	74.607	1165	199		
218	C27ABBR	C27 ββ 20R sterane	69.559	755	181		
218	C27ABBS	C27 ββ 20S sterane	69.775	620	138		
218	C28ABBR	C28 ββ 20R sterane	71.856	445	97		
218	C28ABBS	C28 ββ 20S sterane	72.029	537	117		
218	C29ABBR	C29 ββ 20R sterane	73.697	923	202		
218	C29ABBS	C29 ββ 20S sterane	73.849	794	185		
218	C30ABBR	C30 ββ 20R sterane	75.236	85	22		
218	C30ABBS	C30 ββ 20S sterane	75.322	83	21		
259	D27S	C27 βα 20S diasterane	65.659	369	97		
259	D27R	C27 βα 20R diasterane	66.504	251	61		
259	D28SA	C28 βα 20S diasterane a	67.717	170	45		
259	D28SB	C28 βα 20S diasterane b	67.869	220	49		
259	D28RA	C28 βα 20R diasterane a	68.627	161	38		
259	D28RB	C28 βα 20R diasterane b	68.735	104	31		
259	D29S	C29 βα 20S diasterane	69.580	458	90		
259	D29R	C29 βα 20R diasterane	70.534	376	48		
259	C30TP1	C30 tetracyclic polyprenoid	75.539	144	32		
259	C30TP2	C30 tetracyclic polyprenoid	75.626	116	34		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M2031220.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane					
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane					
135	2EAM	2-Ethyladamantane					
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane					
149	C14DMAM	1,4-Dimethyladamantane, cis					
149	T14DMAM	1,4-Dimethyladamantane, trans					
149	12DMAM	1,2-Dimethyladamantane					
149	1E3MAM	1-Ethyl-3-methyladamantane					
163	135TMAM	1,3,5-Trimethyladamantane					
163	136TMAM	1,3,6-Trimethyladamantane					
163	C134TMAM	1,3,4-Trimethyladamantane, cis					
163	T134TMAM	1,3,4-Trimethyladamantane, trans					
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane					
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane					
187	4MDI	4-Methyldiamantane	25.540	15	4		
187	1MDI	1-Methyldiamantane	27.044	11	4		
187	3MDI	3-Methyldiamantane	28.089	13	4		
188	DI	Diamantane	25.080	41	7		
201	49DMDI	4,9-Dimethyldiamantane					
201	1424DMDI	1,4 and 2,4-dimethyldiamantane					
201	48DMDI	4,8-Dimethyldiamantane					
201	34DMDI	3,4-Dimethyldiamantane					
215	TMDI	Trimethyldiamantane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M2031220.D**

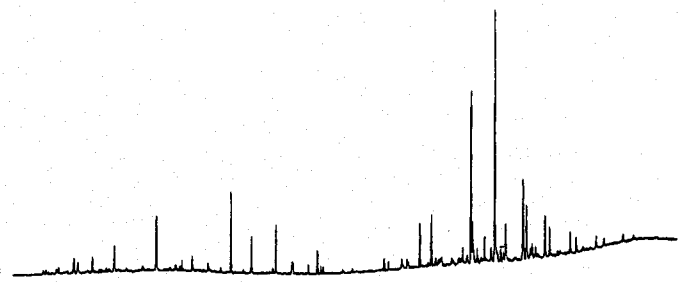
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	31.8	31.4
%C_{28} αββS (218)	27.5	26.6
%C_{29} αββS (218)	40.7	42.0
C_{27}/C_{29} (αββS) (218)	0.78	0.75
C_{28}/C_{29} (αββS) (218)	0.68	0.63
C_{29}/C_{27} (αββS) (218)	1.28	1.34
%C_{27} αααR (217)	26.1	36.5
%C_{28} αααR (217)	29.8	21.2
%C_{29} αααR (217)	44.1	42.3
S/R (C_{29} ααα) (217)	0.69	0.57
S/(S+R) (C_{29} ααα) (217)	0.41	0.36
ββ/(αα+ββ) (C_{29}) (217)	0.40	0.46
αββS/αααR (C_{29}) (217)	0.45	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.11	0.12
Diaster/ααα Ster (C_{27}) (217)	0.93	0.96
Terpenoids		
C19/C23 Tricyclic terpanes	0.22	0.12
C23/C24 Tricyclic terpanes	1.81	1.74
C26/C25 Tricyclic terpanes	0.67	0.71
C24 Tetracyclic/C26 Tricyclics	1.29	1.29
C24 Tetracyclic/Hopane	0.08	0.09
Ts/Tm trisnorhopanes	1.11	1.14
Ts/(Ts+Tm) trisnorhopanes	0.52	0.53
C29Ts/C29 Hopane	0.33	0.27
Bisnorhopane/Hopane	0.04	0.02
Norhopane/Hopane	0.65	0.62
Diahopane/Hopane	0.05	0.05
Oleanane/Hopane	0.09	0.07
Gammacerane/Hopane	0.07	0.06
Moretane/(Moretane+Hopane)	0.14	0.13
H32 S/(S+R) Homohopanes	0.55	0.57
H35/H34 Homohopanes	0.69	0.66
[Steranes]/[Hopanes]	0.19	0.15
[Tricyclic terpanes]/[Hopanes]	0.28	0.28
[Tricyclic terpanes]/[Steranes]	1.47	1.91
DIAMONDOID Ratios		
Methyl Adamantane Index		
Methyl Diamantane Index	0.38	0.33

BASELINE DGSI
ANALYTICAL LABORATORIES

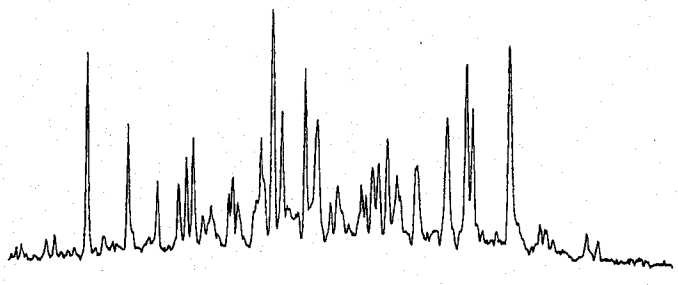
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132264
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218047
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH SIMPSON #1	**Geologic Age:**	
Latitude:		**Top Depth:**	6520 FT
Longitude:		**Bottom Depth:**	6570 FT

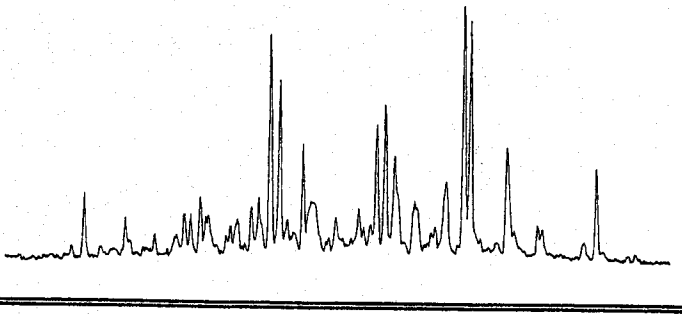
***m/z* 191: Tri- and Pentacyclics** M2031225.D



***m/z* 217: Steranes** M2031225.D



***m/z* 218: ββ Steranes** M2031225.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	30.5	D	
$\%C_{28}$ αββS (218)	28.4	D	
$\%C_{29}$ αββS (218)	41.0	D	
$\%C_{27}$ αααR (217)	27.4	D	
$\%C_{28}$ αααR (217)	24.4	D	
$\%C_{29}$ αααR (217)	48.1	D	
S/(S+R) (C_{29} ααα) (217)	0.41	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.34	M	0.70 (0.9%)
$(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29})$ (217)	0.35		
C_{27}/C_{29} (αββS) (218)	0.74	D	
C_{28}/C_{29} (αββS) (218)	0.69	D	
Diaster/ααα Ster (C_{27}) (217)	1.13	M/D	1.00 (1.4%)
C30 Sterane Index (218)	4.96	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.07	D/A	
Gammacerane/Hopane	0.05	D	
Norhopane/Hopane	0.68	D	
Bisnorhopane/Hopane	0.04		
Diahopane/Hopane	0.06	M/D	
Moretane/Hopane	0.16	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.06	B	
Ts/(Ts+Tm) trisnorhopanes	0.46	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.31	M	
H32 S/(R+S) Homohopanes	0.58	M	0.60 (0.6%)
H35/H34 Homohopanes	0.56	D	
C24 Tetracyclic/Hopane	0.09	D	
C24 Tetracyclic/C26 Tricyclics	1.39	D	
C23/C24 Tricyclic terpanes	2.22	D	
C19/C23 Tricyclic terpanes	0.33	D	
C26/C25 Tricyclic terpanes	0.70	D	
(C28+C29 Tricyclics)/Ts	1.04	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.17	D	
Tricyclic terpanes/Hopanes	0.38	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	2.23	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M2031225.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*				0.0	0.0
125	H30_125	C30 17α(H)-hopane (125)	76.448	776	163		
125	GCAR	γ-carotane					
125	BCAR	β-carotane	87.975	343	37		
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.567	1185	185		
191	TR20	C20 tricyclic terpane	47.600	1613	326		
191	TR21	C21 tricyclic terpane	50.654	2504	661		
191	TR22	C22 tricyclic terpane	53.362	755	188		
191	TR23	C23 tricyclic terpane	56.362	3633	1000		
191	TR24	C24 tricyclic terpane	57.923	1635	453		
191	C24DEOL	C24 des-A-oleanane	59.548	215	61		
191	C24DELUP	C24 des-A-lupane	59.786	2105	603		
191	TR25A	C25 tricyclic terpane (a)	61.021	620	149		
191	TR25B	C25 tricyclic terpane (b)	61.086	528	148		
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.971	1113	289		
191	TR26A	C26 tricyclic terpane (a)	63.231	395	97		
191	TR26B	C26 tricyclic terpane (b)	63.404	407	96		
191	TR28A	C28 tricyclic terpane (a)	68.063	647	143		
191	TR28B	C28 tricyclic terpane (b)	68.409	433	111		
191	TR29A	C29 tricyclic terpane (a)	69.428	589	125		
191	TR29B	C29 tricyclic terpane (b)	69.840	530	112		
191	TS	Ts 18α(H)-trisnorhopane	70.815	2118	550		
191	TM	Tm 17α(H)-trisnorhopane	71.703	2478	643		
191	TR30A	C30 tricyclic terpane (a)	72.006	441	109		
191	TR30B	C30 tricyclic terpane (b)	72.440	581	105		
191	H28	C28 17α18α21β(H)-bisnorhopane	73.761	511	78		
191	NOR25H	C29 Nor-25-hopane	74.043	731	211		
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.671	8320	2127		
191	C29TS	C29 Ts 18α(H)-neomohopane	74.801	2579	521		
191	DH30	C30 17α(H)-diahopane	75.148	725	194		
191	M29	C29 normoretane	75.711	1240	317		
191	OL	oleanane	76.188	906	180		
191	H30	C30 17α(H)-hopane	76.448	12283	3098		
191	M30	C30 moretane	77.271	1977	472		
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.528	3960	995		
191	H31R	C31 22R 17α(H) hopane	78.788	2986	674		
191	GAM	gammacerane	79.091	606	138		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M2031225.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.131	2187	519		
191	H32R	C32 22R 17α(H) hopane	80.478	1607	375		
191	H33S	C33 22S 17α(H) hopane	81.995	1232	275		
191	H33R	C33 22R 17α(H) hopane	82.472	871	199		
191	H34S	C34 22S 17α(H) hopane	83.945	698	154		
191	H34R	C34 22R 17α(H) hopane	84.530	497	104		
191	H35S	C35 22S 17α(H) hopane	85.917	385	97		
191	H35R	C35 22R 17α(H) hopane	86.675	282	61		
217	S21	C21 sterane	53.774	2564	517		
217	DIA27S	C27 βα 20S diasterane	65.658	1005	259		
217	C27R	C27 αα 20R sterane	70.273	887	221		
217	C28R	C28 αα 20R sterane	72.678	790	101		
217	C29S	C29 αα 20S sterane	73.306	1104	164		
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.718	1260	232		
217	C29BBS	C29 ββ 20S sterane	73.848	788	177		
217	C29R	C29 αα 20R sterane	74.606	1557	260		
218	C27ABBR	C27 ββ 20R sterane	69.558	1123	260		
218	C27ABBS	C27 ββ 20S sterane	69.775	883	205		
218	C28ABBR	C28 ββ 20R sterane	71.855	693	152		
218	C28ABBS	C28 ββ 20S sterane	72.028	822	176		
218	C29ABBR	C29 ββ 20R sterane	73.696	1370	300		
218	C29ABBS	C29 ββ 20S sterane	73.848	1186	282		
218	C30ABBR	C30 ββ 20R sterane	75.235	147	37		
218	C30ABBS	C30 ββ 20S sterane	75.343	151	32		
259	D27S	C27 βα 20S diasterane	65.658	546	141		
259	D27R	C27 βα 20R diasterane	66.503	398	95		
259	D28SA	C28 βα 20S diasterane a	67.716	257	66		
259	D28SB	C28 βα 20S diasterane b	67.868	302	71		
259	D28RA	C28 βα 20R diasterane a	68.648	233	51		
259	D28RB	C28 βα 20R diasterane b	68.734	166	39		
259	D29S	C29 βα 20S diasterane	69.580	705	136		
259	D29R	C29 βα 20R diasterane	70.533	598	77		
259	C30TP1	C30 tetracyclic polyprenoid	75.560	213	43		
259	C30TP2	C30 tetracyclic polyprenoid	75.646	172	46		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M2031225.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane					
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane					
135	2EAM	2-Ethyladamantane					
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane					
149	C14DMAM	1,4-Dimethyladamantane, cis					
149	T14DMAM	1,4-Dimethyladamantane, trans					
149	12DMAM	1,2-Dimethyladamantane					
149	1E3MAM	1-Ethyl-3-methyladamantane					
163	135TMAM	1,3,5-Trimethyladamantane					
163	136TMAM	1,3,6-Trimethyladamantane					
163	C134TMAM	1,3,4-Trimethyladamantane, cis					
163	T134TMAM	1,3,4-Trimethyladamantane, trans					
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane					
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane					
187	4MDI	4-Methyldiamantane	25.563	35	9		
187	1MDI	1-Methyldiamantane	27.046	33	9		
187	3MDI	3-Methyldiamantane	28.111	28	7		
188	DI	Diamantane	25.103	85	12		
201	49DMDI	4,9-Dimethyldiamantane	25.980	13	3		
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.109	33	5		
201	48DMDI	4,8-Dimethyldiamantane	27.359	23	6		
201	34DMDI	3,4-Dimethyldiamantane	28.613	55	9		
215	TMDI	Trimethyldiamantane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M2031225.D**

Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	30.5	30.9
%C_{28} αββS (218)	28.4	26.5
%C_{29} αββS (218)	41.0	42.5
C_{27}/C_{29} (αββS) (218)	0.74	0.73
C_{28}/C_{29} (αββS) (218)	0.69	0.62
C_{29}/C_{27} (αββS) (218)	1.34	1.36
%C_{27} αααR (217)	27.4	38.0
%C_{28} αααR (217)	24.4	17.4
%C_{29} αααR (217)	48.1	44.7
S/R (C_{29} ααα) (217)	0.71	0.63
S/(S+R) (C_{29} ααα) (217)	0.41	0.39
ββ/(αα+ββ) (C_{29}) (217)	0.43	0.49
αββS/αααR (C_{29}) (217)	0.51	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.35	0.37
Diaster/ααα Ster (C_{27}) (217)	1.13	1.17
Terpenoids		
C19/C23 Tricyclic terpanes	0.33	0.19
C23/C24 Tricyclic terpanes	2.22	2.21
C26/C25 Tricyclic terpanes	0.70	0.65
C24 Tetracyclic/C26 Tricyclics	1.39	1.50
C24 Tetracyclic/Hopane	0.09	0.09
Ts/Tm trisnorhopanes	0.85	0.86
Ts/(Ts+Tm) trisnorhopanes	0.46	0.46
C29Ts/C29 Hopane	0.31	0.24
Bisnorhopane/Hopane	0.04	0.03
Norhopane/Hopane	0.68	0.69
Diahopane/Hopane	0.06	0.06
Oleanane/Hopane	0.07	0.06
Gammacerane/Hopane	0.05	0.04
Moretane/(Moretane+Hopane)	0.14	0.13
H32 S/(S+R) Homohopanes	0.58	0.58
H35/H34 Homohopanes	0.56	0.61
[Steranes]/[Hopanes]	0.17	0.13
[Tricyclic terpanes]/[Hopanes]	0.38	0.38
[Tricyclic terpanes]/[Steranes]	2.23	2.83
DIAMONDOID Ratios		
Methyl Adamantane Index		
Methyl Diamantane Index	0.36	0.36

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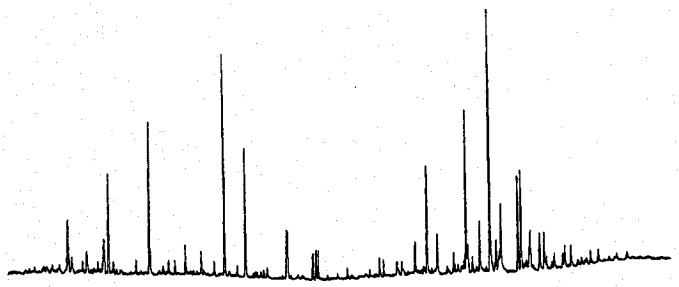
BASELINE DGSI
ANALYTICAL LABORATORIES

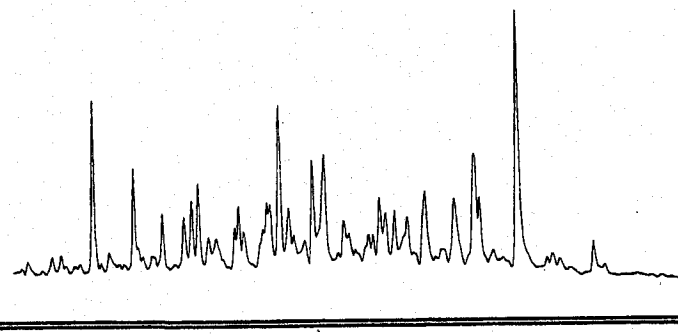
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:		**Lab ID:**	CP272549
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	EAST TOPAGORUK-1	**Geologic Age:**	
Latitude:		**Top Depth:**	2249 FT
Longitude:		**Bottom Depth:**	FT

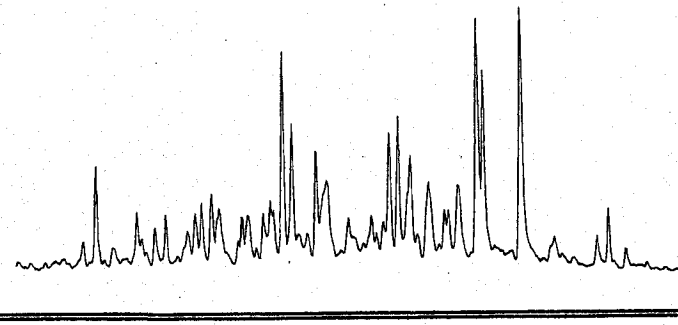
***m/z* 191: Tri- and Pentacyclics** M2040603.D



***m/z* 217: Steranes** M2040603.D



***m/z* 218: ββ Steranes** M2040603.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{28}$ αββS (218)	31.5	D	
$\%C_{28}$ αββS (218)	31.6	D	
$\%C_{29}$ αββS (218)	36.9	D	
$\%C_{27}$ αααR (217)	20.5	D	
$\%C_{28}$ αααR (217)	24.5	D	
$\%C_{29}$ αααR (217)	55.0	D	
S/(S+R) (C_{29} ααα) (217)	0.29	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.19	M	0.70 (0.9%)
$(C_{27}+C_{28})/(C_{27}+C_{28}+C_{29})$ (217)	0.32		
C_{27}/C_{29} (αββS) (218)	0.85	D	
C_{28}/C_{29} (αββS) (218)	0.86	D	
Diaster/ααα Ster (C_{27}) (217)	1.21	M/D	1.00 (1.4%)
C30 Sterane Index (218)		D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.02	D/A	
Gammacerane/Hopane	0.04	D	
Norhopane/Hopane	0.62	D	
Bisnorhopane/Hopane	0.11		
Diahopane/Hopane	0.07	M/D	
Moretane/Hopane	0.28	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.02	B	
Ts/(Ts+Tm) trisnorhopanes	0.24	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.20	M	
H32 S/(R+S) Homohopanes	0.48	M	0.60 (0.6%)
H35/H34 Homohopanes	0.62	D	
C24 Tetracyclic/Hopane	0.10	D	
C24 Tetracyclic/C26 Tricyclics	0.46	D	
C23/C24 Tricyclic terpanes	1.79	D	
C19/C23 Tricyclic terpanes	0.38	D	
C26/C25 Tricyclic terpanes	0.61	D	
(C28+C29 Tricyclics)/Ts	2.24	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.41	D	
Tricyclic terpanes/Hopanes	0.88	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	2.18	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

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Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M2040603.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.279	8349	2107	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.492	1232	290	14.8	13.8
125	GCAR	γ-carotane					
125	BCAR	β-carotane					
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.591	9137	1469	109.4	69.7
191	TR20	C20 tricyclic terpane	47.602	12824	2831	153.6	134.4
191	TR21	C21 tricyclic terpane	50.678	16823	4279	201.5	203.1
191	TR22	C22 tricyclic terpane	53.385	3738	833	44.8	39.5
191	TR23	C23 tricyclic terpane	56.385	23851	6251	285.7	296.7
191	TR24	C24 tricyclic terpane	57.945	13320	3607	159.5	171.2
191	C24DEOL	C24 des-A-oleanane	59.549	1166	279	14.0	13.2
191	C24DELUP	C24 des-A-lupane					
191	TR25A	C25 tricyclic terpane (a)	61.022	6082	1380	72.8	65.5
191	TR25B	C25 tricyclic terpane (b)	61.109	4763	1351	57.0	64.1
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.994	3069	744	36.8	35.3
191	TR26A	C26 tricyclic terpane (a)	63.254	3375	839	40.4	39.8
191	TR26B	C26 tricyclic terpane (b)	63.427	3276	840	39.2	39.9
191	TR28A	C28 tricyclic terpane (a)	68.107	2441	530	29.2	25.2
191	TR28B	C28 tricyclic terpane (b)	68.432	1896	464	22.7	22.0
191	TR29A	C29 tricyclic terpane (a)	69.472	1816	389	21.8	18.5
191	TR29B	C29 tricyclic terpane (b)	69.862	2012	382	24.1	18.1
191	TS	Ts 18α(H)-trisnorhopane	70.859	3640	907	43.6	43.0
191	TM	Tm 17α(H)-trisnorhopane	71.726	11512	3038	137.9	144.2
191	TR30A	C30 tricyclic terpane (a)	72.051	724	157	8.7	7.5
191	TR30B	C30 tricyclic terpane (b)	72.484	1013	455	12.1	21.6
191	H28	C28 17α18α21β(H)-bisnorhopane	73.741	3301	578	39.5	27.4
191	NOR25H	C29 Nor-25-hopane	74.087	766	227	9.2	10.8
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.694	19080	4603	228.5	218.5
191	C29TS	C29 Ts 18α(H)-normoretane	74.846	3832	793	45.9	37.6
191	DH30	C30 17α(H)-diahopane	75.192	2124	455	25.4	21.6
191	M29	C29 normoretane	75.734	6413	1438	76.8	68.2
191	OL	oleanane	76.232	735	139	8.8	6.6
191	H30	C30 17α(H)-hopane	76.492	30672	7400	367.4	351.2
191	M30	C30 moretane	77.316	8571	1940	102.7	92.1
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.572	11925	2695	142.8	127.9
191	H31R	C31 22R 17α(H) hopane	78.811	13001	2848	155.7	135.2
191	GAM	gammacerane	79.114	1087	226	13.0	10.7

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M2040603.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.176	4620	1029	55.3	48.8
191	H32R	C32 22R 17α(H) hopane	80.522	4963	1041	59.4	49.4
191	H33S	C33 22S 17α(H) hopane	82.061	3309	624	39.6	29.6
191	H33R	C33 22R 17α(H) hopane	82.538	2958	594	35.4	28.2
191	H34S	C34 22S 17α(H) hopane	83.989	2006	378	24.0	17.9
191	H34R	C34 22R 17α(H) hopane	84.574	1743	350	20.9	16.6
191	H35S	C35 22S 17α(H) hopane	85.983	1197	202	14.3	9.6
191	H35R	C35 22R 17α(H) hopane	86.763	1131	221	13.5	10.5
217	S21	C21 sterane	53.797	15865	3140	190.0	149.0
217	DIA27S	C27 βα 20S diasterane	65.680	6448	1544	77.2	73.3
217	C27R	C27 αα 20R sterane	70.296	5329	1016	63.8	48.2
217	C28R	C28 αα 20R sterane	72.722	6366	737	76.2	35.0
217	C29S	C29 αα 20S sterane	73.329	5706	680	68.3	32.3
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.762	7573	1075	90.7	51.0
217	C29BBS	C29 ββ 20S sterane	73.871	3446	687	41.3	32.6
217	C29R	C29 αα 20R sterane	74.651	14284	2343	171.1	111.2
218	C27ABBR	C27 ββ 20R sterane	69.602	4951	1016	59.3	48.2
218	C27ABBS	C27 ββ 20S sterane	69.797	3702	679	44.3	32.2
218	C28ABBR	C28 ββ 20R sterane	71.877	3695	635	44.3	30.1
218	C28ABBS	C28 ββ 20S sterane	72.072	3718	714	44.5	33.9
218	C29ABBR	C29 ββ 20R sterane	73.741	6624	1160	79.3	55.1
218	C29ABBS	C29 ββ 20S sterane	73.871	4338	921	52.0	43.7
218	C30ABBR	C30 ββ 20R sterane					
218	C30ABBS	C30 ββ 20S sterane					
259	D27S	C27 βα 20S diasterane	65.680	3423	864	41.0	41.0
259	D27R	C27 βα 20R diasterane	66.525	2364	564	28.3	26.8
259	D28SA	C28 βα 20S diasterane a	67.760	1812	393	21.7	18.7
259	D28SB	C28 βα 20S diasterane b	67.890	1964	395	23.5	18.7
259	D28RA	C28 βα 20R diasterane a	68.670	1269	288	15.2	13.7
259	D28RB	C28 βα 20R diasterane b	68.757	1043	272	12.5	12.9
259	D29S	C29 βα 20S diasterane	69.602	4414	735	52.9	34.9
259	D29R	C29 βα 20R diasterane	70.556	4113	567	49.3	26.9
259	C30TP1	C30 tetracyclic polyprenoid	75.582	351	77	4.2	3.7
259	C30TP2	C30 tetracyclic polyprenoid	75.691	402	81	4.8	3.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M2040603.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.341	20205	8374	242.0	397.4
135	2MAM	2-Methyladamantane	15.200	11544	4729	138.3	224.4
135	1EAM	1-Ethyladamantane	17.101	11216	3684	134.3	174.8
135	2EAM	2-Ethyladamantane	17.937	23951	7575	286.9	359.5
136	AM	Adamantane	12.839	1677	673	20.1	31.9
149	13DMAM	1,3-Dimethyladamantane	13.738	23251	7981	278.5	378.8
149	C14DMAM	1,4-Dimethyladamantane, cis	15.492	18825	8044	225.5	381.8
149	T14DMAM	1,4-Dimethyladamantane, trans	15.660	19498	6780	233.5	321.6
149	12DMAM	1,2-Dimethyladamantane	16.391	23023	9450	275.8	448.5
149	1E3MAM	1-Ethyl-3-methyladamantane	17.414	10391	4126	123.7	195.8
163	135TMAM	1,3,5-Trimethyladamantane	14.051	6991	2629	83.7	124.8
163	136TMAM	1,3,6-Trimethyladamantane	15.827	10190	3559	122.1	168.9
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.600	12276	4175	147.0	198.1
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.725	13923	5869	166.8	278.5
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.665	8366	2607	100.2	123.7
177	1357TMAM	1,3,5,7-Tetramethyladamantane	14.281	673	285	8.1	13.5
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.830	4649	2016	55.7	95.7
187	4MDI	4-Methyldiamantane	25.520	5549	1469	66.5	69.7
187	1MDI	1-Methyldiamantane	27.025	4042	975	48.4	46.3
187	3MDI	3-Methyldiamantane	28.090	2848	667	34.1	31.7
188	DI	Diamantane	25.082	5695	1618	68.2	76.8
201	49DMDI	4,9-Dimethyldiamantane	25.959	1676	431	20.1	20.5
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.108	2012	484	24.1	23.0
201	48DMDI	4,8-Dimethyldiamantane	27.338	2270	557	27.2	26.4
201	34DMDI	3,4-Dimethyldiamantane	28.592	2691	598	32.2	28.4
215	TMDI	Trimethyldiamantane	27.380	1671	398	20.0	18.9

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M2040603.D**

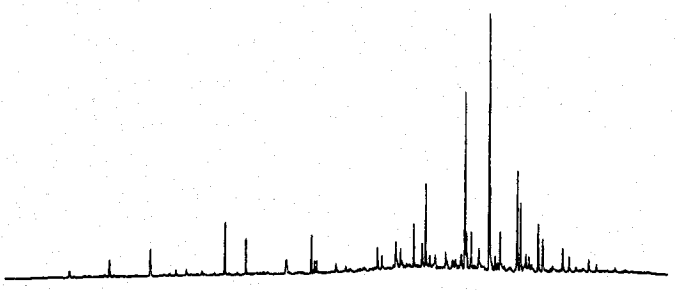
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	31.5	29.3
%C_{28} αββS (218)	31.6	30.9
%C_{29} αββS (218)	36.9	39.8
C_{27}/C_{29} (αββS) (218)	0.85	0.74
C_{28}/C_{29} (αββS) (218)	0.86	0.78
C_{29}/C_{27} (αββS) (218)	1.17	1.36
%C_{27} αααR (217)	20.5	24.8
%C_{28} αααR (217)	24.5	18.0
%C_{29} αααR (217)	55.0	57.2
S/R (C_{29} ααα) (217)	0.40	0.29
S/(S+R) (C_{29} ααα) (217)	0.29	0.22
ββ/(αα+ββ) (C_{29}) (217)	0.36	0.37
αββS/αααR (C_{29}) (217)	0.24	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.32	0.39
Diaster/ααα Ster (C_{27}) (217)	1.21	1.52
Terpenoids		
C19/C25 Tricyclic terpanes	0.38	0.24
C23/C24 Tricyclic terpanes	1.79	1.73
C26/C25 Tricyclic terpanes	0.61	0.61
C24 Tetracyclic/C26 Tricyclics	0.46	0.44
C24 Tetracyclic/Hopane	0.10	0.10
Ts/Tm trisnorhopanes	0.32	0.30
Ts/(Ts+Tm) trisnorhopanes	0.24	0.23
C29Ts/C29 Hopane	0.20	0.17
Bisnorhopane/Hopane	0.11	0.08
Norhopane/Hopane	0.62	0.62
Diahopane/Hopane	0.07	0.06
Oleanane/Hopane	0.02	0.02
Gammacerane/Hopane	0.04	0.03
Moretane/(Moretane+Hopane)	0.22	0.21
H32 S/(S+R) Homohopanes	0.48	0.50
H35/H34 Homohopanes	0.62	0.58
[Steranes]/[Hopanes]	0.41	0.29
[Tricyclic terpanes]/[Hopanes]	0.88	0.94
[Tricyclic terpanes]/[Steranes]	2.18	3.22
DIAMONDOID Ratios		
Methyl Adamantane Index	0.64	0.64
Methyl Diamantane Index	0.45	0.47

BASELINE DGSI
ANALYTICAL LABORATORIES

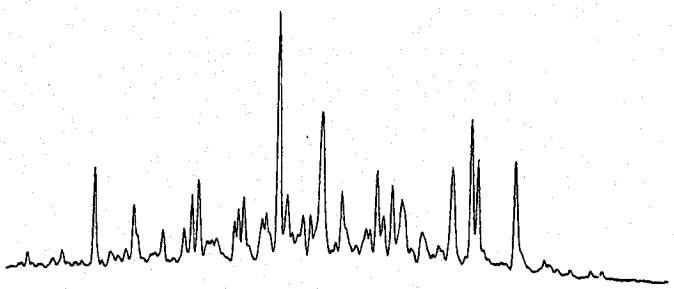
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US134517
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:	NORTH SLOPE	**Lab ID:**	CP273047
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	MEADE 1	**Geologic Age:**	
Latitude:		**Top Depth:**	2959 FT
Longitude:		**Bottom Depth:**	FT

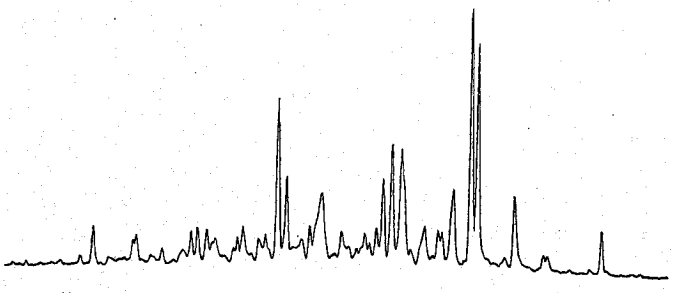
***m/z* 191: Tri- and Pentacyclics** M2040881.D



***m/z* 217: Steranes** M2040881.D



***m/z* 218: ββ Steranes** M2040881.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	23.2	D	
$\%C_{28}$ αββS (218)	30.5	D	
$\%C_{29}$ αββS (218)	46.3	D	
$\%C_{27}$ ααα R (217)	21.4	D	
$\%C_{28}$ ααα R (217)	23.2	D	
$\%C_{29}$ ααα R (217)	55.4	D	
S/(S+R) (C_{29} ααα) (217)	0.51	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.43	M	0.70 (0.9%)
$(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29})$ (217)	0.15		
C_{27}/C_{29} (αββS) (218)	0.50	D	
C_{28}/C_{29} (αββS) (218)	0.66	D	
Diaster/ααα Ster (C_{27}) (217)	1.86	M/D	1.00 (1.4%)
C30 Sterane Index (218)	2.98	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane		D/A	
Gammacerane/Hopane	0.02	D	
Norhopane/Hopane	0.67	D	
Bisnorhopane/Hopane	0.06		
Diahopane/Hopane	0.15	M/D	
Moretane/Hopane	0.16	M	0.05 (0.7%)
25-*nor*-hopane/hopane		B	
Ts/(Ts+Tm) trisnorhopanes	0.34	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.21	M	
H32 S/(R+S) Homohopanes	0.59	M	0.60 (0.6%)
H35/H34 Homohopanes	0.42	D	
C24 Tetracyclic/Hopane	0.14	D	
C24 Tetracyclic/C26 Tricyclics	1.22	D	
C23/C24 Tricyclic terpanes	1.46	D	
C19/C23 Tricyclic terpanes	0.23	D	
C26/C25 Tricyclic terpanes	0.96	D	
(C28+C29 Tricyclics)/Ts	2.08	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.22	D	
Tricyclic terpanes/Hopanes	0.34	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	1.54	M/D	1.00 (1.4%)

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity; B=Possible Biodegradation

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M2040881.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.429	5569	1266	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.599	4492	716	80.7	56.6
125	GCAR	γ-carotane					
125	BCAR	β-carotane					
177	L24BNR1	24,28-bisnorlupane isomer					
177	LA24BNR	17α(H)24,28-bisnorlupane					
177	LB24BNR	17β(H)24,28-bisnorlupane					
177	L24BNR2	24,28-bisnorlupane isomer					
177	L24NOR	24-norlupane					
191	TR19	C19 tricyclic terpane	44.719	1704	235	30.6	18.6
191	TR20	C20 tricyclic terpane	47.752	3173	587	57.0	46.4
191	TR21	C21 tricyclic terpane	50.828	4044	905	72.6	71.5
191	TR22	C22 tricyclic terpane	53.535	1035	209	18.6	16.5
191	TR23	C23 tricyclic terpane	56.536	7312	1797	131.3	141.9
191	TR24	C24 tricyclic terpane	58.096	4993	1233	89.7	97.4
191	C24DEOL	C24 des-A-oleanane					
191	C24DELUP	C24 des-A-lupane					
191	TR25A	C25 tricyclic terpane (a)	61.172	2483	503	44.6	39.7
191	TR25B	C25 tricyclic terpane (b)	61.259	2011	511	36.1	40.4
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	63.144	5233	1317	94.0	104.0
191	TR26A	C26 tricyclic terpane (a)	63.404	2071	437	37.2	34.5
191	TR26B	C26 tricyclic terpane (b)	63.577	2232	471	40.1	37.2
191	TR28A	C28 tricyclic terpane (a)	68.236	3418	756	61.4	59.7
191	TR28B	C28 tricyclic terpane (b)	68.561	1972	490	35.4	38.7
191	TR29A	C29 tricyclic terpane (a)	69.601	4268	925	76.6	73.1
191	TR29B	C29 tricyclic terpane (b)	69.991	2808	659	50.4	52.1
191	TS	Ts 18α(H)-trisnorhopane	70.988	5998	1515	107.7	119.7
191	TM	Tm 17α(H)-trisnorhopane	71.854	11532	2902	207.1	229.2
191	TR30A	C30 tricyclic terpane (a)	72.158	2190	447	39.3	35.3
191	TR30B	C30 tricyclic terpane (b)	72.591	2263	446	40.6	35.2
191	H28	C28 17α18α21β(H)-bisnorhopane	73.913	2412	310	43.3	24.5
191	NOR25H	C29 Nor-25-hopane					
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.823	24812	6137	445.5	484.8
191	C29TS	C29 Ts 18α(H)-norneohopane	74.953	5090	1247	91.4	98.5
191	DH30	C30 17α(H)-diahopane	75.299	5465	1294	98.1	102.2
191	M29	C29 normoretane	75.863	3279	748	58.9	59.1
191	OL	oleanane					
191	H30	C30 17α(H)-hopane	76.599	37156	8881	667.2	701.5
191	M30	C30 moretane	77.423	5799	1327	104.1	104.8
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.680	15010	3442	269.5	271.9
191	H31R	C31 22R 17α(H) hopane	78.918	9794	2348	175.9	185.5
191	GAM	gammacerane	79.243	859	212	15.4	16.7

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M2040881.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.283	7123	1664	127.9	131.4
191	H32R	C32 22R 17α(H) hopane	80.630	4905	1129	88.1	89.2
191	H33S	C33 22S 17α(H) hopane	82.146	3762	809	67.6	63.9
191	H33R	C33 22R 17α(H) hopane	82.623	2202	517	39.5	40.8
191	H34S	C34 22S 17α(H) hopane	84.075	1845	424	33.1	33.5
191	H34R	C34 22R 17α(H) hopane	84.660	1148	248	20.6	19.6
191	H35S	C35 22S 17α(H) hopane	86.068	762	144	13.7	11.4
191	H35R	C35 22R 17α(H) hopane	86.826	508	96	9.1	7.6
217	S21	C21 sterane	53.947	4601	830	82.6	65.6
217	DIA27S	C27 βα 20S diasterane	65.831	4113	899	73.9	71.0
217	C27R	C27 αα 20R sterane	70.424	2209	430	39.7	34.0
217	C28R	C28 αα 20R sterane	72.829	2397	279	43.0	22.0
217	C29S	C29 αα 20S sterane	73.458	5897	884	105.9	69.8
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.869	6451	1328	115.8	104.9
217	C29BBS	C29 ββ 20S sterane	73.999	4292	958	77.1	75.7
217	C29R	C29 αα 20R sterane	74.779	5717	991	102.7	78.3
218	C27ABBR	C27 ββ 20R sterane	69.731	6126	1213	110.0	95.8
218	C27ABBS	C27 ββ 20S sterane	69.926	3691	646	66.3	51.0
218	C28ABBR	C28 ββ 20R sterane	72.006	3170	638	56.9	50.4
218	C28ABBS	C28 ββ 20S sterane	72.201	4849	885	87.1	69.9
218	C29ABBR	C29 ββ 20R sterane	73.869	8685	1861	156.0	147.0
218	C29ABBS	C29 ββ 20S sterane	73.999	7367	1617	132.3	127.7
218	C30ABBR	C30 ββ 20R sterane	75.386	501	114	9.0	9.0
218	C30ABBS	C30 ββ 20S sterane	75.473	488	105	8.8	8.3
259	D27S	C27 βα 20S diasterane	65.831	2677	604	48.1	47.7
259	D27R	C27 βα 20R diasterane	66.676	1856	373	33.3	29.5
259	D28SA	C28 βα 20S diasterane a	67.889	1847	414	33.2	32.7
259	D28SB	C28 βα 20S diasterane b	68.041	2331	433	41.9	34.2
259	D28RA	C28 βα 20R diasterane a	68.799	1539	340	27.6	26.9
259	D28RB	C28 βα 20R diasterane b	68.886	1197	305	21.5	24.1
259	D29S	C29 βα 20S diasterane	69.753	8360	1437	150.1	113.5
259	D29R	C29 βα 20R diasterane	70.684	6638	918	119.2	72.5
259	C30TP1	C30 tetracyclic polyprenoid	75.689	337	78	6.1	6.2
259	C30TP2	C30 tetracyclic polyprenoid	75.798	296	80	5.3	6.3

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M2040881.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.550	105	41	1.9	3.2
135	2MAM	2-Methyladamantane	15.409	75	28	1.3	2.2
135	1EAM	1-Ethyladamantane	17.290	41	17	0.7	1.3
135	2EAM	2-Ethyladamantane	18.125	107	33	1.9	2.6
136	AM	Adamantane	13.049	20	9	0.4	0.7
149	13DMAM	1,3-Dimethyladamantane	13.947	105	35	1.9	2.8
149	C14DMAM	1,4-Dimethyladamantane, cis	15.702	70	31	1.3	2.4
149	T14DMAM	1,4-Dimethyladamantane, trans	15.848	78	27	1.4	2.1
149	12DMAM	1,2-Dimethyladamantane	16.600	88	37	1.6	2.9
149	1E3MAM	1-Ethyl-3-methyladamantane	17.624	61	22	1.1	1.7
163	135TMAM	1,3,5-Trimethyladamantane	14.260	54	17	1.0	1.3
163	136TMAM	1,3,6-Trimethyladamantane	16.036	65	22	1.2	1.7
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.788	65	25	1.2	2.0
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.934	78	26	1.4	2.1
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.854	58	17	1.0	1.3
177	1357TMAM	1,3,5,7-Tetramethyladamantane	14.490	18	6	0.3	0.5
177	1257TMAM	1,2,5,7-Tetramethyladamantane	17.018	54	17	1.0	1.3
187	4MDI	4-Methyldiamantane	25.730	114	28	2.0	2.2
187	1MDI	1-Methyldiamantane	27.234	79	20	1.4	1.6
187	3MDI	3-Methyldiamantane	28.320	81	17	1.5	1.3
188	DI	Diamantane	25.291	75	19	1.3	1.5
201	49DMDI	4,9-Dimethyldiamantane	26.169	36	8	0.6	0.6
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.338	59	12	1.1	0.9
201	48DMDI	4,8-Dimethyldiamantane	27.547	70	14	1.3	1.1
201	34DMDI	3,4-Dimethyldiamantane	28.801	86	16	1.5	1.3
215	TMDI	Trimethyldiamantane	27.589	51	10	0.9	0.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M2040881.D**

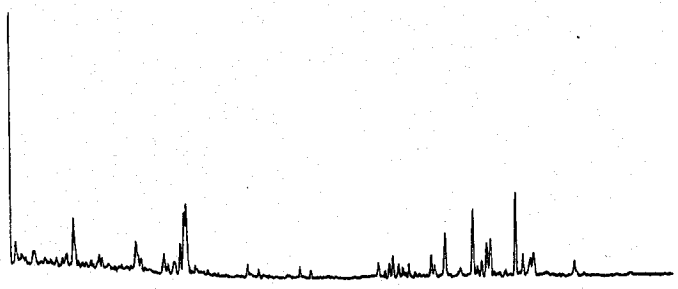
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	23.2	20.5
%C_{28} αββS (218)	30.5	28.1
%C_{29} αββS (218)	46.3	51.4
C_{27}/C_{29} (αββS) (218)	0.50	0.40
C_{28}/C_{29} (αββS) (218)	0.66	0.55
C_{29}/C_{27} (αββS) (218)	2.00	2.50
%C_{27} αααR (217)	21.4	25.3
%C_{28} αααR (217)	23.2	16.4
%C_{29} αααR (217)	55.4	58.3
S/R (C_{29} ααα) (217)	1.03	0.89
S/(S+R) (C_{29} ααα) (217)	0.51	0.47
ββ/(αα+ββ) (C_{29}) (217)	0.48	0.55
αββS/αααR (C_{29}) (217)	0.75	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.15	0.14
Diaster/ααα Ster (C_{27}) (217)	1.86	2.09
Terpenoids		
C19/C23 Tricyclic terpanes	0.23	0.13
C23/C24 Tricyclic terpanes	1.46	1.46
C26/C25 Tricyclic terpanes	0.96	0.90
C24 Tetracyclic/C26 Tricyclics	1.22	1.45
C24 Tetracyclic/Hopane	0.14	0.15
Ts/Tm trisnorhopanes	0.52	0.52
Ts/(Ts+Tm) trisnorhopanes	0.34	0.34
C29Ts/C29 Hopane	0.21	0.20
Bisnorhopane/Hopane	0.06	0.03
Norhopane/Hopane	0.67	0.69
Diahopane/Hopane	0.15	0.15
Oleanane/Hopane		
Gammacerane/Hopane	0.02	0.02
Moretane/(Moretane+Hopane)	0.14	0.13
H32 S/(S+R) Homohopanes	0.59	0.60
H35/H34 Homohopanes	0.42	0.36
[Steranes]/[Hopanes]	0.22	0.17
[Tricyclic terpanes]/[Hopanes]	0.34	0.32
[Tricyclic terpanes]/[Steranes]	1.54	1.84
DIAMONDOID Ratios		
Methyl Adamantane Index	0.58	0.59
Methyl Diamantane Index	0.42	0.43

BASELINE DGSI
ANALYTICAL LABORATORIES

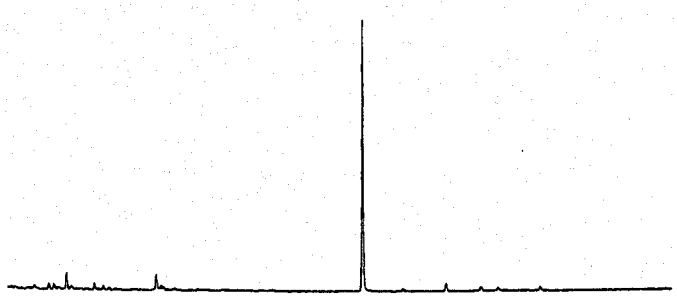
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132257
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218040
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5660 FT
Longitude:		**Bottom Depth:**	5690 FT

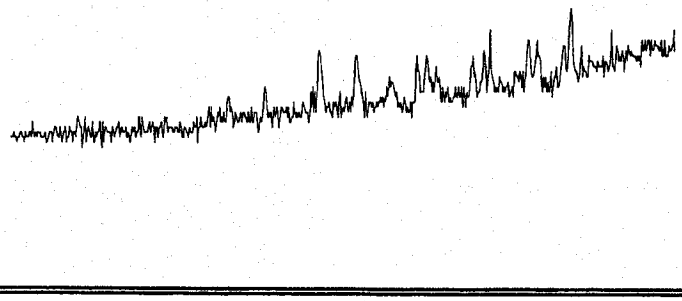
***m/z* 253: Monoaromatic steroids** M1031250.D



***m/z* 231: Triaromatic steroids** M1031250.D



***m/z* 245 Triaromatic Methylsteroids** M1031250.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.32	M	1.0 (1.3%)
TAS #1 20/20+27	0.63	M	
TAS #2 21/21+28	0.47	M	
%26 TAS	23.8	D	
%27 TAS	35.0	D	
%28 TAS	41.3	D	
%29 TAS		D	
C28/C26 20S TAS	1.83		
C28/C27 20R TAS	1.18		
Dia/Regular C27 MAS	1.48		
%27 MAS	25.8	D	
%28 MAS	38.9	D	
%29 MAS	35.4	D	
(C21+C22)/Σ MAS	0.21	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.19	M	
TA28/(TA28+MA29)	0.19	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.33	A	
C4/C3+C4 Mester	0.51	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.89	M	
Rc(a) if Ro < 1.3 (Ro%)	0.91	M	
Rc(b) if Ro > 1.3 (Ro%)	1.76	M	
MPI-2	1.02	M	
DNR-1	3.74	M	
DNR-2	1.42	M	
TNR1	1.04	M	
TDE-1	5.77	M	
TDE-2	0.27	M	
MDR	4.29	M	
Rm (Ro%)	0.83	M	
MDR23	0.72	M	
MDR1	0.33	M	
DBT/Phenanthrene	0.13	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

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Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M1031250.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)				0.0	0.0
92	16AB	C16 Alkyl Benzene	66.751	3970	925		
92	17AB	C17 Alkyl Benzene	71.597	4361	1034		
92	18AB	C18 Alkyl Benzene	75.772	3544	909		
92	1THIO92	Dimethyl dibenzothiophene 1	77.549	1920	261		
92	2THIO92	Dimethyl dibenzothiophene 2	78.229	1276	160		
92	19AB	C19 Alkyl Benzene	79.518	2419	668		
92	20AB	C20 Alkyl Benzene	82.952	2685	724		
92	21AB	C21 Alkyl Benzene	86.141	2719	698		
92	22AB	C22 Alkyl Benzene	89.157	1236	329		
92	23AB	C23 Alkyl Benzene	92.016	1070	289		
92	PHYBz	Phytanyl Benzene	93.916	498	76		
92	24AB	C24 Alkyl Benzene	94.735	731	164		
92	25AB	C25 Alkyl Benzene	97.332	465	112		
92	26AB	C26 Alkyl Benzene	99.824	337	76		
106	16ATM	C16 Alkyl Toluene (meta)	66.002	3542	822		
106	16ATO	C16 Alkyl Toluene (ortho)	66.960	2661	553		
106	17ATM	C17 Alkyl Toluene (meta)	70.900	5536	1273		
106	17ATO	C17 Alkyl Toluene (ortho)	71.754	2907	701		
106	18ATM	C18 Alkyl Toluene (meta)	75.127	3172	816		
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	2349	559		
106	1THIO106	Dimethyl dibenzothiophene 1	77.584	1949	475		
106	2THIO106	Dimethyl dibenzothiophene 2	78.455	1782	395		
106	19ATM	C19 Alkyl Toluene (meta)	78.891	2425	623		
106	19ATO	C19 Alkyl Toluene (ortho)	79.658	1638	429		
106	20ATM	C20 Alkyl Toluene (meta)	82.342	2123	522		
106	20ATO	C20 Alkyl Toluene (ortho)	83.091	1434	381		
106	21ATM	C21 Alkyl Toluene (meta)	85.566	1369	364		
106	21ATO	C21 Alkyl Toluene (ortho)	86.280	1292	346		
106	22ATM	C22 Alkyl Toluene (meta)	88.582	1242	319		
106	22ATO	C22 Alkyl Toluene (ortho)	89.279	1167	278		
106	23ATM	C23 Alkyl Toluene (meta)	91.441	829	193		
106	23ATO	C23 Alkyl Toluene (ortho)	92.138	624	163		
106	24ATM	C24 Alkyl Toluene (meta)	94.177	692	150		
106	24ATO	C24 Alkyl Toluene (ortho)	94.857	590	139		
106	PHYTL	Phytanyl Toluene	95.850	2406	333		
106	25ATM	C25 Alkyl Toluene (meta)	96.774	384	88		
106	25ATO	C25 Alkyl Toluene (ortho)	97.454	344	92		
106	26ATM	C26 Alkyl Toluene (meta)	99.284	387	82		
106	26ATO	C26 Alkyl Toluene (ortho)	99.946	279	65		
134	15AI	C15 Aryl Isoprenoids	60.878	565	99		
134	16AI	C16 Aryl Isoprenoids	66.054	1151	214		
134	17AI	C17 Aryl Isoprenoids	70.725	657	123		
134	18AI	C18 Aryl Isoprenoids	74.848	1997	460		
134	19AI	C19 Aryl Isoprenoids	77.166	3081	477		
134	20AI	C20 Aryl Isoprenoids	80.913	3926	601		
134	21AI	C21 Aryl Isoprenoids	83.805	804	204		
134	22AI	C22 Aryl Isoprenoids	86.698	611	132		
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M1031250.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.957	3269	552		
142	1MN	1-Methylnaphthalene	39.177	2806	468		
149	MTTC5T8	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.148	295	46		
156	1EN	1-Ethylnaphthalene	46.235	146	29		
156	26DMN	2,6-Dimethylnaphthalene	47.054	4332	229		
156	27DMN	2,7-Dimethylnaphthalene	47.211	1450	231		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.204	3675	484		
156	16DMN	1,6-Dimethylnaphthalene	48.448	3221	512		
156	23DMN	2,3-Dimethylnaphthalene	49.650	437	93		
156	14DMN	1,4-Dimethylnaphthalene	49.738	1524	209		
156	15DMN	1,5-Dimethylnaphthalene	49.825	744	150		
156	12DMN	1,2-Dimethylnaphthalene	50.783	847	125		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.618	73	12		
168	DPM	Diphenylmethane	48.884	81	13		
168	3MBP	3-Methylbiphenyl	53.310	5653	914		
168	4MBP	4-Methylbiphenyl	53.972	2159	348		
168	DBF	Dibenzofuran	55.384	2382	369		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.140	2202	283		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.342	1131	171		
170	137TMN	1,3,7-Trimethylnaphthalene	56.795	4745	796		
170	136TMN	1,3,6-Trimethylnaphthalene	57.161	7932	1315		
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.224	5760	872		
170	236TMN	2,3,6-Trimethylnaphthalene	58.503	6006	1048		
170	127TMN	1,2,7-Trimethylnaphthalene	59.235	1932	329		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.427	7093	1097		
170	124TMN	1,2,4-Trimethylnaphthalene	60.338	672	122		
170	125TMN	1,2,5-Trimethylnaphthalene	60.774	3879	692		
178	PHEN	Phenanthrene	70.255	52208	10614		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.747	3476	593		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.897	4466	947		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.646	2975	544		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.821	2273	443		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.187	1123	222		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.622	1535	320		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.814	621	126		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.094	913	246		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.791	2933	633		
184	DBT	Dibenzothiophene	69.000	6928	1389		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.197	20109	4646		
192	2MP	2-Methylphenanthrene	75.371	26611	6157		
192	9MP	9-Methylphenanthrene	76.068	14980	3345		
192	1MP	1-Methylphenanthrene	76.260	11192	2344		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M1031250.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.246	2600	520		
198	12457PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	320	70		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.402	298	64		
198	4MDBT	4 Methyl Dibenzothiophene	73.541	9917	2252		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.308	4988	1001		
198	1MDBT	1 Methyl Dibenzothiophene	75.127	2310	481		
206	36DMP	3,6-Dimethylphenanthrene	79.431	2960	681		
206	26DMP	2,6-Dimethylphenanthrene	79.675	7764	1768		
206	27DMP	2,7-Dimethylphenanthrene	79.780	5419	1290		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.285	13634	2699		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.494	7313	1335		
206	17DMP	1,7-Dimethylphenanthrene	80.651	5689	1281		
206	23DMP	2,3-Dimethylphenanthrene	80.913	2674	602		
206	19DMP	1,9-Dimethylphenanthrene	81.035	1691	431		
206	18DMP	1,8-Dimethylphenanthrene	81.453	868	214		
206	12DMP	1,2-Dimethylphenanthrene	81.958	604	149		
206	9_10DMP	9,10-Dimethylphenanthrene					
212	DMDBT	Dimethyldibenzothiophene	77.514	21776	1167		
219	RET	Retene	86.228	3197	767		
226	TMDBT	Trimethyldibenzothiophene	81.610	12890	490		
231	231A20	C20 Triaromatic Steroid	92.277	237	52		
231	231B21	C21 Triaromatic	94.787	148	37		
231	231C26	C26 20S Triaromatic	103.947	95	23		
231	231D26	C27 20S & C26 20R Triaromatic	105.533	252	53		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.858	174	32		
231	231F27	C27 20R Triaromatic	107.503	140	28		
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic					
231	C29TA2	C29 Triaromatic					
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.089	165	31		
231	TADMD5	C28 23,24-Cholestane Triaromatic	109.194	13	7		
231	C29TA3	C29 Triaromatic					
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.614	21	6		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.224	31	8		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid					
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.130	78	14		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.723	79	12		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.932	16	3		
245	DA	Triaromatic Dinosteroid a	109.246	6	4		
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.298	32	6		
245	DB	Triaromatic Dinosteroid b	109.751	31	9		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.908	49	9		
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.065	33	7		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.675	36	8		
245	DC	Triaromatic Dinosteroid c	110.850	38	9		
245	DD	Triaromatic Dinosteroid d	110.954	38	13		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M1031250.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.355	22	5		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.582	50	10		
245	DE	Triaromatic Dinosteroid e	111.739	54	10		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.175	41	8		
245	DF	Triaromatic Dinosteroid f	112.297	72	15		
253	S253A	C21 Ring C Monoaromatic Steroid	84.555	598	127		
253	S253B	C22 Monoaromatic steroid	87.012	501	80		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.983	185	41		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.105	273	61		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.587	287	59		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.726	157	34		
253	S253G	C28 Dia 10αH,5αCH3 20S+Reg5βH,10βCH3 20S	99.127	617	117		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.390	147	30		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.547	209	45		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.739	445	91		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.896	536	101		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.168	279	59		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.465	311	49		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.587	427	63		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.191	198	41		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132257**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5660 - 5690 FT**	**Lab ID:**	**CP218040**
Sampling Point:		**File Name:**	**M1031250.D**

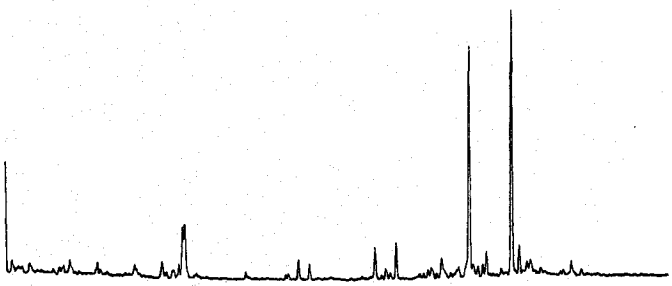
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.32	0.35
TAS #1 20/20+27	0.63	0.65
TAS #2 21/21+28	0.47	0.54
%26TAS	23.8	28.0
%27TAS	35.0	34.1
%28TAS	41.3	37.8
%29TAS		
C28/C26 20S TAS	1.83	1.39
C28/C27 20R TAS	1.18	1.11
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	1.48	1.49
%27 MAS	25.8	28.4
%28 MAS	38.9	38.2
%29 MAS	35.4	33.4
(C21+C22)/Σ MAS	0.21	0.21
TAS/(MAS+TAS)	0.19	0.20
TA28/(TA28+MA29)	0.19	0.19
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.33	0.38
C4/C3+C4 Mester	0.51	0.51
Phenanthrenes and Naphthalenes		
MPI-1	0.89	0.99
MPI-2	1.02	1.13
Ro(a) if Ro < 1.3 (Ro%)	0.91	0.97
Rc(b) if Ro > 1.3 (Ro%)	1.76	1.70
DNR-1	3.74	3.07
DNR-2	1.42	1.52
TNR1	1.04	1.20
TDE-1	5.77	5.67
TDE-2	0.27	0.30
MDR	4.29	4.68
Rm (Ro%)	0.83	0.87
MDR23	0.72	0.72
MDR1	0.33	0.35
DBT/Phenanthrene	0.13	0.13

BASELINE DGSI
ANALYTICAL LABORATORIES

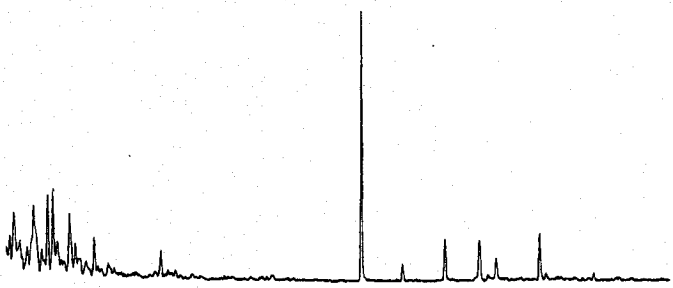
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132258
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218041
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	LOWER TOROK
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	5910 FT
Longitude:		**Bottom Depth:**	5940 FT

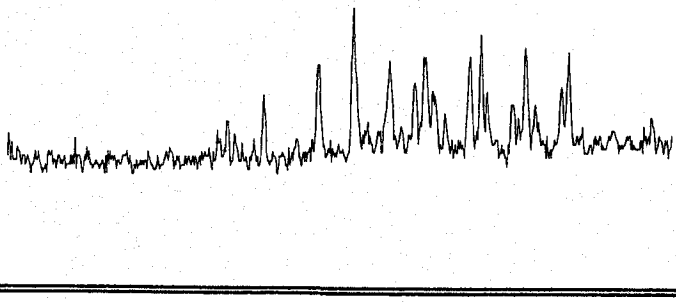
***m/z* 253: Monoaromatic steroids** M1031251.D



***m/z* 231: Triaromatic steroids** M1031251.D



***m/z* 245 Triaromatic Methylsteroids** M1031251.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.26	M	1.0 (1.3%)
TAS #1 20/20+27	0.57	M	
TAS #2 21/21+28	0.38	M	
%26 TAS	18.1	D	
%27 TAS	30.6	D	
%28 TAS	51.2	D	
%29 TAS		D	
C28/C26 20S TAS	3.12		
C28/C27 20R TAS	1.67		
Dia/Regular C27 MAS	0.48		
%27 MAS	27.1	D	
%28 MAS	30.5	D	
%29 MAS	42.3	D	
(C21+C22)/Σ MAS	0.11	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.38	M	
TA28/(TA28+MA29)	0.39	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.26	A	
C4/C3+C4 Mester	0.52	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	1.02	M	
Rc(a) if Ro < 1.3 (Ro%)	0.98	M	
Rc(b) if Ro > 1.3 (Ro%)	1.69	M	
MPI-2	1.16	M	
DNR-1	2.15	M	
DNR-2	1.25	M	
TNR1	0.97	M	
TDE-1	5.95	M	
TDE-2	0.24	M	
MDR	3.89	M	
Rm (Ro%)	0.79	M	
MDR23	0.94	M	
MDR1	0.45	M	
DBT/Phenanthrene	0.06	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M1031251.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)				0.0	0.0
92	16AB	C16 Alkyl Benzene	66.751	1750	402		
92	17AB	C17 Alkyl Benzene	71.579	1944	474		
92	18AB	C18 Alkyl Benzene	75.772	2038	520		
92	1THIO92	Dimethyl dibenzothiophene 1	77.549	1277	163		
92	2THIO92	Dimethyl dibenzothiophene 2	78.211	809	101		
92	19AB	C19 Alkyl Benzene	79.518	1516	419		
92	20AB	C20 Alkyl Benzene	82.952	2025	498		
92	21AB	C21 Alkyl Benzene	86.141	1271	331		
92	22AB	C22 Alkyl Benzene	89.157	687	185		
92	23AB	C23 Alkyl Benzene	91.998	503	124		
92	PHYBz	Phytanyl Benzene	93.916	266	45		
92	24AB	C24 Alkyl Benzene	94.735	693	165		
92	25AB	C25 Alkyl Benzene	97.332	315	71		
92	26AB	C26 Alkyl Benzene	99.824	209	49		
106	16ATM	C16 Alkyl Toluene (meta)	66.002	1785	418		
106	16ATO	C16 Alkyl Toluene (ortho)	66.960	1518	303		
106	17ATM	C17 Alkyl Toluene (meta)	70.900	3006	678		
106	17ATO	C17 Alkyl Toluene (ortho)	71.736	1755	422		
106	18ATM	C18 Alkyl Toluene (meta)	75.127	2074	485		
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	1744	416		
106	1THIO106	Dimethyl dibenzothiophene 1	77.567	1742	302		
106	2THIO106	Dimethyl dibenzothiophene 2	78.281	716	95		
106	19ATM	C19 Alkyl Toluene (meta)	78.891	1810	444		
106	19ATO	C19 Alkyl Toluene (ortho)	79.640	1300	336		
106	20ATM	C20 Alkyl Toluene (meta)	82.342	1655	429		
106	20ATO	C20 Alkyl Toluene (ortho)	83.074	1146	302		
106	21ATM	C21 Alkyl Toluene (meta)	85.566	980	258		
106	21ATO	C21 Alkyl Toluene (ortho)	86.263	958	224		
106	22ATM	C22 Alkyl Toluene (meta)	88.582	719	190		
106	22ATO	C22 Alkyl Toluene (ortho)	89.279	746	185		
106	23ATM	C23 Alkyl Toluene (meta)	91.441	573	145		
106	23ATO	C23 Alkyl Toluene (ortho)	92.138	379	96		
106	24ATM	C24 Alkyl Toluene (meta)	94.160	444	100		
106	24ATO	C24 Alkyl Toluene (ortho)	94.857	331	88		
106	PHYTL	Phytanyl Toluene	95.903	1483	190		
106	25ATM	C25 Alkyl Toluene (meta)	96.774	269	64		
106	25ATO	C25 Alkyl Toluene (ortho)	97.454	257	58		
106	26ATM	C26 Alkyl Toluene (meta)	99.267	324	65		
106	26ATO	C26 Alkyl Toluene (ortho)	99.946	236	56		
134	15AI	C15 Aryl Isoprenoids	60.878	443	77		
134	16AI	C16 Aryl Isoprenoids	66.054	856	173		
134	17AI	C17 Aryl Isoprenoids	70.725	445	92		
134	18AI	C18 Aryl Isoprenoids	74.848	1817	430		
134	19AI	C19 Aryl Isoprenoids	77.148	2067	456		
134	20AI	C20 Aryl Isoprenoids	80.965	2431	427		
134	21AI	C21 Aryl Isoprenoids	83.788	621	162		
134	22AI	C22 Aryl Isoprenoids					
134	ISOR	Isorenieratane					

Company:	CONOCOPHILLIPS	Client ID:	US132258
Well Name:	SOUTH MEADE #1	Project #:	03-473-A
Depth:	5910 - 5940 FT	Lab ID:	CP218041
Sampling Point:		File Name:	M1031251.D

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.943	95	15		
142	1MN	1-Methylnaphthalene	39.181	97	17		
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.151	130	24		
156	1EN	1-Ethylnaphthalene	46.239	78	15		
156	26DMN	2,6-Dimethylnaphthalene	47.058	869	139		
156	27DMN	2,7-Dimethylnaphthalene	47.214	930	152		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.208	2998	399		
156	16DMN	1,6-Dimethylnaphthalene	48.452	2418	390		
156	23DMN	2,3-Dimethylnaphthalene	49.654	455	89		
156	14DMN	1,4-Dimethylnaphthalene	49.741	995	163		
156	15DMN	1,5-Dimethylnaphthalene	49.846	848	130		
156	12DMN	1,2-Dimethylnaphthalene	50.804	700	107		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.622	60	11		
168	DPM	Diphenylmethane	48.853	81	13		
168	3MBP	3-Methylbiphenyl	53.296	5783	935		
168	4MBP	4-Methylbiphenyl	53.959	2341	372		
168	DBF	Dibenzofuran	55.370	1643	244		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.144	1793	236		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.346	976	155		
170	137TMN	1,3,7-Trimethylnaphthalene	56.782	5007	828		
170	136TMN	1,3,6-Trimethylnaphthalene	57.165	8060	1332		
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.228	6541	1003		
170	236TMN	2,3,6-Trimethylnaphthalene	58.490	6357	1091		
170	127TMN	1,2,7-Trimethylnaphthalene	59.239	1815	322		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.413	7590	1164		
170	124TMN	1,2,4-Trimethylnaphthalene	60.338	743	134		
170	125TMN	1,2,5-Trimethylnaphthalene	60.774	4420	778		
178	PHEN	Phenanthrene	70.255	97588	20723		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.730	3310	581		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.880	5045	1081		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.647	3120	554		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.821	2416	503		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.187	1324	266		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.623	1822	370		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.814	704	137		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.094	858	237		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.791	4433	939		
184	DBT	Dibenzothiophene	68.983	6034	1204		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.197	54137	12433		
192	2MP	2-Methylphenanthrene	75.371	70757	15995		
192	9MP	9-Methylphenanthrene	76.068	48491	10681		
192	1MP	1-Methylphenanthrene	76.242	37400	8371		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M1031251.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.246	2709	523		
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	432	93		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.402	389	83		
198	4MDBT	4 Methyl Dibenzothiophene	73.524	10568	2271		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.308	5681	1198		
198	1MDBT	1 Methyl Dibenzothiophene	75.127	2717	590		
206	36DMP	3,6-Dimethylphenanthrene	79.431	8203	1942		
206	26DMP	2,6-Dimethylphenanthrene	79.675	20875	4893		
206	27DMP	2,7-Dimethylphenanthrene	79.780	13639	3367		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.285	46317	9449		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.494	25277	4551		
206	17DMP	1,7-Dimethylphenanthrene	80.634	22260	5121		
206	23DMP	2,3-Dimethylphenanthrene	80.913	11513	2573		
206	19DMP	1,9-Dimethylphenanthrene	81.035	6850	1665		
206	18DMP	1,8-Dimethylphenanthrene	81.453	3626	835		
206	12DMP	1,2-Dimethylphenanthrene	81.958	2716	644		
206	9_10DMP	9,10-Dimethylphenanthrene	82.586	186	47		
212	DMDBT	Dimethyldibenzothiophene	77.514	22952	1317		
219	RET	Retene	86.228	6736	1624		
226	TMDBT	Trimethyldibenzothiophene	81.610	15004	518		
231	231A20	C20 Triaromatic Steroid	92.277	483	110		
231	231B21	C21 Triaromatic	94.770	376	80		
231	231C26	C26 20S Triaromatic	103.930	216	49		
231	231D26	C27 20S & C26 20R Triaromatic	105.534	584	120		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.841	674	114		
231	231F27	C27 20R Triaromatic	107.486	365	64		
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic					
231	C29TA2	C29 Triaromatic					
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.090	610	135		
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic					
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.597	36	10		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.224	71	17		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.765	29	6		
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.131	113	21		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.724	177	33		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.968	24	7		
245	DA	Triaromatic Dinosteroid a	109.142	22	5		
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.334	136	21		
245	DB	Triaromatic Dinosteroid b	109.752	74	16		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.892	149	22		
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.031	82	14		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.676	113	22		
245	DC	Triaromatic Dinosteroid c	110.850	109	27		
245	DD	Triaromatic Dinosteroid d	110.955	53	14		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M1031251.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.356	52	11		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.583	121	24		
245	DE	Triaromatic Dinosteroid e	111.739	60	11		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.175	74	15		
245	DF	Triaromatic Dinosteroid f	112.297	101	23		
253	S253A	C21 Ring-C Monoaromatic Steroid	84.537	354	64		
253	S253B	C22 Monoaromatic steroid	87.029	240	50		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.931	301	50		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.105	144	34		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.587	176	39		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.709	368	50		
253	S253G	C28 Dia 10αH,5αCH3 20S+Reg5βH,10βCH3 20S	99.110	573	90		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.374	303	59		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.548	224	48		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.740	277	58		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.897	547	115		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.152	666	137		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.448	384	67		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.588	530	75		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.174	278	68		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132258**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**5910 - 5940 FT**	**Lab ID:**	**CP218041**
Sampling Point:		**File Name:**	**M1031251.D**

Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.26	0.28
TAS #1 20/20+27	0.57	0.63
TAS #2 21/21+28	0.38	0.37
%26TAS	18.1	19.8
%27TAS	30.6	25.8
%28TAS	51.2	54.4
%29TAS		
C28/C26 20S TAS	3.12	2.33
C28/C27 20R TAS	1.67	2.11
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.48	0.68
%27 MAS	27.1	26.1
%28 MAS	30.5	29.6
%29 MAS	42.3	44.4
(C21+C22)/Σ MAS	0.11	0.11
TAS/(MAS+TAS)	0.38	0.40
TA28/(TA28+MA29)	0.39	0.39
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.26	0.30
C4/C3+C4 Mester	0.52	0.53
Phenanthrenes and Naphthalenes		
MPI-1	1.02	1.07
MPI-2	1.16	1.21
Rc(a) if Ro < 1.3 (Ro%)	0.98	1.01
Rc(b) if Ro > 1.3 (Ro%)	1.69	1.66
DNR-1	2.15	2.24
DNR-2	1.25	1.15
TNR1	0.97	1.09
TDE-1	5.95	5.81
TDE-2	0.24	0.28
MDR	3.89	3.85
Rm (Ro%)	0.79	0.79
MDR23	0.94	1.00
MDR1	0.45	0.49
DBT/Phenanthrene	0.06	0.06

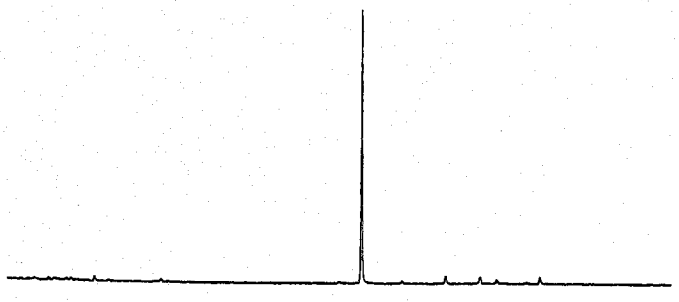
BASELINE DGSI
ANALYTICAL LABORATORIES

AROMATIC GCMS

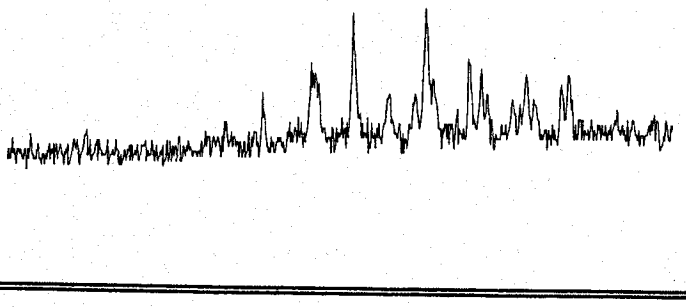
Company:	CONOCOPHILLIPS	**Client ID:**	US132259
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218042
Lease:	SOUTH MEADE #1	**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH MEADE #1	**Geologic Age:**	
Latitude:		**Top Depth:**	7870 FT
Longitude:		**Bottom Depth:**	7910 FT

***m/z* 253: Monoaromatic steroids** M1031257.D

***m/z* 231: Triaromatic steroids** M1031257.D



***m/z* 245 Triaromatic Methylsteroids** M1031257.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.21	M	1.0 (1.3%)
TAS #1 20/20+27	0.57	M	
TAS #2 21/21+28	0.25	M	
%26 TAS	19.3	D	
%27 TAS	29.9	D	
%28 TAS	50.8	D	
%29 TAS		D	
C28/C26 20S TAS	2.79		
C28/C27 20R TAS	1.70		
Dia/Regular C27 MAS	1.45		
%27 MAS	15.2	D	
%28 MAS	33.7	D	
%29 MAS	51.1	D	
(C21+C22)/Σ MAS	0.13	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.26	M	
TA28/(TA28+MA29)	0.23	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.23	A	
C4/C3+C4 Mester	0.49	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.74	M	
Rc(a) if Ro < 1.3 (Ro%)	0.81	M	
Rc(b) if Ro > 1.3 (Ro%)	1.86	M	
MPI-2	0.82	M	
DNR-1	1.64	M	
DNR-2	1.03	M	
TNR1	0.83	M	
TDE-1	5.76	M	
TDE-2	0.29	M	
MDR	2.48	M	
Rm (Ro%)	0.73	M	
MDR23	0.99	M	
MDR1	0.61	M	
DBT/Phenanthrene	0.11	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M1031257.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)				0.0	0.0
92	16AB	C16 Alkyl Benzene	66.752	908	208		
92	17AB	C17 Alkyl Benzene	71.580	1342	324		
92	18AB	C18 Alkyl Benzene	75.754	2017	488		
92	1THIO92	Dimethyl dibenzothiophene 1	77.549	1283	156		
92	2THIO92	Dimethyl dibenzothiophene 2	78.211	744	91		
92	19AB	C19 Alkyl Benzene	79.501	1554	414		
92	20AB	C20 Alkyl Benzene	82.934	2616	635		
92	21AB	C21 Alkyl Benzene	86.140	1540	423		
92	22AB	C22 Alkyl Benzene	89.158	791	187		
92	23AB	C23 Alkyl Benzene	91.999	461	126		
92	PHYBz	Phytanyl Benzene	93.917	323	50		
92	24AB	C24 Alkyl Benzene	94.736	382	80		
92	25AB	C25 Alkyl Benzene	97.315	258	62		
92	26AB	C26 Alkyl Benzene	99.808	198	36		
106	16ATM	C16 Alkyl Toluene (meta)	66.002	748	173		
106	16ATO	C16 Alkyl Toluene (ortho)	66.943	602	130		
106	17ATM	C17 Alkyl Toluene (meta)	70.883	1972	448		
106	17ATO	C17 Alkyl Toluene (ortho)	71.737	967	230		
106	18ATM	C18 Alkyl Toluene (meta)	75.109	1731	429		
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	1447	319		
106	1THIO106	Dimethyl dibenzothiophene 1	77.566	1214	285		
106	2THIO106	Dimethyl dibenzothiophene 2	78.316	595	107		
106	19ATM	C19 Alkyl Toluene (meta)	78.873	1678	403		
106	19ATO	C19 Alkyl Toluene (ortho)	79.640	1211	320		
106	20ATM	C20 Alkyl Toluene (meta)	82.341	1656	420		
106	20ATO	C20 Alkyl Toluene (ortho)	83.073	1110	333		
106	21ATM	C21 Alkyl Toluene (meta)	85.548	804	220		
106	21ATO	C21 Alkyl Toluene (ortho)	86.262	880	233		
106	22ATM	C22 Alkyl Toluene (meta)	88.566	666	164		
106	22ATO	C22 Alkyl Toluene (ortho)	89.280	644	172		
106	23ATM	C23 Alkyl Toluene (meta)	91.442	531	118		
106	23ATO	C23 Alkyl Toluene (ortho)	92.121	365	92		
106	24ATM	C24 Alkyl Toluene (meta)	94.161	278	68		
106	24ATO	C24 Alkyl Toluene (ortho)	94.840	334	89		
106	PHYTL	Phytanyl Toluene	95.851	1231	193		
106	25ATM	C25 Alkyl Toluene (meta)	96.758	148	36		
106	25ATO	C25 Alkyl Toluene (ortho)	97.437	210	46		
106	26ATM	C26 Alkyl Toluene (meta)	99.267	152	35		
106	26ATO	C26 Alkyl Toluene (ortho)	99.930	171	40		
134	15AI	C15 Aryl Isoprenoids					
134	16AI	C16 Aryl Isoprenoids					
134	17AI	C17 Aryl Isoprenoids					
134	18AI	C18 Aryl Isoprenoids	74.848	1615	352		
134	19AI	C19 Aryl Isoprenoids	77.148	1801	473		
134	20AI	C20 Aryl Isoprenoids	80.964	1963	487		
134	21AI	C21 Aryl Isoprenoids	83.788	743	195		
134	22AI	C22 Aryl Isoprenoids	86.698	504	112		
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M1031257.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene					
142	1MN	1-Methylnaphthalene					
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene					
156	1EN	1-Ethylnaphthalene					
156	26DMN	2,6-Dimethylnaphthalene	47.024	90	14		
156	27DMN	2,7-Dimethylnaphthalene	47.198	67	14		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.191	252	32		
156	16DMN	1,6-Dimethylnaphthalene	48.453	201	37		
156	23DMN	2,3-Dimethylnaphthalene	49.603	59	10		
156	14DMN	1,4-Dimethylnaphthalene	49.725	93	16		
156	15DMN	1,5-Dimethylnaphthalene	49.795	96	15		
156	12DMN	1,2-Dimethylnaphthalene	50.788	102	14		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.588	39	6		
168	DPM	Diphenylmethane	48.853	78	12		
168	3MBP	3-Methylbiphenyl	53.297	1333	222		
168	4MBP	4-Methylbiphenyl	53.959	498	79		
168	DBF	Dibenzofuran	55.371	238	38		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.127	316	40		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.330	192	28		
170	137TMN	1,3,7-Trimethylnaphthalene	56.783	716	120		
170	136TMN	1,3,6-Trimethylnaphthalene	57.149	1088	187		
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.229	1010	153		
170	236TMN	2,3,6-Trimethylnaphthalene	58.490	839	142		
170	127TMN	1,2,7-Trimethylnaphthalene	59.222	339	55		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.414	1177	186		
170	124TMN	1,2,4-Trimethylnaphthalene	60.321	152	27		
170	125TMN	1,2,5-Trimethylnaphthalene	60.774	876	170		
178	PHEN	Phenanthrene	70.256	13842	2920		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.730	727	125		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.880	934	196		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.630	824	142		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.821	582	117		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.187	266	54		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.623	404	92		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.797	158	35		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.095	166	46		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.792	1192	256		
184	DBT	Dibenzothiophene	68.984	1583	328		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.179	5286	1176		
192	2MP	2-Methylphenanthrene	75.370	6649	1481		
192	9MP	9-Methylphenanthrene	76.050	5885	1256		
192	1MP	1-Methylphenanthrene	76.242	4538	1011		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M1031257.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.246	521	110		
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	212	42		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.384	160	34		
198	4MDBT	4 Methyl Dibenzothiophene	73.523	2382	514		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.307	1562	314		
198	1MDBT	1 Methyl Dibenzothiophene	75.109	959	206		
206	36DMP	3,6-Dimethylphenanthrene	79.413	947	219		
206	26DMP	2,6-Dimethylphenanthrene	79.675	2279	495		
206	27DMP	2,7-Dimethylphenanthrene	79.779	1449	366		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.285	6054	1195		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.477	3315	597		
206	17DMP	1,7-Dimethylphenanthrene	80.633	3315	780		
206	23DMP	2,3-Dimethylphenanthrene	80.912	1248	268		
206	19DMP	1,9-Dimethylphenanthrene	81.017	1146	260		
206	18DMP	1,8-Dimethylphenanthrene	81.435	548	127		
206	12DMP	1,2-Dimethylphenanthrene	81.940	480	119		
206	9_10DMP	9,10-Dimethylphenanthrene	82.585	62	17		
212	DMDBT	Dimethyldibenzothiophene	77.514	10147	409		
219	RET	Retene	86.227	5168	1273		
226	TMDBT	Trimethyldibenzothiophene	82.254	10589	259		
231	231A20	C20 Triaromatic Steroid	92.278	268	56		
231	231B21	C21 Triaromatic	94.771	114	31		
231	231C26	C26 20S Triaromatic	103.930	132	32		
231	231D26	C27 20S & C26 20R Triaromatic	105.533	423	83		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.858	368	68		
231	231F27	C27 20R Triaromatic	107.468	205	45		
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic					
231	C29TA2	C29 Triaromatic					
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.090	348	74		
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic					
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.579	26	7		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.207	51	13		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid					
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.026	170	18		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.706	142	27		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid					
245	DA	Triaromatic Dinosteroid a					
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.334	71	11		
245	DB	Triaromatic Dinosteroid b	109.752	59	11		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.909	184	28		
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.031	72	14		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.624	81	17		
245	DC	Triaromatic Dinosteroid c	110.850	66	15		
245	DD	Triaromatic Dinosteroid d	110.937	40	10		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M1031257.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.356	59	10		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.582	91	15		
245	DE	Triaromatic Dinosteroid e	111.704	63	10		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.158	50	12		
245	DF	Triaromatic Dinosteroid f	112.262	64	14		
253	S253A	C21 Ring-C Monoaromatic Steroid	84.537	375	75		
253	S253B	C22 Monoaromatic steroid	87.012	334	65		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.967	113	27		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.106	164	43		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.570	216	55		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.710	90	22		
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.111	456	78		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.408	114	25		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.548	246	56		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.740	412	81		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.897	608	119		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.152	670	150		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.448	426	77		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.605	542	86		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.174	519	113		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132259**
Well Name:	**SOUTH MEADE #1**	**Project #:**	**03-473-A**
Depth:	**7870 - 7910 FT**	**Lab ID:**	**CP218042**
Sampling Point:		**File Name:**	**M1031257.D**

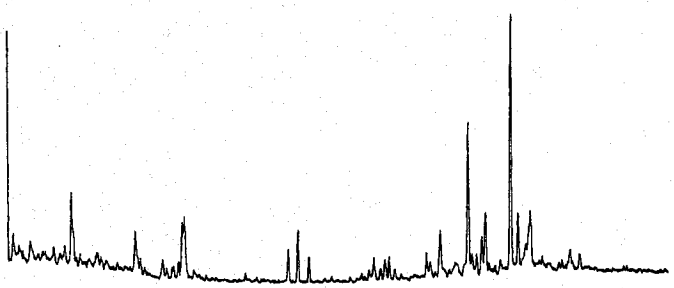
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.21	0.22
TAS #1 20/20+27	0.57	0.55
TAS #2 21/21+28	0.25	0.30
%26TAS	19.3	21.2
%27TAS	29.9	29.8
%28TAS	50.8	49.0
%29TAS		
C28/C26 20S TAS	2.79	2.13
C28/C27 20R TAS	1.70	1.64
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	1.45	1.59
%27 MAS	15.2	18.5
%28 MAS	33.7	31.3
%29 MAS	51.1	50.2
(C21+C22)/Σ MAS	0.13	0.13
TAS/(MAS+TAS)	0.26	0.27
TA28/(TA28+MA29)	0.23	0.23
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.23	0.26
C4/C3+C4 Mester	0.49	0.54
Phenanthrenes and Naphthalenes		
MPI-1	0.74	0.77
MPI-2	0.82	0.86
Rc(a) if Ro < 1.3 (Ro%)	0.81	0.83
Rc(b) if Ro > 1.3 (Ro%)	1.86	1.84
DNR-1	1.64	1.87
DNR-2	1.03	1.08
TNR1	0.83	0.93
TDE-1	5.76	6.30
TDE-2	0.29	0.39
MDR	2.46	2.50
Rm (Ro%)	0.73	0.73
MDR23	0.99	0.96
MDR1	0.61	0.63
DBT/Phenanthrene	0.11	0.11

BASELINE DGSI
ANALYTICAL LABORATORIES

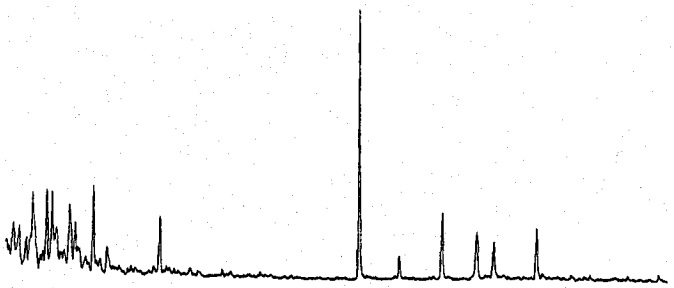
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132264
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:		**Lab ID:**	CP218047
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	SIMPSON SS
Well Name:	SOUTH SIMPSON #1	**Geologic Age:**	
Latitude:		**Top Depth:**	6520 FT
Longitude:		**Bottom Depth:**	6570 FT

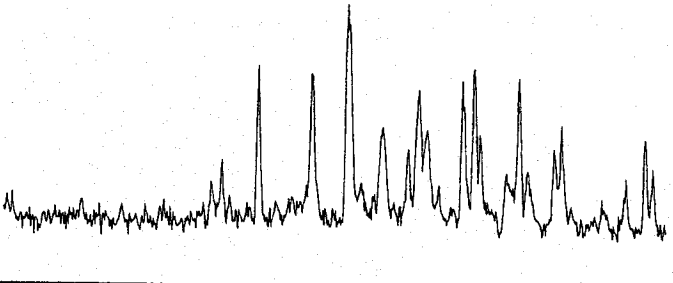
***m/z* 253: Monoaromatic steroids** M1031261.D



***m/z* 231: Triaromatic steroids** M1031261.D



***m/z* 245 Triaromatic Methylsteroids** M1031261.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.35	M	1.0 (1.3%)
TAS #1 20/20+27	0.65	M	
TAS #2 21/21+28	0.51	M	
%26 TAS	17.4	D	
%27 TAS	34.7	D	
%28 TAS	43.0	D	
%29 TAS	5.0	D	
C28/C26 20S TAS	2.89		
C28/C27 20R TAS	1.24		
Dia/Regular C27 MAS	0.78		
%27 MAS	24.7	D	
%28 MAS	33.8	D	
%29 MAS	41.5	D	
(C21+C22)/Σ MAS	0.21	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.53	M	
TA28/(TA28+MA29)	0.51	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.23	A	
C4/C3+C4 Mester	0.52	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.59	M	
Rc(a) if Ro < 1.3 (Ro%)	0.72	M	
Rc(b) if Ro > 1.3 (Ro%)	1.95	M	
MPI-2	0.66	M	
DNR-1	4.69	M	
DNR-2	1.70	M	
TNR1	1.07	M	
TDE-1	7.81	M	
TDE-2	0.18	M	
MDR	1.76	M	
Rm (Ro%)	0.70	M	
MDR23	0.72	M	
MDR1	0.60	M	
DBT/Phenanthrene	0.06	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M1031261.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)				0.0	0.0
92	16AB	C16 Alkyl Benzene	66.734	1586	348		
92	17AB	C17 Alkyl Benzene	71.579	2282	568		
92	18AB	C18 Alkyl Benzene	75.754	2910	759		
92	1THIO92	Dimethyl dibenzothiophene 1	77.532	1691	187		
92	2THIO92	Dimethyl dibenzothiophene 2	78.211	1259	137		
92	19AB	C19 Alkyl Benzene	79.501	2200	571		
92	20AB	C20 Alkyl Benzene	82.934	2322	594		
92	21AB	C21 Alkyl Benzene	86.140	1789	479		
92	22AB	C22 Alkyl Benzene	89.157	1053	252		
92	23AB	C23 Alkyl Benzene	91.998	846	211		
92	PHYBz	Phytanyl Benzene	93.915	379	56		
92	24AB	C24 Alkyl Benzene	94.717	861	193		
92	25AB	C25 Alkyl Benzene	97.314	579	131		
92	26AB	C26 Alkyl Benzene	99.807	401	88		
106	16ATM	C16 Alkyl Toluene (meta)	65.984	1362	322		
106	16ATO	C16 Alkyl Toluene (ortho)	66.943	1192	255		
106	17ATM	C17 Alkyl Toluene (meta)	70.882	3058	714		
106	17ATO	C17 Alkyl Toluene (ortho)	71.736	1833	446		
106	18ATM	C18 Alkyl Toluene (meta)	75.109	2810	680		
106	18ATO	C18 Alkyl Toluene (ortho)	75.893	2381	494		
106	1THIO106	Dimethyl dibenzothiophene 1	77.566	1642	380		
106	2THIO106	Dimethyl dibenzothiophene 2	78.316	739	144		
106	19ATM	C19 Alkyl Toluene (meta)	78.873	2795	646		
106	19ATO	C19 Alkyl Toluene (ortho)	79.640	1778	447		
106	20ATM	C20 Alkyl Toluene (meta)	82.324	2262	572		
106	20ATO	C20 Alkyl Toluene (ortho)	83.073	1449	367		
106	21ATM	C21 Alkyl Toluene (meta)	85.548	1577	397		
106	21ATO	C21 Alkyl Toluene (ortho)	86.262	1257	309		
106	22ATM	C22 Alkyl Toluene (meta)	88.565	1189	300		
106	22ATO	C22 Alkyl Toluene (ortho)	89.279	1116	254		
106	23ATM	C23 Alkyl Toluene (meta)	91.423	952	210		
106	23ATO	C23 Alkyl Toluene (ortho)	92.120	562	139		
106	24ATM	C24 Alkyl Toluene (meta)	94.159	731	146		
106	24ATO	C24 Alkyl Toluene (ortho)	94.839	567	121		
106	PHYTL	Phytanyl Toluene	95.850	2015	256		
106	25ATM	C25 Alkyl Toluene (meta)	96.756	416	104		
106	25ATO	C25 Alkyl Toluene (ortho)	97.454	394	87		
106	26ATM	C26 Alkyl Toluene (meta)	99.266	439	87		
106	26ATO	C26 Alkyl Toluene (ortho)	99.929	372	72		
134	15AI	C15 Aryl Isoprenoids	60.861	213	38		
134	16AI	C16 Aryl Isoprenoids	66.054	549	103		
134	17AI	C17 Aryl Isoprenoids					
134	18AI	C18 Aryl Isoprenoids	74.848	2087	498		
134	19AI	C19 Aryl Isoprenoids	77.148	2476	580		
134	20AI	C20 Aryl Isoprenoids	80.965	2744	614		
134	21AI	C21 Aryl Isoprenoids	83.788	1250	315		
134	22AI	C22 Aryl Isoprenoids	86.681	568	137		
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M1031261.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.945	54474	9190		
142	1MN	1-Methylnaphthalene	39.182	45649	7444		
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.136	2286	339		
156	1EN	1-Ethylnaphthalene	46.240	1376	283		
156	26DMN	2,6-Dimethylnaphthalene	47.042	8969	1469		
156	27DMN	2,7-Dimethylnaphthalene	47.199	10035	1631		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.192	23504	3194		
156	16DMN	1,6-Dimethylnaphthalene	48.436	19344	3170		
156	23DMN	2,3-Dimethylnaphthalene	49.638	2457	520		
156	14DMN	1,4-Dimethylnaphthalene	49.726	8712	1202		
156	15DMN	1,5-Dimethylnaphthalene	49.813	4051	832		
156	12DMN	1,2-Dimethylnaphthalene	50.771	4009	626		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.624	586	102		
168	DPM	Diphenylmethane	48.872	261	46		
168	3MBP	3-Methylbiphenyl	53.298	10669	1743		
168	4MBP	4-Methylbiphenyl	53.943	3191	514		
168	DBF	Dibenzofuran	55.372	18353	2852		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.128	2264	300		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.330	1192	188		
170	137TMN	1,3,7-Trimethylnaphthalene	56.783	4882	795		
170	136TMN	1,3,6-Trimethylnaphthalene	57.149	8275	1357		
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.230	6647	1016		
170	236TMN	2,3,6-Trimethylnaphthalene	58.491	7091	1223		
170	127TMN	1,2,7-Trimethylnaphthalene	59.223	1870	340		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.415	10296	1581		
170	124TMN	1,2,4-Trimethylnaphthalene	60.321	916	159		
170	125TMN	1,2,5-Trimethylnaphthalene	60.756	7157	1266		
178	PHEN	Phenanthrene	70.254	173399	36603		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.729	2924	501		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.880	5591	1227		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.629	4200	761		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.803	3830	756		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.187	1568	322		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.605	3102	633		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.797	1049	221		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.093	1185	328		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.773	10414	2224		
184	DBT	Dibenzothiophene	68.982	9621	1910		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.179	56601	13456		
192	2MP	2-Methylphenanthrene	75.353	70748	15997		
192	9MP	9-Methylphenanthrene	76.050	80413	18042		
192	1MP	1-Methylphenanthrene	76.242	69104	15036		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M1031261.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.228	1260	226		
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.070	820	192		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.384	890	191		
198	4MDBT	4 Methyl Dibenzothiophene	73.523	10246	2239		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.290	6923	1313		
198	1MDBT	1 Methyl Dibenzothiophene	75.109	5817	1268		
206	36DMP	3,6-Dimethylphenanthrene	79.414	7619	1746		
206	26DMP	2,6-Dimethylphenanthrene	79.658	18865	4069		
206	27DMP	2,7-Dimethylphenanthrene	79.762	10980	2941		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.268	66565	13690		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.477	37923	6597		
206	17DMP	1,7-Dimethylphenanthrene	80.633	36657	8320		
206	23DMP	2,3-Dimethylphenanthrene	80.895	16603	3623		
206	19DMP	1,9-Dimethylphenanthrene	81.017	16590	4209		
206	18DMP	1,8-Dimethylphenanthrene	81.435	8826	2103		
206	12DMP	1,2-Dimethylphenanthrene	81.940	7965	1935		
206	9_10DMP	9,10-Dimethylphenanthrene	82.568	1010	251		
212	DMDBT	Dimethyldibenzothiophene	77.514	28488	1158		
219	RET	Retene	86.210	11718	2755		
226	TMDBT	Trimethyldibenzothiophene	81.592	18988	482		
231	231A20	C20 Triaromatic Steroid	92.260	2020	451		
231	231B21	C21 Triaromatic	94.752	1435	300		
231	231C26	C26 20S Triaromatic	103.929	552	120		
231	231D26	C27 20S & C26 20R Triaromatic	105.533	1734	352		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.840	1594	248		
231	231F27	C27 20R Triaromatic	107.485	1102	193		
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic	107.869	180	28		
231	C29TA2	C29 Triaromatic	108.008	96	21		
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.072	1366	267		
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic	110.362	159	27		
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.614	112	28		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.224	288	68		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid					
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.113	394	64		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.723	729	95		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.950	113	20		
245	DA	Triaromatic Dinosteroid a	109.176	54	14		
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.316	359	42		
245	DB	Triaromatic Dinosteroid b	109.752	177	33		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.926	372	58		
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.065	322	41		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.641	345	62		
245	DC	Triaromatic Dinosteroid c	110.850	322	67		
245	DD	Triaromatic Dinosteroid d	110.937	151	39		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M1031261.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.373	143	25		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.582	329	65		
245	DE	Triaromatic Dinosteroid e	111.721	187	26		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.157	181	35		
245	DF	Triaromatic Dinosteroid f	112.279	209	45		
253	S253A	C21 Ring-C Monoaromatic Steroid	84.537	1052	226		
253	S253B	C22 Monoaromatic steroid	86.994	785	130		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.931	358	61		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.105	281	71		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.569	352	77		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.726	292	50		
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.109	911	147		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.356	411	70		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.530	318	68		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.739	647	120		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.879	990	193		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.134	848	173		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.447	441	75		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.569	652	134		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.173	350	61		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132264**
Well Name:	**SOUTH SIMPSON #1**	**Project #:**	**03-473-A**
Depth:	**6520 - 6570 FT**	**Lab ID:**	**CP218047**
Sampling Point:		**File Name:**	**M1031261.D**

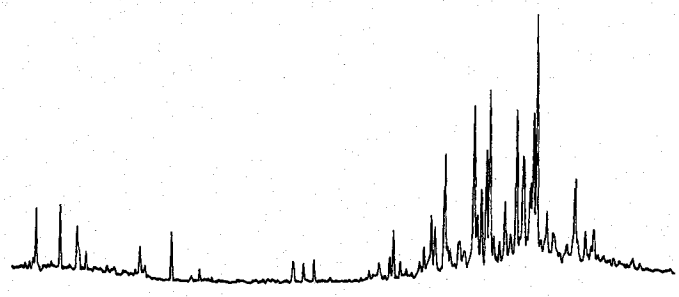
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.35	0.38
TAS #1 20/20+27	0.65	0.70
TAS #2 21/21+28	0.51	0.53
%26TAS	17.4	19.8
%27TAS	34.7	31.8
%28TAS	43.0	44.0
%29TAS	5.0	4.4
C28/C26 20S TAS	2.89	2.07
C28/C27 20R TAS	1.24	1.38
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.78	1.16
%27 MAS	24.7	25.3
%28 MAS	33.8	31.5
%29 MAS	41.5	43.2
(C21+C22)/Σ MAS	0.21	0.21
TAS/(MAS+TAS)	0.53	0.54
TA28/(TA28+MA29)	0.51	0.48
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.23	0.27
C4/C3+C4 Mester	0.52	0.55
Phenanthrenes and Naphthalenes		
MPI-1	0.59	0.63
MPI-2	0.66	0.69
Rc(a) if Ro < 1.3 (Ro%)	0.72	0.75
Rc(b) if Ro > 1.3 (Ro%)	1.95	1.92
DNR-1	4.69	3.73
DNR-2	1.70	1.80
TNR1	1.07	1.20
TDE-1	7.81	7.96
TDE-2	0.18	0.22
MDR	1.76	1.77
Rm (Ro%)	0.70	0.70
MDR23	0.72	0.69
MDR1	0.60	0.66
DBT/Phenanthrene	0.06	0.05

BASELINE DGSI
ANALYTICAL LABORATORIES

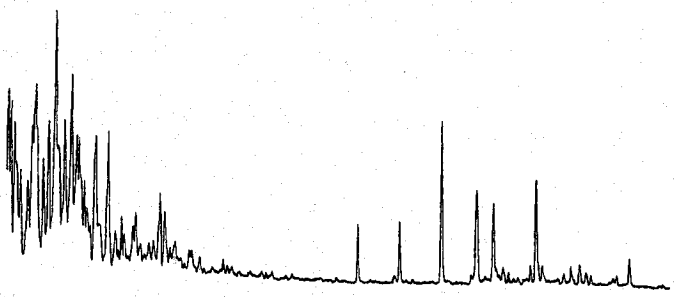
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:		**Lab ID:**	CP272549
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	EAST TOPAGORUK-1	**Geologic Age:**	
Latitude:		**Top Depth:**	2249 FT
Longitude:		**Bottom Depth:**	FT

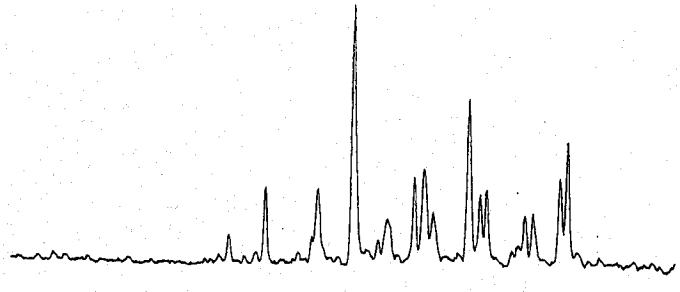
m/z 253: Monoaromatic steroids M1040545.D



m/z 231: Triaromatic steroids M1040545.D



m/z 245 Triaromatic Methylsteroids M1040545.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.34	M	1.0 (1.3%)
TAS #1 20/20+27	0.67	M	
TAS #2 21/21+28	0.48	M	
%26 TAS	20.7	D	
%27 TAS	34.4	D	
%28 TAS	39.1	D	
%29 TAS	5.8	D	
C28/C26 20S TAS	2.24		
C28/C27 20R TAS	1.14		
Dia/Regular C27 MAS	1.93		
%27 MAS	17.0	D	
%28 MAS	34.4	D	
%29 MAS	48.6	D	
(C21+C22)/Σ MAS	0.06	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.35	M	
TA28/(TA28+MA29)	0.25	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.27	A	
C4/C3+C4 Mester	0.69	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.39	M	
Rc(a) if Ro < 1.3 (Ro%)	0.60	M	
Rc(b) if Ro > 1.3 (Ro%)	2.07	M	
MPI-2	0.44	M	
DNR-1	8.88	M	
DNR-2	3.26	M	
TNR1	1.09	M	
TDE-1	6.67	M	
TDE-2	0.30	M	
MDR	1.12	M	
Rm (Ro%)	0.63	M	
MDR23	0.55	M	
MDR1	0.64	M	
DBT/Phenanthrene	0.12	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

Company:	CONOCOPHILLIPS	**Client ID:**	US134004
Well Name:	EAST TOPAGORUK-1	**Project #:**	04-180-A
Depth:	2249 - FT	**Lab ID:**	CP272549
Sampling Point:		**File Name:**	M1040545.D

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.021	26739	7143	300.0	300.0
92	16AB	C16 Alkyl Benzene	66.735	30802	6809	345.6	286.0
92	17AB	C17 Alkyl Benzene	71.580	15540	3684	174.4	154.7
92	18AB	C18 Alkyl Benzene	75.770	7502	1861	84.2	78.2
92	1THIO92	Dimethyl dibenzothiophene 1					
92	2THIO92	Dimethyl dibenzothiophene 2					
92	19AB	C19 Alkyl Benzene	79.517	2802	775	31.4	32.5
92	20AB	C20 Alkyl Benzene	82.950	1501	380	16.8	16.0
92	21AB	C21 Alkyl Benzene	86.139	1126	322	12.6	13.5
92	22AB	C22 Alkyl Benzene	89.141	608	149	6.8	6.3
92	23AB	C23 Alkyl Benzene	91.999	538	124	6.0	5.2
92	PHYBZ	Phytanyl Benzene	93.882	342	42	3.8	1.8
92	24AB	C24 Alkyl Benzene	94.701	317	78	3.6	3.3
92	25AB	C25 Alkyl Benzene	97.315	258	53	2.9	2.2
92	26AB	C26 Alkyl Benzene	99.790	195	41	2.2	1.7
106	16ATM	C16 Alkyl Toluene (meta)	66.003	28811	6674	323.2	280.3
106	16ATO	C16 Alkyl Toluene (ortho)	66.944	20580	4296	230.9	180.4
106	17ATM	C17 Alkyl Toluene (meta)	70.883	21107	4783	236.8	200.9
106	17ATO	C17 Alkyl Toluene (ortho)	71.737	11159	2687	125.2	112.9
106	18ATM	C18 Alkyl Toluene (meta)	75.126	7164	1709	80.4	71.8
106	18ATO	C18 Alkyl Toluene (ortho)	75.910	5027	1241	56.4	52.1
106	1THIO106	Dimethyl dibenzothiophene 1					
106	2THIO106	Dimethyl dibenzothiophene 2					
106	19ATM	C19 Alkyl Toluene (meta)	78.890	2842	738	31.9	31.0
106	19ATO	C19 Alkyl Toluene (ortho)	79.657	1988	523	22.3	22.0
106	20ATM	C20 Alkyl Toluene (meta)	82.340	1809	415	20.3	17.4
106	20ATO	C20 Alkyl Toluene (ortho)	83.072	1218	303	13.7	12.7
106	21ATM	C21 Alkyl Toluene (meta)	85.582	1356	242	15.2	10.2
106	21ATO	C21 Alkyl Toluene (ortho)	86.261	2235	462	25.1	19.4
106	22ATM	C22 Alkyl Toluene (meta)	88.566	1043	167	11.7	7.0
106	22ATO	C22 Alkyl Toluene (ortho)	89.298	1604	268	18.0	11.3
106	23ATM	C23 Alkyl Toluene (meta)	91.424	1098	200	12.3	8.4
106	23ATO	C23 Alkyl Toluene (ortho)	92.139	460	106	5.2	4.5
106	24ATM	C24 Alkyl Toluene (meta)					
106	24ATO	C24 Alkyl Toluene (ortho)					
106	PHYTL	Phytanyl Toluene	95.834	3121	335	35.0	14.1
106	25ATM	C25 Alkyl Toluene (meta)					
106	25ATO	C25 Alkyl Toluene (ortho)					
106	26ATM	C26 Alkyl Toluene (meta)					
106	26ATO	C26 Alkyl Toluene (ortho)					
134	15AI	C15 Aryl Isoprenoids	60.862	11034	2008	123.8	84.3
134	16AI	C16 Aryl Isoprenoids	66.055	8791	1767	98.6	74.2
134	17AI	C17 Aryl Isoprenoids	70.709	2268	475	25.4	20.0
134	18AI	C18 Aryl Isoprenoids	74.864	5458	1283	61.2	53.9
134	19AI	C19 Aryl Isoprenoids	77.165	6744	1451	75.7	60.9
134	20AI	C20 Aryl Isoprenoids	80.964	5266	949	59.1	39.9
134	21AI	C21 Aryl Isoprenoids	83.787	2056	514	23.1	21.6
134	22AI	C22 Aryl Isoprenoids	86.697	1565	382	17.6	16.0
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M1040545.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.993	2002323	310619	22465.2	13045.7
142	1MN	1-Methylnaphthalene	39.195	1027938	173869	11533.0	7281.4
149	MTTC5T8	5,7,8,-triMe-MTTChroman	103.162	10556	1507	118.4	63.3
156	2EN	2-Ethylnaphthalene	46.148	174767	27018	1960.8	1134.7
156	1EN	1-Ethylnaphthalene	46.218	42781	10932	480.0	459.1
156	26DMN	2,6-Dimethylnaphthalene	47.072	617763	95649	6931.0	4017.2
156	27DMN	2,7-Dimethylnaphthalene	47.229	606240	103361	6801.8	4341.1
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.240	946660	122714	10621.1	5153.9
156	16DMN	1,6-Dimethylnaphthalene	48.484	827510	138934	9284.3	5835.1
156	23DMN	2,3-Dimethylnaphthalene	49.634	79544	16257	892.4	682.8
156	14DMN	1,4-Dimethylnaphthalene	49.738	295607	44097	3316.6	1852.0
156	15DMN	1,5-Dimethylnaphthalene	49.843	137777	28929	1545.8	1215.0
156	12DMN	1,2-Dimethylnaphthalene	50.801	135646	22764	1521.9	956.1
161	MTTC8	8-Me-MTTChroman	98.274	244	47	2.7	2.0
168	2MBP	2-Methylbiphenyl	46.619	25101	4235	281.6	177.9
168	DPM	Diphenylmethane	48.650	16431	2857	184.3	120.0
168	3MBP	3-Methylbiphenyl	53.311	364809	61210	4093.0	2570.8
168	4MBP	4-Methylbiphenyl	53.956	140153	24347	1572.5	1022.6
168	DBF	Dibenzofuran	55.385	153008	24573	1716.7	1032.0
170	BB_EMN	Ethyl-methyl-Naphthalene	55.141	190225	25957	2134.2	1090.2
170	AB_EMN	Ethyl-methyl-Naphthalene	56.343	73183	11932	821.1	501.1
170	137TMN	1,3,7-Trimethylnaphthalene	56.796	220366	37774	2472.4	1586.5
170	136TMN	1,3,6-Trimethylnaphthalene	57.180	333258	57253	3739.0	2404.6
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.243	222417	34373	2495.4	1443.6
170	236TMN	2,3,6-Trimethylnaphthalene	58.504	241668	42539	2711.4	1786.6
170	127TMN	1,2,7-Trimethylnaphthalene	59.236	68621	11919	769.9	500.6
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.428	232430	36088	2607.8	1515.7
170	124TMN	1,2,4-Trimethylnaphthalene	60.322	16946	3143	190.1	132.0
170	125TMN	1,2,5-Trimethylnaphthalene	60.775	112947	20815	1267.2	874.2
178	PHEN	Phenanthrene	70.290	225163	49306	2526.2	2070.8
184	1357	1,3,5,7-Tetramethylnaphthalene	64.748	39921	7013	447.9	294.5
184	1367	1,3,6,7-Tetramethylnaphthalene	65.898	38696	8631	434.2	362.5
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.647	25571	4836	286.9	203.1
184	1257	1,2,5,7-Tetramethylnaphthalene	66.822	22811	4368	255.9	183.5
184	2367	2,3,6,7-Tetramethylnaphthalene	67.205	10778	2348	120.9	98.6
184	1267	1,2,6,7-Tetramethylnaphthalene	67.641	15185	3119	170.4	131.0
184	1237	1,2,3,7-Tetramethylnaphthalene	67.815	5012	986	56.2	41.4
184	1236	1,2,3,6-Tetramethylnaphthalene	68.095	9497	2153	106.6	90.4
184	1256	1,2,5,6-Tetramethylnaphthalene	68.809	23277	5153	261.2	216.4
184	DBT	Dibenzothiophene	69.018	28143	5596	315.8	235.0
191	BH32	C32 Benzohopane	115.923	4488	1409	50.4	59.2
191	BH33	C33 Benzohopane	116.968	3941	1097	44.2	46.1
191	BH34	C34 Benzohopane	117.910	2464	634	27.6	26.6
191	BH35	C35 Benzohopane	119.095	1296	246	14.5	10.3
192	3MP	3-Methylphenanthrene	75.213	37049	8741	415.7	367.1
192	2MP	2-Methylphenanthrene	75.404	48457	11757	543.7	493.8
192	9MP	9-Methylphenanthrene	76.084	72965	16405	818.6	689.0
192	1MP	1-Methylphenanthrene	76.276	34485	7753	386.9	325.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M1040545.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.247	51305	9626	575.6	404.3
198	12457PMN	1,2,4,6,7-Pentamethylnaphthalene	73.104	3742	919	42.0	38.6
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.418	2333	575	26.2	24.2
198	4MDBT	4 Methyl Dibenzothiophene	73.557	19996	4484	224.3	188.3
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.341	15460	2459	173.5	103.3
198	1MDBT	1 Methyl Dibenzothiophene	75.143	17889	3581	200.7	150.4
206	36DMP	3,6-Dimethylphenanthrene	79.447	20776	4694	233.1	197.1
206	26DMP	2,6-Dimethylphenanthrene	79.709	15734	3733	176.5	156.8
206	27DMP	2,7-Dimethylphenanthrene	79.813	36458	8229	409.0	345.6
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.319	119254	25683	1338.0	1078.7
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.528	79925	16709	896.7	701.8
206	17DMP	1,7-Dimethylphenanthrene	80.667	19830	4554	222.5	191.3
206	23DMP	2,3-Dimethylphenanthrene	80.946	17963	3613	201.5	151.7
206	19DMP	1,9-Dimethylphenanthrene	81.051	26618	5617	298.6	235.9
206	18DMP	1,8-Dimethylphenanthrene	81.469	8215	1736	92.2	72.9
206	12DMP	1,2-Dimethylphenanthrene	81.992	2664	630	29.9	26.5
206	9_10DMP	9,10-Dimethylphenanthrene	82.619	8100	1907	90.9	80.1
212	DMDBT	Dimethyldibenzothiophene	77.548	99915	2657	1121.0	111.6
219	RET	Retene	86.244	144781	36971	1624.4	1552.8
226	TMDBT	Trimethyldibenzothiophene	81.643	76198	2031	854.9	85.3
231	231A20	C20 Triaromatic Steroid	92.330	15106	2151	169.5	90.3
231	231B21	C21 Triaromatic	94.770	7759	1241	87.1	52.1
231	231C26	C26 20S Triaromatic	103.912	4482	1041	50.3	43.7
231	231D26	C27 20S & C26 20R Triaromatic	105.516	12482	2781	140.0	116.8
231	TADMD1	C28 23,24-Cholestane Triaromatic	106.073	154	60	1.7	2.5
231	TADMD2	C28 23,24-Cholestane Triaromatic	106.631	738	157	8.3	6.6
231	231E28	C28 20S Triaromatic	106.823	10030	1602	112.5	67.3
231	231F27	C27 20R Triaromatic	107.450	7452	1370	83.6	57.5
231	TADMD3	C28 23,24-Cholestane Triaromatic	107.573	1131	258	12.7	10.8
231	C29TA1	C29 Triaromatic	107.817	1631	270	18.3	11.3
231	C29TA2	C29 Triaromatic	108.008	714	188	8.0	7.9
231	TADMD4	C28 23,24-Cholestane Triaromatic	108.845	972	276	10.9	11.6
231	231G28	C28 20R Triaromatic	109.054	8485	1747	95.2	73.4
231	TADMD5	C28 23,24-Cholestane Triaromatic	109.124	650	327	7.3	13.7
231	C29TA3	C29 Triaromatic	110.344	1266	306	14.2	12.9
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.596	979	220	11.0	9.2
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.206	2471	570	27.7	23.9
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.764	389	92	4.4	3.9
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.095	3649	558	40.9	23.4
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.688	10354	1913	116.2	80.3
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.915	779	114	8.7	4.8
245	DA	Triaromatic Dinosteroid a	109.124	811	182	9.1	7.6
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.281	2863	338	32.1	14.2
245	DB	Triaromatic Dinosteroid b	109.717	2966	646	33.3	27.1
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.874	4684	706	52.6	29.7
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.030	2644	391	29.7	16.4
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.623	6554	1225	73.5	51.4
245	DC	Triaromatic Dinosteroid c	110.815	2520	525	28.3	22.1
245	DD	Triaromatic Dinosteroid d	110.920	2551	559	28.6	23.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M1040545.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.338	472	110	5.3	4.6
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.547	1875	368	21.0	15.5
245	DE	Triaromatic Dinosteroid e	111.687	2120	385	23.8	16.2
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.122	3169	649	35.6	27.3
245	DF	Triaromatic Dinosteroid f	112.244	3884	907	43.6	38.1
253	S253A	C21 Ring C Monoaromatic Steroid	84.554	3880	805	43.5	33.8
253	S253B	C22 Monoaromatic steroid	87.011	3004	557	33.7	23.4
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.949	1756	411	19.7	17.3
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.089	3385	896	38.0	37.6
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.553	5114	1067	57.4	44.8
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.710	4369	856	49.0	36.0
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.093	12386	2177	139.0	91.4
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.373	4937	1017	55.4	42.7
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.530	7008	1467	78.6	61.6
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.704	10553	2175	118.4	91.3
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.826	16842	3250	189.0	136.5
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.116	15289	2009	171.5	84.4
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.430	9696	1510	108.8	63.4
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.535	15159	2758	170.1	115.8
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.156	8725	1503	97.9	63.1

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134004**
Well Name:	**EAST TOPAGORUK-1**	**Project #:**	**04-180-A**
Depth:	**2249 - FT**	**Lab ID:**	**CP272549**
Sampling Point:		**File Name:**	**M1040545.D**

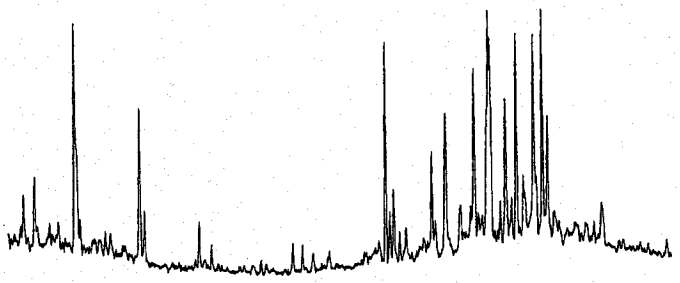
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.34	0.28
TAS #1 20/20+27	0.67	0.61
TAS #2 21/21+28	0.48	0.42
%26TAS	20.7	23.3
%27TAS	34.4	30.7
%28TAS	39.1	39.1
%29TAS	5.8	6.9
C28/C26 20S TAS	2.24	1.54
C28/C27 20R TAS	1.14	1.28
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	1.93	2.18
%27 MAS	17.0	20.1
%28 MAS	34.4	34.7
%29 MAS	48.6	45.1
(C21+C22)/Σ MAS	0.06	0.06
TAS/(MAS+TAS)	0.35	0.35
TA28/(TA28+MA29)	0.25	0.26
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.27	0.31
C4/C3+C4 Mester	0.69	0.71
Phenanthrenes and Naphthalenes		
MPI-1	0.39	0.42
MPI-2	0.44	0.48
Rc(a) if Ro < 1.3 (Ro%)	0.60	0.62
Rc(b) if Ro > 1.3 (Ro%)	2.07	2.05
DNR-1	8.88	6.88
DNR-2	3.26	3.30
TNR1	1.09	1.24
TDE-1	6.67	6.62
TDE-2	0.30	0.33
MDR	1.12	1.25
Rm (Ro%)	0.63	0.65
MDR23	0.55	0.44
MDR1	0.64	0.64
DBT/Phenanthrene	0.12	0.11

BASELINE DGSI ANALYTICAL LABORATORIES

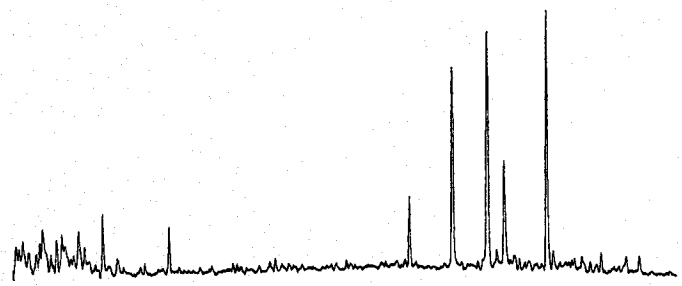
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US134517
Country:	UNITED STATES	**Project #:**	04-180-A
Basin:	NORTH SLOPE	**Lab ID:**	CP273047
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	MEADE 1	**Geologic Age:**	
Latitude:		**Top Depth:**	2959 FT
Longitude:		**Bottom Depth:**	FT

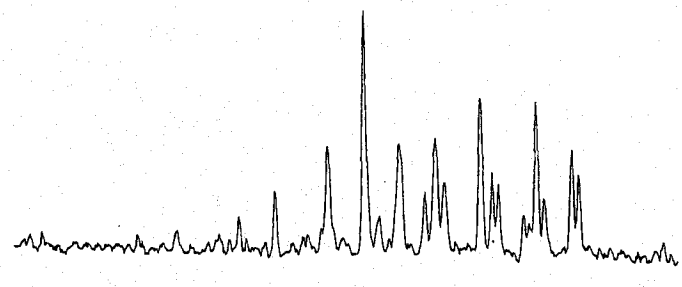
***m/z* 253: Monoaromatic steroids** M1040829.D



***m/z* 231: Triaromatic steroids** M1040829.D



***m/z* 245 Triaromatic Methylsteroids** M1040829.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.10	M	1.0 (1.3%)
TAS #1 20/20+27	0.32	M	
TAS #2 21/21+28	0.14	M	
%26 TAS	13.7	D	
%27 TAS	28.2	D	
%28 TAS	55.0	D	
%29 TAS	3.1	D	
C28/C26 20S TAS	4.66		
C28/C27 20R TAS	1.95		
Dia/Regular C27 MAS	1.31		
%27 MAS	19.8	D	
%28 MAS	42.3	D	
%29 MAS	37.9	D	
(C21+C22)/Σ MAS	0.22	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.53	M	
TA28/(TA28+MA29)	0.66	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.20	A	
C4/C3+C4 Mester	0.55	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.67	M	
Rc(a) if Ro < 1.3 (Ro%)	0.77	M	
Rc(b) if Ro > 1.3 (Ro%)	1.90	M	
MPI-2	0.78	M	
DNR-1	8.69	M	
DNR-2	2.17	M	
TNR1	1.04	M	
TDE-1	9.04	M	
TDE-2	0.22	M	
MDR	1.61	M	
Rm (Ro%)	0.69	M	
MDR23	0.91	M	
MDR1	0.82	M	
DBT/Phenanthrene	0.04	D	

[1]Definition and utility of the ratios can be found on our website www.BaselineDGSI.com

[2]A=Source Age; D=Depositional environment; M= Maturity

[3]Thermal equilibrium value of the biomarker ratio and in brackets the approximate VR value at which this value is reached

GMC DATA REPORT 3 2 5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M1040829.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.093	17675	4298	300.0	300.0
92	16AB	C16 Alkyl Benzene	66.821	6184	1377	105.0	96.1
92	17AB	C17 Alkyl Benzene	71.667	8763	2187	148.7	152.7
92	18AB	C18 Alkyl Benzene	75.842	16392	4142	278.2	289.1
92	1THIO92	Dimethyl dibenzothiophene 1	77.620	3583	453	60.8	31.6
92	2THIO92	Dimethyl dibenzothiophene 2	78.299	3740	626	63.5	43.8
92	19AB	C19 Alkyl Benzene	79.606	27673	7329	469.7	511.6
92	20AB	C20 Alkyl Benzene	83.040	37068	10151	629.2	708.5
92	21AB	C21 Alkyl Benzene	86.246	50262	13123	853.1	916.0
92	22AB	C22 Alkyl Benzene	89.245	47746	13723	810.4	957.9
92	23AB	C23 Alkyl Benzene	92.103	46040	12806	781.4	893.9
92	PHYBz	Phytanyl Benzene	94.003	7203	988	122.3	69.0
92	24AB	C24 Alkyl Benzene	94.822	43108	11243	731.7	784.8
92	25AB	C25 Alkyl Benzene	97.419	45141	11960	766.2	834.8
92	26AB	C26 Alkyl Benzene	99.912	38826	10196	659.0	711.7
106	16ATM	C16 Alkyl Toluene (meta)	66.072	6543	1469	111.1	102.5
106	16ATO	C16 Alkyl Toluene (ortho)	67.013	3969	839	67.4	58.6
106	17ATM	C17 Alkyl Toluene (meta)	70.970	13160	3194	223.4	222.9
106	17ATO	C17 Alkyl Toluene (ortho)	71.824	6474	1552	109.9	108.3
106	18ATM	C18 Alkyl Toluene (meta)	75.198	21630	5395	367.1	376.6
106	18ATO	C18 Alkyl Toluene (ortho)	75.999	11080	2762	188.1	192.8
106	1THIO106	Dimethyl dibenzothiophene 1					
106	2THIO106	Dimethyl dibenzothiophene 2					
106	19ATM	C19 Alkyl Toluene (meta)	78.979	34720	9833	589.3	686.3
106	19ATO	C19 Alkyl Toluene (ortho)	79.728	15613	4135	265.0	288.6
106	20ATM	C20 Alkyl Toluene (meta)	82.430	53499	14606	908.0	1019.5
106	20ATO	C20 Alkyl Toluene (ortho)	83.162	23173	6505	393.3	454.0
106	21ATM	C21 Alkyl Toluene (meta)	85.654	63946	17802	1085.4	1242.6
106	21ATO	C21 Alkyl Toluene (ortho)	86.368	29368	7564	498.5	528.0
106	22ATM	C22 Alkyl Toluene (meta)	88.670	73688	21092	1250.7	1472.2
106	22ATO	C22 Alkyl Toluene (ortho)	89.367	32007	8425	543.3	588.1
106	23ATM	C23 Alkyl Toluene (meta)	91.528	70379	18961	1194.6	1323.5
106	23ATO	C23 Alkyl Toluene (ortho)	92.225	26195	7014	444.6	489.6
106	24ATM	C24 Alkyl Toluene (meta)	94.265	61150	15905	1037.9	1110.2
106	24ATO	C24 Alkyl Toluene (ortho)	94.944	25573	6430	434.1	448.8
106	PHYTL	Phytanyl Toluene	95.938	37975	5880	644.6	410.4
106	25ATM	C25 Alkyl Toluene (meta)	96.862	61663	16945	1046.6	1182.8
106	25ATO	C25 Alkyl Toluene (ortho)	97.541	21625	5485	367.0	382.9
106	26ATM	C26 Alkyl Toluene (meta)	99.354	62909	15335	1067.8	1070.4
106	26ATO	C26 Alkyl Toluene (ortho)	100.016	12242	3723	207.8	259.9
134	15AI	C15 Aryl Isoprenoids	60.931	1220	227	20.7	15.8
134	16AI	C16 Aryl Isoprenoids	66.124	1650	292	28.0	20.4
134	17AI	C17 Aryl Isoprenoids	70.778	975	195	16.5	13.6
134	18AI	C18 Aryl Isoprenoids	74.936	3556	938	60.4	65.5
134	19AI	C19 Aryl Isoprenoids	77.236	10055	1946	170.7	135.8
134	20AI	C20 Aryl Isoprenoids	81.053	8692	2182	147.5	152.3
134	21AI	C21 Aryl Isoprenoids	83.876	5012	1216	85.1	84.9
134	22AI	C22 Aryl Isoprenoids	86.786	3996	914	67.8	63.8
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M1040829.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	38.010	144013	25247	2444.4	1762.2
142	1MN	1-Methylnaphthalene	39.230	79512	13422	1349.6	936.9
149	MTTC5T8	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.201	15936	2401	270.5	167.6
156	1EN	1-Ethylnaphthalene	46.288	3439	1046	58.4	73.0
156	26DMN	2,6-Dimethylnaphthalene	47.124	56367	9067	956.7	632.9
156	27DMN	2,7-Dimethylnaphthalene	47.264	54420	9320	923.7	650.5
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.257	107987	15153	1832.9	1057.7
156	16DMN	1,6-Dimethylnaphthalene	48.519	91720	15561	1556.8	1086.2
156	23DMN	2,3-Dimethylnaphthalene	49.721	11562	2310	196.2	161.2
156	14DMN	1,4-Dimethylnaphthalene	49.791	39567	5824	671.6	406.5
156	15DMN	1,5-Dimethylnaphthalene	49.895	12743	3079	216.3	214.9
156	12DMN	1,2-Dimethylnaphthalene	50.854	17254	2783	292.9	194.3
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.671	1636	287	27.8	20.0
168	DPM	Diphenylmethane	48.919	2175	370	36.9	25.8
168	3MBP	3-Methylbiphenyl	53.363	68877	11579	1169.1	808.2
168	4MBP	4-Methylbiphenyl	54.025	26126	4399	443.4	307.1
168	DBF	Dibenzofuran	55.437	40014	6256	679.2	436.7
170	BB_EMN	Ethyl-methyl-Naphthalene	55.193	24345	3250	413.2	226.9
170	AB_EMN	Ethyl-methyl-Naphthalene	56.413	9702	1587	164.7	110.8
170	137TMN	1,3,7-Trimethylnaphthalene	56.849	35929	5908	609.8	412.4
170	136TMN	1,3,6-Trimethylnaphthalene	57.232	51609	8586	876.0	599.3
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.295	40623	6185	689.5	431.7
170	236TMN	2,3,6-Trimethylnaphthalene	58.556	42087	7390	714.3	515.8
170	127TMN	1,2,7-Trimethylnaphthalene	59.306	11190	1981	189.9	138.3
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.480	50145	7744	851.1	540.5
170	124TMN	1,2,4-Trimethylnaphthalene	60.408	4139	736	70.3	51.4
170	125TMN	1,2,5-Trimethylnaphthalene	60.844	37406	6833	634.9	476.9
178	PHEN	Phenanthrene	70.342	236658	50724	4016.8	3540.5
184	1357	1,3,5,7-Tetramethylnaphthalene	64.817	11277	1907	191.4	133.1
184	1367	1,3,6,7-Tetramethylnaphthalene	65.967	15503	3303	263.1	230.5
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.717	10338	1954	175.5	136.4
184	1257	1,2,5,7-Tetramethylnaphthalene	66.891	8657	1661	146.9	115.9
184	2367	2,3,6,7-Tetramethylnaphthalene	67.274	3793	822	64.4	57.4
184	1267	1,2,6,7-Tetramethylnaphthalene	67.693	6075	1250	103.1	87.3
184	1237	1,2,3,7-Tetramethylnaphthalene	67.884	2216	503	37.6	35.1
184	1236	1,2,3,6-Tetramethylnaphthalene	68.164	4380	952	74.3	66.5
184	1256	1,2,5,6-Tetramethylnaphthalene	68.861	21912	4590	371.9	320.4
184	DBT	Dibenzothiophene	69.070	8744	1741	148.4	121.5
191	BH32	C32 Benzohopane	115.871	2430	964	41.2	67.3
191	BH33	C33 Benzohopane	116.847	2319	735	39.4	51.3
191	BH34	C34 Benzohopane	117.719	1053	321	17.9	22.4
191	BH35	C35 Benzohopane	118.817	658	164	11.2	11.4
192	3MP	3-Methylphenanthrene	75.285	75694	16632	1284.8	1160.9
192	2MP	2-Methylphenanthrene	75.459	106703	23760	1811.1	1658.4
192	9MP	9-Methylphenanthrene	76.156	94039	20664	1596.1	1442.3
192	1MP	1-Methylphenanthrene	76.348	79469	17594	1348.8	1228.1

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M1040829.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.316	11309	2359	191.9	164.7
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.176	1453	305	24.7	21.3
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.490	1738	373	29.5	26.0
198	4MDBT	4 Methyl Dibenzothiophene	73.629	11551	2564	196.1	179.0
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.396	7983	1295	135.5	90.4
198	1MDBT	1 Methyl Dibenzothiophene	75.215	7185	1578	122.0	110.1
206	36DMP	3,6-Dimethylphenanthrene	79.519	13882	2912	235.6	203.3
206	26DMP	2,6-Dimethylphenanthrene	79.781	30937	6859	525.1	478.8
206	27DMP	2,7-Dimethylphenanthrene	79.885	22539	5756	382.6	401.8
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.391	94031	19022	1596.0	1327.7
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.582	49607	8510	842.0	594.0
206	17DMP	1,7-Dimethylphenanthrene	80.739	46165	11405	783.6	796.1
206	23DMP	2,3-Dimethylphenanthrene	81.018	19385	4160	329.0	290.4
206	19DMP	1,9-Dimethylphenanthrene	81.123	18471	4267	313.5	297.8
206	18DMP	1,8-Dimethylphenanthrene	81.541	8334	1864	141.5	130.1
206	12DMP	1,2-Dimethylphenanthrene	82.046	8024	1878	136.2	131.1
206	9_10DMP	9,10-Dimethylphenanthrene	82.691	1554	382	26.4	26.7
212	DMDBT	Dimethyldibenzothiophene	77.620	42716	2094	725.0	146.2
219	RET	Retene	86.333	61403	15417	1042.2	1076.1
226	TMDBT	Trimethyldibenzothiophene	81.715	31269	972	530.7	67.8
231	231A20	C20 Triaromatic Steroid	92.382	3654	776	62.0	54.2
231	231B21	C21 Triaromatic	94.875	2333	574	39.6	40.1
231	231C26	C26 20S Triaromatic	104.035	3697	865	62.8	60.4
231	231D26	C27 20S & C26 20R Triaromatic	105.621	12046	2447	204.5	170.8
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.946	17223	2866	292.3	200.0
231	231F27	C27 20R Triaromatic	107.573	7614	1306	129.2	91.2
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic	107.957	1408	186	23.9	13.0
231	C29TA2	C29 Triaromatic	108.131	573	145	9.7	10.1
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.177	14827	3148	251.7	219.7
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic	110.485	838	183	14.2	12.8
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.702	720	174	12.2	12.1
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.312	1289	292	21.9	20.4
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.870	471	101	8.0	7.1
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.218	3165	490	53.7	34.2
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.811	5881	1080	99.8	75.4
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	109.073	1283	190	21.8	13.3
245	DA	Triaromatic Dinosteroid a	109.247	431	91	7.3	6.4
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.421	4170	505	70.8	35.2
245	DB	Triaromatic Dinosteroid b	109.840	1536	301	26.1	21.0
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	110.014	3583	533	60.8	37.2
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.153	2244	343	38.1	23.9
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.746	4041	711	68.6	49.6
245	DC	Triaromatic Dinosteroid c	110.938	1657	390	28.1	27.2
245	DD	Triaromatic Dinosteroid d	111.042	1539	338	26.1	23.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M1040829.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.461	1045	209	17.7	14.6
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.670	3502	700	59.4	48.9
245	DE	Triaromatic Dinosteroid e	111.792	1551	280	26.3	19.5
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.263	2478	494	42.1	34.5
245	DF	Triaromatic Dinosteroid f	112.367	1905	386	32.3	26.9
253	S253A	C21 Ring-C Monoaromatic Steroid	84.625	7274	1519	123.5	106.0
253	S253B	C22 Monoaromatic steroid	87.100	4945	1012	83.9	70.6
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	97.053	1555	333	26.4	23.2
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.193	2031	484	34.5	33.8
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.674	2852	666	48.4	46.5
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.814	935	208	15.9	14.5
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.214	5332	910	90.5	63.5
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.461	1189	228	20.2	15.9
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.635	1577	207	26.8	14.4
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.879	10279	1564	174.5	109.2
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.949	6247	1377	106.0	96.1
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.309	1619	366	27.5	25.5
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.570	1111	261	18.9	18.2
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.640	7292	1397	123.8	97.5
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.244	1257	157	21.3	11.0

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US134517**
Well Name:	**MEADE 1**	**Project #:**	**04-180-A**
Depth:	**2959 - FT**	**Lab ID:**	**CP273047**
Sampling Point:		**File Name:**	**M1040829.D**

Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.10	0.11
TAS #1 20/20+27	0.32	0.37
TAS #2 21/21+28	0.14	0.15
%26TAS	13.7	15.7
%27TAS	28.2	23.7
%28TAS	55.0	57.2
%29TAS	3.1	3.3
C28/C26 20S TAS	4.66	3.31
C28/C27 20R TAS	1.95	2.41
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	1.31	1.45
%27 MAS	19.8	23.5
%28 MAS	42.3	36.1
%29 MAS	37.9	40.4
(C21+C22)/Σ MAS	0.22	0.24
TAS/(MAS+TAS)	0.53	0.53
TA28/(TA28+MA29)	0.66	0.65
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.20	0.23
C4/C3+C4 Mester	0.55	0.55
Phenanthrenes and Naphthalenes		
MPI-1	0.67	0.68
MPI-2	0.78	0.80
Rc(a) if Ro < 1.3 (Ro%)	0.77	0.78
Rc(b) if Ro > 1.3 (Ro%)	1.90	1.89
DNR-1	8.69	5.97
DNR-2	2.17	2.26
TNR1	1.04	1.19
TDE-1	9.04	9.28
TDE-2	0.22	0.26
MDR	1.61	1.62
Rm (Ro%)	0.69	0.69
MDR23	0.91	0.74
MDR1	0.82	0.91
DBT/Phenanthrene	0.04	0.03

Conoco Phillips - Alaska

HGS No.	Well Name	Top Depth (ft.)	Bottom Depth (ft.)	Median Depth (ft.)	Sample Type	Leco TOC	S1	S2	S3	Tmax (°C)	Cal. %Ro	Meas. %Ro	HI	OI	S1/TOC	PI	Notes Checks	Notes Pyrogram
03-2133-069770	Ikpikpuk #1	8910	8920	8915	cuttings	1.55	0.67	2.65		444	0.83		171		43	0.20	c	n
03-2133-069771	Ikpikpuk #1	9300	9310	9305	cuttings	1.33	0.40	1.31		453	0.99		98		30	0.23		n
03-2133-069772	Ikpikpuk #1	9540	9550	9545	cuttings	1.14	0.49	1.24		453	0.99		109		43	0.28		n
03-2133-069773	Ikpikpuk #1	9750	9760	9755	cuttings	1.13	0.79	5.26		420	0.40		465		70	0.13		n
03-2133-069774	North Inigok #1	9800	9810	9805	cuttings	2.92	0.49	1.00		488	1.62		34		17	0.33		n;ltS2p
03-2133-069775	North Inigok #1	9860	9870	9865	cuttings	3.93	0.51	1.17		488	1.62		30		13	0.30	lc	n;ltS2p
03-2133-069776	North Inigok #1	9880	9890	9885	cuttings	3.44	0.47	0.99		487	1.61		29		14	0.32		n;ltS2p
03-2133-069777	North Inigok #1	9960	9970	9965	cuttings	3.13	0.46	1.17		491	1.68		37		15	0.28		n;ltS2p
03-2133-069778	North Inigok #1	10000	10010	10005	cuttings	3.86	0.55	1.43		497	1.79		37		14	0.28		n
03-2133-069779	Inigok #1	11960	11970	11965	cuttings	1.43	0.51	0.57		499	1.82		40		36	0.47		n
03-2133-069780	Inigok #1	12010	12020	12015	cuttings	2.47	0.68	0.70		510	2.02		28		28	0.49		n
03-2133-069781	Inigok #1	12060	12070	12065	cuttings	2.38	0.63	0.67		567	3.05		28		26	0.48		n
03-2133-069782	Inigok #1	12110	12120	12115	cuttings	2.14	0.59	0.55		498	1.80		26		28	0.52		n
03-2133-069783	Inigok #1	12150	12160	12155	cuttings	3.47	0.86	1.01		568	3.06		29		25	0.46		n
03-2133-069784	Tunalik #1	13990	14000	13995	cuttings	2.15	0.54	0.16		*			7		25	0.77		n
03-2133-069785	Tunalik #1	14050	14060	14055	cuttings	1.60	0.46	0.38		*			24		29	0.55		n
03-2133-069786	Tunalik #1	14120	14130	14125	cuttings	1.55	0.49	0.33		*			21		32	0.60	lc	n
03-2133-069787	Tunalik #1	14170	14180	14175	cuttings	1.73	0.46	0.20		*			12		27	0.70		n
03-2133-069788	Tunalik #1	14210	14220	14215	cuttings	1.85	0.67	0.16		*			9		36	0.81		n
03-2133-069789	Tunalik #1	14240	14250	14245	cuttings	1.55	0.46	0.15		*			10		30	0.75	c	n

Note: "-1" indicates not measured or meaningless ratio

* Tmax data not reliable due to poor S2 peak

TOC = weight percent organic carbon in rock
S1, S2 = mg hydrocarbons per gram of rock
S3 = mg carbon dioxide per gram of rock
Tmax = °C

HI = hydrogen index = S2 x 100 / TOC
OI = oxygen index = S3 x 100 / TOC
S1/TOC = normalized oil content = S1 x 100 / TOC
PI = production index = S1 / (S1+S2)
Cal. %Ro = calculated vitrinite reflectance based on Tmax
Measured %Ro = measured vitrinite reflectance

Notes:

c = analysis checked and confirmed

Pyrogram:
n=normal
ltS2sh = low temperature S2 shoulder
ltS2p = low temperature S2 peak
htS2p = high temperature S2 peak
f = flat S2 peak

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