Geochemical data for an HC-Show (Hydrocarbon-Show) Evaluation for Arctic Alaska wells as follows:

Husky NPR Operations Walakpa No. 1 from core (2,078.2'),
Husky NPR Operations Walakpa No. 2 from cores (2,618.5' and 2,632.5'),
ARCO Alaska Inc. Brontosaurus No. 1 from cores (4,397.3' and 4,411.6'),
ARCO Alaska Inc. Brontosaurus No. 1-A from cuttings (4,370'-4,400') and core (6,461.5'), and
Husky NPR Operations Kuyanak No. 1 from cuttings (4,560'-4,630'; and 5,400'-5,430') and cores (5,068.4'; and 5,113.6').

Received 30 January 2006

Total of 133 pages in report

Alaska Geologic Materials Center Data Report No. 326

ConocoPhillips

December 8, 2005

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

Well Name,	Well Depth (ft)
Walakpa-1,	2078.2'
Walakpa-2	2618.5'
Walakpa-2,	2632.5'
Brontosaurus-1A,	4370'- 4400'
Brontosaurus-1A,	6461.5'
Brontosaurus-1,	4397.3'
Brontosaurus-1,	4411.6'
Kuyanak-1,	4560' – 4630'
Kuyanak-1,	5068.4'
Kuyanak-1,	5113.6'
Kuyanak-1,	5400' – 5430'

Regards,

Bradley J. Huizinga

GMC DATA REPORT 3 2 6

GMC DATA REPORT 3 2 6

IFS0587

HC-Show Evaluation for Northern Portion of the Northwest NPR-A

Sample ID	Well	Top Depth (ft, MD)	Base Depth (ft, MD)	Reservoir	Sample Type
US136226	Walakpa-1	2078.2	2078.2	Walakpa (Kuparuk equiv.)	Core
US136227	Walakpa-2	2618.5	2618.5	Walakpa (Kuparuk equiv.)	Core
US136228	Walakpa-2	2632.5	2632.5	Walakpa (Kuparuk equiv.)	Core
US136229	Brontosaurus-1A	4370	4400	Walakpa (Kuparuk equiv.)	Cuttings
US136230	Brontosaurus-1A	6461.5	6461.5	Ivishak Ss	Core
US136231	Brontosaurus-1	4397.3	4397.3	Walakpa (Kuparuk equiv.)	Core
US136232	Brontosaurus-1	4411.6	4411.6	Walakpa (Kuparuk equiv.)	Core
US132260	Kuyanak-1	4560	4630	Torok	Cuttings
US132261	Kuyanak-1	5068.4	5068.4	Basal Pebble Shale_LCU	Core
US132262	Kuyanak-1	5113.6	5113.6	Kuyanak/Alpine Ss	Core
US132263	Kuyanak-1	5400	5430	Simpson Ss	Cuttings

Company: CONOCOPHILLIPS **Project #: 05-295-A**

Client ID	Lab ID	Rock Weight (g)	Net Extract Weight (g)	% Extract	EOM (ppm)
US136226	CP278537	15.6320	0.0399	0.26	2552
US136227	CP278538	35.5432	0.0607	0.17	1708
US136228	CP278539	34.3058	0.0886	0.26	2583
US136229	CP278540	0.5796	0.0003	0.05	518
US136230	CP278541	11.7761	0.0192	0.16	1630
US136231	CP278542	11.7052	0.0012	0.01	103
US136232	CP278543	42.1640	0.0120	0.03	285

Baseline/DGSI - USA
8701 New Trails Drive, The Woodlands, TX 77381-4241
Telephone: 281-681-2200
Facsimile: 281-681-0326
E-mail: info@baselinedgsi.com
Web Site: http://www.baselinedgsi.com

Baseline DGSI - Brazil
Rua Benjamin Batista 55 / 301 Jardim Botânico.
22461-120 Rio de Janeiro (RJ) – Brazil
Tel/Fax: + 55.21 / 537 7893
E-mail: ssp@solintec.com.br

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)
US132260	CP218043	10.2295	0.0250	0.24	2444
US132261	CP218044	77.9726	0.0199	0.03	255
US132262	CP218045	57.0924	0.0084	0.01	147
US132263	CP218046	1.5870	0.0008	0.05	504

Baseline/DGSI - USA
8701 New Trails Drive, The Woodlands, TX 77381-4241
Telephone: 281-681-2200
Facsimile: 281-681-0326
E-mail: info@baselinedgsi.com
Web Site: http://www.baselinedgsi.com

Baseline DGSI - Brazil
Rua Benjamin Batista 55 / 301 Jardim Botânico,
22461-120 Rio de Janeiro (RJ) – Brazil
Tel/Fax: + 55.21 / 537 7893
E-mail: ssp@solintec.com.br

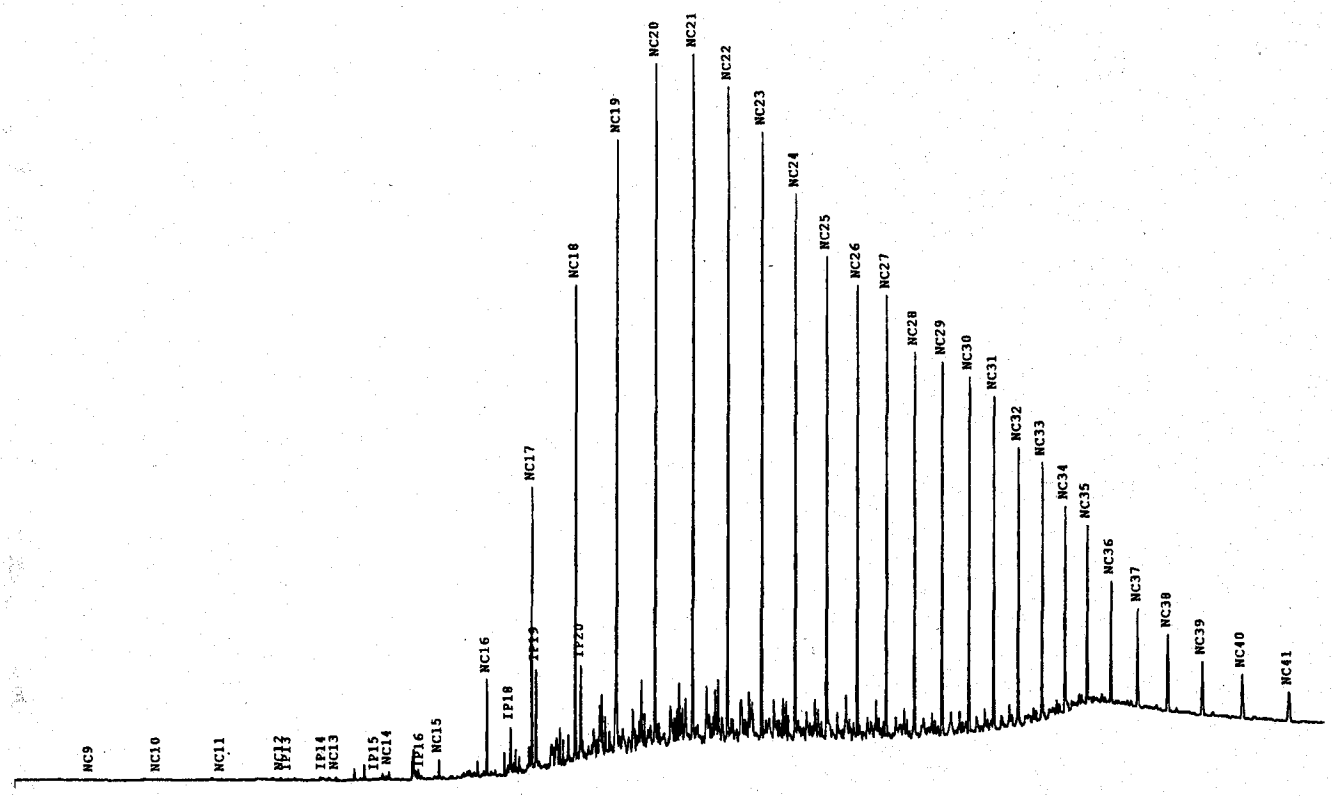
GMC DATA REPORT 3 2 6

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136226
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:		**Lab ID:**	CP278537
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	WALAKPA 1	**Geologic Age:**	
Latitude:	71.09915	**Top Depth:**	2078.2
Longitude:	-156.8846	**Bottom Depth:**	2078.2

Extract GC Trace G2050249.D



EGC parameters	
Ratios	
Pristane/Phytane	0.98
Pristane/*n* C_{17}	0.56
Phytane/*n* C_{18}	0.33
nC_{18}/nC_{19}	0.75
nC_{17}/nC_{29}	0.63
CPI Marzi[4]	1.04

EGC parameters	
Resolved Components (%)	
Normal Paraffins	53.1
Isoprenoids	2.1
Resolved unknowns	44.3

[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:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**G2050249.D**

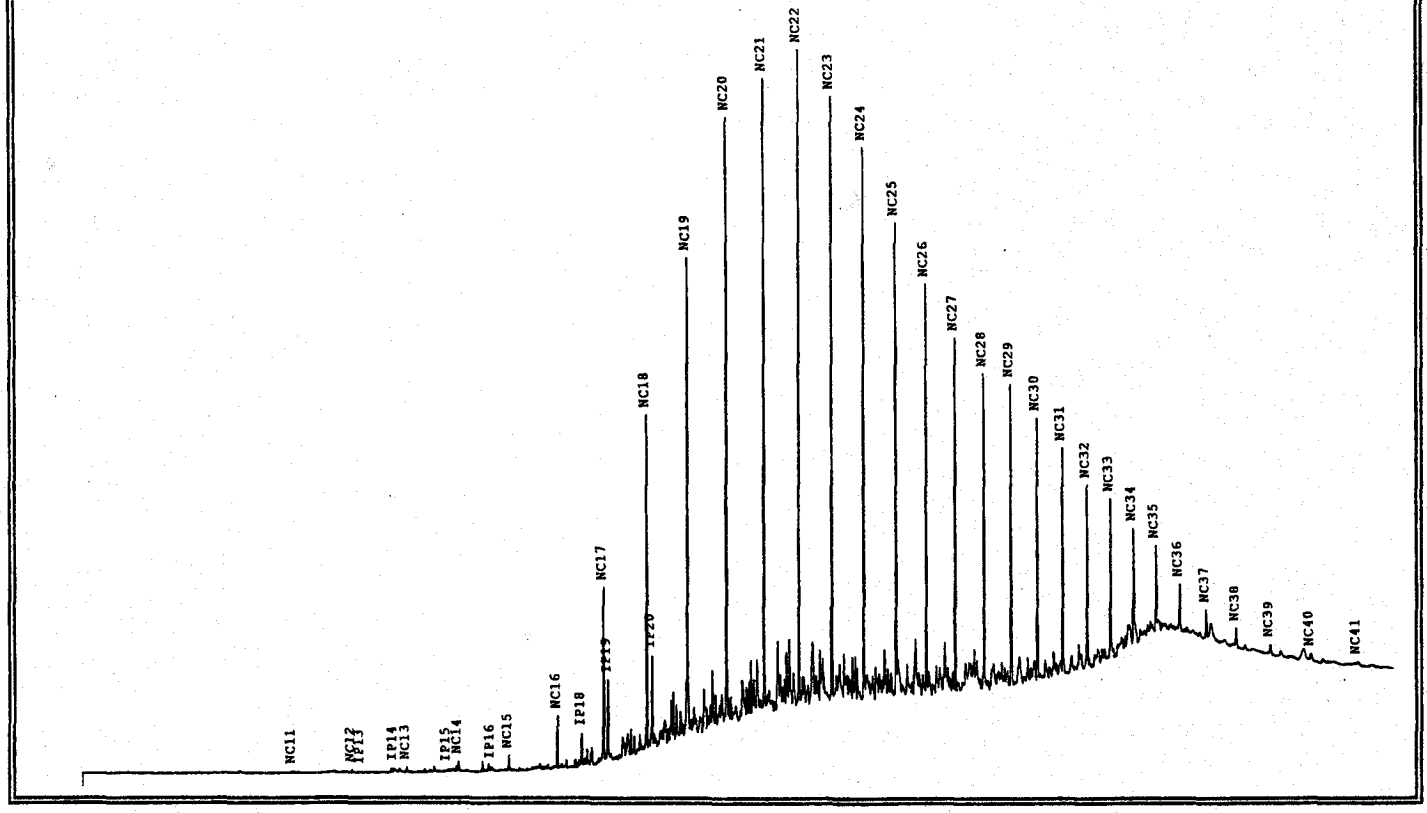
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9	21.037	55	18	0.00	0.00
NC10	Normal Alkane C10	26.607	174	48	0.00	0.01
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	31.847	270	80	0.01	0.01
NC12	Normal Alkane C12	36.749	736	153	0.02	0.02
IP13	Isoprenoid C13	37.362	314	77	0.01	0.01
IP14	Isoprenoid C14	40.239	698	170	0.02	0.02
NC13	Normal Alkane C13	41.342	963	221	0.02	0.02
IP15	Isoprenoid C15	44.632	719	125	0.02	0.01
NC14	Normal Alkane C14	45.655	2256	504	0.06	0.06
IP16	Isoprenoid C16	48.310	1217	265	0.03	0.03
NC15	Normal Alkane C15	49.725	4017	1182	0.10	0.13
NC16	Normal Alkane C16	53.576	19076	5851	0.49	0.65
IP18	Isoprenoid C18	55.511	14897	2857	0.39	0.32
NC17	Normal Alkane C17	57.231	57572	17004	1.49	1.88
IP19	Isoprenoid C19 (Pristane)	57.583	32146	6100	0.83	0.67
NC18	Normal Alkane C18	60.711	99671	28622	2.58	3.16
IP20	Isoprenoid C20 (Phytane)	61.159	32728	5845	0.85	0.64
NC19	Normal Alkane C19	64.025	132708	36853	3.43	4.06
NC20	Normal Alkane C20	67.178	156023	41065	4.04	4.53
NC21	Normal Alkane C21	70.191	150109	41255	3.89	4.55
NC22	Normal Alkane C22	73.073	149346	39112	3.87	4.31
NC23	Normal Alkane C23	75.826	139190	36373	3.60	4.01
NC24	Normal Alkane C24	78.477	122624	32621	3.17	3.60
NC25	Normal Alkane C25	81.023	113739	28897	2.94	3.19
NC26	Normal Alkane C26	83.470	104414	27138	2.70	2.99
NC27	Normal Alkane C27	85.830	98476	26432	2.55	2.92
NC28	Normal Alkane C28	88.111	88186	23030	2.28	2.54
NC29	Normal Alkane C29	90.310	90861	22320	2.35	2.46
NC30	Normal Alkane C30	92.440	80704	21270	2.09	2.35
NC31	Normal Alkane C31	94.500	77733	19908	2.01	2.20
NC32	Normal Alkane C32	96.497	65028	16580	1.68	1.83
NC33	Normal Alkane C33	98.430	64049	15341	1.66	1.69
NC34	Normal Alkane C34	100.305	50456	12276	1.31	1.35
NC35	Normal Alkane C35	102.138	43912	10601	1.14	1.17
NC36	Normal Alkane C36	104.083	35488	7305	0.92	0.81
NC37	Normal Alkane C37	106.257	30277	5842	0.78	0.64
NC38	Normal Alkane C38	108.727	27784	4601	0.72	0.51
NC39	Normal Alkane C39	111.568	23526	3219	0.61	0.36
NC40	Normal Alkane C40	114.846	22367	2665	0.58	0.29
NC41	Normal Alkane C41	118.656	18137	1763	0.47	0.19

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136227
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278538
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:	WALAKPA GAS FIELD	**Formation:**	
Well Name:	WALAKPA 2	**Geologic Age:**	
Latitude:	71.05012	**Top Depth:**	2618.5 FT
Longitude:	-156.9527	**Bottom Depth:**	2618.5 FT

Extract GC Trace G2050250.D



EGC parameters	
Ratios	
Pristane/Phytane	0.81
Pristane/*n* C_{17}	0.69
Phytane/*n* C_{18}	0.46
nC_{18}/nC_{19}	0.69
nC_{17}/nC_{29}	0.54
CPI Marzi[4]	1.04

EGC parameters	
Resolved Components (%)	
Normal Paraffins	42.9
Isoprenoids	1.9
Resolved unknowns	55.1

[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:**	**US136227**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2618.5 - 2618.5 FT**	**Lab ID:**	**CP278538**
Sampling Point:		**File Name:**	**G2050250.D**

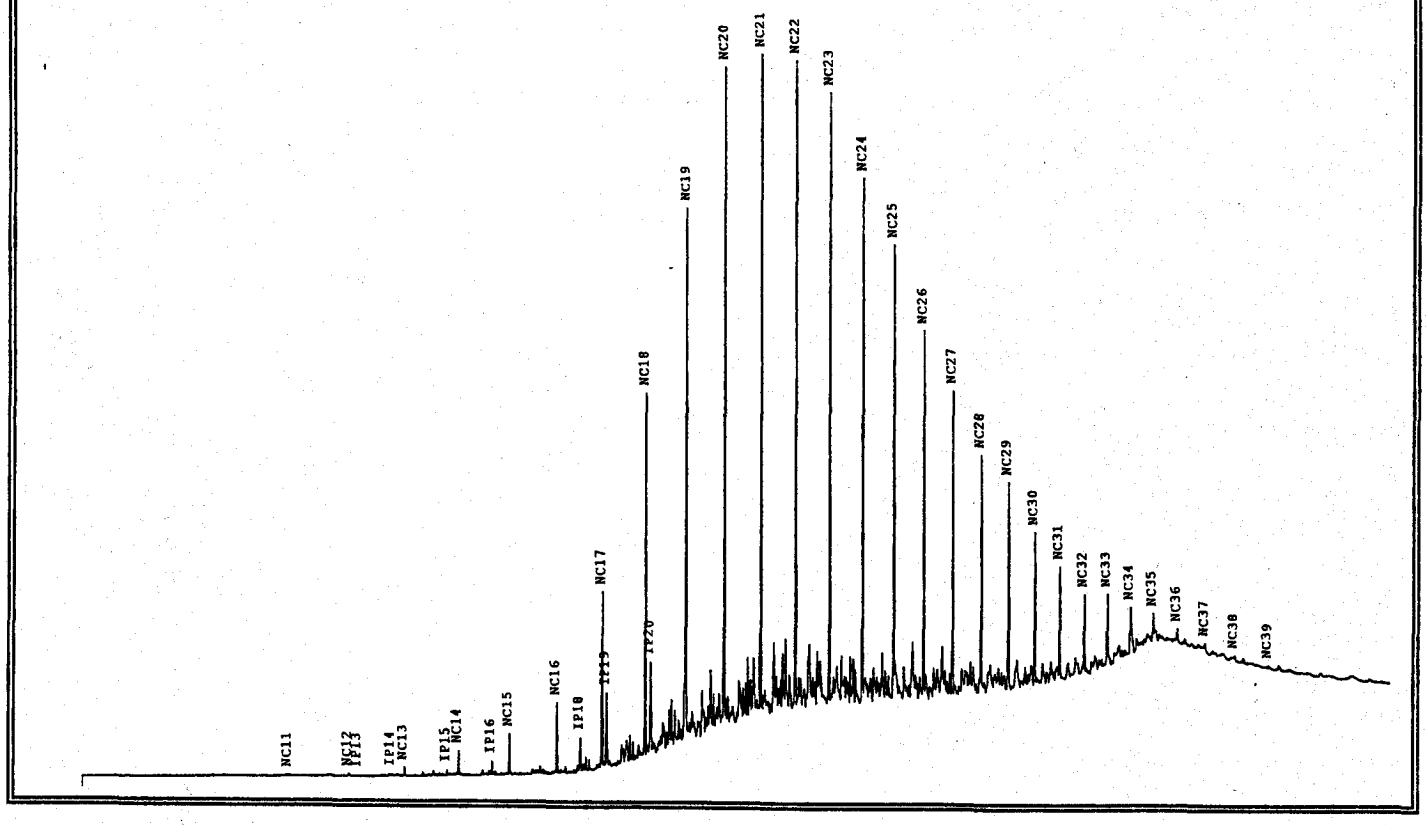
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	31.829	220	64	0.01	0.01
NC12	Normal Alkane C12	36.732	480	116	0.02	0.02
IP13	Isoprenoid C13	37.475	136	26	0.01	0.00
IP14	Isoprenoid C14	40.238	984	154	0.04	0.03
NC13	Normal Alkane C13	41.324	1001	188	0.04	0.04
IP15	Isoprenoid C15	44.759	339	80	0.01	0.01
NC14	Normal Alkane C14	45.640	1894	384	0.08	0.07
IP16	Isoprenoid C16	48.299	871	175	0.04	0.03
NC15	Normal Alkane C15	49.715	2119	571	0.09	0.11
NC16	Normal Alkane C16	53.566	6662	1972	0.29	0.37
IP18	Isoprenoid C18	55.506	6228	1224	0.27	0.23
NC17	Normal Alkane C17	57.220	23031	6502	1.00	1.22
IP19	Isoprenoid C19 (Pristane)	57.581	15869	3033	0.69	0.57
NC18	Normal Alkane C18	60.698	42745	12453	1.86	2.33
IP20	Isoprenoid C20 (Phytane)	61.139	19508	3475	0.85	0.65
NC19	Normal Alkane C19	64.010	61877	17692	2.69	3.31
NC20	Normal Alkane C20	67.168	83958	22352	3.66	4.18
NC21	Normal Alkane C21	70.182	84028	23499	3.66	4.39
NC22	Normal Alkane C22	73.068	86901	24242	3.78	4.53
NC23	Normal Alkane C23	75.828	82774	22346	3.60	4.18
NC24	Normal Alkane C24	78.479	72088	20348	3.14	3.80
NC25	Normal Alkane C25	81.027	64911	17461	2.83	3.26
NC26	Normal Alkane C26	83.479	56267	15158	2.45	2.83
NC27	Normal Alkane C27	85.838	49991	13045	2.18	2.44
NC28	Normal Alkane C28	88.118	43269	11696	1.88	2.19
NC29	Normal Alkane C29	90.321	42909	11124	1.87	2.08
NC30	Normal Alkane C30	92.451	37241	9737	1.62	1.82
NC31	Normal Alkane C31	94.510	32420	8376	1.41	1.57
NC32	Normal Alkane C32	96.507	25555	6780	1.11	1.27
NC33	Normal Alkane C33	98.444	25962	5925	1.13	1.11
NC34	Normal Alkane C34	100.322	18497	4298	0.81	0.80
NC35	Normal Alkane C35	102.154	13575	3167	0.59	0.59
NC36	Normal Alkane C36	104.094	9151	1753	0.40	0.33
NC37	Normal Alkane C37	106.274	5945	1089	0.26	0.20
NC38	Normal Alkane C38	108.751	4566	723	0.20	0.14
NC39	Normal Alkane C39	111.581	2976	403	0.13	0.08
NC40	Normal Alkane C40	114.884	2820	286	0.12	0.05
NC41	Normal Alkane C41	118.676	1848	169	0.08	0.03

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136228
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278539
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:	WALAKPA GAS FIELD	**Formation:**	
Well Name:	WALAKPA 2	**Geologic Age:**	
Latitude:	71.05012	**Top Depth:**	2632.5 FT
Longitude:	-156.9527	**Bottom Depth:**	2632.5 FT

Extract GC Trace G2050251.D



EGC parameters	
Ratios	
Pristane/Phytane	0.75
Pristane/*n*C_{17}	0.61
Phytane/*n*C_{18}	0.42
nC_{18}/nC_{19}	0.66
nC_{17}/nC_{29}	0.77
CPI Marzi[4]	1.04

EGC parameters	
Resolved Components (%)	
Normal Paraffins	41.0
Isoprenoids	2.0
Resolved unknowns	57.0

[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:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**G2050251.D**

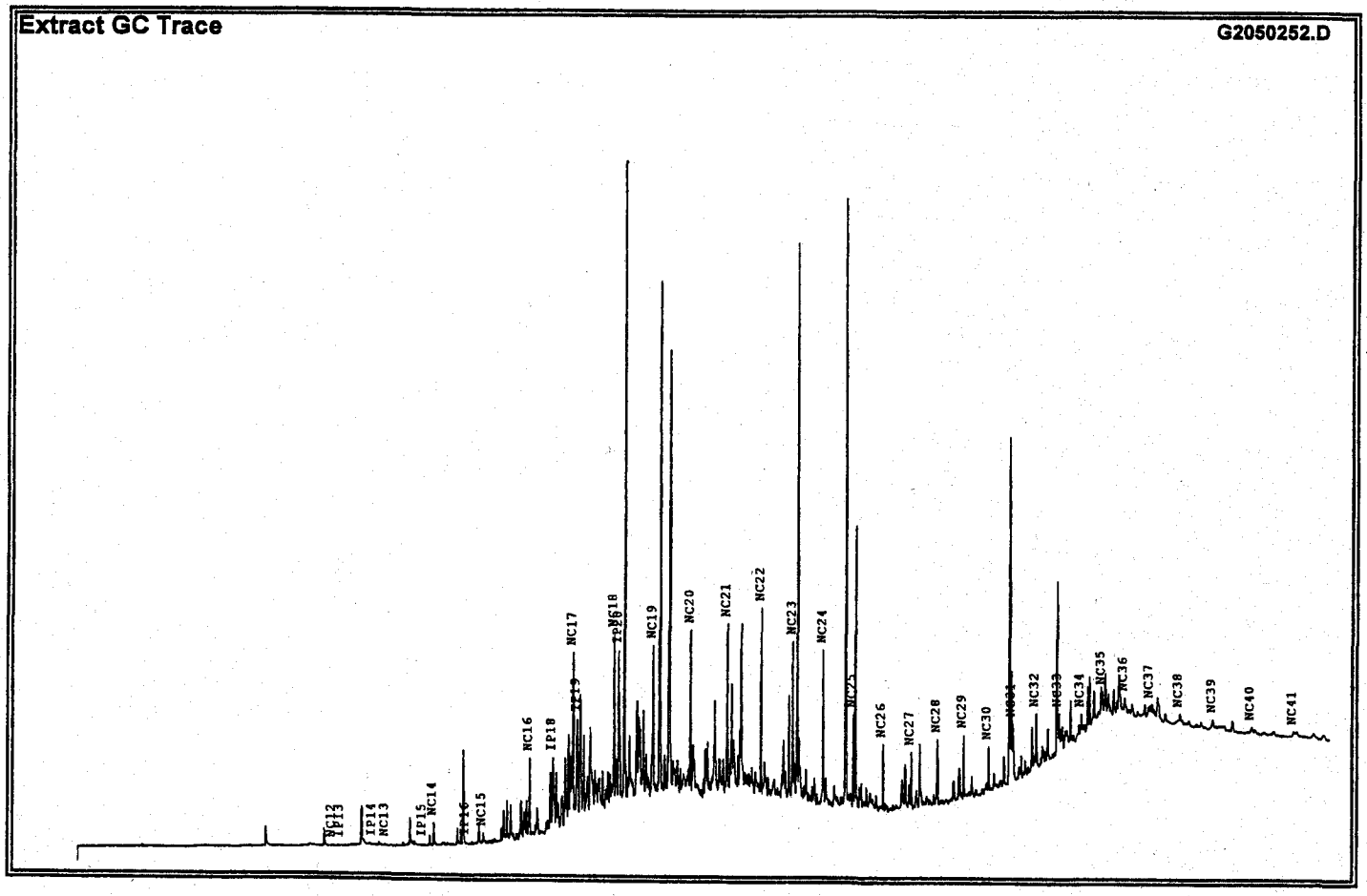
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	31.865	175	47	0.01	0.01
NC12	Normal Alkane C12	36.768	531	113	0.02	0.02
IP13	Isoprenoid C13	37.508	176	34	0.01	0.01
IP14	Isoprenoid C14	40.254	370	89	0.02	0.02
NC13	Normal Alkane C13	41.358	1342	354	0.06	0.06
IP15	Isoprenoid C15	44.792	832	241	0.04	0.04
NC14	Normal Alkane C14	45.675	3719	1004	0.16	0.18
IP16	Isoprenoid C16	48.330	2292	558	0.10	0.10
NC15	Normal Alkane C15	49.743	5682	1650	0.24	0.30
NC16	Normal Alkane C16	53.595	9661	2883	0.41	0.52
IP18	Isoprenoid C18	55.533	6707	1368	0.28	0.25
NC17	Normal Alkane C17	57.245	25148	7164	1.07	1.29
IP19	Isoprenoid C19 (Pristane)	57.603	15448	3009	0.66	0.54
NC18	Normal Alkane C18	60.723	49451	14685	2.10	2.64
IP20	Isoprenoid C20 (Phytane)	61.169	20534	3750	0.87	0.67
NC19	Normal Alkane C19	64.036	74688	21576	3.17	3.88
NC20	Normal Alkane C20	67.191	98880	26573	4.19	4.78
NC21	Normal Alkane C21	70.207	95401	26713	4.05	4.80
NC22	Normal Alkane C22	73.089	95581	26198	4.06	4.71
NC23	Normal Alkane C23	75.850	90740	24720	3.85	4.44
NC24	Normal Alkane C24	78.497	77732	21207	3.30	3.81
NC25	Normal Alkane C25	81.044	68588	18397	2.91	3.31
NC26	Normal Alkane C26	83.492	56891	14877	2.41	2.67
NC27	Normal Alkane C27	85.853	46530	12281	1.97	2.21
NC28	Normal Alkane C28	88.130	36048	9582	1.53	1.72
NC29	Normal Alkane C29	90.332	32635	8383	1.38	1.51
NC30	Normal Alkane C30	92.459	25210	6190	1.07	1.11
NC31	Normal Alkane C31	94.519	18812	4616	0.80	0.83
NC32	Normal Alkane C32	96.514	13717	3261	0.58	0.59
NC33	Normal Alkane C33	98.454	15412	2915	0.65	0.52
NC34	Normal Alkane C34	100.332	9317	1917	0.40	0.34
NC35	Normal Alkane C35	102.166	5355	1137	0.23	0.20
NC36	Normal Alkane C36	104.116	4258	651	0.18	0.12
NC37	Normal Alkane C37	106.301	2829	413	0.12	0.07
NC38	Normal Alkane C38	108.774	1542	240	0.07	0.04
NC39	Normal Alkane C39	111.599	1064	143	0.05	0.03
NC40	Normal Alkane C40					
NC41	Normal Alkane C41					

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136229
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278540
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	BRONTOSAURUS 1A	**Geologic Age:**	
Latitude:	70.8995	**Top Depth:**	4370 FT
Longitude:	-157.249	**Bottom Depth:**	4400 FT

Extract GC Trace G2050252.D



EGC parameters	
Ratios	
Pristane/Phytane	1.01
Pristane/$n C_{17}$	1.00
Phytane/$n C_{18}$	1.06
nC_{18}/nC_{19}	1.17
nC_{17}/nC_{29}	2.84
CPI Marzi[4]	0.79

EGC parameters	
Resolved Components (%)	
Normal Paraffins	13.0
Isoprenoids	2.7
Resolved unknowns	84.3

[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:**	**US136229**
Well Name:	**BRONTOSAURUS 1A**	**Project #:**	**05-295-A**
Depth:	**4370 - 4400 FT**	**Lab ID:**	**CP278540**
Sampling Point:		**File Name:**	**G2050252.D**

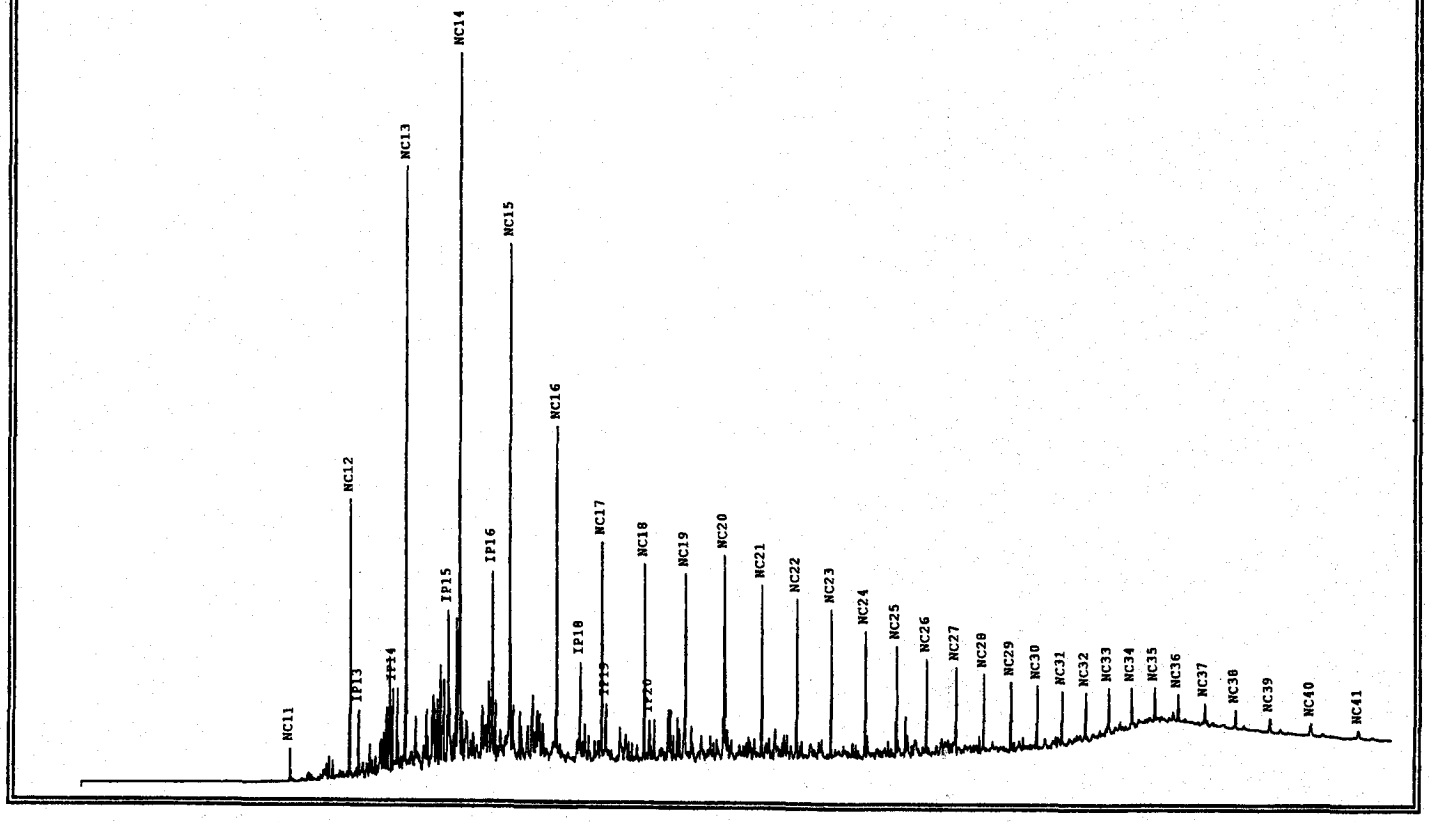
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11					
NC12	Normal Alkane C12	36.790	206	29	0.01	0.01
IP13	Isoprenoid C13	37.492	73	17	0.00	0.00
IP14	Isoprenoid C14	40.253	230	41	0.01	0.01
NC13	Normal Alkane C13	41.375	243	45	0.01	0.01
IP15	Isoprenoid C15	44.661	200	43	0.01	0.01
NC14	Normal Alkane C14	45.561	3305	727	0.15	0.16
IP16	Isoprenoid C16	48.338	265	57	0.01	0.01
NC15	Normal Alkane C15	49.758	1512	347	0.07	0.08
NC16	Normal Alkane C16	53.609	8968	2531	0.42	0.56
IP18	Isoprenoid C18	55.557	13607	2295	0.63	0.50
NC17	Normal Alkane C17	57.257	21899	5389	1.01	1.18
IP19	Isoprenoid C19 (Pristane)	57.615	21933	3217	1.02	0.71
NC18	Normal Alkane C18	60.732	20456	5500	0.95	1.21
IP20	Isoprenoid C20 (Phytane)	61.124	21612	4907	1.00	1.08
NC19	Normal Alkane C19	64.040	17420	4826	0.81	1.06
NC20	Normal Alkane C20	67.185	22291	5349	1.03	1.17
NC21	Normal Alkane C21	70.197	19586	5536	0.91	1.21
NC22	Normal Alkane C22	73.078	21028	6022	0.97	1.32
NC23	Normal Alkane C23	75.841	20655	5078	0.96	1.11
NC24	Normal Alkane C24	78.483	21186	4958	0.98	1.09
NC25	Normal Alkane C25	81.037	11091	3001	0.51	0.66
NC26	Normal Alkane C26	83.482	8165	2149	0.38	0.47
NC27	Normal Alkane C27	85.845	6943	1808	0.32	0.40
NC28	Normal Alkane C28	88.119	11442	2099	0.53	0.46
NC29	Normal Alkane C29	90.326	7704	2054	0.36	0.45
NC30	Normal Alkane C30	92.464	6185	1456	0.29	0.32
NC31	Normal Alkane C31	94.525	8911	1869	0.41	0.41
NC32	Normal Alkane C32	96.509	9089	1766	0.42	0.39
NC33	Normal Alkane C33	98.460	6078	1262	0.28	0.28
NC34	Normal Alkane C34	100.345	5579	748	0.26	0.16
NC35	Normal Alkane C35	102.180	5904	966	0.27	0.21
NC36	Normal Alkane C36	104.133	3210	522	0.15	0.11
NC37	Normal Alkane C37	106.309	2904	453	0.13	0.10
NC38	Normal Alkane C38	108.774	2659	342	0.12	0.08
NC39	Normal Alkane C39	111.645	3117	326	0.14	0.07
NC40	Normal Alkane C40	114.947	2516	212	0.12	0.05
NC41	Normal Alkane C41	118.543	2104	188	0.10	0.04

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136230
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278541
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	BRONTOSAURUS 1A	**Geologic Age:**	
Latitude:	70.8995	**Top Depth:**	6461.5 FT
Longitude:	-157.249	**Bottom Depth:**	6461.5 FT

Extract GC Trace G2050253.D



EGC parameters	
Ratios	
Pristane/Phytane	1.26
Pristane/*n*C_{17}	0.42
Phytane/*n*C_{18}	0.38
nC_{18}/*n*C_{19}	1.02
nC_{17}/*n*C_{29}	2.80
CPI Marzi[4]	1.01

EGC parameters	
Resolved Components (%)	
Normal Paraffins	30.3
Isoprenoids	5.4
Resolved unknowns	64.1

[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:**	**US136230**
Well Name:	**BRONTOSAURUS 1A**	**Project #:**	**05-295-A**
Depth:	**6461.5 - 6461.5 FT**	**Lab ID:**	**CP278541**
Sampling Point:		**File Name:**	**G2050253.D**

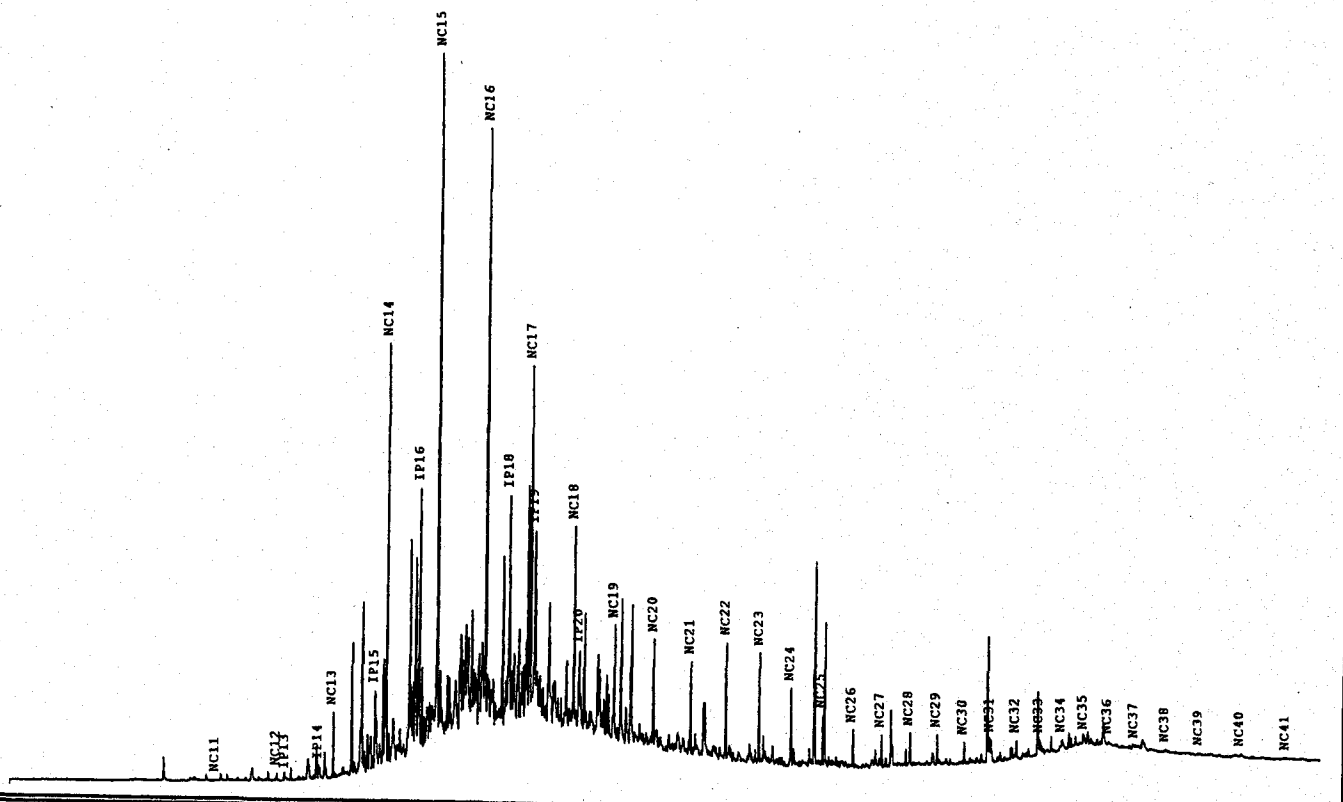
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	31.876	8359	2758	0.18	0.24
NC12	Normal Alkane C12	36.793	69723	23044	1.49	2.03
IP13	Isoprenoid C13	37.528	18929	5627	0.41	0.50
IP14	Isoprenoid C14	40.282	22067	7095	0.47	0.63
NC13	Normal Alkane C13	41.411	164523	49721	3.53	4.38
IP15	Isoprenoid C15	44.831	51255	12945	1.10	1.14
NC14	Normal Alkane C14	45.742	203406	58628	4.36	5.17
IP16	Isoprenoid C16	48.372	73918	15762	1.58	1.39
NC15	Normal Alkane C15	49.807	150591	42463	3.23	3.74
NC16	Normal Alkane C16	53.644	96114	27631	2.06	2.43
IP18	Isoprenoid C18	55.568	40027	8332	0.86	0.73
NC17	Normal Alkane C17	57.285	63421	18177	1.36	1.60
IP19	Isoprenoid C19 (Pristane)	57.636	26450	4842	0.57	0.43
NC18	Normal Alkane C18	60.755	55454	16337	1.19	1.44
IP20	Isoprenoid C20 (Phytane)	61.191	20947	3446	0.45	0.30
NC19	Normal Alkane C19	64.059	54576	15501	1.17	1.37
NC20	Normal Alkane C20	67.208	67964	16919	1.46	1.49
NC21	Normal Alkane C21	70.217	49949	14376	1.07	1.27
NC22	Normal Alkane C22	73.098	47966	13201	1.03	1.16
NC23	Normal Alkane C23	75.860	43876	12291	0.94	1.08
NC24	Normal Alkane C24	78.510	38326	10546	0.82	0.93
NC25	Normal Alkane C25	81.059	34173	9251	0.73	0.82
NC26	Normal Alkane C26	83.506	32743	8096	0.70	0.71
NC27	Normal Alkane C27	85.869	28400	7281	0.61	0.64
NC28	Normal Alkane C28	88.151	24218	6573	0.52	0.58
NC29	Normal Alkane C29	90.352	22619	5775	0.48	0.51
NC30	Normal Alkane C30	92.485	21845	5297	0.47	0.47
NC31	Normal Alkane C31	94.547	17982	4535	0.39	0.40
NC32	Normal Alkane C32	96.546	16464	4016	0.35	0.35
NC33	Normal Alkane C33	98.483	16824	3904	0.36	0.34
NC34	Normal Alkane C34	100.363	14563	3330	0.31	0.29
NC35	Normal Alkane C35	102.198	13948	2883	0.30	0.25
NC36	Normal Alkane C36	104.151	13266	2372	0.28	0.21
NC37	Normal Alkane C37	106.340	11115	1889	0.24	0.17
NC38	Normal Alkane C38	108.826	10218	1562	0.22	0.14
NC39	Normal Alkane C39	111.670	8743	1143	0.19	0.10
NC40	Normal Alkane C40	114.977	9563	1023	0.21	0.09
NC41	Normal Alkane C41	118.840	7792	686	0.17	0.06

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136231
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278542
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	BRONTOSAURUS 1	**Geologic Age:**	
Latitude:	70.90899	**Top Depth:**	4397.3 FT
Longitude:	-157.2456	**Bottom Depth:**	4397.3 FT

Extract GC Trace G2050254.D



EGC parameters	
Ratios	
Pristane/Phytane	2.52
Pristane/nC_{17}	0.88
Phytane/nC_{18}	0.64
nC_{18}/nC_{19}	1.80
nC_{17}/nC_{29}	11.56
CPI Marzi[4]	0.97

EGC parameters	
Resolved Components (%)	
Normal Paraffins	19.8
Isoprenoids	7.1
Resolved unknowns	73.1

[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:**	**US136231**
Well Name:	**BRONTOSAURUS 1**	**Project #:**	**05-295-A**
Depth:	**4397.3 - 4397.3 FT**	**Lab ID:**	**CP278542**
Sampling Point:		**File Name:**	**G2050254.D**

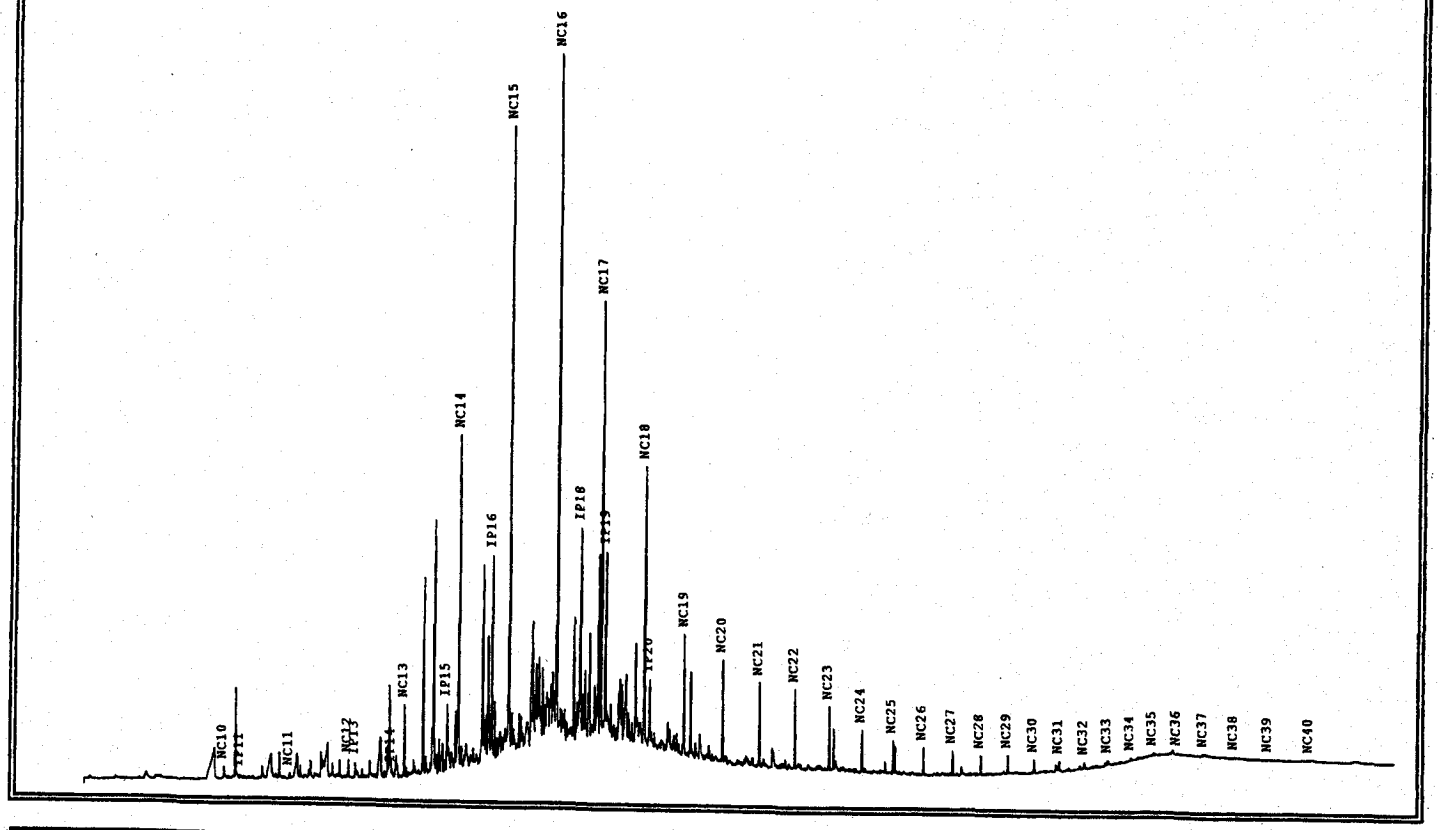
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	31.886	371	107	0.01	0.01
NC12	Normal Alkane C12	36.788	2681	773	0.04	0.05
IP13	Isoprenoid C13	37.528	2094	379	0.03	0.03
IP14	Isoprenoid C14	40.281	4458	1211	0.07	0.08
NC13	Normal Alkane C13	41.386	21441	6630	0.34	0.45
IP15	Isoprenoid C15	44.834	24900	7786	0.39	0.53
NC14	Normal Alkane C14	45.738	144321	42389	2.26	2.90
IP16	Isoprenoid C16	48.394	118573	26232	1.86	1.80
NC15	Normal Alkane C15	49.841	271483	68930	4.25	4.72
NC16	Normal Alkane C16	53.691	236889	59917	3.71	4.10
IP18	Isoprenoid C18	55.600	131001	23209	2.05	1.59
NC17	Normal Alkane C17	57.321	136932	36260	2.15	2.48
IP19	Isoprenoid C19 (Pristane)	57.675	121160	19705	1.90	1.35
NC18	Normal Alkane C18	60.778	75030	20560	1.18	1.41
IP20	Isoprenoid C20 (Phytane)	61.235	48167	8176	0.75	0.56
NC19	Normal Alkane C19	64.072	41705	11744	0.65	0.80
NC20	Normal Alkane C20	67.209	47320	11150	0.74	0.76
NC21	Normal Alkane C21	70.219	32573	9513	0.51	0.65
NC22	Normal Alkane C22	73.104	41676	11917	0.65	0.82
NC23	Normal Alkane C23	75.858	44381	11214	0.70	0.77
NC24	Normal Alkane C24	78.506	30519	7865	0.48	0.54
NC25	Normal Alkane C25	81.057	18385	5173	0.29	0.35
NC26	Normal Alkane C26	83.499	14217	3790	0.22	0.26
NC27	Normal Alkane C27	85.864	12690	3240	0.20	0.22
NC28	Normal Alkane C28	88.143	16291	3326	0.26	0.23
NC29	Normal Alkane C29	90.346	11848	3065	0.19	0.21
NC30	Normal Alkane C30	92.479	9299	2258	0.15	0.15
NC31	Normal Alkane C31	94.541	10472	2272	0.16	0.16
NC32	Normal Alkane C32	96.525	10321	1888	0.16	0.13
NC33	Normal Alkane C33	98.475	7485	1495	0.12	0.10
NC34	Normal Alkane C34	100.355	8632	1106	0.14	0.08
NC35	Normal Alkane C35	102.190	3977	737	0.06	0.05
NC36	Normal Alkane C36	104.143	3663	522	0.06	0.04
NC37	Normal Alkane C37	106.319	2739	384	0.04	0.03
NC38	Normal Alkane C38	108.813	1978	271	0.03	0.02
NC39	Normal Alkane C39	111.649	1902	208	0.03	0.01
NC40	Normal Alkane C40	115.080	4621	354	0.07	0.02
NC41	Normal Alkane C41	118.772	1951	155	0.03	0.01

BASELINE DGSI
ANALYTICAL LABORATORIES

EXTRACT GC

Company:	CONOCOPHILLIPS	**Client ID:**	US136232
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278543
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	BRONTOSAURUS 1	**Geologic Age:**	
Latitude:	70.90899	**Top Depth:**	4411.6 FT
Longitude:	-157.2456	**Bottom Depth:**	4411.6 FT

Extract GC Trace G2050255.D



EGC parameters	
Ratios	
Pristane/Phytane	2.54
Pristane/*n* C_{17}	0.63
Phytane/*n* C_{18}	0.32
nC_{18}/nC_{19}	2.89
nC_{17}/nC_{29}	21.77
CPI Marzi[4]	1.06

EGC parameters	
Resolved Components (%)	
Normal Paraffins	24.6
Isoprenoids	7.8
Resolved unknowns	67.6

[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:**	**US136232**
Well Name:	**BRONTOSAURUS 1**	**Project #:**	**05-295-A**
Depth:	**4411.6 - 4411.6 FT**	**Lab ID:**	**CP278543**
Sampling Point:		**File Name:**	**G2050255.D**

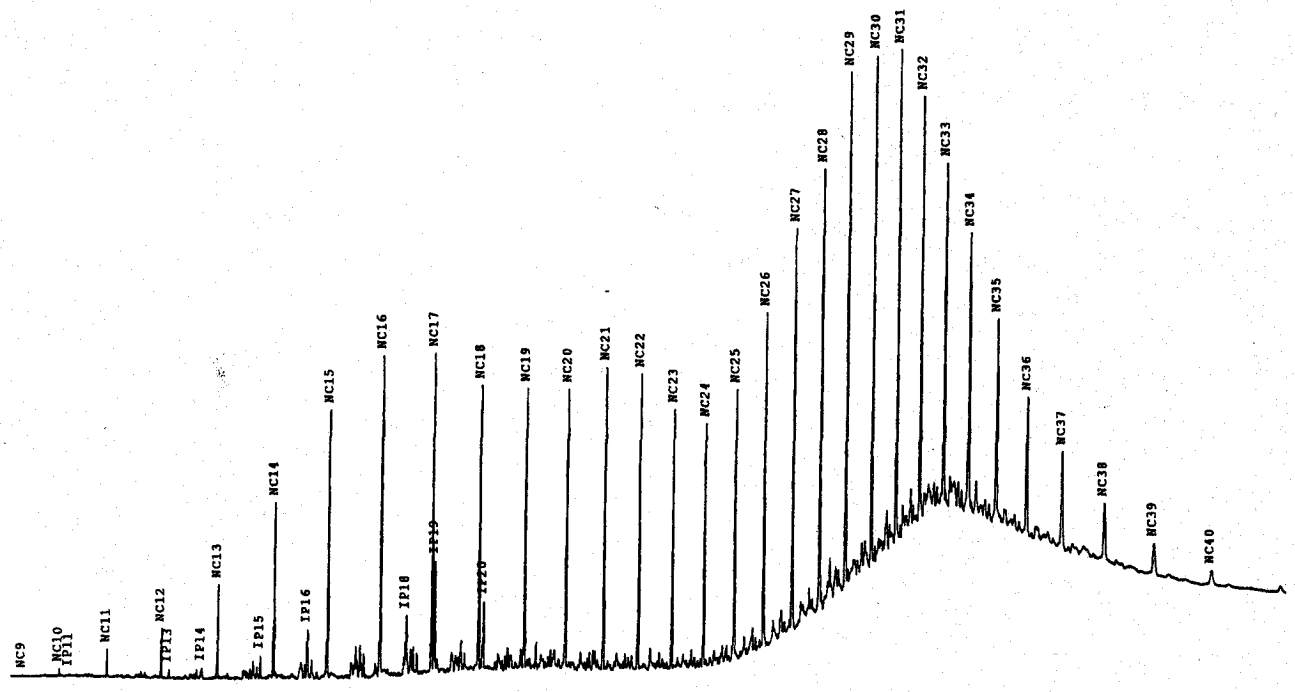
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9	26.342	7599	1286	0.15	0.11
NC10	Normal Alkane C10	27.747	2382	445	0.05	0.04
IP11	Isoprenoid C11	31.766	2077	589	0.04	0.05
NC11	Normal Alkane C11	36.668	6394	1902	0.13	0.16
NC12	Normal Alkane C12	37.256	6975	1555	0.14	0.13
IP13	Isoprenoid C13	40.271	4310	761	0.09	0.07
IP14	Isoprenoid C14	41.265	24836	7437	0.50	0.65
NC13	Normal Alkane C13	44.706	22853	6875	0.46	0.60
IP15	Isoprenoid C15	45.606	113126	34139	2.26	2.96
NC14	Normal Alkane C14	48.261	92618	20962	1.85	1.82
IP16	Isoprenoid C16	49.707	239680	63855	4.79	5.54
NC15	Normal Alkane C15	53.566	287760	69999	5.75	6.07
NC16	Normal Alkane C16	55.467	117555	21820	2.35	1.89
IP18	Isoprenoid C18	57.194	162794	44866	3.26	3.89
NC17	Normal Alkane C17	57.545	103207	19329	2.06	1.68
IP19	Isoprenoid C19 (Pristane)	60.637	128808	28658	2.58	2.49
NC18	Normal Alkane C18	61.101	40666	7055	0.81	0.61
IP20	Isoprenoid C20 (Phytane)	63.932	44524	12515	0.89	1.09
NC19	Normal Alkane C19	67.075	38909	10676	0.78	0.93
NC20	Normal Alkane C20	70.078	30067	8709	0.60	0.76
NC21	Normal Alkane C21	72.959	28499	8207	0.57	0.71
NC22	Normal Alkane C22	75.717	24542	6643	0.49	0.58
NC23	Normal Alkane C23	78.359	18007	4389	0.36	0.38
NC24	Normal Alkane C24	80.908	12403	3420	0.25	0.30
NC25	Normal Alkane C25	83.358	10401	2834	0.21	0.25
NC26	Normal Alkane C26	85.717	9484	2492	0.19	0.22
NC27	Normal Alkane C27	87.995	7437	1979	0.15	0.17
NC28	Normal Alkane C28	90.196	7478	1887	0.15	0.16
NC29	Normal Alkane C29	92.327	5488	1374	0.11	0.12
NC30	Normal Alkane C30	94.383	4527	1050	0.09	0.09
NC31	Normal Alkane C31	96.379	3207	673	0.06	0.06
NC32	Normal Alkane C32	98.319	2430	497	0.05	0.04
NC33	Normal Alkane C33	100.197	1497	320	0.03	0.03
NC34	Normal Alkane C34	102.029	2110	354	0.04	0.03
NC35	Normal Alkane C35	103.960	1396	205	0.03	0.02
NC36	Normal Alkane C36	106.113	1826	234	0.04	0.02
NC37	Normal Alkane C37	108.560	923	125	0.02	0.01
NC38	Normal Alkane C38	111.362	866	83	0.02	0.01
NC39	Normal Alkane C39	114.692	1113	90	0.02	0.01
NC40	Normal Alkane C40					
NC41	Normal Alkane C41					

BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132260
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218043
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	4560 FT
Longitude:	-156.0647	**Bottom Depth:**	4630 FT

Saturate GC Trace G6030181.D



SGC parameters	
Ratios	
Pristane/Phytane	1.58
Pristane/*n* C_{17}	0.48
Phytane/*n* C_{18}	0.34
n C_{18}/*n* C_{19}	1.07
n C_{17}/*n* C_{29}	0.61
CPI Marzi[4]	1.07

SGC parameters	
Resolved Components (%)	
Normal Paraffins	54.5
Isoprenoids	3.0
Resolved unknowns	42.5

GMC DATA REPORT 3 2 6

[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:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**G6030181.D**

Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9	3.577	57	29	0.00	0.01
NC10	Normal Alkane C10	5.257	446	220	0.04	0.06
IP11	Isoprenoid C11	5.726	191	63	0.02	0.02
NC11	Normal Alkane C11	7.473	1777	807	0.15	0.21
NC12	Normal Alkane C12	10.027	3360	1446	0.29	0.38
IP13	Isoprenoid C13	10.401	659	251	0.06	0.07
IP14	Isoprenoid C14	11.976	774	310	0.07	0.08
NC13	Normal Alkane C13	12.705	6608	2781	0.56	0.73
IP15	Isoprenoid C15	14.763	1669	653	0.14	0.17
NC14	Normal Alkane C14	15.375	12914	5200	1.10	1.36
IP16	Isoprenoid C16	17.001	5337	1421	0.45	0.37
NC15	Normal Alkane C15	17.966	20434	7940	1.73	2.07
NC16	Normal Alkane C16	20.449	24988	9511	2.12	2.48
IP18	Isoprenoid C18	21.617	6753	1740	0.57	0.45
NC17	Normal Alkane C17	22.816	25078	9445	2.13	2.47
IP19	Isoprenoid C19 (Pristane)	22.958	12096	3320	1.03	0.87
NC18	Normal Alkane C18	25.072	22807	8430	1.94	2.20
IP20	Isoprenoid C20 (Phytane)	25.291	7645	2031	0.65	0.53
NC19	Normal Alkane C19	27.174	21348	8281	1.81	2.16
NC20	Normal Alkane C20	29.101	21295	8276	1.81	2.16
NC21	Normal Alkane C21	30.891	22278	8922	1.89	2.33
NC22	Normal Alkane C22	32.563	21396	8705	1.82	2.27
NC23	Normal Alkane C23	34.139	18499	7633	1.57	1.99
NC24	Normal Alkane C24	35.636	17462	7144	1.48	1.87
NC25	Normal Alkane C25	37.063	21068	7950	1.79	2.08
NC26	Normal Alkane C26	38.429	24697	9863	2.10	2.58
NC27	Normal Alkane C27	39.741	30951	11862	2.63	3.10
NC28	Normal Alkane C28	41.002	34135	13056	2.90	3.41
NC29	Normal Alkane C29	42.218	40962	15250	3.48	3.98
NC30	Normal Alkane C30	43.391	38464	15040	3.26	3.93
NC31	Normal Alkane C31	44.524	38517	14550	3.27	3.80
NC32	Normal Alkane C32	45.621	32434	12485	2.75	3.26
NC33	Normal Alkane C33	46.707	30577	10208	2.59	2.67
NC34	Normal Alkane C34	47.895	29336	8282	2.49	2.16
NC35	Normal Alkane C35	49.219	25006	6028	2.12	1.57
NC36	Normal Alkane C36	50.722	18211	4093	1.55	1.07
NC37	Normal Alkane C37	52.448	14770	2873	1.25	0.75
NC38	Normal Alkane C38	54.450	10809	1737	0.92	0.45
NC39	Normal Alkane C39	56.779	6976	943	0.59	0.25
NC40	Normal Alkane C40	59.524	4379	449	0.37	0.12

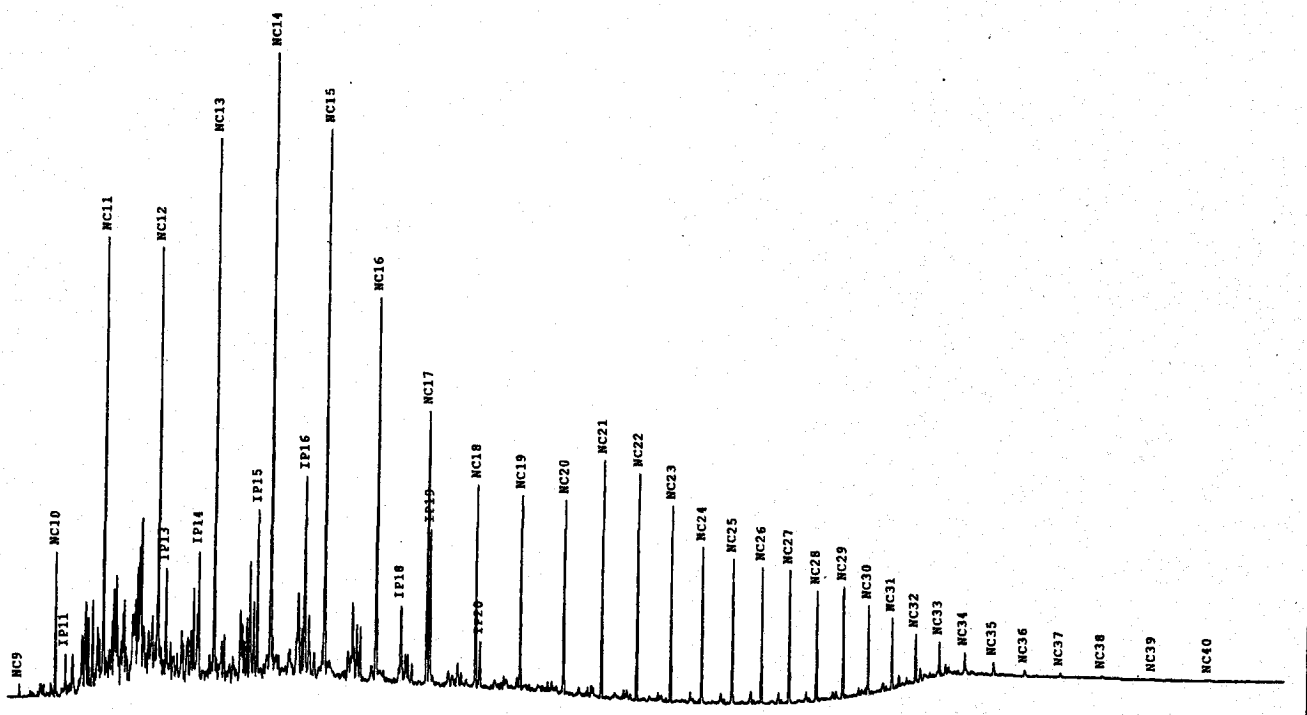
BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	Client ID:	US132261
Country:	UNITED STATES	Project #:	03-473-A
Basin:	NORTH SLOPE	Lab ID:	CP218044
Lease:		Sample Type:	CORE
Block:		Sampling Point:	
Field:		Formation:	
Well Name:	KUYANAK 1	Geologic Age:	
Latitude:	70.93152	Top Depth:	5068.4 FT
Longitude:	-156.0647	Bottom Depth:	5068.4 FT

Saturate GC Trace

G6030179.D



SGC parameters	
Ratios	
Pristane/Phytane	3.06
Pristane/n C_{17}	0.71
Phytane/n C_{18}	0.31
n C_{18}/n C_{19}	1.10
n C_{17}/n C_{29}	2.67
CPI Marzi[4]	1.07

SGC parameters	
Resolved Components (%)	
Normal Paraffins	39.0
Isoprenoids	7.5
Resolved unknowns	53.5

[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:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**G6030179.D**

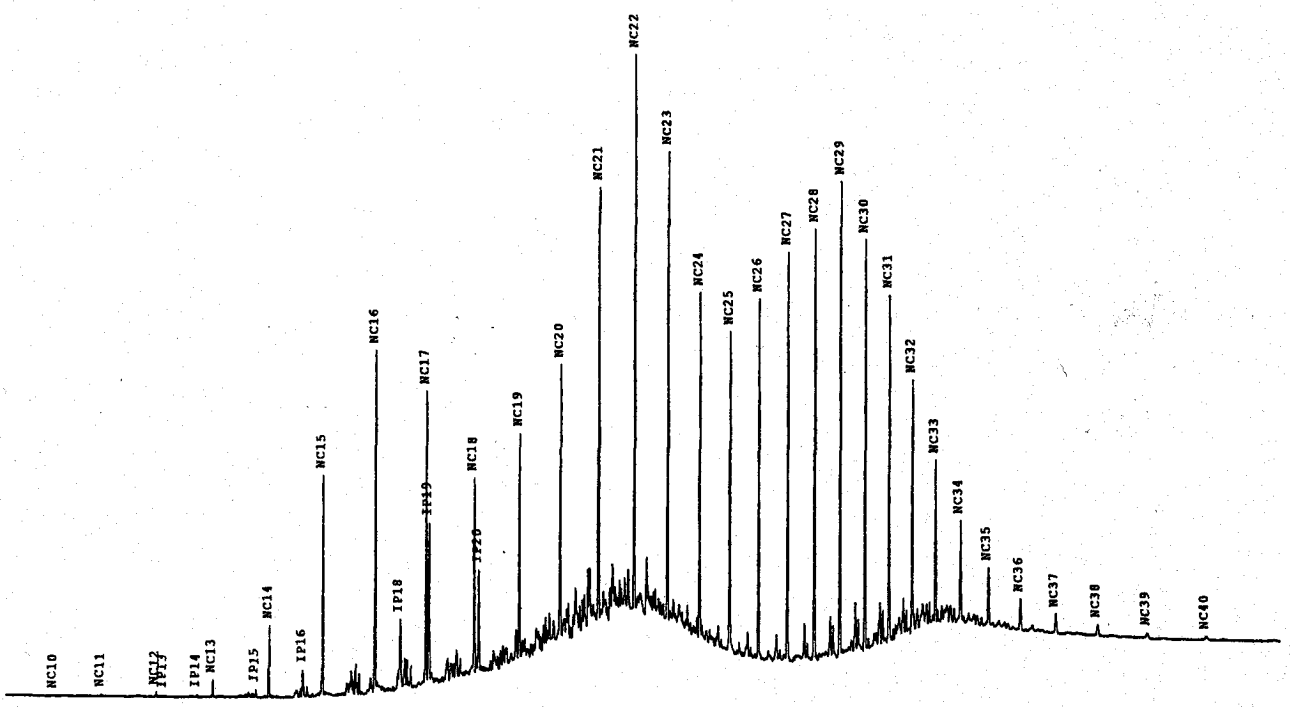
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9	3.555	1391	937	0.05	0.10
NC10	Normal Alkane C10	5.240	18694	10651	0.66	1.10
IP11	Isoprenoid C11	5.709	6766	3099	0.24	0.32
NC11	Normal Alkane C11	7.471	76276	33296	2.70	3.45
NC12	Normal Alkane C12	10.035	80743	31810	2.86	3.29
IP13	Isoprenoid C13	10.398	22387	8130	0.79	0.84
IP14	Isoprenoid C14	11.976	22396	9465	0.79	0.98
NC13	Normal Alkane C13	12.723	104371	39803	3.69	4.12
IP15	Isoprenoid C15	14.768	32030	12414	1.13	1.29
NC14	Normal Alkane C14	15.401	130589	45894	4.62	4.75
IP16	Isoprenoid C16	17.010	53726	14613	1.90	1.51
NC15	Normal Alkane C15	17.986	113689	40337	4.02	4.18
NC16	Normal Alkane C16	20.460	78488	28214	2.78	2.92
IP18	Isoprenoid C18	21.619	21663	5648	0.77	0.58
NC17	Normal Alkane C17	22.823	55905	20040	1.98	2.07
IP19	Isoprenoid C19 (Pristane)	22.963	39612	11412	1.40	1.18
NC18	Normal Alkane C18	25.077	41445	14884	1.47	1.54
IP20	Isoprenoid C20 (Phytane)	25.292	12940	3454	0.46	0.36
NC19	Normal Alkane C19	27.175	37637	14312	1.33	1.48
NC20	Normal Alkane C20	29.102	36734	14194	1.30	1.47
NC21	Normal Alkane C21	30.894	42905	17348	1.52	1.80
NC22	Normal Alkane C22	32.565	40997	16602	1.45	1.72
NC23	Normal Alkane C23	34.141	34979	14330	1.24	1.48
NC24	Normal Alkane C24	35.634	28925	11401	1.02	1.18
NC25	Normal Alkane C25	37.059	27352	10591	0.97	1.10
NC26	Normal Alkane C26	38.422	24788	9917	0.88	1.03
NC27	Normal Alkane C27	39.731	24149	9715	0.85	1.01
NC28	Normal Alkane C28	40.988	20677	8048	0.73	0.83
NC29	Normal Alkane C29	42.202	20902	8087	0.74	0.84
NC30	Normal Alkane C30	43.374	15981	6478	0.57	0.67
NC31	Normal Alkane C31	44.505	13401	5179	0.47	0.54
NC32	Normal Alkane C32	45.601	8832	3502	0.31	0.36
NC33	Normal Alkane C33	46.688	7016	2455	0.25	0.25
NC34	Normal Alkane C34	47.873	5507	1554	0.19	0.16
NC35	Normal Alkane C35	49.196	3835	905	0.14	0.09
NC36	Normal Alkane C36	50.695	2209	453	0.08	0.05
NC37	Normal Alkane C37	52.422	1491	285	0.05	0.03
NC38	Normal Alkane C38	54.408	910	162	0.03	0.02
NC39	Normal Alkane C39	56.756	633	93	0.02	0.01
NC40	Normal Alkane C40	59.486	509	65	0.02	0.01

BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132262
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218045
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5113.6 FT
Longitude:	-156.0647	**Bottom Depth:**	5113.6 FT

Saturate GC Trace G6030180.D



SGC parameters	
Ratios	
Pristane/Phytane	1.52
Pristane/*n* C_{17}	0.73
Phytane/*n* C_{18}	0.68
n C_{18}/*n* C_{19}	0.91
n C_{17}/*n* C_{29}	0.63
CPI Marzi[4]	1.06

SGC parameters	
Resolved Components (%)	
Normal Paraffins	52.1
Isoprenoids	3.9
Resolved unknowns	44.1

GMC DATA REPORT 3 2 6

[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:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**G6030180.D**

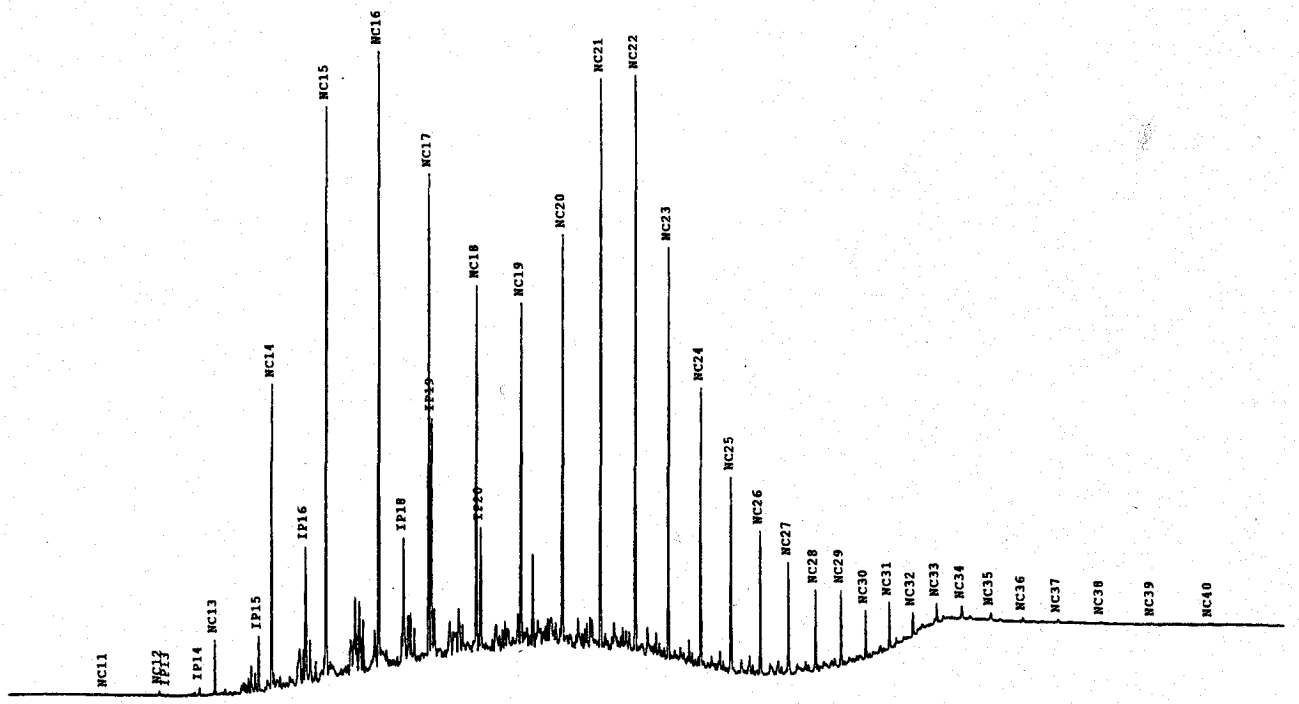
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10	5.238	53	24	0.00	0.00
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	7.457	241	100	0.02	0.02
NC12	Normal Alkane C12	10.012	564	232	0.04	0.05
IP13	Isoprenoid C13	10.383	152	60	0.01	0.01
IP14	Isoprenoid C14	11.961	237	103	0.02	0.02
NC13	Normal Alkane C13	12.690	1834	757	0.12	0.15
IP15	Isoprenoid C15	14.750	928	357	0.06	0.07
NC14	Normal Alkane C14	15.360	7859	3137	0.52	0.63
IP16	Isoprenoid C16	16.987	4442	1168	0.29	0.23
NC15	Normal Alkane C15	17.952	25045	9600	1.65	1.92
NC16	Normal Alkane C16	20.440	38781	14867	2.56	2.97
IP18	Isoprenoid C18	21.611	12033	3070	0.79	0.61
NC17	Normal Alkane C17	22.808	33787	12793	2.23	2.56
IP19	Isoprenoid C19 (Pristane)	22.949	24795	7050	1.63	1.41
NC18	Normal Alkane C18	25.065	23897	8563	1.57	1.71
IP20	Isoprenoid C20 (Phytane)	25.285	16329	4524	1.08	0.90
NC19	Normal Alkane C19	27.170	26222	9866	1.73	1.97
NC20	Normal Alkane C20	29.104	32789	12064	2.16	2.41
NC21	Normal Alkane C21	30.901	49710	19016	3.28	3.80
NC22	Normal Alkane C22	32.578	61033	24110	4.02	4.82
NC23	Normal Alkane C23	34.151	51638	20527	3.40	4.10
NC24	Normal Alkane C24	35.642	38109	15014	2.51	3.00
NC25	Normal Alkane C25	37.065	36575	13922	2.41	2.78
NC26	Normal Alkane C26	38.426	39614	15599	2.61	3.12
NC27	Normal Alkane C27	39.739	45664	17801	3.01	3.56
NC28	Normal Alkane C28	40.999	49379	18738	3.25	3.74
NC29	Normal Alkane C29	42.212	53506	20504	3.53	4.10
NC30	Normal Alkane C30	43.383	46239	17798	3.05	3.56
NC31	Normal Alkane C31	44.514	40169	14917	2.65	2.98
NC32	Normal Alkane C32	45.606	27457	10898	1.81	2.18
NC33	Normal Alkane C33	46.692	19542	7041	1.29	1.41
NC34	Normal Alkane C34	47.875	14726	4519	0.97	0.90
NC35	Normal Alkane C35	49.195	9900	2591	0.65	0.52
NC36	Normal Alkane C36	50.699	5871	1379	0.39	0.28
NC37	Normal Alkane C37	52.415	4353	855	0.29	0.17
NC38	Normal Alkane C38	54.411	2580	471	0.17	0.09
NC39	Normal Alkane C39	56.743	1652	235	0.11	0.05
NC40	Normal Alkane C40	59.475	1234	158	0.08	0.03

BASELINE DGSI ANALYTICAL LABORATORIES

SATURATE GC

Company:	CONOCOPHILLIPS	**Client ID:**	US132263
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218046
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5400 FT
Longitude:	-156.0647	**Bottom Depth:**	5430 FT

Saturate GC Trace G6030176.D



SGC parameters	
Ratios	
Pristane/Phytane	1.86
Pristane/*n* C_{17}	0.63
Phytane/*n* C_{18}	0.45
n C_{18}/*n* C_{19}	1.13
n C_{17}/*n* C_{29}	6.84
CPI Marzi[4]	1.11

SGC parameters	
Resolved Components (%)	
Normal Paraffins	47.6
Isoprenoids	7.6
Resolved unknowns	44.8

GMC DATA REPORT 3 2 6

[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.

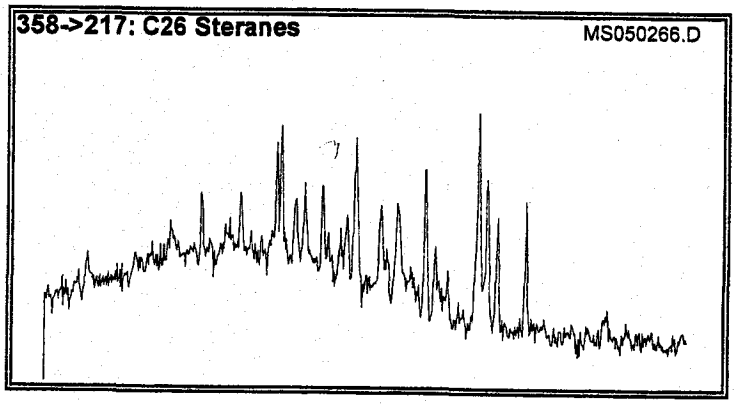
Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**G6030176.D**

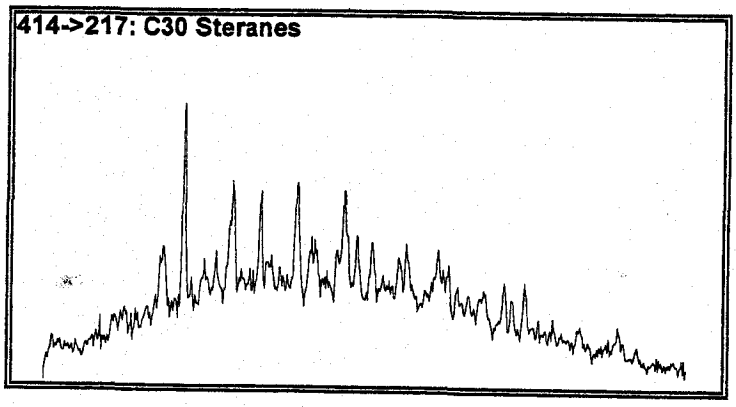
Peak Label	Compound Name	Ret. Time	Area	Height	Area%	Hght%
NC9	Normal Alkane C9					
NC10	Normal Alkane C10					
IP11	Isoprenoid C11					
NC11	Normal Alkane C11	7.475	69	18	0.01	0.00
NC12	Normal Alkane C12	10.026	413	177	0.03	0.04
IP13	Isoprenoid C13	10.398	221	80	0.02	0.02
IP14	Isoprenoid C14	11.974	735	310	0.06	0.08
NC13	Normal Alkane C13	12.704	5015	2102	0.41	0.52
IP15	Isoprenoid C15	14.764	5304	2107	0.43	0.52
NC14	Normal Alkane C14	15.380	29396	11745	2.38	2.88
IP16	Isoprenoid C16	17.004	18860	5234	1.52	1.29
NC15	Normal Alkane C15	17.978	59664	22136	4.82	5.44
NC16	Normal Alkane C16	20.465	64641	23825	5.22	5.85
IP18	Isoprenoid C18	21.627	18553	4861	1.50	1.19
NC17	Normal Alkane C17	22.832	51976	18740	4.20	4.60
IP19	Isoprenoid C19 (Pristane)	22.971	32626	9230	2.64	2.27
NC18	Normal Alkane C18	25.087	39271	14142	3.17	3.47
IP20	Isoprenoid C20 (Phytane)	25.302	17558	4791	1.42	1.18
NC19	Normal Alkane C19	27.191	34788	13273	2.81	3.26
NC20	Normal Alkane C20	29.119	42015	15888	3.40	3.90
NC21	Normal Alkane C21	30.912	57587	21959	4.65	5.39
NC22	Normal Alkane C22	32.584	56997	22184	4.61	5.45
NC23	Normal Alkane C23	34.156	40086	15842	3.24	3.89
NC24	Normal Alkane C24	35.647	26741	10732	2.16	2.64
NC25	Normal Alkane C25	37.071	19363	7522	1.56	1.85
NC26	Normal Alkane C26	38.432	14251	5498	1.15	1.35
NC27	Normal Alkane C27	39.742	11252	4283	0.91	1.05
NC28	Normal Alkane C28	40.997	8043	3090	0.65	0.76
NC29	Normal Alkane C29	42.212	7598	2907	0.61	0.71
NC30	Normal Alkane C30	43.384	4835	1840	0.39	0.45
NC31	Normal Alkane C31	44.515	4652	1773	0.38	0.44
NC32	Normal Alkane C32	45.609	2344	895	0.19	0.22
NC33	Normal Alkane C33	46.699	2255	716	0.18	0.18
NC34	Normal Alkane C34	47.889	1915	481	0.15	0.12
NC35	Normal Alkane C35	49.211	1217	277	0.10	0.07
NC36	Normal Alkane C36	50.713	755	163	0.06	0.04
NC37	Normal Alkane C37	52.433	588	113	0.05	0.03
NC38	Normal Alkane C38	54.446	416	72	0.03	0.02
NC39	Normal Alkane C39	56.767	357	51	0.03	0.01
NC40	Normal Alkane C40	59.518	302	37	0.02	0.01

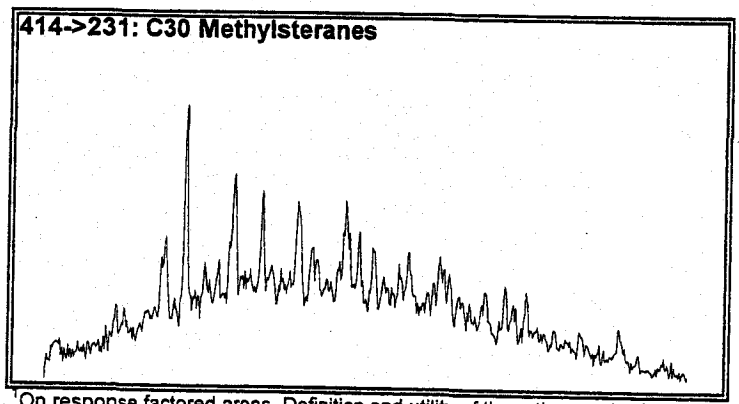
BASELINE DGSI
ANALYTICAL LABORATORIES

SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	05-295-A
Country:	UNITED STATES	**Lab ID:**	CP278537
Basin:		**Client ID:**	US136226
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	WALAKPA 1	**Geologic Age:**	
Latitude:	71.09915	**Top Depth:**	2078.2
Longitude:	-156.8846	**Bottom Depth:**	2078.2







RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	33.6	D	
%28 Steranes	24.7	D	
%29 Steranes	41.7	D	
%27 Diasteranes	32.1	D	
%28 Diasteranes	28.6	D	
%29 Diasteranes	39.3	D	
C30 Sterane Index		D	
C30 iso/n-propyl sterane index		A	
C27 αββ/(ααα+αββ)	0.59	M	
C28 αββ/(ααα+αββ)	0.69	M	
C29 αββ/(ααα+αββ)	0.64	M	
C30 αββ/(ααα+αββ)		M	
C27 S/(S+R)	0.51	M	
C28 S/(S+R)	0.59	M	
C29 S/(S+R)	0.51	M	
C30 S/(S+R)		M	
Diasteranes/Steranes	0.96		
24-Nordiacholestane ratio (NDR)		A	
24-Norcholestane ratio (NCR)	0.67	A	
21-Norcholestane ratio	0.12	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 (%)	12.7	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:**	**US136226**
Well Name:	**WALAKPA 1**	**Lab ID:**	**CP278537**
Top Depth:	**2078.2**	**Fraction:**	**SATURATE**
Bottom Depth:	**2078.2**	**File Name:**	**MS050266.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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	51.361	290224	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S				
D26N24baR	13β,17α,24-nordiacholestane 20R				
D26N27baS	13β,17α,27-nordiacholestane 20S	54.311	7508	2.6	2.6
D26N24abS	13α,17β,24-nordiacholestane 20S				
D26N24abR	13α,17β,24-nordiacholestane 20R				
D26N27baR	13β,17α,27-nordiacholestane 20R	55.401	5476	1.9	1.9
D26N27abS	13α,17β,27-nordiacholestane 20S				
D26N27abR	13α,17β,27-nordiacholestane 20R	56.996	8659	3.0	3.0
S26N24aaaS	5α,14α,17α,24-norcholestane 20S				
S26N24abbR	5α,14β,17β,24-norcholestane 20R				
S26N24abbS	5α,14β,17β,24-norcholestane 20S	58.724	18430	6.4	6.4
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	59.442	13893	4.8	4.8
S26N21	21-norcholestane	59.601	6310	2.2	2.2
S26N27baaR	5β,14α,17α,27-norcholestane 20S	59.841	3227	1.1	1.1
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	59.894	15647	5.4	5.4
S26N27abbR	5α,14β,17β,27-norcholestane 20R				
S26N27abbS	5α,14β,17β,27-norcholestane 20S				
S26N27aaaR	5α,14α,17α,27-norcholestane 20R				
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	56.438	68225	23.5	22.6
D27baR	13β,17α-diacholestane 20R	57.767	43075	14.8	19.8
D27abS	13α,17β-diacholestane 20S	58.751	26987	9.3	6.2
D27abR	13α,17β-diacholestane 20R	59.415	25180	8.7	11.2
S27aaaS	5α,14α,17α-cholestane 20S	62.100	31126	10.7	9.6
S27abbR	5α,14β,17β-cholestane 20R	62.419	25164	8.7	14.2
S27abbS	5α,14β,17β-cholestane 20S	62.712	21083	7.3	13.2
S27aaaR	5α,14α,17α-cholestane 20R	63.509	24614	8.5	9.3
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	59.575	25421	8.8	10.0
D28baSB	13β,17α-diaergostane 20S (24S)	59.787	27932	9.6	11.4
D28baRA	13β,17α-diaergostane 20R (24R)	61.037	18071	6.2	6.9
D28baRB	13β,17α-diaergostane 20R (24R)	61.170	20010	6.9	9.3
D28abS	13α,17β-diaergostane 20S	61.994	18437	6.4	6.4
D28abRA	13α,17β-diaergostane 20R	62.844	14479	5.0	5.0
D28abRB	13α,17β-diaergostane 20R	62.977	9201	3.2	3.2
C28UNK9	C28 Unknown 9	63.642	13028	4.5	4.5
S28aaaSA	5α,14α,17α-ergostane 20S	65.503	6343	2.2	2.8
S28aaaSB	5α,14α,17α-ergostane 20S	65.529	8162	2.8	3.4
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	65.955	19188	6.6	12.6
S28abbS	5α,14β,17β-ergostane 20S	66.220	15199	5.2	10.9
S28N21	21-norstigmastane	66.619	22823	7.9	7.9
S28aaaR	5α,14α,17α-ergostane 20R	67.231	9084	3.1	4.3

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Lab ID:**	**CP278537**
Top Depth:	**2078.2**	**Fraction:**	**SATURATE**
Bottom Depth:	**2078.2**	**File Name:**	**MS050266.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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	62.419	73309	25.3	27.5
D29baR	13β,17α-diastigmastane 20R	63.988	50360	17.4	24.4
D29abS	13α,17β-diastigmastane 20S	64.626	11623	4.0	4.0
D29abR	13α,17β-diastigmastane 20R	65.795	24150	8.3	8.3
C29UNK5	C29 Unknown 5	66.566	18295	6.3	6.3
S29aaaS	5α,14α,17α-stigmastane 20S	68.241	22181	7.6	10.6
S29abbR	5α,14β,17β-stigmastane 20R	68.826	22591	7.8	15.6
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	69.012	43321	14.9	20.9
S29aaaR	5α,14α,17α-stigmastane 20R	70.261	24173	8.3	10.3
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	64.652	4595	1.6	2.1
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	64.732	8186	2.8	3.4
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	66.327	17149	5.9	10.0
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	68.214	7688	2.6	2.6
DC30UNK7	dia-C30 Unknown 7				
DC30UNK8	dia-C30 Unknown 8				
DC30UNK8A	dia-C30 Unknown 8A	68.985	12823	4.4	4.4
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S				
C30UNK10	C30 Unknown 10				
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R				
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S				
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R				
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R				
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	57.927	2740	0.9	0.9
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R				
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	60.532	16044	5.5	5.5
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	61.834	9235	3.2	3.2
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	63.642	6158	2.1	2.1
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	63.988	8539	2.9	2.9
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	64.280	3074	1.1	1.1
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S				
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R				
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R				
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S				
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	66.220	15923	5.5	5.5
XS28aaaR	5α,14α,17α-ergostane 20R	67.177	9902	3.4	3.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Lab ID:**	**CP278537**
Top Depth:	**2078.2**	**Fraction:**	**SATURATE**
Bottom Depth:	**2078.2**	**File Name:**	**MS050266.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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				
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S				
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S				
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S				
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R				
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R				
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R				
XS29aaaR	5α,14α,17α-stigmastane 20R	70.261	20859	7.2	7.2
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S				
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)				
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				
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)				
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S				
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R				
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)				
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)				
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R				
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Lab ID:**	**CP278537**
Top Depth:	**2078.2**	**Fraction:**	**SATURATE**
Bottom Depth:	**2078.2**	**File Name:**	**MS050266.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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				
PP1	Tetracyclic polyprenoid				
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R				
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S				
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R				
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	65.396	6748	2.3	2.3
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane				
TRITERP14	C30 unknown triterpane				
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid				
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	69.969	17694	6.1	6.1
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane				
TRITERP17A	C30 plant terpane				
DH30	Diahopane	70.953	16634	5.7	5.7
TRITERP18	C30 unknown triterpane				
OL18a	18α Oleanane				
OL18b	18β Oleanane				
H30ab	17α, 21β-Hopane	72.973	51996	17.9	39.3
H30N30	30-Norhomohopane	73.213	5153	1.8	1.8
H30TS	18α,17β-Neohopane	73.638	5695	2.0	2.0
H30aa	17α, 21α-Hopane				
H30ba	17β, 21α-Hopane (Moretane)				
GamA	Gammacerane-A				
GamB	Gammacerane-B				
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	31.875	33071	11.4	11.4
NORPREG5	Norpregnane-5	32.115	15660	5.4	5.4
NORPREG6	Norpregnane-6	32.407	30266	10.4	10.4
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	33.444	49213	17.0	17.0
NORPREG10	Norpregnane-10	33.789	23324	8.0	8.0
NORPREG11	Norpregnane-11	34.507	33418	11.5	11.5
NORPREG12	Norpregnane-12	35.278	23885	8.2	8.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Lab ID:**	**CP278537**
Top Depth:	**2078.2**	**Fraction:**	**SATURATE**
Bottom Depth:	**2078.2**	**File Name:**	**MS050266.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-7MBAR CE=25**		

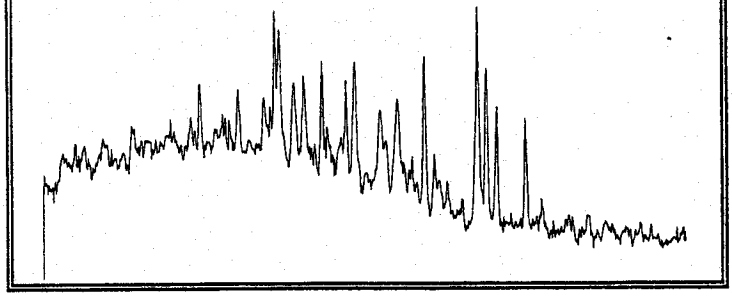
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane				
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane				
DesEHOP	Des-E-Hopane	51.361	315460	108.7	108.7
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
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				
H31abS	C31 22S 2α-Methylhopane	76.243	13523	4.7	4.7
H31abR	C31 22R 2α-Methylhopane	76.642	13628	4.7	4.7
H313Mab	C31 3β-Methylhopane				

BASELINE DGSI ANALYTICAL LABORATORIES

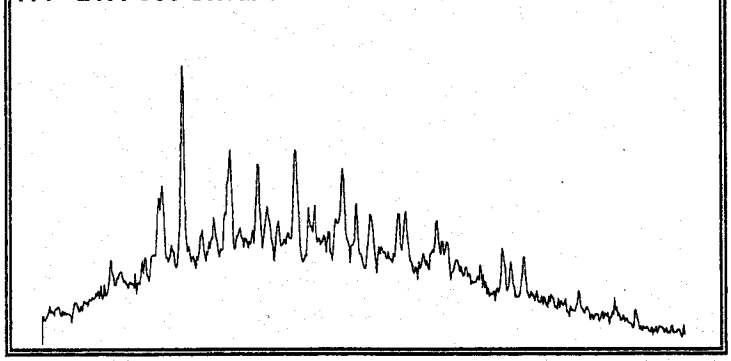
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	05-295-A	
Country:	UNITED STATES	**Lab ID:**	CP278539	
Basin:	NORTH SLOPE	**Client ID:**	US136228	
Lease:		**Sample Type:**	CORE	
Block:		**Sampling Point:**		
Field:	WALAKPA GAS FIELD	**Formation:**		
Well Name:	WALAKPA 2	**Geologic Age:**		
Latitude:	71.05012	**Top Depth:**	2632.5	FT
Longitude:	-156.9527	**Bottom Depth:**	2632.5	FT

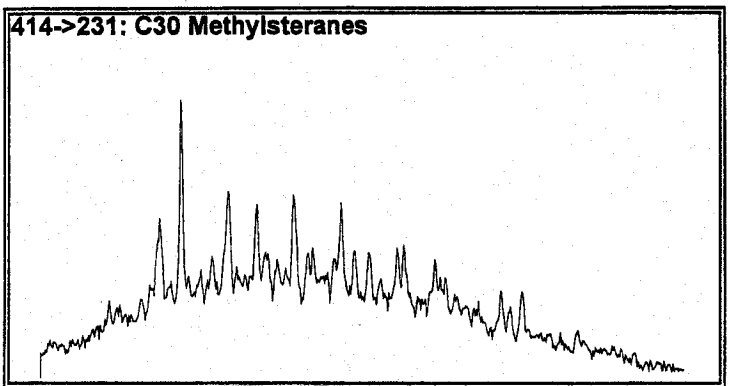
358->217: C26 Steranes MS050267.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	30.1	D	
%28 Steranes	27.1	D	
%29 Steranes	42.8	D	
%27 Diasteranes	32.5	D	
%28 Diasteranes	27.3	D	
%29 Diasteranes	40.2	D	
C30 Sterane Index		D	
C30 iso/n-propyl sterane index		A	
C27 αββ/(ααα+αββ)	0.62	M	
C28 αββ/(ααα+αββ)	0.73	M	
C29 αββ/(ααα+αββ)	0.65	M	
C30 αββ/(ααα+αββ)		M	
C27 S/(S+R)	0.50	M	
C28 S/(S+R)	0.47	M	
C29 S/(S+R)	0.45	M	
C30 S/(S+R)		M	
Diasteranes/Steranes	1.04		
24-Nordiacholestane ratio (NDR)		A	
24-Norcholestane ratio (NCR)		A	
21-Norcholestane ratio		D/M	
Dinosterane ratio		A	
4-Methyl sterane ratio	0.15	A	
Terpane Ratios			
Oleanane Index (%)		A	
DesA Oleanane Index (%)		A	
Gammacerane Index (%)		D	
Bicadinane Index (%)		A/D	
DiaHopane Index (%)	11.3	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:**	**US136228**
Well Name:	**WALAKPA 2**	**Lab ID:**	**CP278539**
Top Depth:	**2632.5 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**2632.5 FT**	**File Name:**	**MS050267.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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	51.387	3673841	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S				
D26N24baR	13β,17α,24-nordiacholestane 20R				
D26N27baS	13β,17α,27-nordiacholestane 20S				
D26N24abS	13α,17β,24-nordiacholestane 20S				
D26N24abR	13α,17β,24-nordiacholestane 20R				
D26N27baR	13β,17α,27-nordiacholestane 20R				
D26N27abS	13α,17β,27-nordiacholestane 20S				
D26N27abR	13α,17β,27-nordiacholestane 20R				
S26N24aaaS	5α,14α,17α,24-norcholestane 20S				
S26N24abbR	5α,14β,17β,24-norcholestane 20R				
S26N24abbS	5α,14β,17β,24-norcholestane 20S				
S26N24aaaR	5α,14α,17α,24-norcholestane 20R				
S26N21	21-norcholestane				
S26N27baaR	5β,14α,17α,27-norcholestane 20S				
S26N27aaaS	5α,14α,17α,27-norcholestane 20S				
S26N27abbR	5α,14β,17β,27-norcholestane 20R				
S26N27abbS	5α,14β,17β,27-norcholestane 20S				
S26N27aaaR	5α,14α,17α,27-norcholestane 20R				
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	56.465	1156688	31.5	30.2
D27baR	13β,17α-diacholestane 20R	57.794	770474	21.0	28.0
D27abS	13α,17β-diacholestane 20S	58.751	338650	9.2	6.2
D27abR	13α,17β-diacholestane 20R	59.442	398617	10.9	14.0
S27aaaS	5α,14α,17α-cholestane 20S	62.153	405774	11.0	9.8
S27abbR	5α,14β,17β-cholestane 20R	62.446	325268	8.9	14.4
S27abbS	5α,14β,17β-cholestane 20S	62.738	359481	9.8	17.8
S27aaaR	5α,14α,17α-cholestane 20R	63.536	333014	9.1	9.9
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	59.628	415625	11.3	13.0
D28baSB	13β,17α-diaergostane 20S (24S)	59.814	467233	12.7	15.1
D28baRA	13β,17α-diaergostane 20R (24R)	61.090	318927	8.7	9.6
D28baRB	13β,17α-diaergostane 20R (24R)	61.196	306702	8.3	11.3
D28abS	13α,17β-diaergostane 20S	62.020	327217	8.9	8.9
D28abRA	13α,17β-diaergostane 20R	62.871	226551	6.2	6.2
D28abRB	13α,17β-diaergostane 20R	62.977	131153	3.6	3.6
C28UNK9	C28 Unknown 9	63.669	183484	5.0	5.0
S28aaaSA	5α,14α,17α-ergostane 20S	65.582	89511	2.4	3.1
S28aaaSB	5α,14α,17α-ergostane 20S	65.742	90329	2.5	3.0
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	66.008	320952	8.7	16.6
S28abbS	5α,14β,17β-ergostane 20S	66.247	307248	8.4	17.4
S28N21	21-norstigmastane	66.646	456428	12.4	12.4
S28aaaR	5α,14α,17α-ergostane 20R	67.204	179757	4.9	6.7

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Lab ID:**	**CP278539**
Top Depth:	**2632.5 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**2632.5 FT**	**File Name:**	**MS050267.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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	62.446	1201545	32.7	35.6
D29baR	13β,17α-diastigmastane 20R	64.014	954464	26.0	36.5
D29abS	13α,17β-diastigmastane 20S	64.652	234707	6.4	6.4
D29abR	13α,17β-diastigmastane 20R	65.822	341597	9.3	9.3
C29UNK5	C29 Unknown 5	66.566	309691	8.4	8.4
S29aaaS	5α,14α,17α-stigmastane 20S	68.267	308803	8.4	11.7
S29abbR	5α,14β,17β-stigmastane 20R	68.852	447677	12.2	24.4
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	69.065	628243	17.1	24.0
S29aaaR	5α,14α,17α-stigmastane 20R	70.288	415977	11.3	14.0
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	64.705	130329	3.5	4.6
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	64.785	153282	4.2	5.1
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	66.380	333438	9.1	15.3
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S				
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	68.188	107567	2.9	2.9
DC30UNK7	dia-C30 Unknown 7				
DC30UNK8	dia-C30 Unknown 8				
DC30UNK8A	dia-C30 Unknown 8A				
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S				
C30UNK10	C30 Unknown 10				
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R				
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S				
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R				
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R				
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				
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R				
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	60.558	230879	6.3	6.3
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	61.887	157675	4.3	4.3
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	63.669	165357	4.5	4.5
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	64.014	179234	4.9	4.9
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	64.307	91260	2.5	2.5
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S				
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R				
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	65.077	94213	2.6	2.6
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S				
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R				
XS28aaaR	5α,14α,17α-ergostane 20R				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Lab ID:**	**CP278539**
Top Depth:	**2632.5 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**2632.5 FT**	**File Name:**	**MS050267.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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				
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S				
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S				
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S				
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R				
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R				
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R				
XS29aaaR	5α,14α,17α-stigmastane 20R	70.288	323273	8.8	8.8
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S				
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	69.676	107435	2.9	2.9
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	70.341	141824	3.9	3.9
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	70.501	136709	3.7	3.7
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S				
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	71.219	114153	3.1	3.1
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	71.458	72749	2.0	2.0
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)				
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	72.787	90660	2.5	2.5
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Lab ID:**	**CP278539**
Top Depth:	**2632.5 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**2632.5 FT**	**File Name:**	**MS050267.D**

Acquisition Parameters: SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-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				
PP1	Tetracyclic polyprenoid				
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R				
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S				
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R				
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	65.450	111334	3.0	3.0
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane				
TRITERP14	C30 unknown triterpane				
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid				
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	69.996	302393	8.2	8.2
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane				
TRITERP17A	C30 plant terpane				
DH30	Diahopane	70.979	252700	6.9	6.9
TRITERP18	C30 unknown triterpane				
OL18a	18α Oleanane				
OL18b	18β Oleanane				
H30ab	17α, 21β-Hopane	73.000	900603	24.5	53.7
H30N30	30-Norhomohopane	73.239	79344	2.2	2.2
H30TS	18α,17β-Neohopane	73.638	73252	2.0	2.0
H30aa	17α, 21α-Hopane				
H30ba	17β, 21α-Hopane (Moretane)				
GamA	Gammacerane-A				
GamB	Gammacerane-B				
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	31.875	589713	16.1	16.1
NORPREG5	Norpregnane-5	32.141	247487	6.7	6.7
NORPREG6	Norpregnane-6	32.434	442373	12.0	12.0
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	33.470	678021	18.5	18.5
NORPREG10	Norpregnane-10	33.789	346756	9.4	9.4
NORPREG11	Norpregnane-11	34.507	536019	14.6	14.6
NORPREG12	Norpregnane-12	35.305	449028	12.2	12.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Lab ID:**	**CP278539**
Top Depth:	**2632.5 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**2632.5 FT**	**File Name:**	**MS050267.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1 RES 70EV 700UA 250C AR=3E-7MBAR CE=25**		

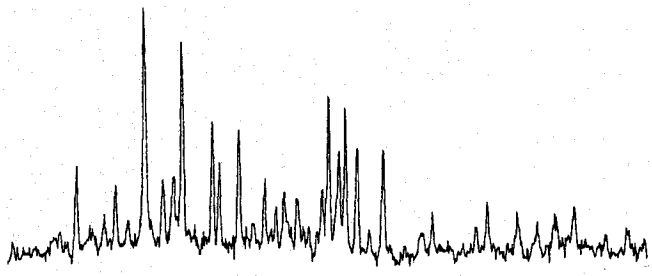
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane				
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane				
DesEHOP	Des-E-Hopane	52.291	563852	15.3	15.3
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
Bicadinene	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				
H31abS	C31 22S 2α-Methylhopane	76.270	215215	5.9	5.9
H31abR	C31 22R 2α-Methylhopane	76.642	215821	5.9	5.9
H313Mab	C31 3β-Methylhopane				

BASELINE DGSI ANALYTICAL LABORATORIES

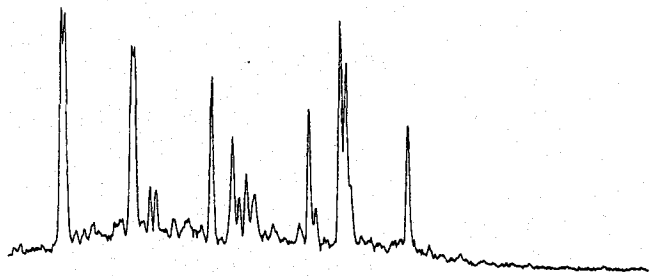
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218043
Basin:	NORTH SLOPE	**Client ID:**	US132260
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.931520	**Top Depth:**	4560 FT
Longitude:	##########	**Bottom Depth:**	4630 FT

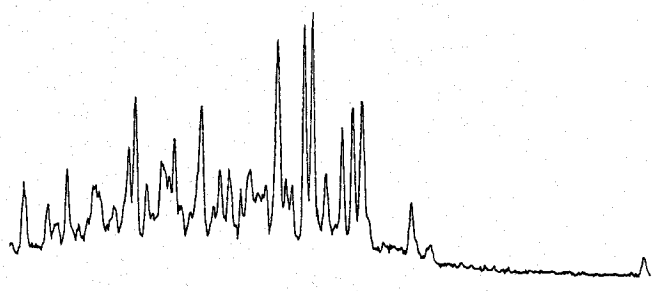
358->217: C26 Steranes MS030445.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	19.7	D	
%28 Steranes	26.3	D	
%29 Steranes	54.0	D	
%27 Diasteranes	19.3	D	
%28 Diasteranes	24.8	D	
%29 Diasteranes	55.9	D	
C30 Sterane Index	0.096	D	
C30 iso/n-propyl sterane index		A	
C27 αββ/(ααα+αββ)	0.67	M	
C28 αββ/(ααα+αββ)	0.72	M	
C29 αββ/(ααα+αββ)	0.66	M	
C30 αββ/(ααα+αββ)	0.68	M	
C27 S/(S+R)	0.47	M	
C28 S/(S+R)	0.48	M	
C29 S/(S+R)	0.51	M	
C30 S/(S+R)	0.46	M	
Diasteranes/Steranes	0.84		
24-Nordiacholestane ratio (NDR)	0.26	A	
24-Norcholestane ratio (NCR)	0.35	A	
21-Norcholestane ratio	0.17	D/M	
Dinosterane ratio		A	
4-Methyl sterane ratio	0.06	A	
Terpane Ratios			
Oleanane Index (%)	1.4	A	
DesA Oleanane Index (%)	25.7	A	
Gammacerane Index (%)	0.5	D	
Bicadinane Index (%)	0.2	A/D	
DiaHopane Index (%)	4.6	D	
TPP	0.29	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

GMC DATA REPORT 3 2 6

Company:	CONOCOPHILLIPS	**Client ID:**	US132260
Well Name:	KUYANAK 1	**Lab ID:**	CP218043
Top Depth:	4560 FT	**Fraction:**	SATURATE
Bottom Depth:	4630 FT	**File Name:**	MS030445.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	49.846	1368197	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.947	5597	0.4	0.4
D26N24baR	13β,17α,24-nordiacholestane 20R	52.025	4910	0.4	0.4
D26N27baS	13β,17α,27-nordiacholestane 20S	52.845	16922	1.2	1.2
D26N24abS	13α,17β,24-nordiacholestane 20S	53.032	2235	0.2	0.2
D26N24abR	13α,17β,24-nordiacholestane 20R	53.711	5743	0.4	0.4
D26N27baR	13β,17α,27-nordiacholestane 20R	53.922	12300	0.9	0.9
D26N27abS	13α,17β,27-nordiacholestane 20S	54.976	4966	0.4	0.4
D26N27abR	13α,17β,27-nordiacholestane 20R	55.538	7369	0.5	0.5
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.616	3071	0.2	0.2
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.827	4509	0.3	0.3
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.178	4489	0.3	0.3
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.928	4763	0.3	0.3
S26N21	21-norcholestane	58.092	10046	0.7	0.7
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.303	1913	0.1	0.1
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.396	7608	0.6	0.6
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.560	8386	0.6	0.6
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.614	7207	0.5	0.5
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.614	7864	0.6	0.6
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.976	132177	9.7	13.4
D27baR	13β,17α-diacholestane 20R	56.288	96143	7.0	13.9
D27abS	13α,17β-diacholestane 20S	57.272	42800	3.1	3.9
D27abR	13α,17β-diacholestane 20R	57.951	52472	3.8	7.2
S27aaaS	5α,14α,17α-cholestane 20S	60.645	51604	3.8	5.1
S27abbR	5α,14β,17β-cholestane 20R	60.973	79138	5.8	12.4
S27abbS	5α,14β,17β-cholestane 20S	61.278	59776	4.4	9.9
S27aaaR	5α,14α,17α-cholestane 20R	62.074	53842	3.9	5.8
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.115	91651	6.7	8.9
D28baSB	13β,17α-diaergostane 20S (24S)	58.326	100957	7.4	10.4
D28baRA	13β,17α-diaergostane 20R (24R)	59.591	71491	5.2	7.7
D28baRB	13β,17α-diaergostane 20R (24R)	59.732	79053	5.8	8.1
D28abS	13α,17β-diaergostane 20S	60.528	60913	4.5	4.5
D28abRA	13α,17β-diaergostane 20R	61.418	40775	3.0	3.0
D28abRB	13α,17β-diaergostane 20R	61.535	37432	2.7	2.7
C28UNK9	C28 Unknown 9	62.308	52580	3.8	3.8
S28aaaSA	5α,14α,17α-ergostane 20S	64.018	25708	1.9	2.8
S28aaaSB	5α,14α,17α-ergostane 20S	64.136	27768	2.0	3.1
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.510	119349	8.7	18.6
S28abbS	5α,14β,17β-ergostane 20S	64.815	82438	6.0	13.4
S28N21	21-norstigmastane	65.283	23260	1.7	1.7
S28aaaR	5α,14α,17α-ergostane 20R	65.799	56937	4.2	6.5

Company:	CONOCOPHILLIPS	**Client ID:**	US132260
Well Name:	KUYANAK 1	**Lab ID:**	CP218043
Top Depth:	4560 FT	**Fraction:**	SATURATE
Bottom Depth:	4630 FT	**File Name:**	MS030445.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	60.997	482850	35.3	43.2
D29baR	13β,17α-diastigmastane 20R	62.543	341056	24.9	35.5
D29abS	13α,17β-diastigmastane 20S	63.199	110909	8.1	8.1
D29abR	13α,17β-diastigmastane 20R	64.393	191199	14.0	14.0
C29UNK5	C29 Unknown 5	65.119	151459	11.1	11.1
S29aaaS	5α,14α,17α-stigmastane 20S	66.829	153521	11.2	15.9
S29abbR	5α,14β,17β-stigmastane 20R	67.438	216333	15.8	30.4
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.649	225276	16.5	29.3
S29aaaR	5α,14α,17α-stigmastane 20R	68.867	164288	12.0	15.5
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.245	43960	3.2	3.4
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.339	49108	3.6	4.1
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.885	70657	5.2	7.5
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	65.330	10605	0.8	0.8
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.471	11454	0.8	0.8
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.783	34809	2.5	2.5
DC30UNK7	dia-C30 Unknown 7	67.275	27071	2.0	2.0
DC30UNK8	dia-C30 Unknown 8	67.438	9009	0.7	0.7
DC30UNK8A	dia-C30 Unknown 8A	67.602	16683	1.2	1.2
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	69.078	30389	2.2	2.6
C30UNK10	C30 Unknown 10	69.265	8422	0.6	0.6
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.828	47133	3.4	6.9
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.968	42382	3.1	5.4
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	70.085	9299	0.7	0.7
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.397	28808	2.1	3.1
C30UNK14	C30 Unknown 14	71.537	1810	0.1	0.1
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R				
C30UNK16	C30 Unknown 16	72.615	3155	0.231	0.231
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.475	7275	0.5	0.5
DC28UNK16	dia-C28 Unknown 16	57.295	5431	0.4	0.4
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.881	6809	0.5	0.5
DC28UNK3	dia-C28 Unknown 3	58.068	3764	0.3	0.3
DC28UNK17	dia-C28 Unknown 17	58.631	4932	0.4	0.4
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.076	21414	1.6	1.6
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.411	7861	0.6	0.6
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.191	16228	1.2	1.2
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.589	13512	1.0	1.0
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.847	13758	1.0	1.0
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.386	8524	0.6	0.6
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.526	14524	1.1	1.1
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.620	7642	0.6	0.6
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.831	11128	0.8	0.8
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.791	8703	0.6	0.6
XS28aaaR	5α,14α,17α-ergostane 20R				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218043**
Top Depth:	**4560 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**4630 FT**	**File Name:**	**MS030445.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	59.521	6499	0.5	0.5
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.778	3856	0.3	0.3
DC29UNK27	dia-C29 Unknown 27	60.317	4707	0.3	0.3
DC29UNK28	dia-C29 Unknown 28	60.575	5199	0.4	0.4
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R	61.090	3664	0.3	0.3
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R	61.278	4499	0.3	0.3
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.168	15133	1.1	1.1
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.355	17725	1.3	1.3
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.644	10831	0.8	0.8
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.761	14375	1.1	1.1
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.557	13987	1.0	1.0
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.471	11409	0.8	0.8
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.541	8297	0.6	0.6
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.682	10316	0.8	0.8
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	66.080	13427	1.0	1.0
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.338	18731	1.4	1.4
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.689	6165	0.5	0.5
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.806	11235	0.8	0.8
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	67.017	19391	1.4	1.4
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.321	28157	2.1	2.1
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.399	11159	0.8	0.8
XS29aaaR	5α,14α,17α-stigmastane 20R	68.867	7108	0.5	0.5
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.813	10465	0.8	0.8
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.305	49088	3.6	3.6
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.493	10800	0.8	0.8
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.633	8274	0.6	0.6
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.938	40912	3.0	3.0
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	69.125	40149	2.9	2.9
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.453	17001	1.2	1.2
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.828	22332	1.6	1.6
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.085	28024	2.0	2.0
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.273	33001	2.4	2.4
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.420	12808	0.9	0.9
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218043**
Top Depth:	**4560 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**4630 FT**	**File Name:**	**MS030445.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	70.202	4879	0.4	0.4
PP1	Tetracyclic polyprenoid	70.366	12604	0.9	0.9
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.507	17059	1.2	1.2
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.764	5776	0.4	0.4
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.561	5028	0.4	0.4
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.925	23948	1.8	1.8
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.134	2524	0.2	0.2
TRITERP14	C30 unknown triterpane	67.345	10411	0.8	0.8
OLEANOID15A	Oleanoid	67.696	2697	0.2	0.2
OLEANOID15	Oleanoid	67.860	3619	0.3	0.3
OLEANOID16	Oleanoid				
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.516	30379	2.2	2.2
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.914	11289	0.8	0.8
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.547	109189	8.0	8.0
TRITERP18	C30 unknown triterpane	70.015	11758	0.9	0.9
OL18a	18α Oleanane	71.139	19018	1.4	1.4
OL18b	18β Oleanane	71.280	14199	1.0	1.0
H30ab	17α, 21β-Hopane	71.561	841526	61.5	166.0
H30N30	30-Norhomohopane	71.818	35012	2.6	2.6
H30TS	18α,17β-Neohopane	72.193	40420	3.0	3.0
H30aa	17α, 21α-Hopane	72.474	29068	2.1	2.1
H30ba	17β, 21α-Hopane (Moretane)	72.755	67507	4.9	16.1
GamA	Gammacerane-A	75.449	16355	1.2	0.6
GamB	Gammacerane-B	75.613	6083	0.4	0.2
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)	64.07	3559	0.26	0.3
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	32.020	4001	0.3	0.3
NORPREG10	Norpregnane-10	32.301	1474	0.1	0.1
NORPREG11	Norpregnane-11	33.050	1481	0.1	0.1
NORPREG12	Norpregnane-12				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218043**
Top Depth:	**4560 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**4630 FT**	**File Name:**	**MS030445.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

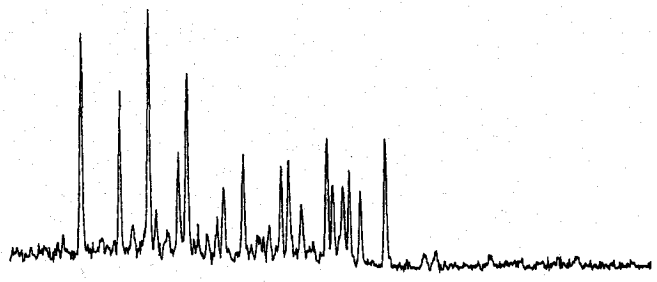
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.911	10873	0.8	0.8
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane	49.284	6408	0.5	0.5
DesEHOP	Des-E-Hopane	50.713	31476	2.3	2.3
410.4->218.2: Monounsaturated C30 Pentacyclic 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	71.795	30643	2.2	2.2
H31abS	C31 22S 2α-Methylhopane	74.816	98994	7.2	7.2
H31abR	C31 22R 2α-Methylhopane	75.191	78818	5.8	5.8
H313Mab	C31 3β-Methylhopane	75.636	19902	1.5	1.5

BASELINE DGSI
ANALYTICAL LABORATORIES

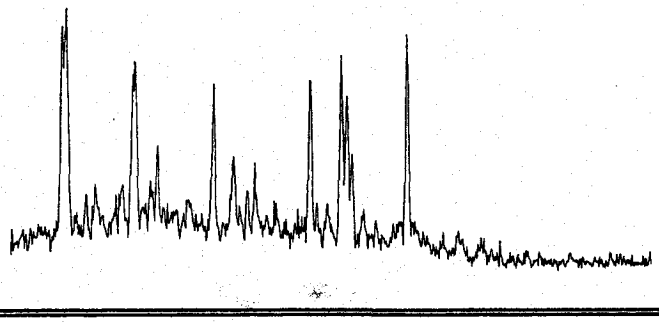
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218044
Basin:	NORTH SLOPE	**Client ID:**	US132261
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.931520	**Top Depth:**	5068 FT
Longitude:	#########	**Bottom Depth:**	5068 FT

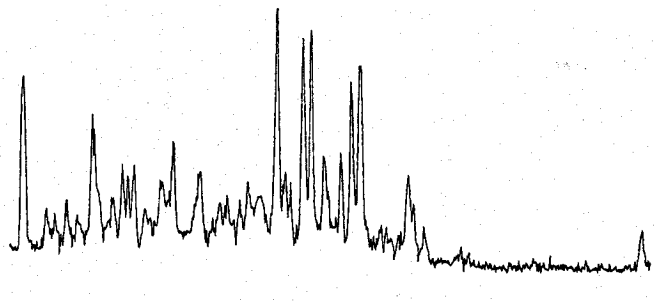
358->217: C26 Steranes MS030446.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	26.6	D	
%28 Steranes	26.2	D	
%29 Steranes	47.2	D	
%27 Diasteranes	28.6	D	
%28 Diasteranes	22.9	D	
%29 Diasteranes	48.5	D	
C30 Sterane Index	0.033	D	
C30 iso/n-propyl sterane index	0.12	A	
C27 αββ/(ααα+αββ)	0.55	M	
C28 αββ/(ααα+αββ)	0.59	M	
C29 αββ/(ααα+αββ)	0.55	M	
C30 αββ/(ααα+αββ)	0.54	M	
C27 S/(S+R)	0.45	M	
C28 S/(S+R)	0.35	M	
C29 S/(S+R)	0.47	M	
C30 S/(S+R)	0.40	M	
Diasteranes/Steranes	0.93		
24-Nordiacholestane ratio (NDR)	0.44	A	
24-Norcholestane ratio (NCR)	0.52	A	
21-Norcholestane ratio	0.10	D/M	
Dinosterane ratio		A	
4-Methyl sterane ratio	0.05	A	
Terpane Ratios			
Oleanane Index (%)		A	
DesA Oleanane Index (%)	13.1	A	
Gammacerane Index (%)	0.2	D	
Bicadinane Index (%)	0.1	A/D	
DiaHopane Index (%)	4.0	D	
TPP	0.15	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:**	US132261
Well Name:	KUYANAK 1	**Lab ID:**	CP218044
Top Depth:	5068 FT	**Fraction:**	SATURATE
Bottom Depth:	5068 FT	**File Name:**	MS030446.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	49.893	1154238	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	50.971	9075	0.8	0.8
D26N24baR	13β,17α,24-nordiacholestane 20R	52.072	5960	0.5	0.5
D26N27baS	13β,17α,27-nordiacholestane 20S	52.891	10534	0.9	0.9
D26N24abS	13α,17β,24-nordiacholestane 20S	53.102	1985	0.2	0.2
D26N24abR	13α,17β,24-nordiacholestane 20R	53.735	5072	0.4	0.4
D26N27baR	13β,17α,27-nordiacholestane 20R	53.969	8362	0.7	0.7
D26N27abS	13α,17β,27-nordiacholestane 20S	55.000	3741	0.3	0.3
D26N27abR	13α,17β,27-nordiacholestane 20R	55.562	4628	0.4	0.4
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.639	4032	0.3	0.3
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.850	4953	0.4	0.4
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.202	3286	0.3	0.3
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.951	5587	0.5	0.5
S26N21	21-norcholestane	58.115	3803	0.3	0.3
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.279	937	0.1	0.1
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.396	4384	0.4	0.4
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.584	3380	0.3	0.3
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.591	3112	0.3	0.3
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.591	5273	0.5	0.5
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.976	71774	6.2	8.6
D27baR	13β,17α-diacholestane 20R	56.311	44894	3.9	7.7
D27abS	13α,17β-diacholestane 20S	57.295	18763	1.6	2.0
D27abR	13α,17β-diacholestane 20R	57.975	21685	1.9	3.5
S27aaaS	5α,14α,17α-cholestane 20S	60.645	28445	2.5	3.3
S27abbR	5α,14β,17β-cholestane 20R	60.973	27910	2.4	5.2
S27abbS	5α,14β,17β-cholestane 20S	61.254	19616	1.7	3.8
S27aaaR	5α,14α,17α-cholestane 20R	62.074	31250	2.7	4.0
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.139	31650	2.7	3.6
D28baSB	13β,17α-diaergostane 20S (24S)	58.326	31220	2.7	3.8
D28baRA	13β,17α-diaergostane 20R (24R)	59.591	20890	1.8	2.7
D28baRB	13β,17α-diaergostane 20R (24R)	59.732	24038	2.1	2.9
D28abS	13α,17β-diaergostane 20S	60.505	17525	1.5	1.5
D28abRA	13α,17β-diaergostane 20R	61.418	10881	0.9	0.9
D28abRB	13α,17β-diaergostane 20R	61.512	9831	0.9	0.9
C28UNK9	C28 Unknown 9	62.308	12588	1.1	1.1
S28aaaSA	5α,14α,17α-ergostane 20S	63.995	8681	0.8	1.1
S28aaaSB	5α,14α,17α-ergostane 20S	64.112	8787	0.8	1.2
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.487	33274	2.9	6.2
S28abbS	5α,14β,17β-ergostane 20S	64.768	17540	1.5	3.4
S28N21	21-norstigmastane	65.213	4735	0.4	0.4
S28aaaR	5α,14α,17α-ergostane 20R	65.752	31586	2.7	4.3

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218044**
Top Depth:	**5068 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5068 FT**	**File Name:**	**MS030446.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	60.973	149593	13.0	15.9
D29baR	13β,17α-diastigmastane 20R	62.519	94931	8.2	11.7
D29abS	13α,17β-diastigmastane 20S	63.175	35335	3.1	3.1
D29abR	13α,17β-diastigmastane 20R	64.346	51184	4.4	4.4
C29UNK5	C29 Unknown 5	65.096	34430	3.0	3.0
S29aaaS	5α,14α,17α-stigmastane 20S	66.806	50222	4.4	6.2
S29abbR	5α,14β,17β-stigmastane 20R	67.392	48264	4.2	8.0
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.602	50668	4.4	7.8
S29aaaR	5α,14α,17α-stigmastane 20R	68.820	62436	5.4	7.0
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.222	4156	0.4	0.4
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.316	5212	0.5	0.5
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.909	5687	0.5	0.7
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	65.283	1330	0.1	0.1
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.447	1734	0.2	0.2
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.759	3241	0.3	0.3
DC30UNK7	dia-C30 Unknown 7	67.228	2455	0.2	0.2
DC30UNK8	dia-C30 Unknown 8	67.368	637	0.1	0.1
DC30UNK8A	dia-C30 Unknown 8A	67.556	1120	0.1	0.1
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	69.031	3733	0.3	0.4
C30UNK10	C30 Unknown 10	69.195	843	0.1	0.1
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S	69.453	1072	0.1	0.1
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.781	3821	0.3	0.7
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.921	3154	0.3	0.5
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	70.038	1473	0.1	0.1
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R	70.319	991	0.1	0.1
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.327	4403	0.4	0.6
C30UNK14	C30 Unknown 14	71.514	895	0.1	0.1
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R	71.584	381	0.0	0.0
C30UNK16	C30 Unknown 16	72.521	1089	0.094	0.094
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.499	3761	0.3	0.3
DC28UNK16	dia-C28 Unknown 16	57.319	1685	0.1	0.1
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.881	3006	0.3	0.3
DC28UNK3	dia-C28 Unknown 3	58.092	1181	0.1	0.1
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.099	4779	0.4	0.4
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.411	2038	0.2	0.2
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.191	4536	0.4	0.4
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.566	3475	0.3	0.3
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.847	4208	0.4	0.4
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.339	3231	0.3	0.3
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.550	2640	0.2	0.2
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.597	3788	0.3	0.3
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.784	2536	0.2	0.2
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.745	2898	0.3	0.3
XS28aaaR	5α,14α,17α-ergostane 20R	65.728	1186	0.1	0.1

Company:	CONOCOPHILLIPS	**Client ID:**	US132261
Well Name:	KUYANAK 1	**Lab ID:**	CP218044
Top Depth:	5068 FT	**Fraction:**	SATURATE
Bottom Depth:	5068 FT	**File Name:**	MS030446.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	59.544	2051	0.2	0.2
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.755	1463	0.1	0.1
DC29UNK27	dia-C29 Unknown 27	60.317	960	0.1	0.1
DC29UNK28	dia-C29 Unknown 28	60.551	869	0.1	0.1
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R	61.114	1309	0.1	0.1
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R	61.254	1324	0.1	0.1
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.144	2610	0.2	0.2
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.332	3313	0.3	0.3
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.620	2121	0.2	0.2
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.737	1965	0.2	0.2
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.557	2495	0.2	0.2
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.424	1608	0.1	0.1
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.494	1788	0.2	0.2
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.682	2891	0.3	0.3
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	66.056	2412	0.2	0.2
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.314	3075	0.3	0.3
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.665	1123	0.1	0.1
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.806	3200	0.3	0.3
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.970	3008	0.3	0.3
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.275	6685	0.6	0.6
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.375	5954	0.5	0.5
XS29aaaR	5α,14α,17α-stigmastane 20R	68.820	2705	0.2	0.2
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	67.884	2647	0.2	0.2
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.282	10123	0.9	0.9
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.469	2784	0.2	0.2
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.586	1564	0.1	0.1
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	68.891	8439	0.7	0.7
BBDINO	ββ-dino (?)	69.078	8026	0.7	0.7
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	69.359	3949	0.3	0.3
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.781	3190	0.3	0.3
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	70.015	6811	0.6	0.6
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.249	8655	0.8	0.8
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	71.373	4338	0.4	0.4
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane				
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane				
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R				
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane				
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218044**
Top Depth:	**5068 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5068 FT**	**File Name:**	**MS030446.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	70.156	1151	0.1	0.1
PP1	Tetracyclic polyprenoid	70.296	3100	0.3	0.3
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.460	4369	0.4	0.4
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.718	1193	0.1	0.1
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.514	2043	0.2	0.2
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.925	78077	6.8	6.8
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane				
TRITERP14	C30 unknown triterpane				
OLEANOID15A	Oleanoid				
OLEANOID15	Oleanoid				
OLEANOID16	Oleanoid				
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.493	37692	3.3	3.3
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.867	13949	1.2	1.2
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.500	176245	15.3	15.3
TRITERP18	C30 unknown triterpane	69.968	8933	0.8	0.8
OL18a	18α Oleanane				
OL18b	18β Oleanane				
H30ab	17α, 21β-Hopane	71.537	1573149	136.3	367.9
H30N30	30-Norhomohopane	71.772	29254	2.5	2.5
H30TS	18α,17β-Neohopane	72.146	41582	3.6	3.6
H30aa	17α, 21α-Hopane	72.404	51296	4.4	4.4
H30ba	17β, 21α-Hopane (Moretane)	72.708	177787	15.4	50.3
GamA	Gammacerane-A	75.378	9511	0.8	0.4
GamB	Gammacerane-B	75.566	3697	0.3	0.2
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)	64.04	2773	0.24	0.2
B30T1	Bicadinane T1				
B30R	Bicadinane R				
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	30.497	5607	0.5	0.5
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	31.083	4661	0.4	0.4
NORPREG7	Norpregnane-7	31.598	1989	0.2	0.2
NORPREG8_9	Norpregnane-8+Norpregnane-9	32.066	11834	1.0	1.0
NORPREG10	Norpregnane-10	32.394	3478	0.3	0.3
NORPREG11	Norpregnane-11	33.121	5263	0.5	0.5
NORPREG12	Norpregnane-12	33.893	1126	0.1	0.1

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218044**
Top Depth:	**5068 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5068 FT**	**File Name:**	**MS030446.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

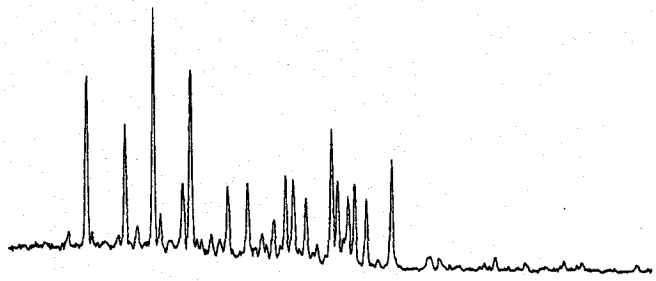
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane				
DesALUP	Des-A-Lupane	45.957	36490	3.2	3.2
DesATARAX	Des-A-Taraxastane				
DesEHOP	Des-E-Hopane	49.354	9729	0.8	0.8
		50.760	243096	21.1	21.1
410.4->218.2: Monounsaturated 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				
H31abS	C31 22S 2α-Methylhopane	71.748	46851	4.1	4.1
H31abR	C31 22R 2α-Methylhopane	74.769	333400	28.9	28.9
H313Mab	C31 3β-Methylhopane	75.121	238025	20.6	20.6
		75.566	31998	2.8	2.8

BASELINE DGSI
ANALYTICAL LABORATORIES

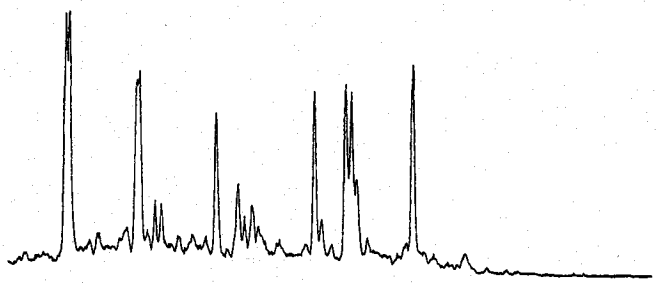
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218045
Basin:	NORTH SLOPE	**Client ID:**	US132262
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.931520	**Top Depth:**	5114 FT
Longitude:	#########	**Bottom Depth:**	5114 FT

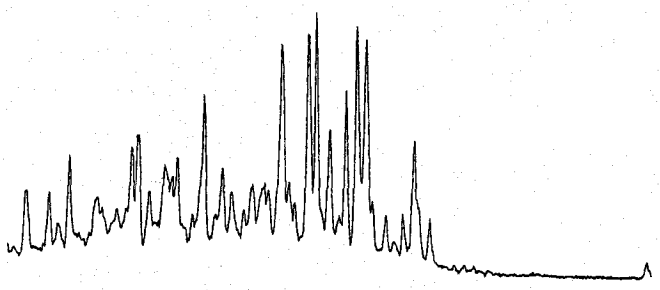
358->217: C26 Steranes MS030447.D



414->217: C30 Steranes



414->231: C30 Methylsteranes



RATIOS (on Area)[1]		Appl[2]	TEV[3]
Steranes			
%27 Steranes	29.1	D	
%28 Steranes	32.0	D	
%29 Steranes	38.9	D	
%27 Diasteranes	36.4	D	
%28 Diasteranes	29.3	D	
%29 Diasteranes	34.3	D	
C30 Sterane Index	0.064	D	
C30 iso/n-propyl sterane index	0.058	A	
C27 αββ/(ααα+αββ)	0.57	M	
C28 αββ/(ααα+αββ)	0.64	M	
C29 αββ/(ααα+αββ)	0.58	M	
C30 αββ/(ααα+αββ)	0.56	M	
C27 S/(S+R)	0.48	M	
C28 S/(S+R)	0.40	M	
C29 S/(S+R)	0.50	M	
C30 S/(S+R)	0.37	M	
Diasteranes/Steranes	0.95		
24-Nordiacholestane ratio (NDR)	0.39	A	
24-Norcholestane ratio (NCR)	0.54	A	
21-Norcholestane ratio	0.12	D/M	
Dinosterane ratio	0.40	A	
4-Methyl sterane ratio	0.07	A	
Terpane Ratios			
Oleanane Index (%)	4.8	A	
DesA Oleanane Index (%)	41.6	A	
Gammacerane Index (%)	0.6	D	
Bicadinane Index (%)	0.2	A/D	
DiaHopane Index (%)	2.1	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:**	US132262
Well Name:	KUYANAK 1	**Lab ID:**	CP218045
Top Depth:	5114 FT	**Fraction:**	SATURATE
Bottom Depth:	5114 FT	**File Name:**	MS030447.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	50.080	1188797	100.0	100.0
358.3->217.2: C26 Desmethylsteranes					
D26N24baS	13β,17α,24-nordiacholestane 20S	51.158	36883	3.1	3.1
D26N24baR	13β,17α,24-nordiacholestane 20R	52.212	27134	2.3	2.3
D26N27baS	13β,17α,27-nordiacholestane 20S	53.032	52755	4.4	4.4
D26N24abS	13α,17β,24-nordiacholestane 20S	53.243	8553	0.7	0.7
D26N24abR	13α,17β,24-nordiacholestane 20R	53.875	20436	1.7	1.7
D26N27baR	13β,17α,27-nordiacholestane 20R	54.110	45803	3.9	3.9
D26N27abS	13α,17β,27-nordiacholestane 20S	55.140	17234	1.5	1.5
D26N27abR	13α,17β,27-nordiacholestane 20R	55.702	18281	1.5	1.5
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.757	19662	1.7	1.7
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.967	21225	1.8	1.8
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.342	15746	1.3	1.3
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	58.068	33026	2.8	2.8
S26N21	21-*norcholestane*	58.232	21461	1.8	1.8
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.420	5435	0.5	0.5
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.537	17231	1.4	1.4
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.701	19091	1.6	1.6
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.732	14992	1.3	1.3
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.732	23804	2.0	2.0
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	55.140	438182	36.9	51.0
D27baR	13β,17α-diacholestane 20R	56.452	276349	23.2	45.8
D27abS	13α,17β-diacholestane 20S	57.412	109532	9.2	11.4
D27abR	13α,17β-diacholestane 20R	58.092	127011	10.7	20.0
S27aaaS	5α,14α,17α-cholestane 20S	60.786	148971	12.5	16.9
S27abbR	5α,14β,17β-cholestane 20R	61.090	143239	12.0	25.8
S27abbS	5α,14β,17β-cholestane 20S	61.395	108271	9.1	20.6
S27aaaR	5α,14α,17α-cholestane 20R	62.191	145659	12.3	18.1
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	58.256	191852	16.1	21.5
D28baSB	13β,17α-diaergostane 20S (24S)	58.467	195649	16.5	23.1
D28baRA	13β,17α-diaergostane 20R (24R)	59.708	134983	11.4	16.7
D28baRB	13β,17α-diaergostane 20R (24R)	59.849	142894	12.0	16.8
D28abS	13α,17β-diaergostane 20S	60.645	104440	8.8	8.8
D28abRA	13α,17β-diaergostane 20R	61.535	64161	5.4	5.4
D28abRB	13α,17β-diaergostane 20R	61.652	64639	5.4	5.4
C28UNK9	C28 Unknown 9	62.402	78993	6.6	6.6
S28aaaSA	5α,14α,17α-ergostane 20S	64.112	49052	4.1	6.2
S28aaaSB	5α,14α,17α-ergostane 20S	64.253	52543	4.4	6.7
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.627	203503	17.1	36.5
S28abbS	5α,14β,17β-ergostane 20S	64.909	110551	9.3	20.7
S28N21	21-norstigmastane	65.354	19079	1.6	1.6
S28aaaR	5α,14α,17α-ergostane 20R	65.892	148139	12.5	19.4

Company:	CONOCOPHILLIPS	**Client ID:**	US132262
Well Name:	KUYANAK 1	**Lab ID:**	CP218045
Top Depth:	5114 FT	**Fraction:**	SATURATE
Bottom Depth:	5114 FT	**File Name:**	MS030447.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	61.114	512459	43.1	52.8
D29baR	13β,17α-diastigmastane 20R	62.660	320510	27.0	38.4
D29abS	13α,17β-diastigmastane 20S	63.292	103793	8.7	8.7
D29abR	13α,17β-diastigmastane 20R	64.487	173918	14.6	14.6
C29UNK5	C29 Unknown 5	65.213	137336	11.6	11.6
S29aaaS	5α,14α,17α-stigmastane 20S	66.923	187412	15.8	22.4
S29abbR	5α,14β,17β-stigmastane 20R	67.509	182683	15.4	29.5
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.720	227311	19.1	34.0
S29aaaR	5α,14α,17α-stigmastane 20R	68.961	209542	17.6	22.7
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-*n*-propylcholestane 20S	63.339	48662	4.1	4.3
D30nPbaSB	13β,17α-dia-24-*n*-propylcholestane 20S	63.433	40828	3.4	3.9
D30nPbaR	13β,17α-dia-24-*n*-propylcholestane 20R	65.049	58750	4.9	7.2
D30nPabSA	13α,17β-dia-24-*n*-propylcholestane 20S	65.424	8211	0.7	0.7
D30nPabSB	13α,17β-dia-24-*n*-propylcholestane 20S	65.564	8562	0.7	0.7
D30nPabR	13α,17β-dia-24-*n*-propylcholestane 20R	66.853	29211	2.5	2.5
DC30UNK7	dia-C30 Unknown 7	67.368	17998	1.5	1.5
DC30UNK8	dia-C30 Unknown 8	67.509	6170	0.5	0.5
DC30UNK8A	dia-C30 Unknown 8A	67.673	12524	1.1	1.1
S30nPaaaS	5α,14α,17α-24-*n*-propylcholestane 20S	69.172	31324	2.6	3.1
C30UNK10	C30 Unknown 10	69.336	7681	0.6	0.6
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S	69.570	3534	0.3	0.3
S30nPabbR	5α,14β,17β-24-*n*-propylcholestane 20R	69.898	36486	3.1	6.1
S30nPabbS	5α,14β,17β-24-*n*-propylcholestane 20S	70.038	31193	2.6	4.6
S30nPbaaR	5β,14α,17α-24-*n*-propylcholestane 20R	70.156	14746	1.2	1.2
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R	70.390	5631	0.5	0.5
S30nPaaaR	5α,14α,17α-24-*n*-propylcholestane 20R	71.444	42479	3.6	5.3
C30UNK14	C30 Unknown 14	71.608	2286	0.2	0.2
S30iPaaaR	5α,14α,17α-24-iso-propylcholestane 20R	71.701	2589	0.2	0.2
C30UNK16	C30 Unknown 16	72.662	6012	0.506	0.506
386.4->231.2: C28 Methylsteranes					
D283MbaS	3β-Methyl-13β,17α-diacholestane 20S	56.639	13339	1.1	1.1
DC28UNK16	dia-C28 Unknown 16	57.412	8433	0.7	0.7
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	58.022	12026	1.0	1.0
DC28UNK3	dia-C28 Unknown 3	58.232	5297	0.4	0.4
DC28UNK17	dia-C28 Unknown 17	58.795	6912	0.6	0.6
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	59.216	29335	2.5	2.5
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.528	13798	1.2	1.2
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.332	21313	1.8	1.8
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.707	20401	1.7	1.7
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.964	20632	1.7	1.7
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.503	18491	1.6	1.6
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.620	15871	1.3	1.3
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.714	20712	1.7	1.7
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.925	15805	1.3	1.3
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.885	16682	1.4	1.4
XS28aaaR	5α,14α,17α-ergostane 20R	65.916	5262	0.4	0.4

Company:	CONOCOPHILLIPS	**Client ID:**	US132262
Well Name:	KUYANAK 1	**Lab ID:**	CP218045
Top Depth:	5114 FT	**Fraction:**	SATURATE
Bottom Depth:	5114 FT	**File Name:**	MS030447.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	59.685	7063	0.6	0.6
D293MbaSB	3β-Methyl-13β,17α-diaergostane 20S	59.872	5819	0.5	0.5
DC29UNK27	dia-C29 Unknown 27	60.434	4573	0.4	0.4
DC29UNK28	dia-C29 Unknown 28	60.669	4298	0.4	0.4
D293MbaRA	3β-Methyl-13β,17α-diaergostane 20R	61.231	3027	0.3	0.3
D293MbaRB	3β-Methyl-13β,17α-diaergostane 20R	61.371	4745	0.4	0.4
D294MbaSA	4α-Methyl-13β,17α-diaergostane 20S	62.285	15629	1.3	1.3
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.472	16189	1.4	1.4
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.737	8215	0.7	0.7
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.854	10136	0.9	0.9
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.651	11291	1.0	1.0
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.518	9482	0.8	0.8
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.635	13858	1.2	1.2
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.752	9822	0.8	0.8
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	66.174	15424	1.3	1.3
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.431	19255	1.6	1.6
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.759	10597	0.9	0.9
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.900	16022	1.3	1.3
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	67.087	24307	2.0	2.0
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.392	44192	3.7	3.7
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.493	26692	2.2	2.2
XS29aaaR	5α,14α,17α-stigmastane 20R	68.938	7805	0.7	0.7
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S	68.001	15051	1.3	1.3
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.375	42642	3.6	3.6
S302MabbR	2α-Methyl-5α,14β,17β-stigmastane 20S + (coelution)	68.563	8778	0.7	0.7
S302MabbS	2α-Methyl-5α,14β,17β-stigmastane 20S	68.703	4455	0.4	0.4
S303MabbR	3β-Methyl-5α,14β,17β-stigmastane 20R	69.008	38856	3.3	3.3
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	69.195	33805	2.8	2.8
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.523	21459	1.8	1.8
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.898	21108	1.8	1.8
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.156	38511	3.2	3.2
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.366	41016	3.5	3.5
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane	70.811	6027	0.5	0.5
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane	71.209	6069	0.5	0.5
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.491	19623	1.7	1.7
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane	71.537	9318	0.8	0.8
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane	71.865	6469	0.5	0.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218045**
Top Depth:	**5114 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5114 FT**	**File Name:**	**MS030447.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	70.296	5456	0.5	0.5
PP1	Tetracyclic polyprenoid	70.437	17199	1.4	1.4
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.577	23154	1.9	1.9
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.858	5899	0.5	0.5
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.631	7317	0.6	0.6
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	64.018	17278	1.5	1.5
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.251	13357	1.1	1.1
TRITERP14	C30 unknown triterpane	67.438	7812	0.7	0.7
OLEANOID15A	Oleanoid	67.790	5546	0.5	0.5
OLEANOID15	Oleanoid	67.907	6141	0.5	0.5
OLEANOID16	Oleanoid	68.188	16933	1.4	1.4
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.610	27354	2.3	2.3
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	69.008	24942	2.1	2.1
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.640	63791	5.4	5.4
TRITERP18	C30 unknown triterpane	70.109	7898	0.7	0.7
OL18a	18α Oleanane	71.233	100898	8.5	8.5
OL18b	18β Oleanane	71.350	47566	4.0	4.0
H30ab	17α, 21β-Hopane	71.654	1097369	92.3	249.2
H30N30	30-Norhomohopane	71.889	43895	3.7	3.7
H30TS	18α,17β-Neohopane	72.263	47878	4.0	4.0
H30aa	17α, 21α-Hopane	72.544	34239	2.9	2.9
H30ba	17β, 21α-Hopane (Moretane)	72.826	90435	7.6	24.8
GamA	Gammacerane-A	75.519	25714	2.2	1.2
GamB	Gammacerane-B	75.706	7205	0.6	0.3
414.2->313.3: Bicadinanes					
B30W	Bicadinane W (*cis,cis,trans*)				
B30T	Bicadinane T (*trans, trans,trans*)	64.16	4585	0.386	0.4
B30T1	Bicadinane T1	64.82	1376	0.116	0.1
B30R	Bicadinane R	65.87	999	0.084	0.1
274.3->203.2: Norpregnanes					
NORPREG1	Norpregnane-1				
NORPREG2	Norpregnane-2				
NORPREG3_4	Norpregnane-3+Norpregnane-4	30.638	5224	0.4	0.4
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	31.223	8566	0.7	0.7
NORPREG7	Norpregnane-7	31.762	4021	0.3	0.3
NORPREG8_9	Norpregnane-8+Norpregnane-9	32.277	20420	1.7	1.7
NORPREG10	Norpregnane-10	32.558	5078	0.4	0.4
NORPREG11	Norpregnane-11	33.284	10390	0.9	0.9
NORPREG12	Norpregnane-12				

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218045**
Top Depth:	**5114 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5114 FT**	**File Name:**	**MS030447.D**

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

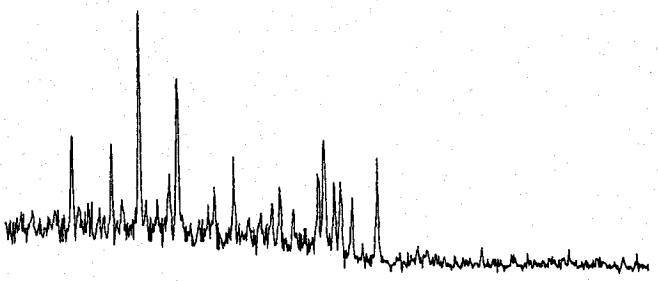
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	46.192	132984	11.2	11.2
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane	49.542	61094	5.1	5.1
DesEHOP	Des-E-Hopane	50.947	186673	15.7	15.7
410.4->218.2: Monounsaturated 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	71.865	48476	4.1	4.1
H31abS	C31 22S 2α-Methylhopane	74.863	108882	9.2	9.2
H31abR	C31 22R 2α-Methylhopane	75.238	86994	7.3	7.3
H313Mab	C31 3β-Methylhopane	75.683	26886	2.3	2.3

BASELINE DGSI ANALYTICAL LABORATORIES

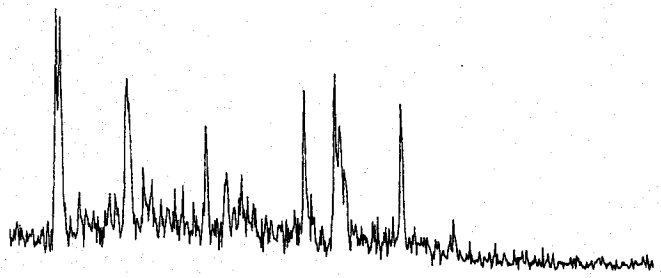
SATURATE GCMSMS

Company:	CONOCOPHILLIPS	**Project #:**	03-473-A
Country:	UNITED STATES	**Lab ID:**	CP218046
Basin:	NORTH SLOPE	**Client ID:**	US132263
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.931520	**Top Depth:**	5400 FT
Longitude:	##########	**Bottom Depth:**	5430 FT

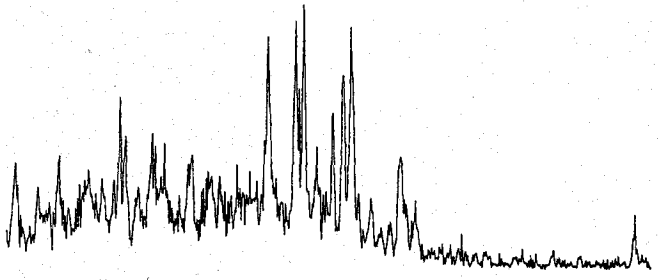
358->217: C26 Steranes MS030442.D



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:**	**US132263**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218046**
Top Depth:	**5400 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5430 FT**	**File Name:**	**MS030442.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	50.877	17338		
D26N24baR	13β,17α,24-nordiacholestane 20R	51.954	15204		
D26N27baS	13β,17α,27-nordiacholestane 20S	52.774	41070		
D26N24abS	13α,17β,24-nordiacholestane 20S	52.962	7968		
D26N24abR	13α,17β,24-nordiacholestane 20R	53.618	14227		
D26N27baR	13β,17α,27-nordiacholestane 20R	53.852	30262		
D26N27abS	13α,17β,27-nordiacholestane 20S	54.883	11392		
D26N27abR	13α,17β,27-nordiacholestane 20R	55.421	12860		
S26N24aaaS	5α,14α,17α,24-norcholestane 20S	56.522	11422		
S26N24abbR	5α,14β,17β,24-norcholestane 20R	56.710	12992		
S26N24abbS	5α,14β,17β,24-norcholestane 20S	57.085	11733		
S26N24aaaR	5α,14α,17α,24-norcholestane 20R	57.787	17639		
S26N21	21-norcholestane	57.975	27409		
S26N27baaR	5β,14α,17α,27-norcholestane 20S	58.139	3083		
S26N27aaaS	5α,14α,17α,27-norcholestane 20S	58.256	14832		
S26N27abbR	5α,14β,17β,27-norcholestane 20R	58.443	15348		
S26N27abbS	5α,14β,17β,27-norcholestane 20S	59.474	12423		
S26N27aaaR	5α,14α,17α,27-norcholestane 20R	59.474	15824		
372.3->217.2: C27 Desmethylsteranes					
D27baS	13β,17α-diacholestane 20S	54.859	285030		
D27baR	13β,17α-diacholestane 20R	56.194	167110		
D27abS	13α,17β-diacholestane 20S	57.178	76510		
D27abR	13α,17β-diacholestane 20R	57.834	82274		
S27aaaS	5α,14α,17α-cholestane 20S	60.528	110519		
S27abbR	5α,14β,17β-cholestane 20R	60.833	99706		
S27abbS	5α,14β,17β-cholestane 20S	61.114	81634		
S27aaaR	5α,14α,17α-cholestane 20R	61.934	132501		
386.4->217.2: C28 Desmethylsteranes					
D28baSA	13β,17α-diaergostane 20S (24S)	57.998	100052		
D28baSB	13β,17α-diaergostane 20S (24S)	58.209	98246		
D28baRA	13β,17α-diaergostane 20R (24R)	59.474	72300		
D28baRB	13β,17α-diaergostane 20R (24R)	59.591	72265		
D28abS	13α,17β-diaergostane 20S	60.387	42666		
D28abRA	13α,17β-diaergostane 20R	61.278	32788		
D28abRB	13α,17β-diaergostane 20R	61.371	31313		
C28UNK9	C28 Unknown 9	62.144	48397		
S28aaaSA	5α,14α,17α-ergostane 20S	63.854	27040		
S28aaaSB	5α,14α,17α-ergostane 20S	63.995	25853		
S28baaR	5β,14α,17α-ergostane 20R				
S28abbR	5α,14β,17β-ergostane 20R	64.346	101620		
S28abbS	5α,14β,17β-ergostane 20S	64.651	62254		
S28N21	21-norstigmastane	65.096	18503		
S28aaaR	5α,14α,17α-ergostane 20R	65.588	88505		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218046**
Top Depth:	**5400 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5430 FT**	**File Name:**	**MS030442.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	60.833	244064		
D29baR	13β,17α-diastigmastane 20R	62.379	169938		
D29abS	13α,17β-diastigmastane 20S	63.035	59208		
D29abR	13α,17β-diastigmastane 20R	64.229	90250		
C29UNK5	C29 Unknown 5	64.955	72867		
S29aaaS	5α,14α,17α-stigmastane 20S	66.665	92714		
S29abbR	5α,14β,17β-stigmastane 20R	67.251	92835		
S29baaR	5β,14α,17α-stigmastane 20R				
S29abbS	5α,14β,17β-stigmastane 20S	67.462	132518		
S29aaaR	5α,14α,17α-stigmastane 20R	68.680	138139		
414.4->217.2: C30 Desmethylsteranes					
D30nPbaSA	13β,17α-dia-24-n-propylcholestane 20S	63.081	16879		
D30nPbaSB	13β,17α-dia-24-n-propylcholestane 20S	63.175	18962		
D30nPbaR	13β,17α-dia-24-n-propylcholestane 20R	64.745	24732		
D30nPabSA	13α,17β-dia-24-n-propylcholestane 20S	65.119	7354		
D30nPabSB	13α,17β-dia-24-n-propylcholestane 20S	65.330	5974		
D30nPabR	13α,17β-dia-24-n-propylcholestane 20R	66.595	10609		
DC30UNK7	dia-C30 Unknown 7	67.087	8589		
DC30UNK8	dia-C30 Unknown 8	67.251	3437		
DC30UNK8A	dia-C30 Unknown 8A	67.438	6082		
S30nPaaaS	5α,14α,17α-24-n-propylcholestane 20S	68.891	13036		
C30UNK10	C30 Unknown 10				
S30iPaaaS	5α,14α,17α-24-iso-propylcholestane 20S				
S30nPabbR	5α,14β,17β-24-n-propylcholestane 20R	69.640	16370		
S30nPabbS	5α,14β,17β-24-n-propylcholestane 20S	69.757	10548		
S30nPbaaR	5β,14α,17α-24-n-propylcholestane 20R	69.851	7385		
S30iPabbR	5α,14β,17β-24-iso-propylcholestane 20R				
S30nPaaaR	5α,14α,17α-24-n-propylcholestane 20R	71.163	13955		
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	56.382	13377		
DC28UNK16	dia-C28 Unknown 16				
D283MbaR	3β-Methyl-13β,17α-diacholestane 20R	57.717	11885		
DC28UNK3	dia-C28 Unknown 3				
DC28UNK17	dia-C28 Unknown 17				
D284MbaS	4α-Methyl-13β,17α-diacholestane 20S	58.959	24554		
D284MbaR	4α-Methyl-13β,17α-diacholestane 20R	60.270	11119		
S283MaaaS	3β-Methyl-5α,14α,17α-cholestane 20S	62.051	15927		
S283MabbR	3β-Methyl-5α,14β,17β-cholestane 20R	62.402	16950		
S283MabbS	3β-Methyl-5α,14β,17β-cholestane 20S	62.730	17626		
S284MaaaS	4α-Methyl-5α,14α,17α-cholestane 20S	63.245	9567		
S284MabbR	4α-Methyl-5α,14β,17β-cholestane 20R	63.362	17338		
S283MaaaR	3β-Methyl-5α,14α,17α-cholestane 20R	63.433	15028		
S284MabbS	4α-Methyl-5α,14β,17β-cholestane 20S	63.667	13571		
S284MaaaR	4α-Methyl-5α,14α,17α-cholestane 20R	64.604	14984		
XS28aaaR	5α,14α,17α-ergostane 20R	65.658	5968		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218046**
Top Depth:	**5400 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5430 FT**	**File Name:**	**MS030442.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	62.215	11350		
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	62.004	12360		
D294MbaSB	4α-Methyl-13β,17α-diaergostane 20S	62.215	8792		
D294MbaRA	4α-Methyl-13β,17α-diaergostane 20R	63.456	6633		
D294MbaRB	4α-Methyl-13β,17α-diaergostane 20R	63.597	9015		
D294MabS	4α-Methyl-13α,17β-diaergostane 20S	64.323	8000		
D294MabRA	4α-Methyl-13α,17β-diaergostane 20R	65.260	6113		
S293MaaaSA_4abRB	3β-Methyl-5α,14α,17α-ergostane 20S + 4a-methyl-13a,17b-diaergostane 20R	65.354	6757		
S293MaaaSB	3β-Methyl-5α,14α,17α-ergostane 20S	65.494	8129		
S293MabbR	3β-Methyl-5α,14β,17β-ergostane 20R	65.869	11698		
S293MabbS	3β-Methyl-5α,14β,17β-ergostane 20S	66.150	10811		
S294MaaaSA	4α-Methyl-5α,14α,17α-ergostane 20S	66.525	6586		
S294MaaaSB	4α-Methyl-5α,14α,17α-ergostane 20S	66.665	9925		
S294MabbR	4α-Methyl-5α,14β,17β-ergostane 20R	66.806	17218		
S294MabbS_3MaaaR	4α-Methyl-5α,14β,17β-ergostane 20S + 3b-Methyl-5a,14a,17a-ergostane 20R	67.134	26132		
S294MaaaR	4α-Methyl-5α,14α,17α-ergostane 20R	68.188	15630		
XS29aaaR	5α,14α,17α-stigmastane 20R	68.680	6037		
414.4->231.2: C30 Methylsteranes					
S302MaaaS	2α-Methyl-5α,14α,17α-stigmastane 20S				
S303MaaaS	3β-Methyl-5α,14α,17α-stigmastane 20S + (coelution)	68.118	23122		
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	68.750	23405		
BBDINO	ββ-dino (?)				
S303MabbS	3b-Methyl-5a,14b,17b-stigmastane 20S + (coelution)	68.938	19656		
S304MaaaS	4α-Methyl-5α,14α,17α-stigmastane 20S	69.242	10386		
S304MabbR	4α-Methyl-5α,14β,17β-stigmastane 20R	69.640	9811		
S304MabbS_2MaaaR	4α-Methyl-5α,14β,17β-stigmastane 20S + 2α-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	69.874	17334		
S303MaaaR	3β-Methyl-5α,14α,17α-stigmastane 20R + (coelution)	70.062	23506		
DS4aSS20R	4α,23S,24S-trimethyl-20R-cholestane	70.530	5596		
DS4aSR20R	4α,23S,24R-trimethyl-20R-cholestane	70.975	3391		
S304MaaaR	4α-Methyl-5α,14α,17α-stigmastane 20R	71.209	13196		
DS4aRR20R	4α,23R,24R-trimethyl-20R-cholestane	71.303	4810		
DS4aRS20R	4α,23R,24S-trimethyl-20R-cholestane	71.561	5863		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218046**
Top Depth:	**5400 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5430 FT**	**File Name:**	**MS030442.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	70.015	3658		
PP1	Tetracyclic polyprenoid	70.156	7640		
PP2_S303PabbR	Tetracyclic polyprenoid+ 3β-propyl-5α,14β,17β-cholestane 20R	70.319	9734		
S303PabbS	3β-Propyl-5α,14β,17β-cholestane 20S	70.577	4948		
S303PaaaR	3β-Propyl-5α,14α,17α-cholestane 20R	71.350	3939		
414.2->191.2: Pentacyclic Triterpenoids					
REARNGHOP	Rearranged hopane	63.784	36363		
OLEANOID13	5(4→3)abeo-3α(H), 5β-Oleanane	67.017	7020		
TRITERP14	C30 unknown triterpane	67.181	6121		
OLEANOID15A	Oleanoid	67.532	3681		
OLEANOID15	Oleanoid	67.696	4721		
OLEANOID16	Oleanoid	67.930	6294		
C30UNKT2	5(4→3)abeo-3β(H)-Oleanane	68.329	15058		
OLEANOID17	3β-methyl-24-nor-1(10→5)abeo-10β(H), 18α-oleanane	68.750	14895		
TRITERP17A	C30 plant terpane				
DH30	Diahopane	69.336	69828		
TRITERP18	C30 unknown triterpane	69.804	5728		
OL18a	18α Oleanane	70.952	34415		
OL18b	18β Oleanane	71.092	20912		
H30ab	17α, 21β-Hopane	71.350	604379		
H30N30	30-Norhomohopane	71.631	42558		
H30TS	18α,17β-Neohopane	72.006	31768		
H30aa	17α, 21α-Hopane	72.263	22982		
H30ba	17β, 21α-Hopane (Moretane)	72.544	47664		
GamA	Gammacerane-A	75.238	18459		
GamB	Gammacerane-B	75.425	5041		
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	37035		
NORPREG5	Norpregnane-5				
NORPREG6	Norpregnane-6	30.966	32347		
NORPREG7	Norpregnane-7				
NORPREG8_9	Norpregnane-8+Norpregnane-9	32.043	84084		
NORPREG10	Norpregnane-10	32.277	28032		
NORPREG11	Norpregnane-11	32.980	32416		
NORPREG12	Norpregnane-12	33.823	11645		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Lab ID:**	**CP218046**
Top Depth:	**5400 FT**	**Fraction:**	**SATURATE**
Bottom Depth:	**5430 FT**	**File Name:**	**MS030442.D**
Acquisition Parameters:	**SAT 0.2UL 1000/1RES 70EV 700UA 250C AR=4E-7MBAR CE=25**		

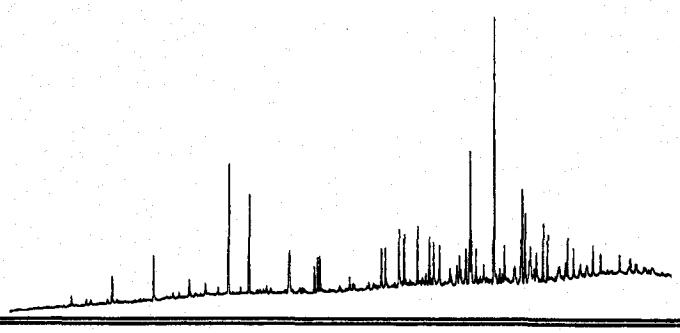
Peak Label	Compound	Retention Time	Area Count	Area ppm	Resp fact Area ppm
330.3->191.2: Tetracyclics					
DesAOL	Des-A-Oleanane	45.864	187156		
DesALUP	Des-A-Lupane				
DesATARAX	Des-A-Taraxastane	49.237	51360		
DesEHOP	Des-E-Hopane	50.643	232836		
410.4->218.2: Monounsaturated C30 Pentacyclic Triterpenoids					
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	71.584	36948		
H31abS	C31 22S 2α-Methylhopane	74.582	67561		
H31abR	C31 22R 2α-Methylhopane	74.957	55490		
H313Mab	C31 3β-Methylhopane	75.378	17735		

BASELINE DGSI ANALYTICAL LABORATORIES

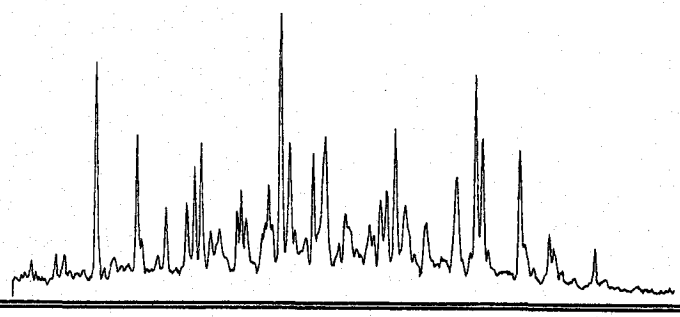
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US136226
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:		**Lab ID:**	CP278537
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	WALAKPA 1	**Geologic Age:**	
Latitude:	71.09915	**Top Depth:**	2078.2
Longitude:	-156.8846	**Bottom Depth:**	2078.2

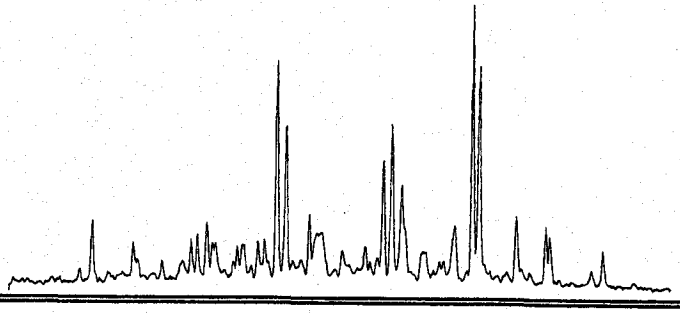
***m/z* 191: Tri- and Pentacyclics** M2050629.D



***m/z* 217: Steranes** M2050629.D



***m/z* 218: ββ Steranes** M2050629.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)	30.8	D	
$\%C_{29}$ αββS (218)	39.0	D	
$\%C_{27}$ αααR (217)	34.3	D	
$\%C_{28}$ αααR (217)	27.1	D	
$\%C_{29}$ αααR (217)	38.5	D	
S/(S+R) (C_{29} ααα) (217)	0.51	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.48	M	0.70 (0.9%)
(C_{27}+C_{28})/(C_{27}+C_{28}+C_{29}) (217)	0.15		
C_{27}/C_{29} (αββS) (218)	0.77	D	
C_{28}/C_{29} (αββS) (218)	0.79	D	
Diaster/ααα Ster (C_{27}) (217)	1.53	M/D	1.00 (1.4%)
C30 Sterane Index (218)	7.02	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane		D/A	
Gammacerane/Hopane	0.11	D	
Norhopane/Hopane	0.52	D	
Bisnorhopane/Hopane	0.13		
Diahopane/Hopane	0.13	M/D	
Moretane/Hopane	0.15	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.05	B	
Ts/(Ts+Tm) trisnorhopanes	0.54	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.35	M	
H32 S/(R+S) Homohopanes	0.57	M	0.60 (0.6%)
H35/H34 Homohopanes	0.73	D	
C24 Tetracyclic/Hopane	0.11	D	
C24 Tetracyclic/C26 Tricyclics	0.39	D	
C23/C24 Tricyclic terpanes	1.43	D	
C19/C23 Tricyclic terpanes	0.11	D	
C26/C25 Tricyclic terpanes	0.81	D	
(C28+C29 Tricyclics)/Ts	3.36	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.28	D	
Tricyclic terpanes/Hopanes	0.75	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	2.68	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:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2** GMC DATA REPORT 3 2 6	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M2050629.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.342	7196	1851	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.534	3865	579	53.7	31.3
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	44.612	582	109	8.1	5.9
191	TR20	C20 tricyclic terpane	47.666	1357	282	18.9	15.2
191	TR21	C21 tricyclic terpane	50.742	2037	464	28.3	25.1
191	TR22	C22 tricyclic terpane	53.450	825	174	11.5	9.4
191	TR23	C23 tricyclic terpane	56.449	5233	1329	72.7	71.8
191	TR24	C24 tricyclic terpane	58.009	3667	1007	51.0	54.4
191	C24DEOL	C24 des-A-oleanane					
191	C24DELUP	C24 des-A-lupane					
191	TR25A	C25 tricyclic terpane (a)	61.086	1886	406	26.2	21.9
191	TR25B	C25 tricyclic terpane (b)	61.172	1704	436	23.7	23.6
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	63.057	1127	272	15.7	14.7
191	TR26A	C26 tricyclic terpane (a)	63.317	1412	355	19.6	19.2
191	TR26B	C26 tricyclic terpane (b)	63.491	1486	371	20.7	20.0
191	TR28A	C28 tricyclic terpane (a)	68.149	1715	400	23.8	21.6
191	TR28B	C28 tricyclic terpane (b)	68.496	1571	404	21.8	21.8
191	TR29A	C29 tricyclic terpane (a)	69.514	2313	592	32.1	32.0
191	TR29B	C29 tricyclic terpane (b)	69.904	2097	535	29.1	28.9
191	TS	Ts 18α(H)-trisnorhopane	70.901	2290	605	31.8	32.7
191	TM	Tm 17α(H)-trisnorhopane	71.768	1923	498	26.7	26.9
191	TR30A	C30 tricyclic terpane (a)	72.093	1612	439	22.4	23.7
191	TR30B	C30 tricyclic terpane (b)	72.526	1772	405	24.6	21.9
191	H28	C28 17α18α21β(H)-bisnorhopane	73.804	1305	198	18.1	10.7
191	NOR25H	C29 Nor-25-hopane	74.129	507	159	7.0	8.6
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.736	5330	1351	74.1	73.0
191	C29TS	C29 Ts 18α(H)-neomohopane	74.888	1850	450	25.7	24.3
191	DH30	C30 17α(H)-diahopane	75.234	1334	358	18.5	19.3
191	M29	C29 normoretane	75.776	853	197	11.9	10.6
191	OL	oleanane					
191	H30	C30 17α(H)-hopane	76.534	10218	2717	142.0	146.8
191	M30	C30 moretane	77.336	1552	389	21.6	21.0
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.593	4226	956	58.7	51.6
191	H31R	C31 22R 17α(H) hopane	78.853	2842	710	39.5	38.4
191	GAM	*gammacerane*	79.178	1140	230	15.8	12.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M2050629.D**

GMC DATA REPORT 3 2 6

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.218	2344	599	32.6	32.4
191	H32R	C32 22R 17α(H) hopane	80.564	1795	479	24.9	25.9
191	H33S	C33 22S 17α(H) hopane	82.081	1693	424	23.5	22.9
191	H33R	C33 22R 17α(H) hopane	82.558	1161	305	16.1	16.5
191	H34S	C34 22S 17α(H) hopane	84.010	1230	312	17.1	16.9
191	H34R	C34 22R 17α(H) hopane	84.595	841	213	11.7	11.5
191	H35S	C35 22S 17α(H) hopane	86.003	777	181	10.8	9.8
191	H35R	C35 22R 17α(H) hopane	86.783	740	146	10.3	7.9
217	S21	C21 sterane	53.861	1714	330	23.8	17.8
217	DIA27S	C27 βα 20S diasterane	65.744	2163	529	30.1	28.6
217	C27R	C27 αα 20R sterane	70.359	1413	303	19.6	16.4
217	C28R	C28 αα 20R sterane	72.764	1117	135	15.5	7.3
217	C29S	C29 αα 20S sterane	73.393	1626	245	22.6	13.2
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.783	2263	491	31.4	26.5
217	C29BBS	C29 ββ 20S sterane	73.934	1477	338	20.5	18.3
217	C29R	C29 αα 20R sterane	74.693	1587	313	22.1	16.9
218	C27ABBR	C27 ββ 20R sterane	69.644	2391	556	33.2	30.0
218	C27ABBS	C27 ββ 20S sterane	69.861	1868	393	26.0	21.2
218	C28ABBR	C28 ββ 20R sterane	71.941	1444	306	20.1	16.5
218	C28ABBS	C28 ββ 20S sterane	72.114	1908	398	26.5	21.5
218	C29ABBR	C29 ββ 20R sterane	73.783	2610	697	36.3	37.7
218	C29ABBS	C29 ββ 20S sterane	73.934	2414	543	33.5	29.3
218	C30ABBR	C30 ββ 20R sterane	75.321	553	141	7.7	7.6
218	C30ABBS	C30 ββ 20S sterane	75.408	467	117	6.5	6.3
259	D27S	C27 βα 20S diasterane	65.744	1256	317	17.5	17.1
259	D27R	C27 βα 20R diasterane	66.589	835	217	11.6	11.7
259	D28SA	C28 βα 20S diasterane a	67.802	619	148	8.6	8.0
259	D28SB	C28 βα 20S diasterane b	67.954	693	164	9.6	8.9
259	D28RA	C28 βα 20R diasterane a	68.712	681	144	9.5	7.8
259	D28RB	C28 βα 20R diasterane b	68.799	360	100	5.0	5.4
259	D29S	C29 βα 20S diasterane	69.666	1552	280	21.6	15.1
259	D29R	C29 βα 20R diasterane	70.619	1331	181	18.5	9.8
259	C30TP1	C30 tetracyclic polyprenoid	75.624	218	54	3.0	2.9
259	C30TP2	C30 tetracyclic polyprenoid	75.733	242	55	3.4	3.0

GMC DATA REPORT 3 2 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M2050629.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.401	50	19	0.7	1.0
135	2MAM	2-Methyladamantane	15.281	24	9	0.3	0.5
135	1EAM	1-Ethyladamantane	17.161	36	12	0.5	0.6
135	2EAM	2-Ethyladamantane	17.997	45	18	0.6	1.0
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane	13.818	49	23	0.7	1.2
149	C14DMAM	1,4-Dimethyladamantane, cis	15.552	44	10	0.6	0.5
149	T14DMAM	1,4-Dimethyladamantane, trans	15.720	46	16	0.6	0.9
149	12DMAM	1,2-Dimethyladamantane	16.472	44	16	0.6	0.9
149	1E3MAM	1-Ethyl-3-methyladamantane	17.495	31	11	0.4	0.6
163	135TMAM	1,3,5-Trimethyladamantane	14.132	28	10	0.4	0.5
163	136TMAM	1,3,6-Trimethyladamantane	15.908	26	10	0.4	0.5
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.660	41	12	0.6	0.6
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.785	38	11	0.5	0.6
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.725	34	12	0.5	0.6
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.889	43	9	0.6	0.5
187	4MDI	4-Methyldiamantane	25.601	76	22	1.1	1.2
187	1MDI	1-Methyldiamantane	27.085	74	15	1.0	0.8
187	3MDI	3-Methyldiamantane	28.150	66	14	0.9	0.8
188	DI	Diamantane	25.142	66	19	0.9	1.0
201	49DMDI	4,9-Dimethyldiamantane	26.019	21	5	0.3	0.3
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.189	50	12	0.7	0.6
201	48DMDI	4,8-Dimethyldiamantane	27.398	54	11	0.8	0.6
201	34DMDI	3,4-Dimethyldiamantane	28.652	68	15	0.9	0.8
215	TMDI	Trimethyldiamantane	27.461	39	10	0.5	0.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2** GMC DATA REPORT 3 2 6	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M2050629.D**

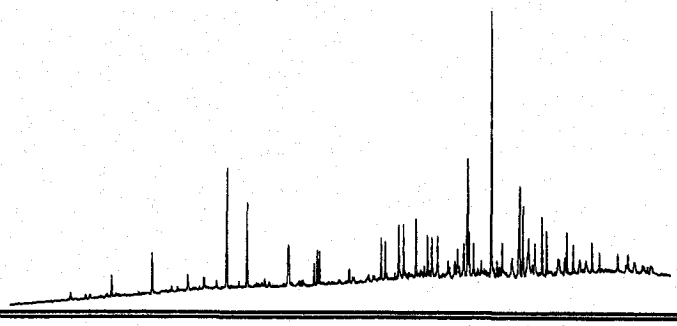
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	30.2	29.5
%C_{28} αββS (218)	30.8	29.8
%C_{29} αββS (218)	39.0	40.7
C_{27}/C_{29} (αββS) (218)	0.77	0.72
C_{28}/C_{29} (αββS) (218)	0.79	0.73
C_{29}/C_{27} (αββS) (218)	1.29	1.38
%C_{27} αααR (217)	34.3	40.3
%C_{28} αααR (217)	27.1	18.0
%C_{29} αααR (217)	38.5	41.7
S/R (C_{29} ααα) (217)	1.02	0.78
S/(S+R) (C_{29} ααα) (217)	0.51	0.44
ββ/(αα+ββ) (C_{29}) (217)	0.54	0.60
αββS/αααR (C_{29}) (217)	0.93	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.15	0.14
Diaster/ααα Ster (C_{27}) (217)	1.53	1.75
Terpenoids		
C19/C23 Tricyclic terpanes	0.11	0.08
C23/C24 Tricyclic terpanes	1.43	1.32
C26/C25 Tricyclic terpanes	0.81	0.86
C24 Tetracyclic/C26 Tricyclics	0.39	0.37
C24 Tetracyclic/Hopane	0.11	0.10
Ts/Tm trisnorhopanes	1.19	1.21
Ts/(Ts+Tm) trisnorhopanes	0.54	0.55
C29Ts/C29 Hopane	0.35	0.33
Bisnorhopane/Hopane	0.13	0.07
Norhopane/Hopane	0.52	0.50
Diahopane/Hopane	0.13	0.13
Oleanane/Hopane		
Gammacerane/Hopane	0.11	0.08
Moretane/(Moretane+Hopane)	0.13	0.13
H32 S/(S+R) Homohopanes	0.57	0.56
H35/H34 Homohopanes	0.73	0.62
[Steranes]/[Hopanes]	0.26	0.22
[Tricyclic terpanes]/[Hopanes]	0.75	0.73
[Tricyclic terpanes]/[Steranes]	2.68	3.27
DIAMONDOID Ratios		
Methyl Adamantane Index	0.68	0.68
Methyl Diamantane Index	0.36	0.43

BASELINE DGSI
ANALYTICAL LABORATORIES

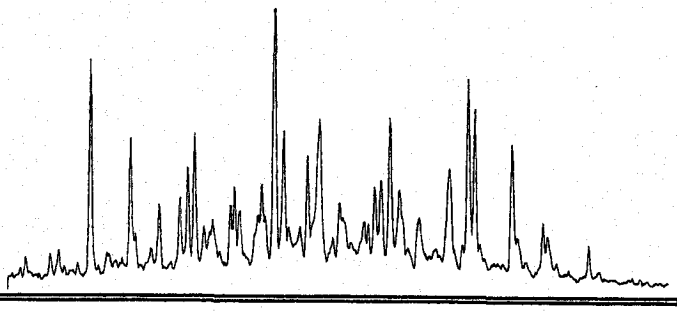
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US136228
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278539
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:	WALAKPA GAS FIELD	**Formation:**	
Well Name:	WALAKPA 2	**Geologic Age:**	
Latitude:	71.05012	**Top Depth:**	2632.5 FT
Longitude:	-156.9527	**Bottom Depth:**	2632.5 FT

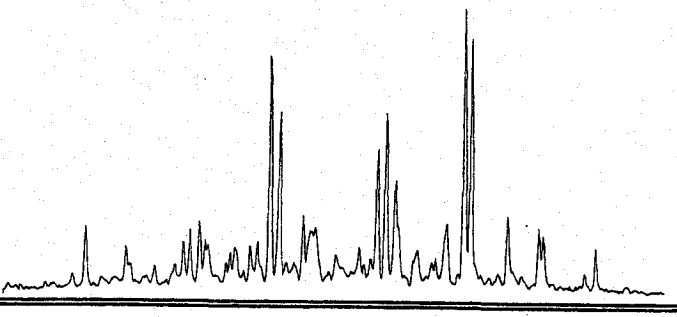
***m/z* 191: Tri- and Pentacyclics** M2050630.D



***m/z* 217: Steranes** M2050630.D



***m/z* 218: ββ Steranes** M2050630.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
%C_{27} αββS (218)	29.6	D	
%C_{28} αββS (218)	31.7	D	
%C_{29} αββS (218)	38.5	D	
%C_{27} aaaR (217)	33.0	D	
%C_{28} aaaR (217)	27.2	D	
%C_{29} aaaR (217)	39.8	D	
S/(S+R) (C_{29} aaa) (217)	0.52	M	0.55 (0.8%)
ββS/(ββS+aaR) (C29) (217)	0.51	M	0.70 (0.9%)
(C_{21}+C_{22})/(C_{21}+C_{28}+C_{29}) (217)	0.16		
C_{27}/C_{29} (αββS) (218)	0.77	D	
C_{28}/C_{29} (αββS) (218)	0.82	D	
Diaster/aaa Ster (C_{27}) (217)	1.76	M/D	1.00 (1.4%)
C30 Sterane Index (218)	7.39	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane		D/A	
Gammacerane/Hopane	0.11	D	
Norhopane/Hopane	0.48	D	
Bisnorhopane/Hopane	0.10		
Diahopane/Hopane	0.13	M/D	
Moretane/Hopane	0.15	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.04	B	
Ts/(Ts+Tm) trisnorhopanes	0.57	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.37	M	
H32 S/(R+S) Homohopanes	0.58	M	0.60 (0.6%)
H35/H34 Homohopanes	0.93	D	
C24 Tetracyclic/Hopane	0.09	D	
C24 Tetracyclic/C26 Tricyclics	0.33	D	
C23/C24 Tricyclic terpanes	1.49	D	
C19/C23 Tricyclic terpanes	0.09	D	
C26/C25 Tricyclic terpanes	0.87	D	
(C28+C29 Tricyclics)/Ts	3.20	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.28	D	
Tricyclic terpanes/Hopanes	0.74	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	2.66	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 326

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M2050630.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.344	7106	1719	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.536	3446	575	48.5	33.5
125	GCAR	γ-carotane					
125	BCAR	β-carotane	88.020	3116	273	43.9	15.9
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	686	120	9.7	7.0
191	TR20	C20 tricyclic terpane	47.665	1773	338	25.0	19.7
191	TR21	C21 tricyclic terpane	50.741	3008	653	42.3	38.0
191	TR22	C22 tricyclic terpane	53.449	1126	242	15.8	14.1
191	TR23	C23 tricyclic terpane	56.450	7931	1843	111.6	107.2
191	TR24	C24 tricyclic terpane	58.010	5340	1300	75.1	75.6
191	C24DEOL	C24 des-A-oleanane					
191	C24DELUP	C24 des-A-lupane					
191	TR25A	C25 tricyclic terpane (a)	61.109	2478	604	34.9	35.1
191	TR25B	C25 tricyclic terpane (b)	61.174	2569	634	36.2	36.9
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	63.059	1430	344	20.1	20.0
191	TR26A	C26 tricyclic terpane (a)	63.319	2193	548	30.9	31.9
191	TR26B	C26 tricyclic terpane (b)	63.492	2186	532	30.8	30.9
191	TR28A	C28 tricyclic terpane (a)	68.172	2363	643	33.3	37.4
191	TR28B	C28 tricyclic terpane (b)	68.497	2233	594	31.4	34.6
191	TR29A	C29 tricyclic terpane (a)	69.516	3608	834	50.8	48.5
191	TR29B	C29 tricyclic terpane (b)	69.906	3182	833	44.8	48.5
191	TS	Ts 18α(H)-trisnorhopane	70.902	3563	902	50.1	52.5
191	TM	Tm 17α(H)-trisnorhopane	71.769	2647	655	37.3	38.1
191	TR30A	C30 tricyclic terpane (a)	72.094	2621	613	36.9	35.7
191	TR30B	C30 tricyclic terpane (b)	72.527	2612	638	36.8	37.1
191	H28	C28 17α18α21β(H)-bisnorhopane	73.806	1564	241	22.0	14.0
191	NOR25H	C29 Nor-25-hopane	74.131	567	163	8.0	9.5
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.738	7388	1811	104.0	105.4
191	C29TS	C29 Ts 18α(H)-neomohopane	74.889	2763	687	38.9	40.0
191	DH30	C30 17α(H)-diahopane	75.236	1987	510	28.0	29.7
191	M29	C29 normoretane	75.778	989	229	13.9	13.3
191	OL	oleanane					
191	H30	C30 17α(H)-hopane	76.536	15487	4088	217.9	237.8
191	M30	C30 moretane	77.338	2282	532	32.1	30.9
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.594	6365	1377	89.6	80.1
191	H31R	C31 22R 17α(H) hopane	78.854	4129	1077	58.1	62.7
191	GAM	gammacerane	79.179	1695	358	23.9	20.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M2050630.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.219	3518	896	49.5	52.1
191	H32R	C32 22R 17α(H) hopane*	80.566	2579	682	36.3	39.7
191	H33S	C33 22S 17α(H) hopane	82.083	2657	664	37.4	38.6
191	H33R	C33 22R 17α(H) hopane	82.559	1759	454	24.8	26.4
191	H34S	C34 22S 17α(H) hopane	84.011	1788	459	25.2	26.7
191	H34R	C34 22R 17α(H) hopane	84.596	1290	304	18.2	17.7
191	H35S	C35 22S 17α(H) hopane	86.004	1360	281	19.1	16.3
191	H35R	C35 22R 17α(H) hopane	86.785	1490	285	21.0	16.6
217	S21	C21 sterane	53.860	2742	519	38.6	30.2
217	DIA27S	C27 βα 20S diasterane	65.746	3309	770	46.6	44.8
217	C27R	C27 αα 20R sterane	70.361	1885	418	26.5	24.3
217	C28R	C28 αα 20R sterane	72.766	1555	191	21.9	11.1
217	C29S	C29 αα 20S sterane	73.394	2447	361	34.4	21.0
217	C29BBR	C29 ββ 20R sterane(+S βαα)	73.784	3420	677	48.1	39.4
217	C29BBS	C29 ββ 20S sterane	73.936	2372	570	33.4	33.2
217	C29R	C29 αα 20R sterane	74.694	2270	448	31.9	26.1
218	C27ABBR	C27 ββ 20R sterane	69.646	3701	821	52.1	47.8
218	C27ABBS	C27 ββ 20S sterane	69.862	2870	626	40.4	36.4
218	C28ABBR	C28 ββ 20R sterane	71.942	2312	491	32.5	28.6
218	C28ABBS	C28 ββ 20S sterane	72.116	3048	619	42.9	36.0
218	C29ABBR	C29 ββ 20R sterane	73.784	4311	988	60.7	57.5
218	C29ABBS	C29 ββ 20S sterane	73.936	3705	880	52.1	51.2
218	C30ABBR	C30 ββ 20R sterane	75.323	841	209	11.8	12.2
218	C30ABBS	C30 ββ 20S sterane	75.409	768	183	10.8	10.6
259	D27S	C27 βα 20S diasterane	65.746	1953	455	27.5	26.5
259	D27R	C27 βα 20R diasterane	66.591	1321	303	18.6	17.6
259	D28SA	C28 βα 20S diasterane a	67.804	1064	234	15.0	13.6
259	D28SB	C28 βα 20S diasterane b	67.956	1213	258	17.1	15.0
259	D28RA	C28 βα 20R diasterane a	68.736	1022	215	14.4	12.5
259	D28RB	C28 βα 20R diasterane b	68.822	614	163	8.6	9.5
259	D29S	C29 βα 20S diasterane	69.667	2686	460	37.8	26.8
259	D29R	C29 βα 20R diasterane	70.621	2184	300	30.7	17.5
259	C30TP1	C30 tetracyclic polyprenoid	75.626	335	75	4.7	4.4
259	C30TP2	C30 tetracyclic polyprenoid	75.734	307	82	4.3	4.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M2050630.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.400	28	11	0.4	0.6
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane					
135	2EAM	2-Ethyladamantane	17.996	30	9	0.4	0.5
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane	13.797	39	10	0.5	0.6
149	C14DMAM	1,4-Dimethyladamantane, cis					
149	T14DMAM	1,4-Dimethyladamantane, trans					
149	12DMAM	1,2-Dimethyladamantane					
149	1E3MAM	1-Ethyl-3-methyladamantane	17.474	18	6	0.3	0.3
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	25.601	81	20	1.1	1.2
187	1MDI	1-Methyldiamantane	27.084	69	13	1.0	0.8
187	3MDI	3-Methyldiamantane	28.171	40	9	0.6	0.5
188	DI	Diamantane	25.141	51	14	0.7	0.8
201	49DMDI	4,9-Dimethyldiamantane	26.019	39	7	0.5	0.4
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.189	39	9	0.5	0.5
201	48DMDI	4,8-Dimethyldiamantane	27.398	51	11	0.7	0.6
201	34DMDI	3,4-Dimethyldiamantane	28.651	61	12	0.9	0.7
215	TMDI	Trimethyldiamantane	27.460	65	11	0.9	0.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M2050630.D**

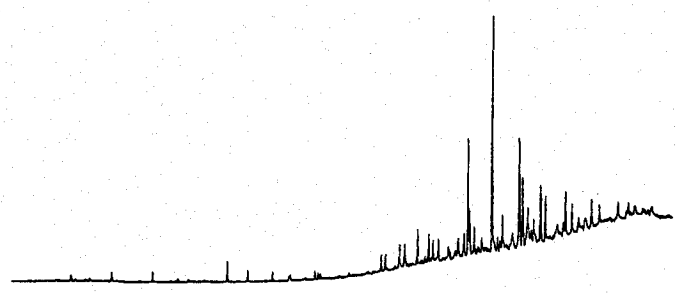
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	29.8	29.5
%C_{28} αββS (218)	31.7	29.1
%C_{29} αββS (218)	38.5	41.4
C_{27}/C_{29} (αββS) (218)	0.77	0.71
C_{28}/C_{29} (αββS) (218)	0.82	0.70
C_{29}/C_{27} (αββS) (218)	1.29	1.41
%C_{27} αααR (217)	33.0	39.5
%C_{28} αααR (217)	27.2	18.1
%C_{29} αααR (217)	39.8	42.4
S/R (C_{29} ααα) (217)	1.08	0.81
S/(S+R) (C_{29} ααα) (217)	0.52	0.45
ββ/(αα+ββ) (C_{29}) (217)	0.55	0.61
αββS/αααR (C_{29}) (217)	1.04	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.16	0.15
Diaster/ααα Ster (C_{27}) (217)	1.76	1.84
Terpenoids		
C19/C23 Tricyclic terpanes	0.09	0.07
C23/C24 Tricyclic terpanes	1.49	1.42
C26/C25 Tricyclic terpanes	0.87	0.87
C24 Tetracyclic/C26 Tricyclics	0.33	0.32
C24 Tetracyclic/Hopane	0.09	0.08
Ts/Tm trisnorhopanes	1.35	1.38
Ts/(Ts+Tm) trisnorhopanes	0.57	0.58
C29Ts/C29 Hopane	0.37	0.38
Bisnorhopane/Hopane	0.10	0.06
Norhopane/Hopane	0.48	0.44
Diahopane/Hopane	0.13	0.12
Oleanane/Hopane		
Gammacerane/Hopane	0.11	0.09
Moretane/(Moretane+Hopane)	0.13	0.12
H32 S/(S+R) Homohopanes	0.58	0.57
H35/H34 Homohopanes	0.93	0.74
[Steranes]/[Hopanes]	0.26	0.22
[Tricyclic terpanes]/[Hopanes]	0.74	0.71
[Tricyclic terpanes]/[Steranes]	2.66	3.19
DIAMONDOID Ratios		
Methyl Adamantane Index	1.00	1.00
Methyl Diamantane Index	0.43	0.48

BASELINE DGSI
ANALYTICAL LABORATORIES

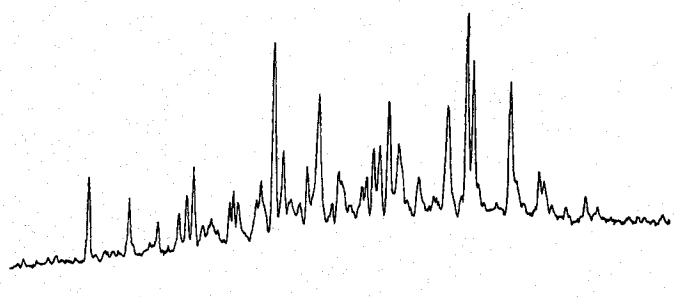
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132260
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218043
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	4560 FT
Longitude:	-156.0647	**Bottom Depth:**	4630 FT

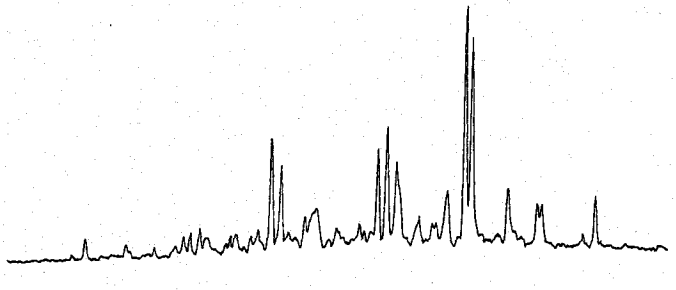
***m/z* 191: Tri- and Pentacyclics** M2031227.D



***m/z* 217: Steranes** M2031227.D



***m/z* 218: ββ Steranes** M2031227.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	20.6	D	
$\%C_{28}$ αββS (218)	30.8	D	
$\%C_{29}$ αββS (218)	48.6	D	
$\%C_{27}$ αααR (217)	24.8	D	
$\%C_{28}$ αααR (217)	19.0	D	
$\%C_{29}$ αααR (217)	56.2	D	
S/(S+R) (C_{29} ααα) (217)	0.46	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.49	M	0.70 (0.9%)
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.06		
C_{27}/C_{29} (αββS) (218)	0.42	D	
C_{28}/C_{29} (αββS) (218)	0.63	D	
Diaster/ααα Ster (C_{27}) (217)	0.96	M/D	1.00 (1.4%)
C30 Sterane Index (218)	8.27	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane		D/A	
Gammacerane/Hopane	0.07	D	
Norhopane/Hopane	0.46	D	
Bisnorhopane/Hopane	0.06		
Diahopane/Hopane	0.11	M/D	
Moretane/Hopane	0.15	M	0.05 (0.7%)
25-*nor*-hopane/hopane		B	
Ts/(Ts+Tm) trisnorhopanes	0.56	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.42	M	
H32 S/(R+S) Homohopanes	0.57	M	0.60 (0.6%)
H35/H34 Homohopanes	0.78	D	
C24 Tetracyclic/Hopane	0.04	D	
C24 Tetracyclic/C26 Tricyclics	0.65	D	
C23/C24 Tricyclic terpanes	1.90	D	
C19/C23 Tricyclic terpanes	0.48	D	
C26/C25 Tricyclic terpanes	1.18	D	
(C28+C29 Tricyclics)/Ts	2.26	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.15	D	
Tricyclic terpanes/Hopanes	0.21	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	1.39	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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M2031227.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.257	4739	1178	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.449	1325	232	28.0	19.7
125	GCAR	γ-carotane					
125	BCAR	β-carotane	87.911	1556	126	32.8	10.7
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	44.524	374	59	7.9	5.0
191	TR20	C20 tricyclic terpane	47.579	435	91	9.2	7.7
191	TR21	C21 tricyclic terpane	50.655	378	101	8.0	8.6
191	TR22	C22 tricyclic terpane	53.362	143	31	3.0	2.6
191	TR23	C23 tricyclic terpane	56.364	779	204	16.4	17.3
191	TR24	C24 tricyclic terpane	57.924	411	114	8.7	9.7
191	C24DEOL	C24 des-A-oleanane					
191	C24DELUP	C24 des-A-lupane	59.787	316	90	6.7	7.6
191	TR25A	C25 tricyclic terpane (a)	61.022	306	53	6.5	4.5
191	TR25B	C25 tricyclic terpane (b)	61.087	173	58	3.7	4.9
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.972	369	87	7.8	7.4
191	TR26A	C26 tricyclic terpane (a)	63.232	302	65	6.4	5.5
191	TR26B	C26 tricyclic terpane (b)	63.406	265	59	5.6	5.0
191	TR28A	C28 tricyclic terpane (a)	68.086	725	166	15.3	14.1
191	TR28B	C28 tricyclic terpane (b)	68.411	644	163	13.6	13.8
191	TR29A	C29 tricyclic terpane (a)	69.451	959	230	20.2	19.5
191	TR29B	C29 tricyclic terpane (b)	69.841	989	223	20.9	18.9
191	TS	Ts 18α(H)-trisnorhopane	70.816	1469	354	31.0	30.1
191	TM	Tm 17α(H)-trisnorhopane	71.704	1145	279	24.2	23.7
191	TR30A	C30 tricyclic terpane (a)	72.029	993	207	21.0	17.6
191	TR30B	C30 tricyclic terpane (b)	72.441	1002	211	21.1	17.9
191	H28	C28 17α18α21β(H)-bisnorhopane	73.741	579	80	12.2	6.8
191	NOR25H	C29 Nor-25-hopane					
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.673	4787	1154	101.0	98.0
191	C29TS	C29 Ts 18α(H)-neomohopane	74.803	2033	450	42.9	38.2
191	DH30	C30 17α(H)-diahopane	75.149	1135	272	24.0	23.1
191	M29	C29 normoretane	75.713	549	147	11.6	12.5
191	OL	oleanane					
191	H30	C30 17α(H)-hopane	76.471	10390	2325	219.2	197.4
191	M30	C30 moretane	77.273	1571	356	33.2	30.2
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.529	5074	1060	107.1	90.0
191	H31R	C31 22R 17α(H) hopane	78.789	3153	663	66.5	56.3
191	GAM	gammacerane	79.115	729	181	15.4	15.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M2031227.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.155	2597	554	54.8	47.0
191	H32R	C32 22R 17α(H) hopane	80.501	1967	447	41.5	37.9
191	H33S	C33 22S 17α(H) hopane	82.018	1954	428	41.2	36.3
191	H33R	C33 22R 17α(H) hopane	82.495	1200	285	25.3	24.2
191	H34S	C34 22S 17α(H) hopane	83.946	1370	280	28.9	23.8
191	H34R	C34 22R 17α(H) hopane	84.531	883	189	18.6	16.0
191	H35S	C35 22S 17α(H) hopane	85.918	1000	168	21.1	14.3
191	H35R	C35 22R 17α(H) hopane	86.720	748	140	15.8	11.9
217	S21	C21 sterane	53.774	355	70	7.5	5.9
217	DIA27S	C27 βα 20S diasterane	65.659	510	128	10.8	10.9
217	C27R	C27 αα 20R sterane	70.274	530	98	11.2	8.3
217	C28R	C28 αα 20R sterane	72.679	406	59	8.6	5.0
217	C29S	C29 αα 20S sterane	73.308	1039	166	21.9	14.1
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.719	1537	307	32.4	26.1
217	C29BBS	C29 ββ 20S sterane	73.849	1148	235	24.2	19.9
217	C29R	C29 αα 20R sterane	74.629	1201	202	25.3	17.1
218	C27ABBR	C27 ββ 20R sterane	69.559	1037	207	21.9	17.6
218	C27ABBS	C27 ββ 20S sterane	69.776	748	159	15.8	13.5
218	C28ABBR	C28 ββ 20R sterane	71.856	872	180	18.4	15.3
218	C28ABBS	C28 ββ 20S sterane	72.051	1122	219	23.7	18.6
218	C29ABBR	C29 ββ 20R sterane	73.719	1953	434	41.2	36.8
218	C29ABBS	C29 ββ 20S sterane	73.849	1768	378	37.3	32.1
218	C30ABBR	C30 ββ 20R sterane	75.236	412	74	8.7	6.3
218	C30ABBS	C30 ββ 20S sterane	75.344	328	74	6.9	6.3
259	D27S	C27 βα 20S diasterane	65.659	311	76	6.6	6.5
259	D27R	C27 βα 20R diasterane	66.504	234	54	4.9	4.6
259	D28SA	C28 βα 20S diasterane a	67.718	237	49	5.0	4.2
259	D28SB	C28 βα 20S diasterane b	67.869	290	62	6.1	5.3
259	D28RA	C28 βα 20R diasterane a	68.649	205	46	4.3	3.9
259	D28RB	C28 βα 20R diasterane b	68.714	150	41	3.2	3.5
259	D29S	C29 βα 20S diasterane	69.581	867	152	18.3	12.9
259	D29R	C29 βα 20R diasterane	70.534	759	109	16.0	9.3
259	C30TP1	C30 tetracyclic polyprenoid	75.561	174	39	3.7	3.3
259	C30TP2	C30 tetracyclic polyprenoid	75.648	177	42	3.7	3.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M2031227.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.400	182	76	3.8	6.5
135	2MAM	2-Methyladamantane	15.259	138	69	2.9	5.9
135	1EAM	1-Ethyladamantane	17.140	103	41	2.2	3.5
135	2EAM	2-Ethyladamantane	17.975	233	79	4.9	6.7
136	AM	Adamantane	12.899	55	18	1.2	1.5
149	13DMAM	1,3-Dimethyladamantane	13.818	186	65	3.9	5.5
149	C14DMAM	1,4-Dimethyladamantane, cis	15.552	163	70	3.4	5.9
149	T14DMAM	1,4-Dimethyladamantane, trans	15.698	157	60	3.3	5.1
149	12DMAM	1,2-Dimethyladamantane	16.450	178	79	3.8	6.7
149	1E3MAM	1-Ethyl-3-methyladamantane	17.474	153	61	3.2	5.2
163	135TMAM	1,3,5-Trimethyladamantane	14.110	70	29	1.5	2.5
163	136TMAM	1,3,6-Trimethyladamantane	15.886	122	45	2.6	3.8
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.638	130	53	2.7	4.5
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.784	142	54	3.0	4.6
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.704	134	51	2.8	4.3
177	1357TMAM	1,3,5,7-Tetramethyladamantane	14.340	18	9	0.4	0.8
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.868	109	36	2.3	3.1
187	4MDI	4-Methyldiamantane	25.559	137	40	2.9	3.4
187	1MDI	1-Methyldiamantane	27.042	110	25	2.3	2.1
187	3MDI	3-Methyldiamantane	28.108	94	21	2.0	1.8
188	DI	Diamantane	25.099	102	28	2.2	2.4
201	49DMDI	4,9-Dimethyldiamantane	25.977	59	13	1.2	1.1
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.126	74	14	1.6	1.2
201	48DMDI	4,8-Dimethyldiamantane	27.356	86	20	1.8	1.7
201	34DMDI	3,4-Dimethyldiamantane	28.609	117	26	2.5	2.2
215	TMDI	Trimethyldiamantane	27.418	75	17	1.6	1.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M2031227.D**

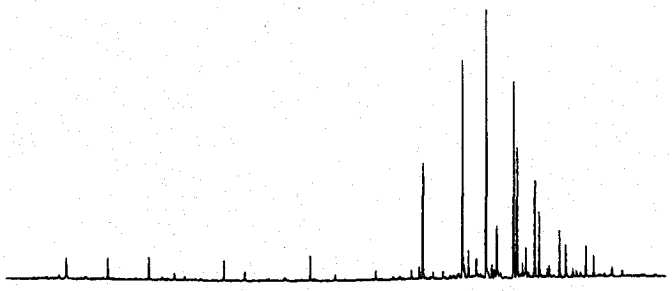
Miscellaneous Ratios	By Areas	By Heights
Steroids		
$\%C_{27}$ αββS (218)	20.6	21.0
$\%C_{28}$ αββS (218)	30.8	29.0
$\%C_{29}$ αββS (218)	48.6	50.0
C_{27}/C_{29} (αββS) (218)	0.42	0.42
C_{28}/C_{29} (αββS) (218)	0.63	0.58
C_{29}/C_{27} (αββS) (218)	2.36	2.38
$\%C_{27}$ αααR (217)	24.8	27.3
$\%C_{28}$ αααR (217)	19.0	16.4
$\%C_{29}$ αααR (217)	56.2	56.3
S/R (C_{29} ααα) (217)	0.87	0.82
S/(S+R) (C_{29} ααα) (217)	0.46	0.45
ββ/(αα+ββ) (C_{29}) (217)	0.55	0.60
αββS/αααR (C_{29}) (217)	0.96	
$(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29})$ (217)	0.06	0.06
Diaster/ααα Ster (C_{27}) (217)	0.96	1.31
Terpenoids		
C19/C23 Tricyclic terpanes	0.48	0.29
C23/C24 Tricyclic terpanes	1.90	1.79
C26/C25 Tricyclic terpanes	1.18	1.12
C24 Tetracyclic/C26 Tricyclics	0.65	0.70
C24 Tetracyclic/Hopane	0.04	0.04
Ts/Tm trisnorhopanes	1.28	1.27
Ts/(Ts+Tm) trisnorhopanes	0.56	0.56
C29Ts/C29 Hopane	0.42	0.39
Bisnorhopane/Hopane	0.06	0.03
Norhopane/Hopane	0.46	0.50
Diahopane/Hopane	0.11	0.12
Oleanane/Hopane		
Gammacerane/Hopane	0.07	0.08
Moretane/(Moretane+Hopane)	0.13	0.13
H32 S/(S+R) Homohopanes	0.57	0.55
H35/H34 Homohopanes	0.78	0.66
[Steranes]/[Hopanes]	0.15	0.13
[Tricyclic terpanes]/[Hopanes]	0.21	0.22
[Tricyclic terpanes]/[Steranes]	1.39	1.70
DIAMONDOID Ratios		
Methyl Adamantane Index	0.57	0.52
Methyl Diamantane Index	0.40	0.47

BASELINE DGSI
ANALYTICAL LABORATORIES

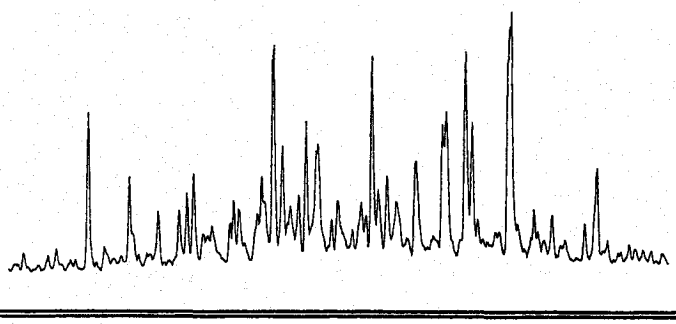
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132261
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218044
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5068.4 FT
Longitude:	-156.0647	**Bottom Depth:**	5068.4 FT

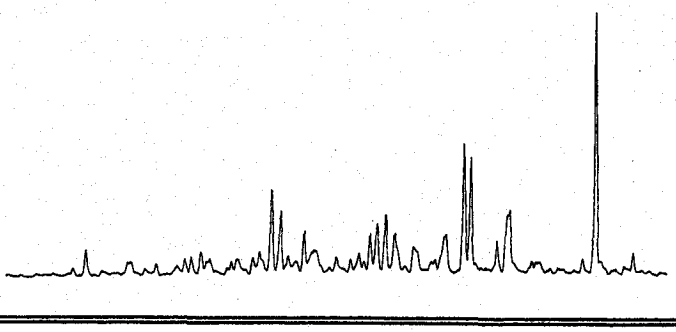
***m/z* 191: Tri- and Pentacyclics** M2031222.D



***m/z* 217: Steranes** M2031222.D



***m/z* 218: ββ Steranes** M2031222.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
%C_{27} αββS (218)	27.2	D	
%C_{28} αββS (218)	25.8	D	
%C_{29} αββS (218)	47.0	D	
%C_{27} αααR (217)	17.5	D	
%C_{28} αααR (217)	22.7	D	
%C_{29} αααR (217)	59.8	D	
S/(S+R) (C_{29} ααα) (217)	0.27	M	0.55 (0.8%)
ββS/(ββS+ααR) (C29) (217)	0.24	M	0.70 (0.9%)
(C_{21}+C_{22})/(C_{21}+C_{28}+C_{29}) (217)	0.55		
C_{27}/C_{29} (αββS) (218)	0.58	D	
C_{28}/C_{29} (αββS) (218)	0.55	D	
Diaster/ααα Ster (C_{27}) (217)	1.19	M/D	1.00 (1.4%)
C30 Sterane Index (218)	5.91	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.01	D/A	
Gammacerane/Hopane	0.01	D	
Norhopane/Hopane	0.76	D	
Bisnorhopane/Hopane	0.02		
Diahopane/Hopane	0.10	M/D	
Moretane/Hopane	0.20	M	0.05 (0.7%)
25-nor-hopane/hopane		B	
Ts/(Ts+Tm) trisnorhopanes	0.08	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.06	M	
H32 S/(R+S) Homohopanes	0.59	M	0.60 (0.6%)
H35/H34 Homohopanes	0.34	D	
C24 Tetracyclic/Hopane	0.10	D	
C24 Tetracyclic/C26 Tricyclics	5.80	D	
C23/C24 Tricyclic terpanes	2.19	D	
C19/C23 Tricyclic terpanes	1.30	D	
C26/C25 Tricyclic terpanes	0.74	D	
(C28+C29 Tricyclics)/Ts	0.95	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.03	D	
Tricyclic terpanes/Hopanes	0.10	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	3.98	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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M2031222.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.279	19603	5342	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.471	7563	1803	38.6	33.8
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	44.567	12949	2711	66.1	50.7
191	TR20	C20 tricyclic terpane	47.622	12581	2789	64.2	52.2
191	TR21	C21 tricyclic terpane	50.698	10887	2844	55.5	53.2
191	TR22	C22 tricyclic terpane	53.405	2099	467	10.7	8.7
191	TR23	C23 tricyclic terpane	56.385	9928	2539	50.6	47.5
191	TR24	C24 tricyclic terpane	57.945	4527	1178	23.1	22.1
191	C24DEOL	C24 des-A-oleanane	59.570	654	142	3.3	2.7
191	C24DELUP	C24 des-A-lupane	59.809	992	283	5.1	5.3
191	TR25A	C25 tricyclic terpane (a)	61.044	1543	365	7.9	6.8
191	TR25B	C25 tricyclic terpane (b)	61.109	1416	389	7.2	7.3
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	63.015	12744	3202	65.0	59.9
191	TR26A	C26 tricyclic terpane (a)	63.254	1173	285	6.0	5.3
191	TR26B	C26 tricyclic terpane (b)	63.427	1023	238	5.2	4.5
191	TR28A	C28 tricyclic terpane (a)	68.107	225	569	1.1	10.7
191	TR28B	C28 tricyclic terpane (b)	68.432	862	190	4.4	3.6
191	TR29A	C29 tricyclic terpane (a)	69.451	1743	407	8.9	7.6
191	TR29B	C29 tricyclic terpane (b)	69.884	1408	237	7.2	4.4
191	TS	Ts 18α(H)-trisnorhopane	70.837	4467	1142	22.8	21.4
191	TM	Tm 17α(H)-trisnorhopane	71.726	54753	14801	279.3	277.1
191	TR30A	C30 tricyclic terpane (a)	72.029	842	221	4.3	4.1
191	TR30B	C30 tricyclic terpane (b)	72.462	535	244	2.7	4.6
191	H28	C28 17α18α21β(H)-bisnorhopane	73.784	2453	483	12.5	9.0
191	NOR25H	C29 Nor-25-hopane					
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.694	101334	27861	516.9	521.5
191	C29TS	C29 Ts 18α(H)-normeohopane	74.824	6309	1702	32.2	31.9
191	DH30	C30 17α(H)-diahopane	75.171	13204	3536	67.4	66.2
191	M29	C29 normoretane	75.734	9743	2419	49.7	45.3
191	OL	oleanane	76.211	1603	374	8.2	7.0
191	H30	C30 17α(H)-hopane	76.492	133298	34297	680.0	642.0
191	M30	C30 moretane	77.294	26220	6640	133.8	124.3
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.551	89447	25138	456.3	470.6
191	H31R	C31 22R 17α(H) hopane	78.789	64698	16618	330.0	311.1
191	GAM	gammacerane	79.092	1478	492	7.5	9.2

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M2031222.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.154	43661	12371	222.7	231.6
191	H32R	C32 22R 17α(H) hopane	80.501	30908	8353	157.7	156.6
191	H33S	C33 22S 17α(H) hopane	82.018	22422	5942	114.4	111.2
191	H33R	C33 22R 17α(H) hopane	82.494	15207	4160	77.6	77.9
191	H34S	C34 22S 17α(H) hopane	83.946	15820	3949	80.7	73.9
191	H34R	C34 22R 17α(H) hopane	84.531	10236	2643	52.2	49.5
191	H35S	C35 22S 17α(H) hopane	85.939	5222	1189	26.6	22.3
191	H35R	C35 22R 17α(H) hopane	86.719	3709	802	18.9	15.0
217	S21	C21 sterane	53.795	8765	1705	44.7	31.9
217	DIA27S	C27 βα 20S diasterane	65.660	1712	437	8.7	8.2
217	C27R	C27 αα 20R sterane	70.296	1433	368	7.3	6.9
217	C28R	C28 αα 20R sterane	72.679	1864	265	9.5	5.0
217	C29S	C29 αα 20S sterane	73.329	1846	396	9.4	7.4
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.719	2708	563	13.8	10.5
217	C29BBS	C29 ββ 20S sterane	73.871	1548	367	7.9	6.9
217	C29R	C29 αα 20R sterane	74.694	4912	676	25.1	12.7
218	C27ABBR	C27 ββ 20R sterane	69.581	1792	413	9.1	7.7
218	C27ABBS	C27 ββ 20S sterane	69.797	1318	307	6.7	5.7
218	C28ABBR	C28 ββ 20R sterane	71.877	1101	236	5.6	4.4
218	C28ABBS	C28 ββ 20S sterane	72.051	1246	284	6.4	5.3
218	C29ABBR	C29 ββ 20R sterane	73.719	2815	655	14.4	12.3
218	C29ABBS	C29 ββ 20S sterane	73.871	2274	587	11.6	11.0
218	C30ABBR	C30 ββ 20R sterane	75.257	192	59	1.0	1.1
218	C30ABBS	C30 ββ 20S sterane	75.322	304	58	1.6	1.1
259	D27S	C27 βα 20S diasterane	65.680	1023	252	5.2	4.7
259	D27R	C27 βα 20R diasterane	68.525	679	159	3.5	3.0
259	D28SA	C28 βα 20S diasterane a	67.739	443	111	2.3	2.1
259	D28SB	C28 βα 20S diasterane b	67.890	508	124	2.6	2.3
259	D28RA	C28 βα 20R diasterane a	68.670	368	84	1.9	1.6
259	D28RB	C28 βα 20R diasterane b	68.735	238	67	1.2	1.3
259	D29S	C29 βα 20S diasterane	69.602	1450	286	7.4	5.4
259	D29R	C29 βα 20R diasterane	70.556	1197	166	6.1	3.1
259	C30TP1	C30 tetracyclic polyprenoid	75.561	683	161	3.5	3.0
259	C30TP2	C30 tetracyclic polyprenoid	75.669	330	90	1.7	1.7

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M2031222.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.423	22464	9252	114.6	173.2
135	2MAM	2-Methyladamantane	15.283	18612	6119	94.9	114.5
135	1EAM	1-Ethyladamantane	17.184	15854	5150	80.9	96.4
135	2EAM	2-Ethyladamantane	18.020	49272	13839	251.3	259.1
136	AM	Adamantane	12.922	3268	1110	16.7	20.8
149	13DMAM	1,3-Dimethyladamantane	13.841	37507	15458	191.3	289.4
149	C14DMAM	1,4-Dimethyladamantane, cis	15.596	22700	7214	115.8	135.0
149	T14DMAM	1,4-Dimethyladamantane, trans	15.742	22884	6678	116.7	125.0
149	12DMAM	1,2-Dimethyladamantane	16.495	22967	8608	117.2	161.1
149	1E3MAM	1-Ethyl-3-methyladamantane	17.518	36584	13370	186.6	250.3
163	135TMAM	1,3,5-Trimethyladamantane	14.155	27113	10013	138.3	187.4
163	136TMAM	1,3,6-Trimethyladamantane	15.951	22871	7833	116.7	146.6
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.683	20036	6688	102.2	125.2
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.829	23219	7295	118.4	136.6
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.748	37332	12888	190.4	241.3
177	1357TMAM	1,3,5,7-Tetramethyladamantane	14.385	4227	1465	21.6	27.4
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.933	24457	9105	124.8	170.4
187	4MDI	4-Methyldiamantane	25.624	10398	2464	53.0	46.1
187	1MDI	1-Methyldiamantane	27.128	7531	1590	38.4	29.8
187	3MDI	3-Methyldiamantane	28.194	6324	1419	32.3	26.6
188	DI	Diamantane	25.165	9117	2242	46.5	42.0
201	49DMDI	4,9-Dimethyldiamantane	26.063	3739	844	19.1	15.8
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.233	4198	887	21.4	16.6
201	48DMDI	4,8-Dimethyldiamantane	27.442	4982	1104	25.4	20.7
201	34DMDI	3,4-Dimethyldiamantane	28.695	7652	1400	39.0	26.2
215	TMDI	Trimethyldiamantane	27.505	3921	891	20.0	16.7

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M2031222.D**

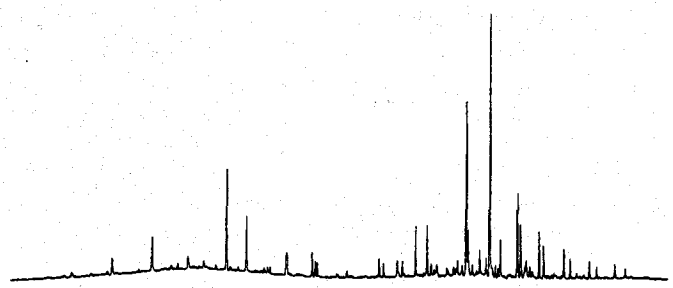
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	27.2	26.1
%C_{28} αββS (218)	25.8	24.1
%C_{29} αββS (218)	47.0	49.8
C_{27}/C_{29} (αββS) (218)	0.58	0.52
C_{28}/C_{29} (αββS) (218)	0.55	0.48
C_{29}/C_{27} (αββS) (218)	1.73	1.91
%C_{27} ααα R (217)	17.5	28.1
%C_{28} ααα R (217)	22.7	20.2
%C_{29} ααα R (217)	59.8	51.6
S/R (C_{29} ααα) (217)	0.38	0.59
S/(S+R) (C_{29} ααα) (217)	0.27	0.37
ββ/(αα+ββ) (C_{29}) (217)	0.39	0.46
αββS/αααR (C_{29}) (217)	0.92	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.55	0.56
Diaster/ααα Ster (C_{27}) (217)	1.19	1.19
Terpenoids		
C19/C23 Tricyclic terpanes	1.30	1.07
C23/C24 Tricyclic terpanes	2.19	2.16
C26/C25 Tricyclic terpanes	0.74	0.69
C24 Tetracyclic/C26 Tricyclics	5.80	6.12
C24 Tetracyclic/Hopane	0.10	0.09
Ts/Tm trisnorhopanes	0.08	0.08
Ts/(Ts+Tm) trisnorhopanes	0.08	0.07
C29Ts/C29 Hopane	0.06	0.06
Bisnorhopane/Hopane	0.02	0.01
Norhopane/Hopane	0.76	0.81
Diahopane/Hopane	0.10	0.10
Oleanane/Hopane	0.01	0.01
Gammacerane/Hopane	0.01	0.01
Moretane/(Moretane+Hopane)	0.16	0.16
H32 S/(S+R) Homohopanes	0.59	0.60
H35/H34 Homohopanes	0.34	0.30
[Steranes]/[Hopanes]	0.03	0.02
[Tricyclic terpanes]/[Hopanes]	0.10	0.09
[Tricyclic terpanes]/[Steranes]	3.98	5.10
DIAMONDOID Ratios		
Methyl Adamantane Index	0.55	0.60
Methyl Diamantane Index	0.43	0.45

BASELINE DGSI ANALYTICAL LABORATORIES

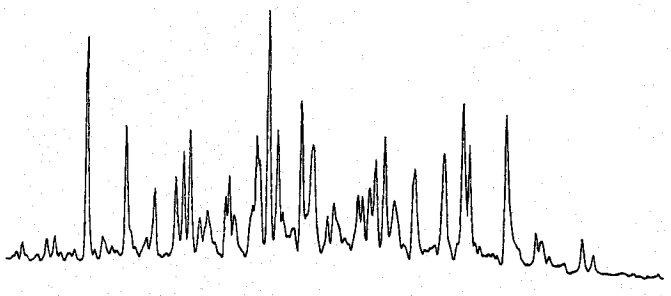
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132262
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218045
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5113.6 FT
Longitude:	-156.0647	**Bottom Depth:**	5113.6 FT

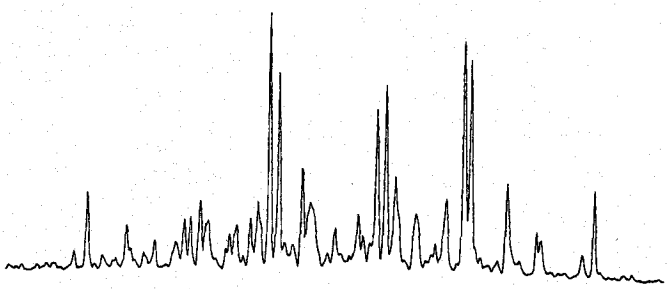
***m/z* 191: Tri- and Pentacyclics** M2031223.D



***m/z* 217: Steranes** M2031223.D



***m/z* 218: ββ Steranes** M2031223.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	32.5	D	
$\%C_{28}$ αββS (218)	30.9	D	
$\%C_{29}$ αββS (218)	36.6	D	
$\%C_{27}$ aaaR (217)	30.3	D	
$\%C_{28}$ aaaR (217)	28.7	D	
$\%C_{29}$ aaaR (217)	41.0	D	
S/(S+R) (C_{29} aaa) (217)	0.44	M	0.55 (0.8%)
ββS/(ββS+aaR) (C29) (217)	0.33	M	0.70 (0.9%)
$(C_{21}+C_{22})/(C_{21}+C_{28}+C_{29})$ (217)	0.34		
C_{27}/C_{29} (αββS) (218)	0.89	D	
C_{28}/C_{29} (αββS) (218)	0.84	D	
Diaster/aaa Ster (C_{27}) (217)	1.37	M/D	1.00 (1.4%)
C30 Sterane Index (218)	6.03	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.09	D/A	
Gammacerane/Hopane	0.05	D	
Norhopane/Hopane	0.64	D	
Bisnorhopane/Hopane	0.05		
Diahopane/Hopane	0.04	M/D	
Moretane/Hopane	0.15	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.05	B	
Ts/(Ts+Tm) trisnorhopanes	0.50	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.33	M	
H32 S/(R+S) Homohopanes	0.59	M	0.60 (0.6%)
H35/H34 Homohopanes	0.91	D	
C24 Tetracyclic/Hopane	0.10	D	
C24 Tetracyclic/C26 Tricyclics	0.82	D	
C23/C24 Tricyclic terpanes	1.76	D	
C19/C23 Tricyclic terpanes	0.10	D	
C26/C25 Tricyclic terpanes	0.68	D	
(C28+C29 Tricyclics)/Ts	1.32	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.19	D	
Tricyclic terpanes/Hopanes	0.47	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	2.53	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:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M2031223.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
217	CHOL	*5β cholane (internal standard)*	62.322	22183	5425	100.0	100.0
125	H30_125	C30 17α(H)-hopane (125)	76.492	9751	1906	44.0	35.1
125	GCAR	γ-carotane					
125	BCAR	β-carotane	88.019	3436	298	15.5	5.5
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	44.633	4035	433	18.2	8.0
191	TR20	C20 tricyclic terpane	47.665	9892	1482	44.6	27.3
191	TR21	C21 tricyclic terpane	50.763	18277	2949	82.4	54.4
191	TR22	C22 tricyclic terpane	53.471	7844	1086	35.4	20.0
191	TR23	C23 tricyclic terpane	56.471	39085	8765	176.2	161.6
191	TR24	C24 tricyclic terpane	58.031	22175	4785	100.0	88.2
191	C24DEOL	C24 des-A-oleanane	59.635	2263	539	10.2	9.9
191	C24DELUP	C24 des-A-lupane	59.851	2187	588	9.9	10.8
191	TR25A	C25 tricyclic terpane (a)	61.087	9914	1970	44.7	36.3
191	TR25B	C25 tricyclic terpane (b)	61.152	7134	1941	32.2	35.8
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	63.058	9502	2181	42.8	40.2
191	TR26A	C26 tricyclic terpane (a)	63.297	5885	1413	26.5	26.0
191	TR26B	C26 tricyclic terpane (b)	63.470	5703	1284	25.7	23.7
191	TR28A	C28 tricyclic terpane (a)	68.128	7107	1648	32.0	30.4
191	TR28B	C28 tricyclic terpane (b)	68.453	5043	1209	22.7	22.3
191	TR29A	C29 tricyclic terpane (a)	69.493	5982	1408	27.0	26.0
191	TR29B	C29 tricyclic terpane (b)	69.883	5945	1386	26.8	25.5
191	TS	Ts 18α(H)-trisnorhopane	70.880	18192	4412	82.0	81.3
191	TM	Tm 17α(H)-trisnorhopane	71.747	17835	4441	80.4	81.9
191	TR30A	C30 tricyclic terpane (a)	72.072	4563	1067	20.6	19.7
191	TR30B	C30 tricyclic terpane (b)	72.483	5197	1010	23.4	18.6
191	H28	C28 17α18α21β(H)-bisnorhopane	73.805	4839	745	21.8	13.7
191	NOR25H	C29 Nor-25-hopane	74.087	5220	1330	23.5	24.5
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.715	62217	15211	280.5	280.4
191	C29TS	C29 Ts 18α(H)-norneohopane	74.845	20677	4019	93.2	74.1
191	DH30	C30 17α(H)-diahopane	75.192	4030	1004	18.2	18.5
191	M29	C29 normoretane	75.755	9188	2239	41.4	41.3
191	OL	oleanane	76.232	8641	1576	39.0	29.1
191	H30	C30 17α(H)-hopane	76.514	97429	22951	439.2	423.1
191	M30	C30 moretane	77.315	14435	3296	65.1	60.8
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.572	31325	7359	141.2	135.7
191	H31R	C31 22R 17α(H) hopane	78.832	22171	4652	99.9	85.8
191	GAM	gammacerane	79.135	4904	1030	22.1	19.0

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M2031223.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.175	16904	4050	76.2	74.7
191	H32R	C32 22R 17α(H) hopane	80.522	11779	2806	53.1	51.7
191	H33S	C33 22S 17α(H) hopane	82.039	10899	2556	49.1	47.1
191	H33R	C33 22R 17α(H) hopane	82.515	6852	1718	30.9	31.7
191	H34S	C34 22S 17α(H) hopane	83.967	6639	1499	29.9	27.6
191	H34R	C34 22R 17α(H) hopane	84.552	3945	986	17.8	18.2
191	H35S	C35 22S 17α(H) hopane	85.961	5812	1222	26.2	22.5
191	H35R	C35 22R 17α(H) hopane	86.741	3870	780	17.4	14.4
217	S21	C21 sterane	53.882	21898	3232	98.7	59.6
217	DIA27S	C27 βα 20S diasterane	65.723	11515	2566	51.9	47.3
217	C27R	C27 αα 20R sterane	70.317	8401	1785	37.9	32.9
217	C28R	C28 αα 20R sterane	72.722	7971	1046	35.9	19.3
217	C29S	C29 αα 20S sterane	73.350	8822	1221	39.8	22.5
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.762	10910	1790	49.2	33.0
217	C29BBS	C29 ββ 20S sterane	73.892	5615	1319	25.3	24.3
217	C29R	C29 αα 20R sterane	74.672	11377	1712	51.3	31.6
218	C27ABBR	C27 ββ 20R sterane	69.623	11046	2552	49.8	47.0
218	C27ABBS	C27 ββ 20S sterane	69.818	8657	1946	39.0	35.9
218	C28ABBR	C28 ββ 20R sterane	71.898	7553	1568	34.0	28.9
218	C28ABBS	C28 ββ 20S sterane	72.093	8246	1809	37.2	33.3
218	C29ABBR	C29 ββ 20R sterane	73.762	11415	2304	51.5	42.5
218	C29ABBS	C29 ββ 20S sterane	73.892	9760	2118	44.0	39.0
218	C30ABBR	C30 ββ 20R sterane	75.279	1712	428	7.7	7.9
218	C30ABBS	C30 ββ 20S sterane	75.387	1711	346	7.7	6.4
259	D27S	C27 βα 20S diasterane	65.723	6657	1625	30.0	30.0
259	D27R	C27 βα 20R diasterane	66.568	4366	902	19.7	16.6
259	D28SA	C28 βα 20S diasterane a	67.782	3532	794	15.9	14.6
259	D28SB	C28 βα 20S diasterane b	67.933	3871	767	17.5	14.1
259	D28RA	C28 βα 20R diasterane a	68.692	2633	602	11.9	11.1
259	D28RB	C28 βα 20R diasterane b	68.778	2043	494	9.2	9.1
259	D29S	C29 βα 20S diasterane	69.623	6592	1211	29.7	22.3
259	D29R	C29 βα 20R diasterane	70.577	5435	676	24.5	12.5
259	C30TP1	C30 tetracyclic polyprenoid	75.604	1698	399	7.7	7.4
259	C30TP2	C30 tetracyclic polyprenoid	75.690	1676	421	7.6	7.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M2031223.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.401	112	39	0.5	0.7
135	2MAM	2-Methyladamantane	15.261	153	54	0.7	1.0
135	1EAM	1-Ethyladamantane	17.162	113	36	0.5	0.7
135	2EAM	2-Ethyladamantane	17.998	485	148	2.2	2.7
136	AM	Adamantane	12.900	50	18	0.2	0.3
149	13DMAM	1,3-Dimethyladamantane	13.819	139	59	0.6	1.1
149	C14DMAM	1,4-Dimethyladamantane, cis	15.553	135	52	0.6	1.0
149	T14DMAM	1,4-Dimethyladamantane, trans	15.720	135	50	0.6	0.9
149	12DMAM	1,2-Dimethyladamantane	16.452	206	70	0.9	1.3
149	1E3MAM	1-Ethyl-3-methyladamantane	17.475	193	58	0.9	1.1
163	135TMAM	1,3,5-Trimethyladamantane	14.133	68	26	0.3	0.5
163	136TMAM	1,3,6-Trimethyladamantane	15.908	125	43	0.6	0.8
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.661	163	56	0.7	1.0
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.786	163	55	0.7	1.0
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.726	179	50	0.8	0.9
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.890	149	57	0.7	1.1
187	4MDI	4-Methyldiamantane	25.581	437	79	2.0	1.5
187	1MDI	1-Methyldiamantane	27.086	459	84	2.1	1.5
187	3MDI	3-Methyldiamantane	28.151	557	84	2.5	1.5
188	DI	Diamantane	25.143	1297	282	5.8	5.2
201	49DMDI	4,9-Dimethyldiamantane	25.999	149	29	0.7	0.5
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.169	231	40	1.0	0.7
201	48DMDI	4,8-Dimethyldiamantane	27.399	323	52	1.5	1.0
201	34DMDI	3,4-Dimethyldiamantane	28.652	524	76	2.4	1.4
215	TMDI	Trimethyldiamantane	27.441	216	33	1.0	0.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M2031223.D**

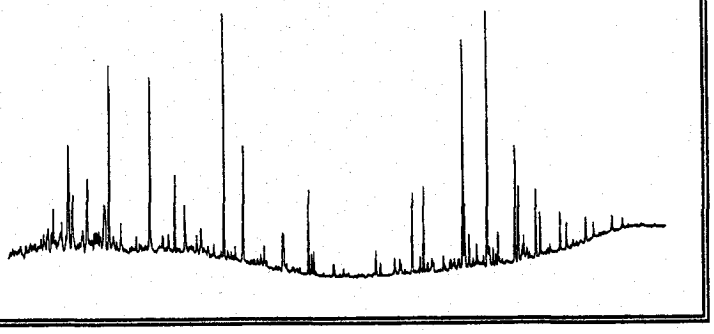
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	32.5	33.1
%C_{28} αββS (218)	30.9	30.8
%C_{29} αββS (218)	36.6	36.1
C_{27}/C_{29} (αββS) (218)	0.89	0.92
C_{28}/C_{29} (αββS) (218)	0.84	0.85
C_{29}/C_{27} (αββS) (218)	1.13	1.09
%C_{27} αααR (217)	30.3	39.3
%C_{28} αααR (217)	28.7	23.0
%C_{29} αααR (217)	41.0	37.7
S/R (C_{29} ααα) (217)	0.78	0.71
S/(S+R) (C_{29} ααα) (217)	0.44	0.42
ββ/(αα+ββ) (C_{29}) (217)	0.45	0.51
αββS/αααR (C_{29}) (217)	0.49	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.34	0.28
Diaster/ααα Ster (C_{27}) (217)	1.37	1.44
Terpenoids		
C19/C23 Tricyclic terpanes	0.10	0.05
C23/C24 Tricyclic terpanes	1.76	1.83
C26/C25 Tricyclic terpanes	0.68	0.69
C24 Tetracyclic/C26 Tricyclics	0.82	0.81
C24 Tetracyclic/Hopane	0.10	0.10
Ts/Tm trisnorhopanes	1.02	0.99
Ts/(Ts+Tm) trisnorhopanes	0.50	0.50
C29Ts/C29 Hopane	0.33	0.26
Bisnorhopane/Hopane	0.05	0.03
Norhopane/Hopane	0.64	0.66
Diahopane/Hopane	0.04	0.04
Oleanane/Hopane	0.09	0.07
Gammacerane/Hopane	0.05	0.04
Moretane/(Moretane+Hopane)	0.13	0.13
H32 S/(S+R) Homohopanes	0.59	0.59
H35/H34 Homohopanes	0.91	0.81
[Steranes]/[Hopanes]	0.19	0.14
[Tricyclic terpanes]/[Hopanes]	0.47	0.42
[Tricyclic terpanes]/[Steranes]	2.53	2.96
DIAMONDOID Ratios		
Methyl Adamantane Index	0.42	0.42
Methyl Diamantane Index	0.30	0.32

BASELINE DGSI
ANALYTICAL LABORATORIES

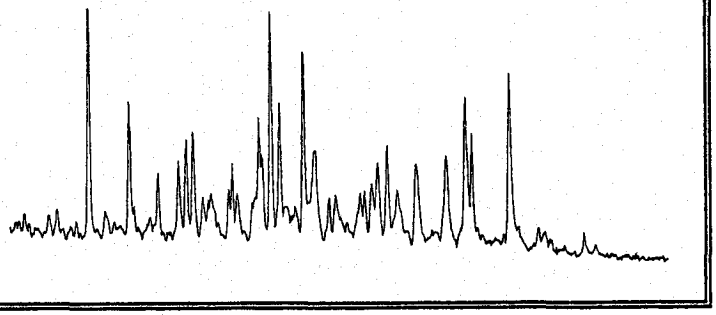
SATURATE GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132263
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218046
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5400 FT
Longitude:	-156.0647	**Bottom Depth:**	5430 FT

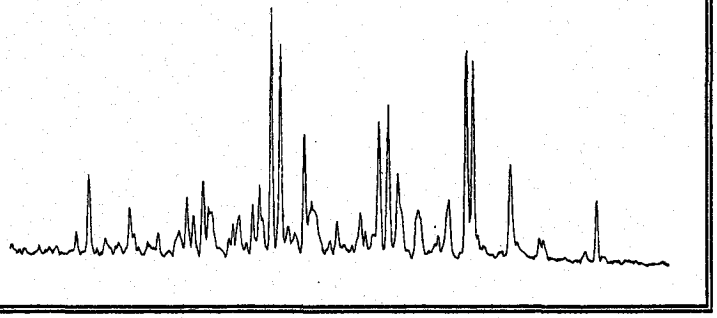
***m/z* 191: Tri- and Pentacyclics** M2031224.D



***m/z* 217: Steranes** M2031224.D



***m/z* 218: ββ Steranes** M2031224.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Steranes (*m/z* 217; 218)			
$\%C_{27}$ αββS (218)	36.0	D	
$\%C_{28}$ αββS (218)	28.2	D	
$\%C_{29}$ αββS (218)	35.8	D	
$\%C_{27}$ aaaR (217)	34.8	D	
$\%C_{28}$ aaaR (217)	24.5	D	
$\%C_{29}$ aaaR (217)	40.7	D	
S/(S+R) (C_{29} aaa) (217)	0.37	M	0.55 (0.8%)
ββS/(ββS+aaR) (C29) (217)	0.30	M	0.70 (0.9%)
(C_{27}+C_{28})/(C_{27}+C_{28}+C_{29}) (217)	0.71		
C_{27}/C_{29} (αββS) (218)	1.01	D	
C_{28}/C_{29} (αββS) (218)	0.79	D	
Diaster/aaa Ster (C_{27}) (217)	1.14	M/D	1.00 (1.4%)
C30 Sterane Index (218)	3.75	D	
Terpanes (*m/z* 191)			
Oleanane/Hopane	0.05	D/A	
Gammacerane/Hopane	0.07	D	
Norhopane/Hopane	0.80	D	
Bisnorhopane/Hopane	0.06		
Diahopane/Hopane	0.11	M/D	
Moretane/Hopane	0.13	M	0.05 (0.7%)
25-*nor*-hopane/hopane	0.04	B	
Ts/(Ts+Tm) trisnorhopanes	0.50	M/D	1.00 (1.4%)
C29Ts/C29 Hopane	0.30	M	
H32 S/(R+S) Homohopanes	0.59	M	0.60 (0.6%)
H35/H34 Homohopanes	0.65	D	
C24 Tetracyclic/Hopane	0.29	D	
C24 Tetracyclic/C26 Tricyclics	1.71	D	
C23/C24 Tricyclic terpanes	2.09	D	
C19/C23 Tricyclic terpanes	0.78	D	
C26/C25 Tricyclic terpanes	0.57	D	
(C28+C29 Tricyclics)/Ts	0.94	A	
Various (*m/z* 191; 217)			
Steranes/Hopanes	0.19	D	
Tricyclic terpanes/Hopanes	0.98	M	1.00 (1.4%)
Tricyclic terpanes/Steranes	5.24	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:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M2031224.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	1349	218		
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	44.569	6402	910		
191	TR20	C20 tricyclic terpane	47.623	7462	1625		
191	TR21	C21 tricyclic terpane	50.699	6267	1512		
191	TR22	C22 tricyclic terpane	53.407	1914	406		
191	TR23	C23 tricyclic terpane	56.385	8252	2165		
191	TR24	C24 tricyclic terpane	57.945	3949	1026		
191	C24DEOL	C24 des-A-oleanane	59.570	818	191		
191	C24DELUP	C24 des-A-lupane	59.765	265	63		
191	TR25A	C25 tricyclic terpane (a)	61.022	1589	344		
191	TR25B	C25 tricyclic terpane (b)	61.108	1234	329		
191	C24DEURS	C24 des-A-ursane					
191	C24DEHOP	C24 des-E-hopane					
191	TET24	C24 tetracyclic terpane (TET)	62.993	2744	751		
191	TR26A	C26 tricyclic terpane (a)	63.253	802	184		
191	TR26B	C26 tricyclic terpane (b)	63.427	803	209		
191	TR28A	C28 tricyclic terpane (a)	68.085	1053	223		
191	TR28B	C28 tricyclic terpane (b)	68.410	420	115		
191	TR29A	C29 tricyclic terpane (a)	69.450	524	138		
191	TR29B	C29 tricyclic terpane (b)	69.840	560	126		
191	TS	Ts 18α(H)-trisnorhopane	70.837	2731	707		
191	TM	Tm 17α(H)-trisnorhopane	71.704	2760	757		
191	TR30A	C30 tricyclic terpane (a)	72.007	395	90		
191	TR30B	C30 tricyclic terpane (b)	72.462	471	92		
191	H28	C28 17α18α21β(H)-bisnorhopane	73.762	593	96		
191	NOR25H	C29 Nor-25-hopane	74.044	337	90		
191	H29	C29 Tm 17α(H)21β(H)-norhopane	74.672	7574	2019		
191	C29TS	C29 Ts 18α(H)-normeohopane	74.802	2262	567		
191	DH30	C30 17α(H)-diahopane	75.149	1080	294		
191	M29	C29 normoretane	75.712	792	199		
191	OL	oleanane	76.189	490	101		
191	H30	C30 17α(H)-hopane	76.449	9443	2261		
191	M30	C30 moretane	77.272	1231	293		
191	TARAX	Taraxerane					
191	H31S	C31 22S 17α(H) hopane	78.529	3973	1033		
191	H31R	C31 22R 17α(H) hopane	78.789	3011	671		
191	GAM	gammacerane	79.092	615	139		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M2031224.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
191	H32S	C32 22S 17α(H) hopane	80.132	2452	602		
191	H32R	C32 22R 17α(H) hopane	80.479	1677	390		
191	H33S	C33 22S 17α(H) hopane	81.995	1528	347		
191	H33R	C33 22R 17α(H) hopane	82.494	1104	244		
191	H34S	C34 22S 17α(H) hopane	83.946	1091	229		
191	H34R	C34 22R 17α(H) hopane	84.531	644	143		
191	H35S	C35 22S 17α(H) hopane	85.917	650	133		
191	H35R	C35 22R 17α(H) hopane	86.697	480	98		
217	S21	C21 sterane	53.797	5733	1090		
217	D1A27S	C27 βα 20S diasterane	65.658	1477	350		
217	C27R	C27 αα 20R sterane	70.274	1301	287		
217	C28R	C28 αα 20R sterane	72.657	915	124		
217	C29S	C29 αα 20S sterane	73.307	883	138		
217	C29BBR	C29 ββ 20R sterane(+5 βαα)	73.719	1274	226		
217	C29BBS	C29 ββ 20S sterane	73.849	664	172		
217	C29R	C29 αα 20R sterane	74.628	1522	269		
218	C27ABBR	C27 ββ 20R sterane	69.580	1327	335		
218	C27ABBS	C27 ββ 20S sterane	69.775	1127	284		
218	C28ABBR	C28 ββ 20R sterane	71.855	815	181		
218	C28ABBS	C28 ββ 20S sterane	72.050	884	204		
218	C29ABBR	C29 ββ 20R sterane	73.719	1295	284		
218	C29ABBS	C29 ββ 20S sterane	73.849	1119	269		
218	C30ABBR	C30 ββ 20R sterane	75.235	153	31		
218	C30ABBS	C30 ββ 20S sterane	75.322	122	29		
259	D27S	C27 βα 20S diasterane	65.680	853	217		
259	D27R	C27 βα 20R diasterane	66.525	563	128		
259	D28SA	C28 βα 20S diasterane a	67.738	358	92		
259	D28SB	C28 βα 20S diasterane b	67.890	381	89		
259	D28RA	C28 βα 20R diasterane a	68.648	237	63		
259	D28RB	C28 βα 20R diasterane b	68.735	206	60		
259	D29S	C29 βα 20S diasterane	69.602	647	129		
259	D29R	C29 βα 20R diasterane	70.555	506	66		
259	C30TP1	C30 tetracyclic polyprenoid	75.560	163	37		
259	C30TP2	C30 tetracyclic polyprenoid	75.647	161	43		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M2031224.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
135	1MAM	1-Methyladamantane	13.401	26	7		
135	2MAM	2-Methyladamantane					
135	1EAM	1-Ethyladamantane	17.141	35	14		
135	2EAM	2-Ethyladamantane	17.977	168	46		
136	AM	Adamantane					
149	13DMAM	1,3-Dimethyladamantane	13.798	21	8		
149	C14DMAM	1,4-Dimethyladamantane, cis	15.553	30	7		
149	T14DMAM	1,4-Dimethyladamantane, trans	15.699	25	8		
149	12DMAM	1,2-Dimethyladamantane	16.451	36	11		
149	1E3MAM	1-Ethyl-3-methyladamantane	17.475	138	56		
163	135TMAM	1,3,5-Trimethyladamantane	14.091	19	4		
163	136TMAM	1,3,6-Trimethyladamantane	15.887	39	10		
163	C134TMAM	1,3,4-Trimethyladamantane, cis	16.639	34	14		
163	T134TMAM	1,3,4-Trimethyladamantane, trans	16.786	53	21		
163	1E35DMAM	1-Ethyl-3,5-dimethyladamantane	17.705	219	89		
177	1357TMAM	1,3,5,7-Tetramethyladamantane					
177	1257TMAM	1,2,5,7-Tetramethyladamantane	16.890	93	35		
187	4MDI	4-Methyldiamantane	25.581	1364	359		
187	1MDI	1-Methyldiamantane	27.064	1246	299		
187	3MDI	3-Methyldiamantane	28.151	1083	233		
188	DI	Diamantane	25.122	941	262		
201	49DMDI	4,9-Dimethyldiamantane	25.999	582	144		
201	1424DMDI	1,4 and 2,4-dimethyldiamantane	27.169	827	202		
201	48DMDI	4,8-Dimethyldiamantane	27.378	984	223		
201	34DMDI	3,4-Dimethyldiamantane	28.631	1307	276		
215	TMDI	Trimethyldiamantane	27.440	1003	237		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M2031224.D**

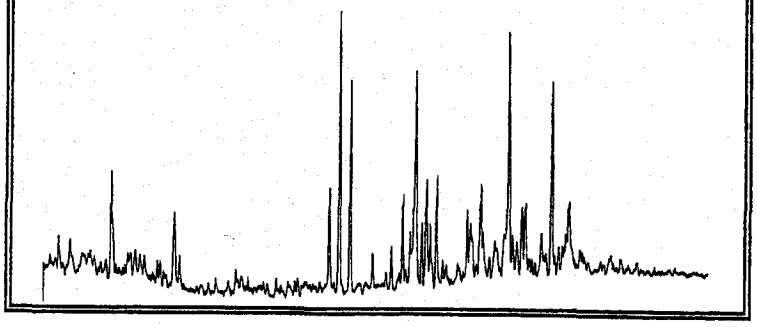
Miscellaneous Ratios	By Areas	By Heights
Steroids		
%C_{27} αββS (218)	36.0	37.5
%C_{28} αββS (218)	28.2	26.9
%C_{29} αββS (218)	35.8	35.5
C_{27}/C_{29} (αββS) (218)	1.01	1.06
C_{28}/C_{29} (αββS) (218)	0.79	0.76
C_{29}/C_{27} (αββS) (218)	0.99	0.95
%C_{27} αααR (217)	34.8	42.2
%C_{28} αααR (217)	24.5	18.2
%C_{29} αααR (217)	40.7	39.6
S/R (C_{29} ααα) (217)	0.58	0.51
S/(S+R) (C_{29} ααα) (217)	0.37	0.34
ββ/(αα+ββ) (C_{29}) (217)	0.45	0.49
αββS/αααR (C_{29}) (217)	0.44	
(C_{21}+C_{22})/(C_{27}+C_{28}+C_{29}) (217)	0.71	0.70
Diaster/ααα Ster (C_{27}) (217)	1.14	1.22
Terpenoids		
C19/C23 Tricyclic terpanes	0.78	0.42
C23/C24 Tricyclic terpanes	2.09	2.11
C26/C25 Tricyclic terpanes	0.57	0.58
C24 Tetracyclic/C26 Tricyclics	1.71	1.91
C24 Tetracyclic/Hopane	0.29	0.33
Ts/Tm trisnorhopanes	0.99	0.93
Ts/(Ts+Tm) trisnorhopanes	0.50	0.48
C29Ts/C29 Hopane	0.30	0.28
Bisnorhopane/Hopane	0.06	0.04
Norhopane/Hopane	0.80	0.89
Diahopane/Hopane	0.11	0.13
Oleanane/Hopane	0.05	0.04
Gammacerane/Hopane	0.07	0.06
Moretane/(Moretane+Hopane)	0.12	0.11
H32 S/(S+R) Homohopanes	0.59	0.61
H35/H34 Homohopanes	0.65	0.62
[Steranes]/[Hopanes]	0.19	0.15
[Tricyclic terpanes]/[Hopanes]	0.98	0.90
[Tricyclic terpanes]/[Steranes]	5.24	6.06
DIAMONDOID Ratios		
Methyl Adamantane Index	1.00	1.00
Methyl Diamantane Index	0.37	0.40

BASELINE DGSI
ANALYTICAL LABORATORIES

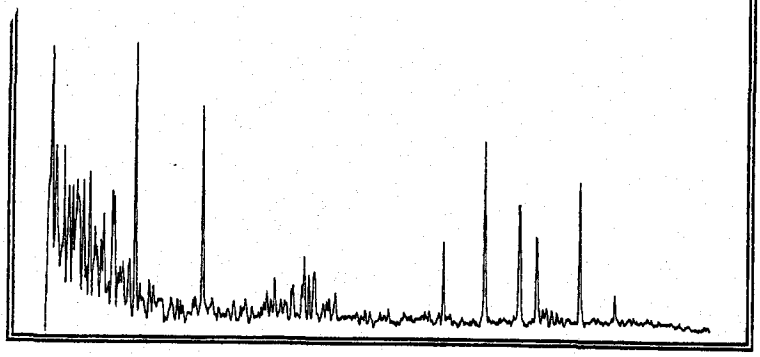
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US136226
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:		**Lab ID:**	CP278537
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	WALAKPA 1	**Geologic Age:**	
Latitude:	71.09915	**Top Depth:**	2078.2
Longitude:	-156.8846	**Bottom Depth:**	2078.2

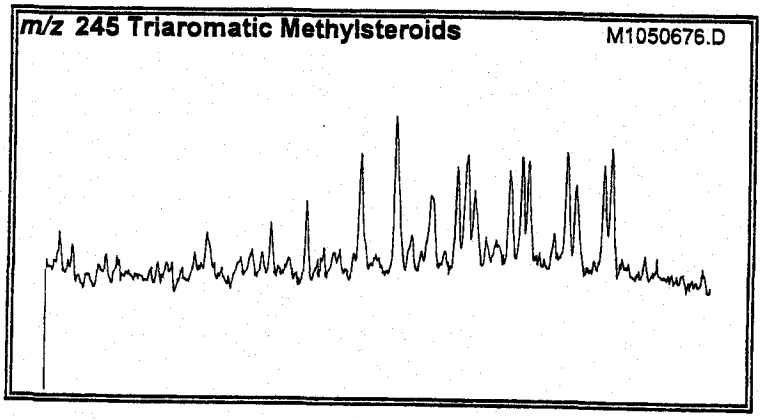
***m/z* 253: Monoaromatic steroids** M1050676.D



***m/z* 231: Triaromatic steroids** M1050676.D



***m/z* 245 Triaromatic Methylsteroids** M1050676.D



RATIOS (on Areas)[1]	Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)		
(C20+C21)/Σ TAS	0.38	M 1.0 (1.3%)
TAS #1 20/20+27	0.70	M
TAS #2 21/21+26	0.57	M
%26 TAS	21.0	D
%27 TAS	31.0	D
%28 TAS	40.4	D
%29 TAS	7.7	D
C28/C26 20S TAS	2.19	
C28/C27 20R TAS	1.30	
Dia/Regular C27 MAS	0.45	
%27 MAS	40.7	D
%28 MAS	32.7	D
%29 MAS	26.5	D
(C21+C22)/Σ MAS	0.19	M 1.0 (1.3%)
TAS/(MAS+TAS)	0.59	M
TA28/(TA28+MA29)	0.64	M 1.0 (0.8%)
Triaromatic Methylsteroids		
Dinosteroid Index	0.30	A
C4/C3+C4 Mester	0.50	A
Phenanthrenes, Naphthalenes, and Dibenzothiophenes		
MPI-1	1.26	M
Rc(a) if Ro < 1.3 (Ro%)	1.13	M
Rc(b) if Ro > 1.3 (Ro%)	1.54	M
MPI-2	1.32	M
DNR-1	9.08	M
DNR-2	2.62	M
TNR1	1.35	M
TDE-1	5.82	M
TDE-2	0.18	M
MDR	5.80	M
Rm (Ro%)	1.12	M
MDR23	1.17	M
MDR1	0.45	M
DBT/Phenanthrene	0.06	D

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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M1050676.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.096	12586	3174	300.0	300.0
142	2MN	2-Methylnaphthalene	38.059	12242	2096	291.8	198.1
142	1MN	1-Methylnaphthalene	39.278	7701	1264	183.6	119.5
148	C1BTA	C1 Benzothiophene					
148	C1BTB	C1 Benzothiophene					
148	C1BTC	C1 Benzothiophene					
156	2EN	2-Ethylnaphthalene	46.248	1869	275	44.5	26.0
156	1EN	1-Ethylnaphthalene	46.335	437	125	10.4	11.8
156	26DMN	2,6-Dimethylnaphthalene	47.154	9400	1489	224.1	140.7
156	27DMN	2,7-Dimethylnaphthalene	47.311	9000	1545	214.5	145.0
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.304	17457	2379	416.1	224.9
156	16DMN	1,6-Dimethylnaphthalene	48.548	11880	1957	283.2	185.0
156	23DMN	2,3-Dimethylnaphthalene	49.750	1465	313	34.9	29.6
156	14DMN	1,4-Dimethylnaphthalene	49.837	5564	819	132.6	77.4
156	15DMN	1,5-Dimethylnaphthalene	49.924	2026	430	48.3	40.6
156	12DMN	1,2-Dimethylnaphthalene	50.900	2037	320	48.6	30.2
162	C2BTA	C2 Benzothiophene	45.690	42	6	1.0	0.6
162	C2BTB	C2 Benzothiophene	46.074	22	3	0.5	0.3
162	C2BTC	C2 Benzothiophene	46.875	40	5	1.0	0.5
162	C2BTD	C2 Benzothiophene	48.095	35	4	0.8	0.4
162	C2BTE	C2 Benzothiophene	48.617	76	11	1.8	1.0
168	3MBP	3-Methylbiphenyl	53.392	37593	6230	896.1	588.8
168	4MBP	4-Methylbiphenyl	54.054	17046	2800	406.3	264.7
168	DBF	Dibenzofuran	55.483	7827	1199	186.6	113.3
170	BB_EMN	Ethyl-methyl-Naphthalene	55.221	4732	627	112.8	59.3
170	AB_EMN	Ethyl-methyl-Naphthalene	56.441	1794	286	42.8	27.0
170	137TMN	1,3,7-Trimethylnaphthalene	56.876	10059	1660	239.8	156.9
170	136TMN	1,3,6-Trimethylnaphthalene	57.260	14024	2335	334.3	226.7
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.323	10421	1606	248.4	151.8
170	236TMN	2,3,6-Trimethylnaphthalene	58.584	14028	2454	334.4	231.9
170	127TMN	1,2,7-Trimethylnaphthalene	59.333	2341	403	55.8	38.1
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.507	12708	1946	302.9	183.9
170	124TMN	1,2,4-Trimethylnaphthalene	60.425	949	170	22.6	16.1
170	125TMN	1,2,5-Trimethylnaphthalene	60.861	5519	996	131.6	94.1
176	C3BT11	C3 BenzothioC3BT11e	53.636	25	4	0.6	0.4
176	C3BT12	C3 BenzothioC3BT12e	54.193	22	3	0.5	0.3
176	C3BT13	C3 BenzothioC3BT13e	55.117	91	13	2.2	1.2
176	C3BT1415	C3 BenzothioC3BT1415e	55.273	55	8	1.3	0.8
176	C3BT16	C3 BenzothioC3BT16e	56.110	39	7	0.9	0.7
176	C3BT17	C3 BenzothioC3BT17e	56.249	165	26	3.9	2.5
176	C3BT18	C3 BenzothioC3BT18e	57.486	113	17	2.7	1.6
176	C3BT19	C3 BenzothioC3BT19e	60.930	265	50	6.3	4.7
178	PHEN	Phenanthrene	70.357	240058	51272	5722.0	4846.1
180	9MF	9-Methylfluorene	61.680	494	84	11.8	7.9
180	3MF	3-Methylfluorene					
180	2MF	2-Methylfluorene	66.855	6776	1011	161.5	95.6
180	1MF	1-Methylfluorene	67.168	5351	1088	127.5	102.8
180	4MF	4-Methylfluorene	67.708	942	174	22.5	16.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M1050676.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
182	DMBP1	Dimethybiphenyl peak 1	60.146	3946	576	94.1	54.4
182	DMBP2	Dimethylbiphenyl peak 2	60.930	16851	3275	401.7	309.5
182	DMBP3	Dimethylbiphenyl peak 3	61.140	37000	7192	881.9	679.8
182	DMBP4	Dimethylbiphenyl peak 4	61.314	1665	322	39.7	30.4
182	DMBP5	Dimethylbiphenyl peak 5	61.749	33049	6408	787.8	605.7
182	DMBP6	Dimethylbiphenyl peak 6	62.185	7731	1560	184.3	147.4
182	DMBP7	Dimethylbiphenyl peak 7	62.481	67	10	1.6	0.9
182	DMBP8	Dimethylbiphenyl peak 8	62.812	15685	3027	373.9	286.1
182	DMBP9	Dimethylbiphenyl peak 9	62.952	52	10	1.2	0.9
182	DMBP10	Dimethylbiphenyl peak 10	63.265	12837	2539	306.0	240.0
182	DMBP11	Dimethylbiphenyl peak 11	63.561	19834	3070	472.8	290.2
182	DMBP12	Dimethylbiphenyl peak 12	63.858	389	77	9.3	7.3
182	DMBP13	Dimethylbiphenyl peak 13	64.032	12682	2414	302.3	228.2
182	DMBP14	Dimethylbiphenyl peak 14	64.293	118	18	2.8	1.7
182	DMBP15	Dimethylbiphenyl peak 15	64.572	311	62	7.4	5.9
182	DMBP16	Dimethylbiphenyl peak 16	64.868	159	21	3.8	2.0
184	1357	1,3,5,7-Tetramethylnaphthalene	64.816	7921	1439	188.8	136.0
184	1367	1,3,6,7-Tetramethylnaphthalene	65.983	12984	2779	309.5	262.7
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.733	5976	1147	142.4	108.4
184	1257	1,2,5,7-Tetramethylnaphthalene	66.907	4999	1019	119.2	96.3
184	2367	2,3,6,7-Tetramethylnaphthalene	67.273	3772	802	89.9	75.8
184	1267	1,2,6,7-Tetramethylnaphthalene	67.708	4497	975	107.2	92.2
184	1237	1,2,3,7-Tetramethylnaphthalene	67.900	1386	311	33.0	29.4
184	1236	1,2,3,6-Tetramethylnaphthalene	68.161	2750	553	65.5	52.3
184	1256	1,2,5,6-Tetramethylnaphthalene	68.876	10767	2306	256.6	218.0
184	DBT	Dibenzothiophene	69.085	13262	2760	316.1	260.9
192	3MP	3-Methylphenanthrene	75.305	217263	48300	5178.7	4565.2
192	2MP	2-Methylphenanthrene	75.479	238416	55356	5682.9	5232.1
192	9MP	9-Methylphenanthrene	76.159	179681	39026	4282.9	3688.7
192	1MP	1-Methylphenanthrene	76.351	120997	28642	2884.1	2707.2
198	CAD	(Cadalene)	66.332	1504	284	35.8	26.8
198	4MDBT	4 Methyl Dibenzothiophene	73.633	34567	7904	823.9	747.1
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.417	15490	3191	369.2	301.6
198	1MDBT	1 Methyl Dibenzothiophene	75.218	5961	1362	142.1	128.7
206	36DMP	3,6-Dimethylphenanthrene	79.522	48281	10858	1150.8	1026.3
206	26DMP	2,6-Dimethylphenanthrene	79.783	109416	24371	2608.0	2303.5
206	27DMP	2,7-Dimethylphenanthrene	79.888	58015	15221	1382.8	1438.7
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.393	250108	49924	5961.6	4718.7
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.585	122676	21872	2924.1	2067.3
206	17DMP	1,7-Dimethylphenanthrene	80.742	82068	20823	1956.2	1968.1
206	23DMP	2,3-Dimethylphenanthrene	81.020	48962	11330	1167.1	1070.9
206	19DMP	1,9-Dimethylphenanthrene	81.125	39560	9583	943.0	905.8
206	18DMP	1,8-Dimethylphenanthrene	81.543	16614	3934	396.0	371.8
206	12DMP	1,2-Dimethylphenanthrene	82.048	10150	2428	241.9	229.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M1050676.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
212	ET4DBT	4-Ethyldibenzothiophene	77.257	2346	549	55.9	51.9
212	DM46DBT	4,6-Dimethyldibenzothiophene	77.623	24002	5582	572.1	527.6
212	DMDBT3	Dimethyldibenzothiophene peak 3	77.936	687	89	16.4	8.4
212	DMDBT4	Dimethyldibenzothiophene peak 4	78.180	9872	2329	236.3	220.1
212	DMDBT5	Dimethyldibenzothiophene peak 5	78.372	24027	3966	572.7	374.9
212	DMDBT6	Dimethyldibenzothiophene peak 6	78.999	4461	815	106.3	77.0
212	DM14DBT	1,4-Dimethyldibenzothiophene	79.191	6506	1102	155.1	104.2
212	DMDBT7	Dimethyldibenzothiophene peak 7	79.679	4685	774	111.7	73.2
212	DMDBT8	Dimethyldibenzothiophene peak 8	79.766	648	236	15.4	22.3
212	DMDBT9	Dimethyldibenzothiophene peak 9	80.271	911	188	21.7	17.8
226	TMDBT	Trimethyldibenzothiophene	81.700	60468	3581	1441.3	338.5
231	231A20	C20 Triaromatic Steroid	92.363	4199	984	100.1	93.0
231	231B21	C21 Triaromatic	94.855	3163	751	75.4	71.0
231	231C26	C26 20S Triaromatic S	104.003	1242	297	29.6	28.1
231	231D26	C27 20S & C26 20R Triaromatic	105.588	3201	661	76.3	62.5
231	231E28	C28 20S Triaromatic	106.895	2716	435	64.7	41.1
231	231F27	C27 20R Triaromatic	107.522	1835	319	43.7	30.2
231	231G28	C28 20R Triaromatic	109.125	2393	517	57.0	48.9
231	231H29	C29 Triaromatic (24 n-propyl)	110.432	454	105	10.8	9.9
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.668	230	54	5.5	5.1
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.278	291	77	6.9	7.3
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.836	106	28	2.5	2.6
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.184	692	122	16.5	11.5
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.759	982	158	23.4	14.9
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	109.038	270	41	6.4	3.9
245	DA	Triaromatic Dinosteroid a	109.195	122	26	2.9	2.5
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.369	667	80	15.9	7.6
245	DB	Triaromatic Dinosteroid b	109.787	529	108	12.6	10.2
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.979	790	120	18.8	11.3
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.101	549	85	13.1	8.0
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.693	617	105	14.7	9.9
245	DC	Triaromatic Dinosteroid c	110.885	576	119	13.7	11.2
245	DD	Triaromatic Dinosteroid d	111.007	561	115	13.4	10.9
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.408	230	43	5.5	4.1
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.617	706	123	16.8	11.6
245	DE	Triaromatic Dinosteroid e	111.774	531	91	12.7	8.6
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.227	552	111	13.2	10.5
245	DF	Triaromatic Dinosteroid f	112.349	572	127	13.6	12.0

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M1050676.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
253	S253A	C21 Ring-C Monoaromatic Steroid	84.627	1239	290	29.5	27.4
253	S253B	C22 Monoaromatic steroid	87.084	1309	206	31.2	19.5
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	97.016	1559	285	37.2	26.9
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.172	709	165	16.9	15.6
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.636	777	183	18.5	17.3
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.793	862	147	20.5	13.9
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.176	1441	250	34.3	23.6
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.448	487	107	11.6	10.1
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.605	482	89	11.5	8.4
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.797	914	181	21.8	17.1
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.936	1064	192	25.4	18.1
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.225	362	74	8.6	7.0
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.504	695	107	16.6	10.1
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.626	1186	195	28.3	18.4
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.246	251	48	6.0	4.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136226**
Well Name:	**WALAKPA 1**	**Project #:**	**05-295-A**
Depth:	**2078.2 - 2078.2**	**Lab ID:**	**CP278537**
Sampling Point:		**File Name:**	**M1050676.D**

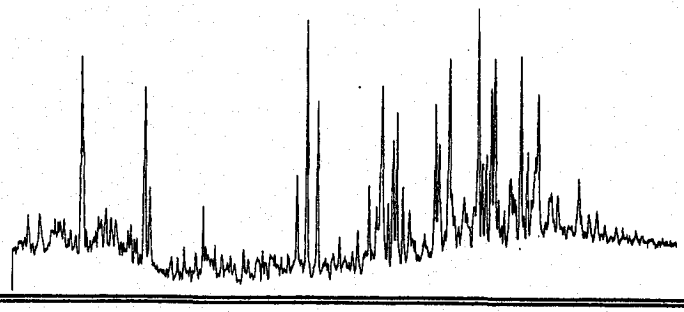
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.38	0.43
TAS #1 20/20+27	0.70	0.76
TAS #2 21/21+28	0.57	0.59
%26TAS	21.0	24.0
%27TAS	31.0	25.8
%28TAS	40.4	41.8
%29TAS	7.7	8.5
C28/C26 20S TAS	2.19	1.46
C28/C27 20R TAS	1.30	1.62
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.45	0.58
%27 MAS	40.7	43.8
%28 MAS	32.7	31.0
%29 MAS	26.5	25.2
(C21+C22)/Σ MAS	0.19	0.20
TAS/(MAS+TAS)	0.59	0.62
TA28/(TA28+MA29)	0.64	0.65
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.30	0.34
C4/C3+C4 Mester	0.50	0.53
Phenanthrenes and Naphthalenes		
MPI-1	1.26	1.31
MPI-2	1.32	1.40
Rc(a) if Ro < 1.3 (Ro%)	1.13	1.15
Rc(b) if Ro > 1.3 (Ro%)	1.54	1.52
DNR-1	9.08	7.06
DNR-2	2.62	2.68
TNR1	1.35	1.53
TDE-1	5.82	5.86
TDE-2	0.18	0.21
MDR	5.80	5.80
Rm (Ro%)	1.12	1.13
MDR23	1.17	1.16
MDR1	0.45	0.49
DBT/Phenanthrene	0.06	0.05
TPHEN	22.53	21.56
C3BTI	0.76	0.72
RC_S	0.36	0.35

BASELINE DGSI
ANALYTICAL LABORATORIES

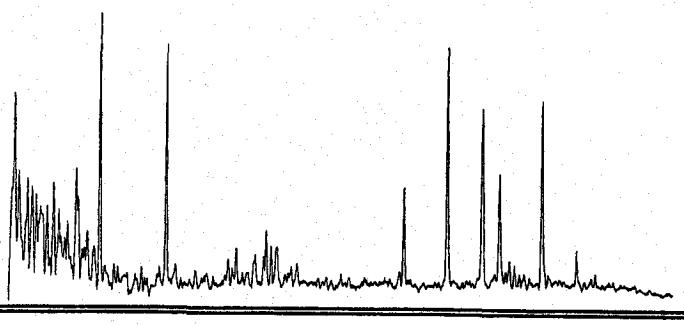
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US136228
Country:	UNITED STATES	**Project #:**	05-295-A
Basin:	NORTH SLOPE	**Lab ID:**	CP278539
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:	WALAKPA GAS FIELD	**Formation:**	
Well Name:	WALAKPA 2	**Geologic Age:**	
Latitude:	71.05012	**Top Depth:**	2632.5 FT
Longitude:	-156.9527	**Bottom Depth:**	2632.5 FT

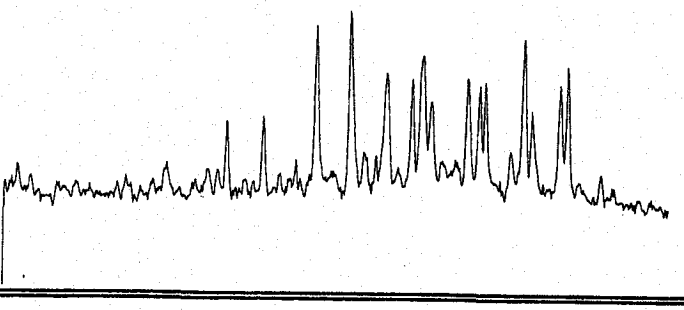
***m/z* 253: Monoaromatic steroids** M1050677.D



***m/z* 231: Triaromatic steroids** M1050677.D



***m/z* 245 Triaromatic Methylsteroids** M1050677.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.33	M	1.0 (1.3%)
TAS #1 20/20+27	0.66	M	
TAS #2 21/21+28	0.52	M	
%26 TAS	20.5	D	
%27 TAS	29.3	D	
%28 TAS	43.1	D	
%29 TAS	7.2	D	
C28/C26 20S TAS	2.44		
C28/C27 20R TAS	1.47		
Dia/Regular C27 MAS	0.98		
%27 MAS	35.4	D	
%28 MAS	33.4	D	
%29 MAS	31.2	D	
(C21+C22)/Σ MAS	0.19	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.57	M	
TA28/(TA28+MA29)	0.61	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.27	A	
C4/C3+C4 Mester	0.49	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	1.27	M	
Rc(a) if Ro < 1.3 (Ro%)	1.13	M	
Rc(b) if Ro > 1.3 (Ro%)	1.54	M	
MPI-2	1.32	M	
DNR-1	9.69	M	
DNR-2	2.89	M	
TNR1	1.28	M	
TDE-1	4.98	M	
TDE-2	0.19	M	
MDR	4.31	M	
Rm (Ro%)	0.83	M	
MDR23	2.12	M	
MDR1	0.70	M	
DBT/Phenanthrene	0.10	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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M1050677.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.096	12154	2939	300.0	300.0
142	2MN	2-Methylnaphthalene	38.058	6915	1156	170.7	116.0
142	1MN	1-Methylnaphthalene	39.277	4107	667	101.4	68.1
148	C1BTA	C1 Benzothiophene					
148	C1BTB	C1 Benzothiophene					
148	C1BTC	C1 Benzothiophene					
156	2EN	2-Ethylnaphthalene	46.247	840	120	20.7	12.2
156	1EN	1-Ethylnaphthalene	46.334	188	52	4.6	5.3
156	26DMN	2,6-Dimethylnaphthalene	47.153	3737	594	92.2	60.6
156	27DMN	2,7-Dimethylnaphthalene	47.310	3543	603	87.5	61.6
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.303	6376	857	157.4	87.5
156	16DMN	1,6-Dimethylnaphthalene	48.547	4531	735	111.8	75.0
156	23DMN	2,3-Dimethylnaphthalene	49.749	537	118	13.3	12.0
156	14DMN	1,4-Dimethylnaphthalene	49.836	1980	288	48.9	29.4
156	15DMN	1,5-Dimethylnaphthalene	49.923	751	166	18.5	16.9
156	12DMN	1,2-Dimethylnaphthalene	50.899	736	116	18.2	11.8
162	C2BTA	C2 Benzothiophene	45.689	20	3	0.5	0.3
162	C2BTB	C2 Benzothiophene	46.038	7	1	0.2	0.1
162	C2BTC	C2 Benzothiophene	46.857	25	3	0.6	0.3
162	C2BTD	C2 Benzothiophene	48.094	14	2	0.3	0.2
162	C2BTE	C2 Benzothiophene	48.599	36	5	0.9	0.5
168	3MBP	3-Methylbiphenyl	53.391	10825	1758	267.2	179.4
168	4MBP	4-Methylbiphenyl	54.053	4747	770	117.2	78.6
168	DBF	Dibenzofuran	55.482	2623	400	64.7	40.8
170	BB_EMN	Ethyl-methyl-Naphthalene	55.238	1426	189	35.2	19.3
170	AB_EMN	Ethyl-methyl-Naphthalene	56.440	492	75	12.1	7.7
170	137TMN	1,3,7-Trimethylnaphthalene	56.876	2168	367	53.5	37.5
170	136TMN	1,3,6-Trimethylnaphthalene	57.259	3060	490	75.5	50.0
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.322	2130	323	52.6	33.0
170	236TMN	2,3,6-Trimethylnaphthalene	58.583	2737	462	67.6	47.2
170	127TMN	1,2,7-Trimethylnaphthalene	59.332	467	76	11.5	7.8
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.507	2450	369	60.5	37.7
170	124TMN	1,2,4-Trimethylnaphthalene	60.408	212	36	5.2	3.7
170	125TMN	1,2,5-Trimethylnaphthalene	60.861	1055	184	26.0	18.8
176	C3BT11	C3 BenzothioC3BT11e	53.583	21	3	0.5	0.3
176	C3BT12	C3 BenzothioC3BT12e	54.262	13	3	0.3	0.3
176	C3BT13	C3 BenzothioC3BT13e	55.098	30	5	0.7	0.5
176	C3BT1415	C3 BenzothioC3BT1415e	55.238	27	4	0.7	0.4
176	C3BT16	C3 BenzothioC3BT16e	56.092	16	3	0.4	0.3
176	C3BT17	C3 BenzothioC3BT17e	56.248	62	9	1.5	0.9
176	C3BT18	C3 BenzothioC3BT18e	57.451	44	5	1.1	0.5
176	C3BT19	C3 BenzothioC3BT19e	60.913	34	7	0.8	0.7
178	PHEN	Phenanthrene	70.357	62061	12705	1531.9	1296.9
180	9MF	9-Methylfluorene	61.662	132	29	3.3	3.0
180	3MF	3-Methylfluorene					
180	2MF	2-Methylfluorene	66.872	2039	263	50.3	26.8
180	1MF	1-Methylfluorene	67.168	2223	453	54.9	46.2
180	4MF	4-Methylfluorene	67.691	280	54	6.9	5.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M1050677.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
182	DMBP1	Dimethybiphenyl peak 1	60.147	795	111	19.6	11.3
182	DMBP2	Dimethylbiphenyl peak 2	60.913	2135	401	52.7	40.9
182	DMBP3	Dimethylbiphenyl peak 3	61.140	5657	1068	139.6	109.0
182	DMBP4	Dimethylbiphenyl peak 4	61.314	349	65	8.6	6.6
182	DMBP5	Dimethylbiphenyl peak 5	61.750	5017	969	123.8	98.9
182	DMBP6	Dimethylbiphenyl peak 6	62.185	1175	230	29.0	23.5
182	DMBP7	Dimethylbiphenyl peak 7	62.342	28	4	0.7	0.4
182	DMBP8	Dimethylbiphenyl peak 8	62.795	3033	562	74.9	57.4
182	DMBP9	Dimethylbiphenyl peak 9	62.934	15	5	0.4	0.5
182	DMBP10	Dimethylbiphenyl peak 10	63.265	1763	348	43.5	35.5
182	DMBP11	Dimethylbiphenyl peak 11	63.562	4245	645	104.8	65.8
182	DMBP12	Dimethylbiphenyl peak 12	63.858	133	25	3.3	2.6
182	DMBP13	Dimethylbiphenyl peak 13	64.015	2203	411	54.4	42.0
182	DMBP14	Dimethylbiphenyl peak 14	64.293	37	7	0.9	0.7
182	DMBP15	Dimethylbiphenyl peak 15	64.572	59	12	1.5	1.2
182	DMBP16	Dimethylbiphenyl peak 16	64.868	36	6	0.9	0.6
184	1357	1,3,5,7-Tetramethylnaphthalene	64.816	1247	224	30.8	22.9
184	1367	1,3,6,7-Tetramethylnaphthalene	65.966	1957	414	48.3	42.3
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.715	1124	209	27.7	21.3
184	1257	1,2,5,7-Tetramethylnaphthalene	66.907	846	170	20.9	17.4
184	2367	2,3,6,7-Tetramethylnaphthalene	67.273	724	147	17.9	15.0
184	1267	1,2,6,7-Tetramethylnaphthalene	67.709	803	169	19.8	17.3
184	1237	1,2,3,7-Tetramethylnaphthalene	67.900	268	59	6.6	6.0
184	1236	1,2,3,6-Tetramethylnaphthalene	68.162	574	117	14.2	11.9
184	1256	1,2,5,6-Tetramethylnaphthalene	68.876	2327	510	57.4	52.1
184	DBT	Dibenzothiophene	69.085	6078	1218	150.0	124.3
192	3MP	3-Methylphenanthrene	75.288	79834	18289	1970.6	1866.9
192	2MP	2-Methylphenanthrene	75.462	86569	19721	2136.8	2013.0
192	9MP	9-Methylphenanthrene	76.159	78013	17379	1925.6	1774.0
192	1MP	1-Methylphenanthrene	76.351	56459	12421	1393.6	1267.9
198	CAD	(Cadalene)					
198	4MDBT	4 Methyl Dibenzothiophene	73.633	18452	3993	455.5	407.6
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.399	12856	2668	317.3	272.3
198	1MDBT	1 Methyl Dibenzothiophene	75.218	4281	931	105.7	95.0
206	36DMP	3,6-Dimethylphenanthrene	79.522	27259	6130	672.8	625.7
206	26DMP	2,6-Dimethylphenanthrene	79.766	57521	12825	1419.8	1309.1
206	27DMP	2,7-Dimethylphenanthrene	79.871	27322	6878	674.4	702.1
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.393	149287	29403	3684.9	3001.3
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.585	73010	12791	1802.1	1305.6
206	17DMP	1,7-Dimethylphenanthrene	80.742	47744	11359	1178.5	1159.5
206	23DMP	2,3-Dimethylphenanthrene	81.003	28489	6146	703.2	627.4
206	19DMP	1,9-Dimethylphenanthrene	81.125	24860	6233	613.6	636.2
206	18DMP	1,8-Dimethylphenanthrene	81.543	10991	2507	271.3	255.9
206	12DMP	1,2-Dimethylphenanthrene	82.049	6615	1523	163.3	155.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M1050677.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
212	ET4DBT	4-Ethyldibenzothiophene	77.240	1759	388	43.4	39.6
212	DM46DBT	4,6-Dimethyldibenzothiophene	77.605	18712	4242	461.9	433.0
212	DMDBT3	Dimethyldibenzothiophene peak 3	77.936	444	67	11.0	6.8
212	DMDBT4	Dimethyldibenzothiophene peak 4	78.180	9754	2211	240.8	225.7
212	DMDBT5	Dimethyldibenzothiophene peak 5	78.355	23554	3901	581.4	398.2
212	DMDBT6	Dimethyldibenzothiophene peak 6	78.999	7087	1403	174.9	143.2
212	DM14DBT	1,4-Dimethyldibenzothiophene	79.191	6884	1174	169.9	119.8
212	DMDBT7	Dimethyldibenzothiophene peak 7	79.661	5159	757	127.3	77.3
212	DMDBT8	Dimethyldibenzothiophene peak 8	79.766	1180	343	29.1	35.0
212	DMDBT9	Dimethyldibenzothiophene peak 9	80.254	1516	336	37.4	34.3
226	TMDBT	Trimethyldibenzothiophene	81.700	78951	4184	1948.8	427.1
231	231A20	C20 Triaromatic Steroid	92.364	4685	1081	115.6	110.3
231	231B21	C21 Triaromatic	94.855	3864	950	95.4	97.0
231	231C26	C26 20S Triaromatic	104.003	1717	394	42.4	40.2
231	231D26	C27 20S & C26 20R Triaromatic	105.588	4503	941	111.1	96.1
231	231E28	C28 20S Triaromatic	106.895	4192	697	103.5	71.11
231	231F27	C27 20R Triaromatic	107.540	2456	445	60.6	45.4
231	231G28	C28 20R Triaromatic	109.125	3617	731	89.3	74.6
231	231H29	C29 Triaromatic (24 n-propyl)	110.432	600	145	14.8	14.8
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.669	371	96	9.2	9.8
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.278	402	96	9.9	9.8
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.836	153	44	3.8	4.5
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.185	1117	207	27.6	21.1
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.760	1381	225	34.1	23.0
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	109.003	405	56	10.0	5.7
245	DA	Triaromatic Dinosteroid a	109.213	230	52	5.7	5.3
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.387	1191	152	29.4	15.5
245	DB	Triaromatic Dinosteroid b	109.805	692	146	17.1	14.9
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.979	1276	174	31.5	17.8
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.119	750	120	18.5	12.2
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.711	926	148	22.9	15.1
245	DC	Triaromatic Dinosteroid c	110.903	709	141	17.5	14.4
245	DD	Triaromatic Dinosteroid d	110.990	642	145	15.8	14.8
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.408	397	62	9.8	6.3
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.634	1043	198	25.7	20.2
245	DE	Triaromatic Dinosteroid e	111.756	667	111	16.5	11.3
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.227	787	144	19.4	14.7
245	DF	Triaromatic Dinosteroid f	112.349	757	166	18.7	16.9

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M1050677.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
253	S253A	C21 Ring-C Monoaromatic Steroid	84.627	1722	380	42.5	38.8
253	S253B	C22 Monoaromatic steroid	87.084	1928	344	47.6	35.1
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	97.016	1280	241	31.6	24.6
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.173	1267	294	31.0	30.0
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.636	1208	290	29.8	29.6
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.776	1196	214	29.5	21.8
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.176	2175	372	53.7	38.0
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.466	668	156	16.5	15.9
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.605	772	172	19.1	17.6
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.797	1435	297	35.4	30.3
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.936	1889	352	46.6	35.9
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.208	722	164	17.8	16.7
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.522	914	153	22.6	15.6
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.626	1710	272	42.2	27.6
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.229	625	113	15.4	11.5

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US136228**
Well Name:	**WALAKPA 2**	**Project #:**	**05-295-A**
Depth:	**2632.5 - 2632.5 FT**	**Lab ID:**	**CP278539**
Sampling Point:		**File Name:**	**M1050677.D**

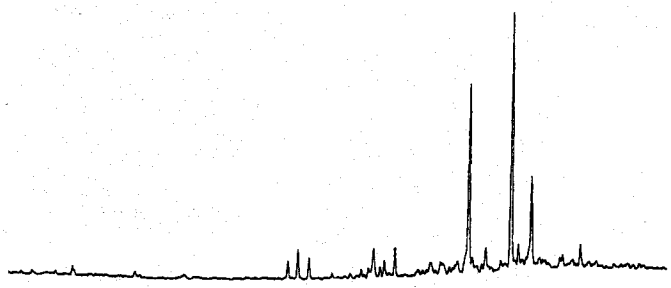
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.33	0.38
TAS #1 20/20+27	0.66	0.71
TAS #2 21/21+28	0.52	0.57
%26TAS	20.5	23.0
%27TAS	29.3	25.9
%28TAS	43.1	42.6
%29TAS	7.2	8.5
C28/C26 20S TAS	2.44	1.77
C28/C27 20R TAS	1.47	1.64
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.98	1.22
%27 MAS	35.4	38.7
%28 MAS	33.4	32.2
%29 MAS	31.2	29.2
(C21+C22)/Σ MAS	0.19	0.19
TAS/(MAS+TAS)	0.57	0.59
TA28/(TA28+MA29)	0.61	0.61
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.27	0.31
C4/C3+C4 Mester	0.49	0.48
Phenanthrenes and Naphthalenes		
MPI-1	1.27	1.34
MPI-2	1.32	1.39
Rc(a) if Ro < 1.3 (Ro%)	1.13	1.17
Rc(b) if Ro > 1.3 (Ro%)	1.54	1.50
DNR-1	9.69	7.21
DNR-2	2.89	2.95
TNR1	1.28	1.43
TDE-1	4.98	5.11
TDE-2	0.19	0.21
MDR	4.31	4.29
Rm (Ro%)	0.83	0.83
MDR23	2.12	2.19
MDR1	0.70	0.76
DBT/Phenanthrene	0.10	0.10
TPHEN	15.34	14.22
C3BTI	1.45	1.13
RC_S	0.47	0.42

BASELINE DGSI
ANALYTICAL LABORATORIES

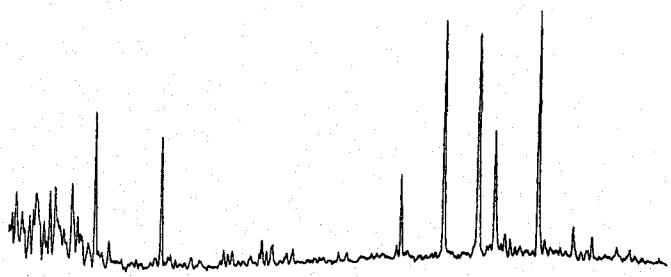
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132260
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218043
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	4560 FT
Longitude:	-156.0647	**Bottom Depth:**	4630 FT

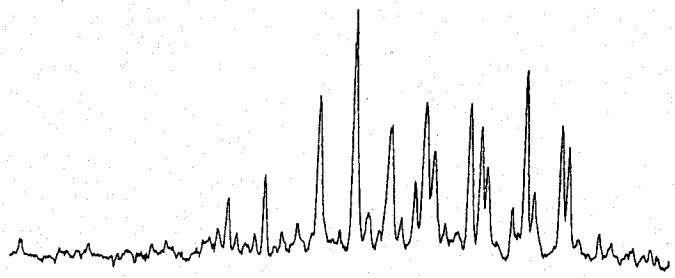
m/z 253: Monoaromatic steroids M1031253.D



m/z 231: Triaromatic steroids M1031253.D



m/z 245 Triaromatic Methylsteroids M1031253.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	0.48	M	
TAS #2 21/21+28	0.33	M	
%26 TAS	14.3	D	
%27 TAS	30.8	D	
%28 TAS	48.9	D	
%29 TAS	6.0	D	
C28/C26 20S TAS	3.83		
C28/C27 20R TAS	1.59		
Dia/Regular C27 MAS	0.27		
%27 MAS	33.2	D	
%28 MAS	28.7	D	
%29 MAS	38.1	D	
(C21+C22)/Σ MAS	0.08	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.77	M	
TA28/(TA28+MA29)	0.80	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.23	A	
C4/C3+C4 Mester	0.50	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.69	M	
Rc(a) if Ro < 1.3 (Ro%)	0.79	M	
Rc(b) if Ro > 1.3 (Ro%)	1.88	M	
MPI-2	0.77	M	
DNR-1	5.57	M	
DNR-2	1.92	M	
TNR1	1.12	M	
TDE-1	6.91	M	
TDE-2	0.21	M	
MDR	3.42	M	
Rm (Ro%)	0.77	M	
MDR23	0.84	M	
MDR1	0.49	M	
DBT/Phenanthrene	0.05	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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M1031253.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.022	31530	7503	300.0	300.0
92	16AB	C16 Alkyl Benzene	66.750	13539	3241	128.8	129.6
92	17AB	C17 Alkyl Benzene	71.596	11290	2646	107.4	105.8
92	18AB	C18 Alkyl Benzene	75.772	8717	2310	82.9	92.4
92	1THIO92	Dimethyl dibenzothiophene 1	77.514	2109	346	20.1	13.8
92	2THIO92	Dimethyl dibenzothiophene 2	78.229	2043	286	19.4	11.4
92	19AB	C19 Alkyl Benzene	79.518	7042	1926	67.0	77.0
92	20AB	C20 Alkyl Benzene	82.952	5769	1530	54.9	61.2
92	21AB	C21 Alkyl Benzene	86.141	5309	1394	50.5	55.7
92	22AB	C22 Alkyl Benzene	89.157	3918	1060	37.3	42.4
92	23AB	C23 Alkyl Benzene	92.016	3824	984	36.4	39.3
92	PHYBz	Phytanyl Benzene	93.915	983	139	9.4	5.6
92	24AB	C24 Alkyl Benzene	94.735	3844	907	36.6	36.3
92	25AB	C25 Alkyl Benzene	97.332	4025	942	38.3	37.7
92	26AB	C26 Alkyl Benzene	99.824	3599	817	34.2	32.7
106	16ATM	C16 Alkyl Toluene (meta)	66.001	15566	3642	148.1	145.6
106	16ATO	C16 Alkyl Toluene (ortho)	66.959	9796	2051	93.2	82.0
106	17ATM	C17 Alkyl Toluene (meta)	70.899	16377	3803	155.8	152.1
106	17ATO	C17 Alkyl Toluene (ortho)	71.753	8813	2077	83.9	83.0
106	18ATM	C18 Alkyl Toluene (meta)	75.127	12612	2978	120.0	119.1
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	6795	1651	64.7	66.0
106	1THIO106	Dimethyl dibenzothiophene 1	77.514	3039	345	28.9	13.8
106	2THIO106	Dimethyl dibenzothiophene 2	78.281	1614	240	15.4	9.6
106	19ATM	C19 Alkyl Toluene (meta)	78.891	9731	2531	92.6	101.2
106	19ATO	C19 Alkyl Toluene (ortho)	79.640	5268	1320	50.1	52.8
106	20ATM	C20 Alkyl Toluene (meta)	82.342	8312	2236	79.1	89.4
106	20ATO	C20 Alkyl Toluene (ortho)	83.074	4365	1198	41.5	47.9
106	21ATM	C21 Alkyl Toluene (meta)	85.566	6915	1775	65.8	71.0
106	21ATO	C21 Alkyl Toluene (ortho)	86.280	4235	986	40.3	39.4
106	22ATM	C22 Alkyl Toluene (meta)	88.582	6030	1655	57.4	66.2
106	22ATO	C22 Alkyl Toluene (ortho)	89.279	3626	927	34.5	37.1
106	23ATM	C23 Alkyl Toluene (meta)	91.440	6586	1549	62.7	61.9
106	23ATO	C23 Alkyl Toluene (ortho)	92.138	2947	801	28.0	32.0
106	24ATM	C24 Alkyl Toluene (meta)	94.159	5619	1331	53.5	53.2
106	24ATO	C24 Alkyl Toluene (ortho)	94.857	3279	780	31.2	31.2
106	PHYTL	Phytanyl Toluene	95.868	8789	1227	83.6	49.1
106	25ATM	C25 Alkyl Toluene (meta)	96.774	5812	1316	55.3	52.6
106	25ATO	C25 Alkyl Toluene (ortho)	97.454	2955	729	28.1	29.1
106	26ATM	C26 Alkyl Toluene (meta)	99.266	6618	1396	63.0	55.8
106	26ATO	C26 Alkyl Toluene (ortho)	99.946	3235	786	30.8	31.4
134	15AI	C15 Aryl Isoprenoids	60.878	1857	314	17.7	12.6
134	16AI	C16 Aryl Isoprenoids	66.071	2097	363	20.0	14.5
134	17AI	C17 Aryl Isoprenoids					
134	18AI	C18 Aryl Isoprenoids	74.848	1860	398	17.7	15.9
134	19AI	C19 Aryl Isoprenoids	77.148	2506	410	23.8	16.4
134	20AI	C20 Aryl Isoprenoids	80.965	1612	349	15.3	14.0
134	21AI	C21 Aryl Isoprenoids	83.788	635	146	6.0	5.8
134	22AI	C22 Aryl Isoprenoids					
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M1031253.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.959	42280	7055	402.3	282.1
142	1MN	1-Methylnaphthalene	39.178	33612	5406	319.8	216.2
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.149	9936	1439	94.5	57.5
156	1EN	1-Ethylnaphthalene	46.236	2620	704	24.9	28.1
156	26DMN	2,6-Dimethylnaphthalene	47.055	47655	7306	453.4	292.1
156	27DMN	2,7-Dimethylnaphthalene	47.212	45865	7881	436.4	315.1
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.205	102202	13318	972.4	532.5
156	16DMN	1,6-Dimethylnaphthalene	48.467	85084	13406	809.6	536.0
156	23DMN	2,3-Dimethylnaphthalene	49.652	10270	2277	97.7	91.0
156	14DMN	1,4-Dimethylnaphthalene	49.739	38465	5364	366.0	214.5
156	15DMN	1,5-Dimethylnaphthalene	49.844	16785	3450	159.7	137.9
156	12DMN	1,2-Dimethylnaphthalene	50.802	17874	2839	170.1	113.5
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.637	2476	409	23.6	16.4
168	DPM	Diphenylmethane	48.868	2904	486	27.6	19.4
168	3MBP	3-Methylbiphenyl	53.311	105268	17092	1001.6	683.4
168	4MBP	4-Methylbiphenyl	53.956	43257	6862	411.6	274.4
168	DBF	Dibenzofuran	55.385	58193	9064	553.7	362.4
170	BB_EMN	Ethyl-methyl-Naphthalene	55.141	24486	3234	233.0	129.3
170	AB_EMN	Ethyl-methyl-Naphthalene	56.344	11016	1662	104.8	66.5
170	137TMN	1,3,7-Trimethylnaphthalene	56.797	48255	7629	459.1	305.0
170	136TMN	1,3,6-Trimethylnaphthalene	57.163	75952	12391	722.7	495.4
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.243	57356	8332	545.7	333.1
170	236TMN	2,3,6-Trimethylnaphthalene	58.505	64175	10861	610.6	434.3
170	127TMN	1,2,7-Trimethylnaphthalene	59.254	14663	2519	139.5	100.7
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.428	70895	10751	674.5	429.9
170	124TMN	1,2,4-Trimethylnaphthalene	60.337	5470	955	52.0	38.2
170	125TMN	1,2,5-Trimethylnaphthalene	60.790	37813	6536	359.8	261.3
178	PHEN	Phenanthrene	70.271	399912	81640	3805.1	3264.3
184	1357	1,3,5,7-Tetramethylnaphthalene	64.746	15083	2542	143.5	101.6
184	1367	1,3,6,7-Tetramethylnaphthalene	65.896	24201	4794	230.3	191.7
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.646	12759	2370	121.4	94.8
184	1257	1,2,5,7-Tetramethylnaphthalene	66.820	11706	2257	111.4	90.2
184	2367	2,3,6,7-Tetramethylnaphthalene	67.186	5847	1177	55.6	47.1
184	1267	1,2,6,7-Tetramethylnaphthalene	67.622	8772	1761	83.5	70.4
184	1237	1,2,3,7-Tetramethylnaphthalene	67.813	3225	657	30.7	26.3
184	1236	1,2,3,6-Tetramethylnaphthalene	68.093	4662	1277	44.4	51.1
184	1256	1,2,5,6-Tetramethylnaphthalene	68.790	21335	4433	203.0	177.2
184	DBT	Dibenzothiophene	68.999	21718	4309	206.6	172.3
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.197	160582	34278	1527.9	1370.6
192	2MP	2-Methylphenanthrene	75.388	201594	43641	1918.1	1744.9
192	9MP	9-Methylphenanthrene	76.068	223230	47701	2124.0	1907.3
192	1MP	1-Methylphenanthrene	76.260	159617	35428	1518.7	1416.6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M1031253.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.245	6975	1325	66.4	53.0
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	1025	233	9.8	9.3
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.402	1099	248	10.5	9.9
198	4MDBT	4 Methyl Dibenzothiophene	73.541	36505	7941	347.3	317.5
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.325	18304	3520	174.2	140.7
198	1MDBT	1 Methyl Dibenzothiophene	75.127	10679	2308	101.6	92.3
206	36DMP	3,6-Dimethylphenanthrene	79.431	23515	5071	223.7	202.8
206	26DMP	2,6-Dimethylphenanthrene	79.675	54902	11194	522.4	447.6
206	27DMP	2,7-Dimethylphenanthrene	79.780	27857	7089	265.1	283.4
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.303	187482	36164	1783.8	1446.0
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.494	98471	17326	936.9	692.8
206	17DMP	1,7-Dimethylphenanthrene	80.651	81606	18589	776.5	743.3
206	23DMP	2,3-Dimethylphenanthrene	80.913	35302	7475	335.9	298.9
206	19DMP	1,9-Dimethylphenanthrene	81.035	40907	10120	389.2	404.6
206	18DMP	1,8-Dimethylphenanthrene	81.453	18566	4258	176.7	170.3
206	12DMP	1,2-Dimethylphenanthrene	81.958	14039	3248	133.6	129.9
206	9_10DMP	9,10-Dimethylphenanthrene	82.603	1842	452	17.5	18.1
212	DMDBT	Dimethyldibenzothiophene	77.532	91740	5081	872.9	203.2
219	RET	Retene	86.228	25248	5714	240.2	228.5
226	TMDBT	Trimethyldibenzothiophene	81.610	60178	2681	572.6	107.2
231	231A20	C20 Triaromatic Steroid	92.277	4707	1055	44.8	42.2
231	231B21	C21 Triaromatic	94.787	4015	879	38.2	35.1
231	231C26	C26 20S Triaromatic	103.946	2389	576	22.7	23.0
231	231D26	C27 20S & C26 20R Triaromatic	105.550	7648	1596	72.8	63.8
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.857	9155	1514	87.1	60.5
231	231F27	C27 20R Triaromatic	107.502	5146	856	49.0	34.2
231	TADMD3	C28 23,24-Cholestane Triaromatic					
231	C29TA1	C29 Triaromatic	107.851	973	160	9.3	6.4
231	C29TA2	C29 Triaromatic	108.043	578	127	5.5	5.1
231	TADMD4	C28 23,24-Cholestane Triaromatic					
231	231G28	C28 20R Triaromatic	109.089	8170	1667	77.7	66.7
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic	110.396	997	209	9.5	8.4
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.631	605	128	5.8	5.1
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.241	777	179	7.4	7.2
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.799	503	78	4.8	3.1
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.130	2216	349	21.1	14.0
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.723	3433	533	32.7	21.3
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.984	776	106	7.4	4.2
245	DA	Triaromatic Dinosteroid a	109.176	347	67	3.3	2.7
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.368	2456	290	23.4	11.6
245	DB	Triaromatic Dinosteroid b	109.769	945	173	9.0	6.9
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.926	2355	340	22.4	13.6
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.082	1722	238	16.4	9.5
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.675	2109	342	20.1	13.7
245	DC	Triaromatic Dinosteroid c	110.867	1513	293	14.4	11.7
245	DD	Triaromatic Dinosteroid d	110.954	1110	209	10.6	8.4

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M1031253.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.390	539	124	5.1	5.0
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.599	2102	416	20.0	16.6
245	DE	Triaromatic Dinosteroid e	111.738	1036	159	9.9	6.4
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.174	1533	300	14.6	12.0
245	DF	Triaromatic Dinosteroid f	112.296	1215	255	11.6	10.2
253	S253A	C21 Ring-C Monoaromatic Steroid	84.555	540	119	5.1	4.8
253	S253B	C22 Monoaromatic steroid	87.012	432	79	4.1	3.2
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.931	1027	192	9.8	7.7
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.122	273	52	2.6	2.1
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.587	277	63	2.6	2.5
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.726	1305	147	12.4	5.9
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.127	1792	152	17.1	6.1
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.373	988	182	9.4	7.3
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.564	471	78	4.5	3.1
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.739	526	103	5.0	4.1
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.913	1663	294	15.8	11.8
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.151	1390	276	13.2	11.0
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.465	555	117	5.3	4.7
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.587	986	241	9.4	9.6
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.277	395	100	3.8	4.0

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132260**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**4560 - 4630 FT**	**Lab ID:**	**CP218043**
Sampling Point:		**File Name:**	**M1031253.D**

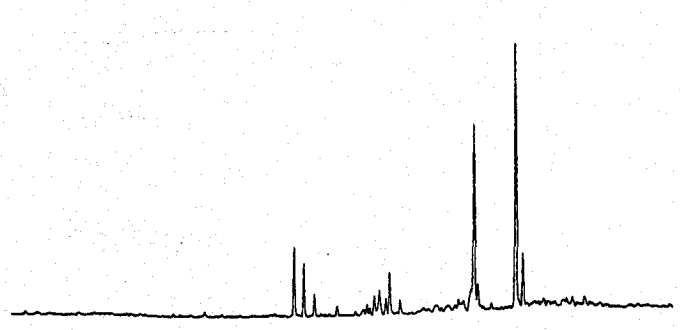
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.21	0.23
TAS #1 20/20+27	0.48	0.55
TAS #2 21/21+28	0.33	0.35
%26TAS	14.3	17.4
%27TAS	30.8	25.9
%28TAS	48.9	50.4
%29TAS	6.0	6.3
C28/C26 20S TAS	3.83	2.63
C28/C27 20R TAS	1.59	1.95
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.27	0.27
%27 MAS	33.2	31.8
%28 MAS	28.7	22.5
%29 MAS	38.1	45.6
(C21+C22)/Σ MAS	0.08	0.09
TAS/(MAS+TAS)	0.77	0.79
TA28/(TA28+MA29)	0.80	0.78
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.23	0.25
C4/C3+C4 Mester	0.50	0.51
Phenanthrenes and Naphthalenes		
MPI-1	0.69	0.71
MPI-2	0.77	0.79
Rc(a) if Rc < 1.3 (Ro%)	0.79	0.80
Rc(b) if Ro > 1.3 (Ro%)	1.88	1.87
DNR-1	5.57	4.40
DNR-2	1.92	1.99
TNR1	1.12	1.30
TDE-1	6.91	6.84
TDE-2	0.21	0.23
MDR	3.42	3.44
Rm (Ro%)	0.77	0.77
MDR23	0.84	0.82
MDR1	0.49	0.54
DBT/Phenanthrene	0.05	0.05

BASELINE DGSI
ANALYTICAL LABORATORIES

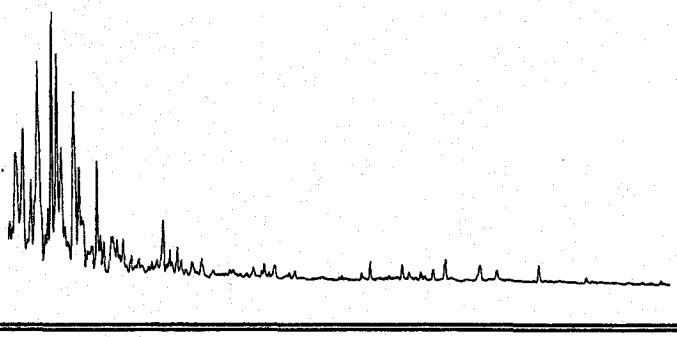
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132261
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218044
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5068.4 FT
Longitude:	-156.0647	**Bottom Depth:**	5068.4 FT

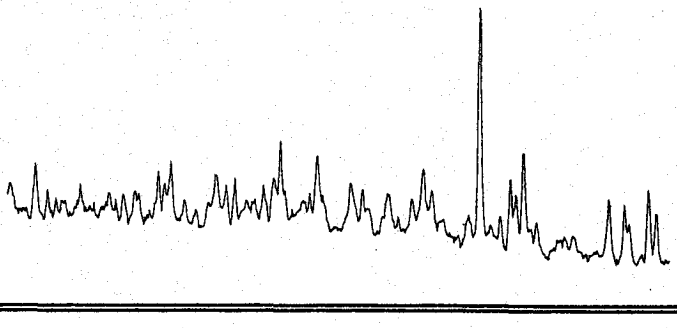
***m/z* 253: Monoaromatic steroids** M1031258.D



***m/z* 231: Triaromatic steroids** M1031258.D



***m/z* 245 Triaromatic Methylsteroids** M1031258.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.64	M	1.0 (1.3%)
TAS #1 20/20+27	0.89	M	
TAS #2 21/21+28	0.74	M	
%26 TAS	33.4	D	
%27 TAS	26.4	D	
%28 TAS	40.2	D	
%29 TAS		D	
C28/C26 20S TAS	1.33		
C28/C27 20R TAS	1.52		
Dia/Regular C27 MAS			
%27 MAS		D	
%28 MAS		D	
%29 MAS		D	
(C21+C22)/Σ MAS		M	1.0 (1.3%)
TAS/(MAS+TAS)	1.00	M	
TA28/(TA28+MA29)	1.00	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.12	A	
C4/C3+C4 Mester	0.37	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.48	M	
Rc(a) if Ro < 1.3 (Ro%)	0.66	M	
Rc(b) if Ro > 1.3 (Ro%)	2.01	M	
MPI-2	0.51	M	
DNR-1	5.38	M	
DNR-2	1.67	M	
TNR1	1.05	M	
TDE-1	8.75	M	
TDE-2	0.19	M	
MDR	1.45	M	
Rm (Ro%)	0.67	M	
MDR23	0.32	M	
MDR1	0.27	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 6

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M1031258.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)	75.040	44852	10695	300.0	300.0
92	16AB	C16 Alkyl Benzene	66.769	25337	5114	169.5	143.5
92	17AB	C17 Alkyl Benzene	71.597	13261	3249	88.7	91.1
92	18AB	C18 Alkyl Benzene	75.772	9129	2372	61.1	66.5
92	1THIO92	Dimethyl dibenzothiophene 1	77.514	2055	357	13.7	10.0
92	2THIO92	Dimethyl dibenzothiophene 2	78.246	3092	445	20.7	12.5
92	19AB	C19 Alkyl Benzene	79.518	6624	1820	44.3	51.1
92	20AB	C20 Alkyl Benzene	82.951	5464	1431	36.5	40.1
92	21AB	C21 Alkyl Benzene	86.141	4551	1204	30.4	33.8
92	22AB	C22 Alkyl Benzene	89.158	3844	1097	25.7	30.8
92	23AB	C23 Alkyl Benzene	92.016	3272	824	21.9	23.1
92	PHYBz	Phytanyl Benzene	93.933	507	89	3.4	2.5
92	24AB	C24 Alkyl Benzene	94.718	2936	716	19.6	20.1
92	25AB	C25 Alkyl Benzene	97.332	2781	645	18.6	18.1
92	26AB	C26 Alkyl Benzene	99.825	2220	459	14.8	12.9
106	16ATM	C16 Alkyl Toluene (meta)	66.020	21836	5066	146.1	142.1
106	16ATO	C16 Alkyl Toluene (ortho)	66.961	17375	3484	116.2	97.7
106	17ATM	C17 Alkyl Toluene (meta)	70.900	17055	3938	114.1	110.5
106	17ATO	C17 Alkyl Toluene (ortho)	71.754	10301	2518	68.9	70.6
106	18ATM	C18 Alkyl Toluene (meta)	75.127	11566	2726	77.4	76.5
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	7252	1798	48.5	50.4
106	1THIO106	Dimethyl dibenzothiophene 1					
106	2THIO106	Dimethyl dibenzothiophene 2					
106	19ATM	C19 Alkyl Toluene (meta)	78.891	7219	1926	48.3	54.0
106	19ATO	C19 Alkyl Toluene (ortho)	79.658	4932	1251	33.0	35.1
106	20ATM	C20 Alkyl Toluene (meta)	82.342	6951	1889	46.5	53.0
106	20ATO	C20 Alkyl Toluene (ortho)	83.073	3674	979	24.6	27.5
106	21ATM	C21 Alkyl Toluene (meta)	85.565	8862	2036	59.3	57.1
106	21ATO	C21 Alkyl Toluene (ortho)	86.263	5827	1122	39.0	31.5
106	22ATM	C22 Alkyl Toluene (meta)	88.583	4532	1176	30.3	33.0
106	22ATO	C22 Alkyl Toluene (ortho)	89.280	6026	1150	40.3	32.3
106	23ATM	C23 Alkyl Toluene (meta)	91.441	8653	1345	57.9	37.7
106	23ATO	C23 Alkyl Toluene (ortho)	92.138	2274	605	15.2	17.0
106	24ATM	C24 Alkyl Toluene (meta)	94.160	6078	1022	40.7	28.7
106	24ATO	C24 Alkyl Toluene (ortho)	94.840	2725	521	18.2	14.6
106	PHYTL	Phytanyl Toluene	95.920	5014	782	33.5	21.9
106	25ATM	C25 Alkyl Toluene (meta)	96.774	3245	731	21.7	20.5
106	25ATO	C25 Alkyl Toluene (ortho)	97.454	1588	375	10.6	10.5
106	26ATM	C26 Alkyl Toluene (meta)	99.267	2847	615	19.0	17.3
106	26ATO	C26 Alkyl Toluene (ortho)	99.947	1379	314	9.2	8.8
134	15AI	C15 Aryl Isoprenoids	60.896	11228	2017	75.1	56.6
134	16AI	C16 Aryl Isoprenoids	66.072	7411	1319	49.6	37.0
134	17AI	C17 Aryl Isoprenoids					
134	18AI	C18 Aryl Isoprenoids	74.865	2858	699	19.1	19.6
134	19AI	C19 Aryl Isoprenoids	77.166	3739	774	25.0	21.7
134	20AI	C20 Aryl Isoprenoids	80.965	3047	615	20.4	17.3
134	21AI	C21 Aryl Isoprenoids					
134	22AI	C22 Aryl Isoprenoids					
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M1031258.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	38.097	6532063	815632	43690.8	22878.9
142	1MN	1-Methylnaphthalene	39.317	5472592	705296	36604.3	19783.9
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.183	337850	44719	2259.8	1254.4
156	1EN	1-Ethylnaphthalene	46.288	166819	37311	1115.8	1046.6
156	26DMN	2,6-Dimethylnaphthalene	47.107	1320929	169530	8835.3	4755.4
156	27DMN	2,7-Dimethylnaphthalene	47.281	1238619	208250	8284.7	5841.5
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.309	2998621	328776	20056.8	9222.3
156	16DMN	1,6-Dimethylnaphthalene	48.571	2430854	362120	16259.2	10157.6
156	23DMN	2,3-Dimethylnaphthalene	49.703	344948	61856	2307.2	1735.1
156	14DMN	1,4-Dimethylnaphthalene	49.808	1186050	149576	7933.1	4195.7
156	15DMN	1,5-Dimethylnaphthalene	49.913	476058	114552	3184.2	3213.2
156	12DMN	1,2-Dimethylnaphthalene	50.836	544581	86408	3642.5	2423.8
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.654	79055	11886	528.8	333.4
168	DPM	Diphenylmethane	48.902	32975	5356	220.6	150.2
168	3MBP	3-Methylbiphenyl	53.363	1307138	203966	8743.0	5721.3
168	4MBP	4-Methylbiphenyl	53.990	393592	63518	2632.6	1781.7
168	DBF	Dibenzofuran	55.454	2194366	311402	14677.4	8735.0
170	BB_EMN	Ethyl-methyl-Naphthalene	55.193	295641	37113	1977.4	1041.0
170	AB_EMN	Ethyl-methyl-Naphthalene	56.360	145332	21432	972.1	601.2
170	137TMN	1,3,7-Trimethylnaphthalene	56.831	541372	82112	3621.1	2303.3
170	136TMN	1,3,6-Trimethylnaphthalene	57.214	878730	139720	5877.5	3919.2
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.260	645732	94156	4319.1	2641.1
170	236TMN	2,3,6-Trimethylnaphthalene	58.539	679425	116772	4544.4	3275.5
170	127TMN	1,2,7-Trimethylnaphthalene	59.271	175071	28232	1171.0	791.9
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.462	931280	138849	6229.0	3894.8
170	124TMN	1,2,4-Trimethylnaphthalene	60.356	60764	10793	406.4	302.7
170	125TMN	1,2,5-Trimethylnaphthalene	60.809	531442	92084	3554.6	2583.0
178	PHEN	Phenanthrene	70.360	5804348	947213	38823.3	26569.8
184	1357	1,3,5,7-Tetramethylnaphthalene	64.748	102874	17443	688.1	489.3
184	1367	1,3,6,7-Tetramethylnaphthalene	65.898	172906	36011	1156.5	1010.1
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.647	109041	19602	729.3	549.8
184	1257	1,2,5,7-Tetramethylnaphthalene	66.839	123507	24562	826.1	689.0
184	2367	2,3,6,7-Tetramethylnaphthalene	67.205	42291	8842	282.9	248.0
184	1267	1,2,6,7-Tetramethylnaphthalene	67.640	91628	18794	612.9	527.2
184	1237	1,2,3,7-Tetramethylnaphthalene	67.815	24896	5349	166.5	150.0
184	1236	1,2,3,6-Tetramethylnaphthalene	68.095	59049	15173	395.0	425.6
184	1256	1,2,5,6-Tetramethylnaphthalene	68.809	266371	52877	1781.7	1483.2
184	DBT	Dibenzothiophene	69.018	337696	65456	2258.7	1836.1
191	BH32	C32 Benzohopane	115.854	361	132	2.4	3.7
191	BH33	C33 Benzohopane	116.917	594	190	4.0	5.3
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.231	1320577	259536	8832.9	7280.1
192	2MP	2-Methylphenanthrene	75.423	1519261	333270	10161.8	9348.4
192	9MP	9-Methylphenanthrene	76.103	1660852	324638	11108.9	9106.3
192	1MP	1-Methylphenanthrene	76.294	1392572	309470	9314.4	8680.8

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M1031258.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.264	19398	3391	129.7	95.1
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	11311	2548	75.7	71.5
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.402	12509	2755	83.7	77.3
198	4MDBT	4 Methyl Dibenzothrophene	73.541	132938	28072	883.2	787.4
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.325	108965	21313	728.8	597.8
198	1MDBT	1 Methyl Dibenzothiophene	75.144	90941	19761	608.3	554.3
206	36DMP	3,6-Dimethylphenanthrene	79.431	123601	26924	826.7	755.2
206	26DMP	2,6-Dimethylphenanthrene	79.693	261060	57763	1746.1	1620.3
206	27DMP	2,7-Dimethylphenanthrene	79.797	143573	35224	960.3	988.1
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.320	934941	171750	6253.5	4817.7
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.512	481285	82822	3219.2	2323.2
206	17DMP	1,7-Dimethylphenanthrene	80.669	438983	100530	2936.2	2819.9
206	23DMP	2,3-Dimethylphenanthrene	80.930	243534	54440	1628.9	1527.1
206	19DMP	1,9-Dimethylphenanthrene	81.052	240560	57912	1609.0	1624.5
206	18DMP	1,8-Dimethylphenanthrene	81.453	107800	24936	721.0	699.5
206	12DMP	1,2-Dimethylphenanthrene	81.958	126077	30104	843.3	844.4
206	9_10DMP	9,10-Dimethylphenanthrene	82.603	14860	3598	99.4	100.9
212	DMDBT	Dimethyldibenzothiophene	78.281	206344	7798	1380.2	218.7
219	RET	Retene	86.245	64580	14695	432.0	412.2
226	TMDBT	Trimethyldibenzothiophene	81.610	102635	2149	686.5	60.3
231	231A20	C20 Triaromatic Steroid	92.278	18371	4119	122.9	115.5
231	231B21	C21 Triaromatic	94.770	9867	1961	66.0	55.0
231	231C26	C26 20S Triaromatic	103.948	2811	574	18.8	16.1
231	231D26	C27 20S & C26 20R Triaromatic	105.534	4011	759	26.8	21.3
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.841	3725	590	24.9	16.6
231	231F27	C27 20R Triaromatic	107.504	2219	385	14.8	10.8
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	3382	665	22.6	18.7
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic					
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.615	474	108	3.2	3.0
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.225	596	115	4.0	3.2
245	E2S	C28 20S 2-Methyl Triaromatic Steroid					
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.149	1211	201	8.1	5.6
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.707	914	131	6.1	3.7
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.916	529	114	3.5	3.2
245	DA	Triaromatic Dinosteroid a	109.264	215	49	1.4	1.4
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.334	762	112	5.1	3.1
245	DB	Triaromatic Dinosteroid b	109.735	557	98	3.7	2.7
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.927	1246	185	8.3	5.2
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.066	729	129	4.9	3.6
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.676	516	87	3.5	2.4
245	DC	Triaromatic Dinosteroid c					
245	DD	Triaromatic Dinosteroid d					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M1031258.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.374	761	199	5.1	5.6
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.600	1299	271	8.7	7.6
245	DE	Triaromatic Dinosteroid e	111.705	249	61	1.7	1.7
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.158	356	57	2.4	1.6
245	DF	Triaromatic Dinosteroid f	112.280	311	65	2.1	1.8
253	S253A	C21 Ring-C Monoaromatic Steroid					
253	S253B	C22 Monoaromatic steroid					
253	S253C	C27 Reg 5β(H),10β(CH3) 20S					
253	S253D	C27 Dia 10β(H),5β(CH3) 20S					
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R					
253	S253F	C27 Reg 5α(H),10β(CH3) 20S					
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S					
253	S253H	C27 Reg 5α(H),10β(CH3) 20R					
253	S253I	C28 Reg 5α(H),10β(CH3) 20S					
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R					
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S					
253	S253L	C29 Reg 5α(H),10β(CH3) 20S					
253	S253M	C28 Reg 5α(H),10β(CH3) 20R					
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R					
253	S253O	C29 Reg 5α(H),10β(CH3) 20R					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132261**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5068.4 - 5068.4 FT**	**Lab ID:**	**CP218044**
Sampling Point:		**File Name:**	**M1031258.D**

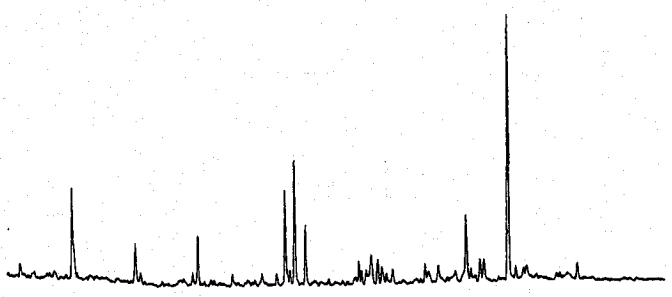
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.64	0.67
TAS #1 20/20+27	0.89	0.91
TAS #2 21/21+28	0.74	0.75
%26TAS	33.4	35.3
%27TAS	26.4	23.7
%28TAS	40.2	40.9
%29TAS		
C28/C26 20S TAS	1.33	1.03
C28/C27 20R TAS	1.52	1.73
Monoaromatic Steroids m/z 253		
Dra/Regular C27 MAS		
%27 MAS		
%28 MAS		
%29 MAS		
(C21+C22)/Σ MAS		
TAS/(MAS+TAS)	1.00	1.00
TA28/(TA28+MA29)	1.00	1.00
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index 2	0.12	0.14
C4/C3+C4 Mester	0.37	0.34
Phenanthrenes and Naphthalenes		
MPI-1	0.48	0.56
MPI-2	0.51	0.63
Rc(a) if Ro < 1.3 (Ro%)	0.66	0.71
Rc(b) if Ro > 1.3 (Ro%)	2.01	1.96
DNR-1	5.38	3.30
DNR-2	1.67	1.79
TNR1	1.05	1.24
TDE-1	8.75	8.53
TDE-2	0.19	0.20
MDR	1.45	1.42
Rm (Ro%)	0.67	0.67
MDR23	0.32	0.33
MDR1	0.27	0.30
DBT/Phenanthrene	0.06	0.07

BASELINE DGSI
ANALYTICAL LABORATORIES

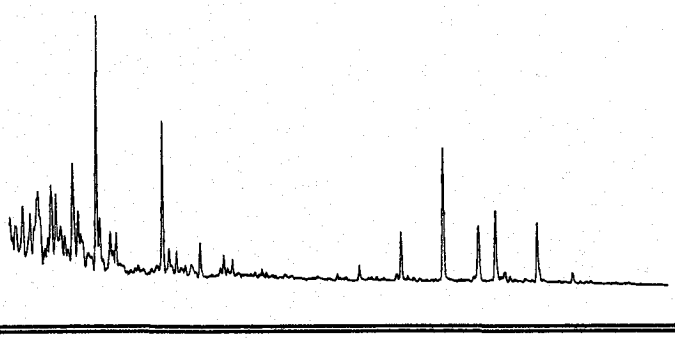
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132262
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218045
Lease:		**Sample Type:**	CORE
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5113.6 FT
Longitude:	-156.0647	**Bottom Depth:**	5113.6 FT

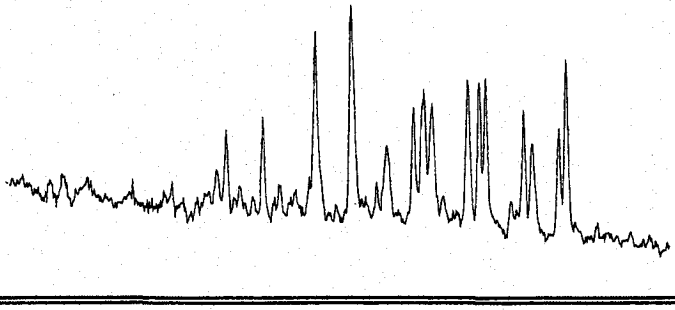
m/z 253: Monoaromatic steroids M1031259.D



m/z 231: Triaromatic steroids M1031259.D



m/z 245 Triaromatic Methylsteroids M1031259.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.47	M	1.0 (1.3%)
TAS #1 20/20+27	0.72	M	
TAS #2 21/21+28	0.68	M	
%26 TAS	21.2	D	
%27 TAS	41.8	D	
%28 TAS	31.4	D	
%29 TAS	5.6	D	
C28/C26 20S TAS	1.58		
C28/C27 20R TAS	0.75		
Dia/Regular C27 MAS	0.45		
%27 MAS	37.4	D	
%28 MAS	30.7	D	
%29 MAS	31.9	D	
(C21+C22)/Σ MAS	0.38	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.66	M	
TA28/(TA28+MA29)	0.62	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.31	A	
C4/C3+C4 Mester	0.50	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.45	M	
Rc(a) if Ro < 1.3 (Ro%)	0.64	M	
Rc(b) if Ro > 1.3 (Ro%)	2.03	M	
MPI-2	0.50	M	
DNR-1	4.50	M	
DNR-2	1.56	M	
TNR1	1.04	M	
TDE-1	5.80	M	
TDE-2	0.23	M	
MDR	2.57	M	
Rm (Ro%)	0.74	M	
MDR23	0.52	M	
MDR1	0.31	M	
DBT/Phenanthrene	0.21	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:**	US132262
Well Name:	KUYANAK 1	**Project #:**	03-473-A
Depth:	5113.6 - 5113.6 FT	**Lab ID:**	CP218045
Sampling Point:		**File Name:**	M1031259.D

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
230	OTP	*Ortho-terphenyl* (internal standard)					
92	16AB	C16 Alkyl Benzene				0.0	0.0
92	17AB	C17 Alkyl Benzene	66.751	43654	9750		
92	18AB	C18 Alkyl Benzene	71.580	32504	7616		
92	1THIO92	Dimethyl dibenzothiophene 1	75.771	22195	5675		
92	2THIO92	Dimethyl dibenzothiophene 2	77.514	8588	1426		
92	19AB	C19 Alkyl Benzene	78.281	8786	1299		
92	20AB	C20 Alkyl Benzene	79.518	16640	4294		
92	21AB	C21 Alkyl Benzene	82.951	15045	3996		
92	22AB	C22 Alkyl Benzene	86.140	14137	4020		
92	23AB	C23 Alkyl Benzene	89.157	8526	2313		
92	PHYBz	Phytanyl Benzene	91.998	5801	1525		
92	24AB	C24 Alkyl Benzene	93.915	3662	549		
92	25AB	C25 Alkyl Benzene	94.717	4472	1047		
92	26AB	C26 Alkyl Benzene	97.331	2473	579		
106	16ATM	C16 Alkyl Toluene (meta)	99.806	1934	426		
106	16ATO	C16 Alkyl Toluene (ortho)	66.001	43760	9987		
106	17ATM	C17 Alkyl Toluene (meta)	66.960	35423	7476		
106	17ATO	C17 Alkyl Toluene (ortho)	70.901	44848	10241		
106	18ATM	C18 Alkyl Toluene (meta)	71.755	28174	6788		
106	18ATO	C18 Alkyl Toluene (ortho)	75.127	25249	5895		
106	1THIO106	Dimethyl dibenzothiophene 1	75.911	19225	4872		
106	2THIO106	Dimethyl dibenzothiophene 2	77.514	9831	1408		
106	19ATM	C19 Alkyl Toluene (meta)	78.281	7195	1191		
106	19ATO	C19 Alkyl Toluene (ortho)	78.891	16592	4256		
106	20ATM	C20 Alkyl Toluene (meta)	79.640	14947	3775		
106	20ATO	C20 Alkyl Toluene (ortho)	82.341	14650	3729		
106	21ATM	C21 Alkyl Toluene (meta)	83.073	12057	3374		
106	21ATO	C21 Alkyl Toluene (ortho)	85.548	9426	2459		
106	22ATM	C22 Alkyl Toluene (meta)	86.280	9098	2345		
106	22ATO	C22 Alkyl Toluene (ortho)	88.582	8612	2286		
106	23ATM	C23 Alkyl Toluene (meta)	89.279	8148	2024		
106	23ATO	C23 Alkyl Toluene (ortho)	91.440	5330	1343		
106	24ATM	C24 Alkyl Toluene (meta)	92.137	4370	1128		
106	24ATO	C24 Alkyl Toluene (ortho)	94.159	4703	1029		
106	PHYTL	Phytanyl Toluene	94.856	3397	790		
106	25ATM	C25 Alkyl Toluene (meta)	95.850	31749	4740		
106	25ATO	C25 Alkyl Toluene (ortho)	96.774	2688	622		
106	26ATM	C26 Alkyl Toluene (meta)	97.453	2347	542		
106	26ATO	C26 Alkyl Toluene (ortho)	99.266	2553	504		
134	15AI	C15 Aryl Isoprenoids	99.946	1662	385		
134	16AI	C16 Aryl Isoprenoids	60.878	9058	1590		
134	17AI	C17 Aryl Isoprenoids	66.071	12444	2373		
134	18AI	C18 Aryl Isoprenoids	70.709	4579	948		
134	19AI	C19 Aryl Isoprenoids	74.865	13779	3303		
134	20AI	C20 Aryl Isoprenoids	77.166	17325	3919		
134	21AI	C21 Aryl Isoprenoids	80.965	13251	3143		
134	22AI	C22 Aryl Isoprenoids	83.805	6310	1616		
134	ISOR	Isorenieratane	86.698	4029	960		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M1031259.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.959	101792	17347		
142	1MN	1-Methylnaphthalene	39.179	93977	15413		
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.149	22131	3266		
156	1EN	1-Ethylnaphthalene	46.254	10137	2152		
156	26DMN	2,6-Dimethylnaphthalene	47.056	76854	12663		
156	27DMN	2,7-Dimethylnaphthalene	47.212	82249	13529		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.206	188096	24519		
156	16DMN	1,6-Dimethylnaphthalene	48.450	156365	25181		
156	23DMN	2,3-Dimethylnaphthalene	49.652	24196	5003		
156	14DMN	1,4-Dimethylnaphthalene	49.739	77629	10755		
156	15DMN	1,5-Dimethylnaphthalene	49.844	35337	7669		
156	12DMN	1,2-Dimethylnaphthalene	50.802	43067	6933		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.637	6274	1042		
168	DPM	Diphenylmethane	48.868	8440	1376		
168	3MBP	3-Methylbiphenyl	53.312	241273	38952		
168	4MBP	4-Methylbiphenyl	53.957	97749	15615		
168	DBF	Dibenzofuran	55.386	195658	30070		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.142	87209	11810		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.344	43173	6437		
170	137TMN	1,3,7-Trimethylnaphthalene	56.797	122694	20034		
170	136TMN	1,3,6-Trimethylnaphthalene	57.163	201256	32690		
170	146135T	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.244	164582	24455		
170	236TMN	2,3,6-Trimethylnaphthalene	58.505	171500	29109		
170	127TMN	1,2,7-Trimethylnaphthalene	59.254	47677	8455		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.429	208598	31143		
170	124TMN	1,2,4-Trimethylnaphthalene	60.338	20601	3643		
170	125TMN	1,2,5-Trimethylnaphthalene	60.791	119426	21063		
178	PHEN	Phenanthrene	70.291	1514151	307500		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.747	52837	8850		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.897	54514	11142		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.646	43990	8150		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.820	42712	8391		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.186	16775	3405		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.639	29490	5966		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.814	10281	2200		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.095	16344	4482		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.810	76110	15804		
184	DBT	Dibenzothiophene	69.001	321396	64158		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.214	368777	79797		
192	2MP	2-Methylphenanthrene	75.388	444566	102629		
192	9MP	9-Methylphenanthrene	76.085	650561	140298		
192	1MP	1-Methylphenanthrene	76.259	524058	117532		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M1031259.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.245	40182	7931		
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.088	3483	812		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.401	4365	1027		
198	4MDBT	4 Methyl Dibenzothiophene	73.541	258396	54044		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.325	168383	34033		
198	1MDBT	1 Methyl Dibenzothiophene	75.144	100398	21478		
206	36DMP	3,6-Dimethylphenanthrene	79.431	32511	8807		
206	26DMP	2,6-Dimethylphenanthrene	79.675	85150	18674		
206	27DMP	2,7-Dimethylphenanthrene	79.780	44854	12192		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.302	371787	74780		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.494	192040	33755		
206	17DMP	1,7-Dimethylphenanthrene	80.651	162819	39799		
206	23DMP	2,3-Dimethylphenanthrene	80.912	85535	18192		
206	19DMP	1,9-Dimethylphenanthrene	81.034	117279	29011		
206	18DMP	1,8-Dimethylphenanthrene	81.453	60043	14578		
206	12DMP	1,2-Dimethylphenanthrene	81.958	55724	13241		
206	9_10DMP	9,10-Dimethylphenanthrene	82.603	13672	3214		
212	DMDBT	Dimethyldibenzothiophene	78.281	546181	24604		
219	RET	Retene	86.227	35806	8169		
226	TMDBT	Trimethyldibenzothiophene	81.609	353291	10160		
231	231A20	C20 Triaromatic Steroid	92.277	15770	3745		
231	231B21	C21 Triaromatic	94.769	9819	2238		
231	231C26	C26 20S Triaromatic	103.929	3080	706		
231	231D26	C27 20S & C26 20R Triaromatic	105.533	9288	1936		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic	106.648	276	73		
231	231E28	C28 20S Triaromatic	106.840	4876	801		
231	231F27	C27 20R Triaromatic	107.485	6072	1057		
231	TADMD3	C28 23,24-Cholestane Triaromatic	107.590	112	83		
231	C29TA1	C29 Triaromatic	107.851	915	158		
231	C29TA2	C29 Triaromatic	108.043	515	108		
231	TADMD4	C28 23,24-Cholestane Triaromatic	108.880	250	47		
231	231G28	C28 20R Triaromatic	109.089	4558	882		
231	TADMD5	C28 23,24-Cholestane Triaromatic	109.159	439	204		
231	C29TA3	C29 Triaromatic	110.379	817	169		
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.613	546	122		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.224	661	141		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.799	242	46		
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.130	1612	261		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.723	1938	297		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.967	195	42		
245	DA	Triaromatic Dinosteroid a	109.159	341	61		
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.333	852	112		
245	DB	Triaromatic Dinosteroid b	109.751	858	165		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.926	1152	189		
245	E3R	C28 20R 3-Methyl Triaromatic Steroid	110.065	1184	172		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.658	1149	205		
245	DC	Triaromatic Dinosteroid c	110.849	974	203		
245	DD	Triaromatic Dinosteroid d	110.954	911	208		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M1031259.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.372	296	52		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.582	792	174		
245	DE	Triaromatic Dinosteroid e	111.721	830	128		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.174	684	149		
245	DF	Triaromatic Dinosteroid f	112.279	1113	241		
253	S253A	C21 Ring-C Monoaromatic Steroid	84.554	6995	1591		
253	S253B	C22 Monoaromatic steroid	87.012	3726	720		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.930	1858	312		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.105	832	186		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.569	1510	338		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.708	1326	208		
253	S253G	C28 Dia 10αH,5αCH3 20s+Reg5βH,10βCH3 20S	99.127	1754	298		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.390	1121	241		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.547	612	122		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.721	2088	410		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.896	2208	399		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.151	1016	247		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.447	1009	191		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.569	1637	242		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.155	802	132		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132262**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5113.6 - 5113.6 FT**	**Lab ID:**	**CP218045**
Sampling Point:		**File Name:**	**M1031259.D**

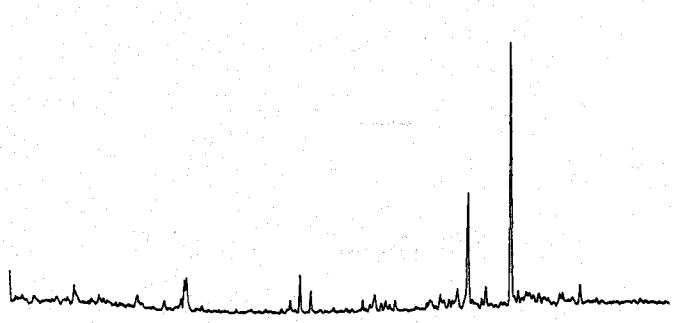
Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.47	0.52
TAS #1 20/20+27	0.72	0.78
TAS #2 21/21+28	0.68	0.72
%26TAS	21.2	25.1
%27TAS	41.8	37.6
%28TAS	31.4	31.3
%29TAS	5.6	6.0
C28/C26 20S TAS	1.58	1.13
C28/C27 20R TAS	0.75	0.83
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.45	0.60
%27 MAS	37.4	38.6
%28 MAS	30.7	30.7
%29 MAS	31.9	30.7
(C21+C22)/Σ MAS	0.38	0.41
TAS/(MAS+TAS)	0.66	0.67
TA28/(TA28+MA29)	0.62	0.62
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.31	0.34
C4/C3+C4 Mester	0.50	0.51
Phenanthrenes and Naphthalenes		
MPI-1	0.45	0.48
MPI-2	0.50	0.54
Rc(a) if Ro < 1.3 (Ro%)	0.64	0.66
Rc(b) if Ro > 1.3 (Ro%)	2.03	2.01
DNR-1	4.50	3.42
DNR-2	1.56	1.66
TNR1	1.04	1.19
TDE-1	5.80	5.78
TDE-2	0.23	0.27
MDR	2.57	2.52
Rm (Ro%)	0.74	0.73
MDR23	0.52	0.53
MDR1	0.31	0.33
DBT/Phenanthrene	0.21	0.21

BASELINE DGSI
ANALYTICAL LABORATORIES

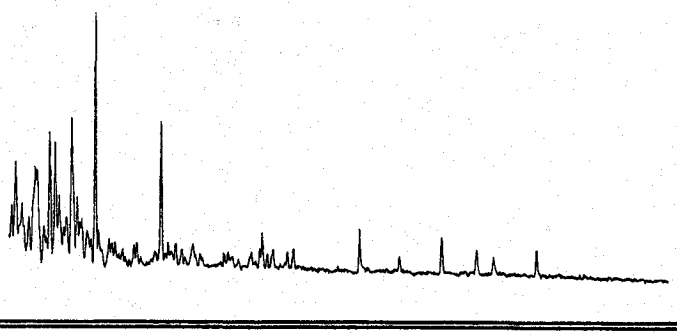
AROMATIC GCMS

Company:	CONOCOPHILLIPS	**Client ID:**	US132263
Country:	UNITED STATES	**Project #:**	03-473-A
Basin:	NORTH SLOPE	**Lab ID:**	CP218046
Lease:		**Sample Type:**	CUTTINGS
Block:		**Sampling Point:**	
Field:		**Formation:**	
Well Name:	KUYANAK 1	**Geologic Age:**	
Latitude:	70.93152	**Top Depth:**	5400 FT
Longitude:	-156.0647	**Bottom Depth:**	5430 FT

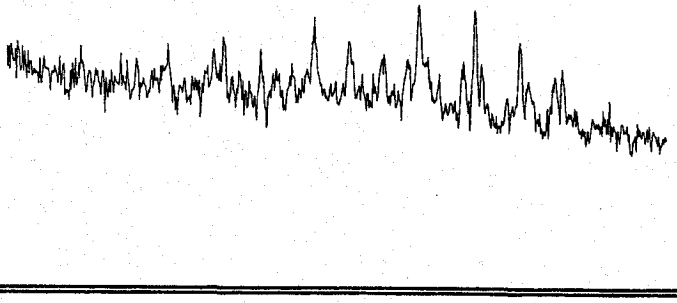
***m/z* 253: Monoaromatic steroids** M1031260.D



***m/z* 231: Triaromatic steroids** M1031260.D



***m/z* 245 Triaromatic Methylsteroids** M1031260.D



RATIOS (on Areas)[1]		Appl[2]	TEV[3]
Mono- (MAS) and Triaromatic Steroids (TAS)			
(C20+C21)/Σ TAS	0.71	M	1.0 (1.3%)
TAS #1 20/20+27	0.91	M	
TAS #2 21/21+28	0.81	M	
%26 TAS	25.5	D	
%27 TAS	32.6	D	
%28 TAS	41.9	D	
%29 TAS		D	
C28/C26 20S TAS	1.85		
C28/C27 20R TAS	1.28		
Dia/Regular C27 MAS	0.49		
%27 MAS	27.7	D	
%28 MAS	34.5	D	
%29 MAS	37.8	D	
(C21+C22)/Σ MAS	0.18	M	1.0 (1.3%)
TAS/(MAS+TAS)	0.57	M	
TA28/(TA28+MA29)	0.35	M	1.0 (0.8%)
Triaromatic Methylsteroids			
Dinosteroid Index	0.28	A	
C4/C3+C4 Mester	0.49	A	
Phenanthrenes, Naphthalenes, and Dibenzothiophenes			
MPI-1	0.53	M	
Rc(a) if Ro < 1.3 (Ro%)	0.69	M	
Rc(b) if Ro > 1.3 (Ro%)	1.98	M	
MPI-2	0.57	M	
DNR-1	3.79	M	
DNR-2	1.70	M	
TNR1	0.74	M	
TDE-1	5.01	M	
TDE-2	0.24	M	
MDR	1.87	M	
Rm (Ro%)	0.70	M	
MDR23	0.62	M	
MDR1	0.48	M	
DBT/Phenanthrene	0.05	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:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M1031260.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	8790	1936		
92	17AB	C17 Alkyl Benzene	71.580	6275	1571		
92	18AB	C18 Alkyl Benzene	75.754	4691	1171		
92	1THIO92	Dimethyl dibenzothiophene 1	77.514	1693	212		
92	2THIO92	Dimethyl dibenzothiophene 2	78.211	1170	159		
92	19AB	C19 Alkyl Benzene	79.501	3297	850		
92	20AB	C20 Alkyl Benzene	82.934	3417	844		
92	21AB	C21 Alkyl Benzene	86.141	3015	846		
92	22AB	C22 Alkyl Benzene	89.141	1966	543		
92	23AB	C23 Alkyl Benzene	91.999	1632	424		
92	PHYB2	Phytanyl Benzene	93.899	624	95		
92	24AB	C24 Alkyl Benzene	94.718	1435	339		
92	25AB	C25 Alkyl Benzene	97.315	950	230		
92	26AB	C26 Alkyl Benzene	99.808	690	157		
106	16ATM	C16 Alkyl Toluene (meta)	66.002	9325	2160		
106	16ATO	C16 Alkyl Toluene (ortho)	66.943	7396	1491		
106	17ATM	C17 Alkyl Toluene (meta)	70.883	9392	2219		
106	17ATO	C17 Alkyl Toluene (ortho)	71.737	5617	1375		
106	18ATM	C18 Alkyl Toluene (meta)	75.109	6514	1510		
106	18ATO	C18 Alkyl Toluene (ortho)	75.911	4144	968		
106	1THIO106	Dimethyl dibenzothiophene 1					
106	2THIO106	Dimethyl dibenzothiophene 2					
106	19ATM	C19 Alkyl Toluene (meta)	78.874	4230	1042		
106	19ATO	C19 Alkyl Toluene (ortho)	79.640	3215	805		
106	20ATM	C20 Alkyl Toluene (meta)	82.342	3922	1005		
106	20ATO	C20 Alkyl Toluene (ortho)	83.073	2327	648		
106	21ATM	C21 Alkyl Toluene (meta)	85.548	2971	806		
106	21ATO	C21 Alkyl Toluene (ortho)	86.263	2219	575		
106	22ATM	C22 Alkyl Toluene (meta)	88.565	2575	695		
106	22ATO	C22 Alkyl Toluene (ortho)	89.280	2054	498		
106	23ATM	C23 Alkyl Toluene (meta)	91.424	2364	538		
106	23ATO	C23 Alkyl Toluene (ortho)	92.121	1316	348		
106	24ATM	C24 Alkyl Toluene (meta)	94.160	1642	360		
106	24ATO	C24 Alkyl Toluene (ortho)	94.840	1084	259		
106	PHYTL	Phytanyl Toluene	95.851	3105	417		
106	25ATM	C25 Alkyl Toluene (meta)	96.757	1096	257		
106	25ATO	C25 Alkyl Toluene (ortho)	97.455	674	158		
106	26ATM	C26 Alkyl Toluene (meta)	99.267	1060	247		
106	26ATO	C26 Alkyl Toluene (ortho)	99.930	519	122		
134	15AI	C15 Aryl Isoprenoids	60.861	3901	734		
134	16AI	C16 Aryl Isoprenoids	66.055	4041	765		
134	17AI	C17 Aryl Isoprenoids	70.709	1127	241		
134	18AI	C18 Aryl Isoprenoids	74.848	3237	762		
134	19AI	C19 Aryl Isoprenoids	77.148	4104	875		
134	20AI	C20 Aryl Isoprenoids	80.965	3336	665		
134	21AI	C21 Aryl Isoprenoids	83.788	1144	315		
134	22AI	C22 Aryl Isoprenoids	86.681	714	161		
134	ISOR	Isorenieratane					

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M1031260.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
142	2MN	2-Methylnaphthalene	37.958	129580	21641		
142	1MN	1-Methylnaphthalene	39.178	118692	19377		
149	MTTC578	5,7,8,-triMe-MTTChroman					
156	2EN	2-Ethylnaphthalene	46.149	14621	2077		
156	1EN	1-Ethylnaphthalene	46.236	6148	1408		
156	26DMN	2,6-Dimethylnaphthalene	47.055	57151	9083		
156	27DMN	2,7-Dimethylnaphthalene	47.212	57297	9491		
156	1317DMN	1,3 & 1,7-Dimethylnaphthalenes	48.205	162257	21484		
156	16DMN	1,6-Dimethylnaphthalene	48.449	122645	19592		
156	23DMN	2,3-Dimethylnaphthalene	49.652	20002	3822		
156	14DMN	1,4-Dimethylnaphthalene	49.722	47265	6958		
156	15DMN	1,5-Dimethylnaphthalene	49.843	30171	5560		
156	12DMN	1,2-Dimethylnaphthalene	50.785	27184	4380		
161	MTTC8	8-Me-MTTChroman					
168	2MBP	2-Methylbiphenyl	46.637	5236	853		
168	DPM	Diphenylmethane	48.868	3336	548		
168	3MBP	3-Methylbiphenyl	53.294	90921	14643		
168	4MBP	4-Methylbiphenyl	53.956	32443	5277		
168	DBF	Dibenzofuran	55.368	67759	10321		
170	BB_EMN	Ethyl-methyl-Naphthalene	55.141	30060	3951		
170	AB_EMN	Ethyl-methyl-Naphthalene	56.344	15404	2374		
170	137TMN	1,3,7-Trimethylnaphthalene	56.779	68921	11495		
170	136TMN	1,3,6-Trimethylnaphthalene	57.163	100940	16353		
170	1461357	(1,4,6+1,3,5)-Trimethylnaphthalenes	58.226	89168	13370		
170	236TMN	2,3,6-Trimethylnaphthalene	58.487	66017	11330		
170	127TMN	1,2,7-Trimethylnaphthalene	59.237	21107	3542		
170	167126T	(1,6,7+1,2,6)-Trimethylnaphthalenes	59.411	86769	13404		
170	124TMN	1,2,4-Trimethylnaphthalene	60.321	8641	1503		
170	125TMN	1,2,5-Trimethylnaphthalene	60.774	43330	7576		
178	PHEN	Phenanthrene	70.256	354300	74221		
184	1357	1,3,5,7-Tetramethylnaphthalene	64.730	24045	4388		
184	1367	1,3,6,7-Tetramethylnaphthalene	65.880	31016	6543		
184	1247	(1,2,4,7+1,2,4,6+1,4,6,7)-Tetramethylnaphthalenes	66.630	19476	3655		
184	1257	1,2,5,7-Tetramethylnaphthalene	66.821	16964	3290		
184	2367	2,3,6,7-Tetramethylnaphthalene	67.187	6389	1330		
184	1267	1,2,6,7-Tetramethylnaphthalene	67.623	11088	2307		
184	1237	1,2,3,7-Tetramethylnaphthalene	67.797	4634	902		
184	1236	1,2,3,6-Tetramethylnaphthalene	68.095	4354	1208		
184	1256	1,2,5,6-Tetramethylnaphthalene	68.792	23586	5158		
184	DBT	Dibenzothiophene	68.984	18969	3839		
191	BH32	C32 Benzohopane					
191	BH33	C33 Benzohopane					
191	BH34	C34 Benzohopane					
191	BH35	C35 Benzohopane					
192	3MP	3-Methylphenanthrene	75.197	111159	23818		
192	2MP	2-Methylphenanthrene	75.371	130574	30714		
192	9MP	9-Methylphenanthrene	76.051	194198	43194		
192	1MP	1-Methylphenanthrene	76.242	140265	31866		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M1031260.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
198	CAD	Cadalene	66.246	8804	1729		
198	12467PMN	1,2,4,6,7-Pentamethylnaphthalene	73.071	2317	523		
198	12357PMN	1,2,3,5,7-Pentamethylnaphthalene	73.402	3279	736		
198	4MDBT	4 Methyl Dibenzothiophene	73.524	17166	3751		
198	23MDBT	2 & 3 Methyl Dibenzothiophenes	74.308	11795	2136		
198	1MDBT	1 Methyl Dibenzothiophene	75.109	9183	2012		
206	36DMP	3,6-Dimethylphenanthrene	79.414	15762	3491		
206	26DMP	2,6-Dimethylphenanthrene	79.675	33379	7644		
206	27DMP	2,7-Dimethylphenanthrene	79.780	18265	4553		
206	39DMP	(3,9+3,10+2,10+1,3)-Dimethylphenanthrenes	80.285	173761	35386		
206	29DMP	(2,9+1,6)-Dimethylphenanthrenes	80.477	85400	15705		
206	17DMP	1,7-Dimethylphenanthrene	80.634	60647	14409		
206	23DMP	2,3-Dimethylphenanthrene	80.913	30212	6472		
206	19DMP	1,9-Dimethylphenanthrene	81.017	46117	11416		
206	18DMP	1,8-Dimethylphenanthrene	81.435	20609	4850		
206	12DMP	1,2-Dimethylphenanthrene	81.941	15995	3793		
206	9_10DMP	9,10-Dimethylphenanthrene	82.586	3390	883		
212	DMDBT	Dimethyldibenzothiophene	77.514	37776	1694		
219	RET	Retene	86.228	10503	2325		
226	TMDBT	Trimethyldibenzothiophene	81.610	25492	717		
231	231A20	C20 Triaromatic Steroid	92.278	4659	1110		
231	231B21	C21 Triaromatic	94.770	2671	626		
231	231C26	C26 20S Triaromatic	103.929	381	73		
231	231D26	C27 20S & C26 20R Triaromatic	105.533	827	163		
231	TADMD1	C28 23,24-Cholestane Triaromatic					
231	TADMD2	C28 23,24-Cholestane Triaromatic					
231	231E28	C28 20S Triaromatic	106.840	703	113		
231	231F27	C27 20R Triaromatic	107.468	488	81		
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	109.072	626	119		
231	TADMD5	C28 23,24-Cholestane Triaromatic					
231	C29TA3	C29 Triaromatic					
245	C3S	C27 20S 3-Methyl Triaromatic Steroid	106.596	126	29		
245	C4S	C27 20S 4-Methyl Triaromatic Steroid	107.224	149	30		
245	E2S	C28 20S 2-Methyl Triaromatic Steroid	107.747	66	19		
245	E3SC3R	C28 20S 3-Methyl & C27 20R 3-Methyl TAS	108.130	221	37		
245	E4SC4R	C28 20S 4-Methyl & C27 20R 4-Methyl TAS	108.706	222	30		
245	S2S	C29 20S 2-Methyl Triaromatic Steroid	108.950	58	17		
245	DA	Triaromatic Dinosteroid a	109.141	66	19		
245	S3S	C29 20S 3-Methyl Triaromatic Steroid	109.333	212	27		
245	DB	Triaromatic Dinosteroid b	109.734	168	25		
245	S4SE2R	C29 20S 4-Methyl & C28 20R 2-Methyl TAS	109.926	321	47		
245	E3R	C26 20R 3-Methyl Triaromatic Steroid	110.065	155	26		
245	E4R	C28 20R 4-Methyl Triaromatic Steroid	110.658	175	28		
245	DC	Triaromatic Dinosteroid c	110.850	251	49		
245	DD	Triaromatic Dinosteroid d	110.954	103	27		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
Well Name:	**KUYANAK 1**	**Project #:**	**03-473-A**
Depth:	**5400 - 5430 FT**	**Lab ID:**	**CP218046**
Sampling Point:		**File Name:**	**M1031260.D**

Ion	Peak Label	Compound Name	Ret. Time	Area	Height	ppm (Area)	ppm (Hght)
245	S2R	C29 20R 2-Methyl Triaromatic Steroid	111.373	54	14		
245	S3R	C29 20R 3-Methyl Triaromatic Steroid	111.582	186	37		
245	DE	Triaromatic Dinosteroid e	111.721	121	21		
245	S4R	C29 20R 4-Methyl Triaromatic Steroid	112.157	130	23		
245	DF	Triaromatic Dinosteroid f	112.279	106	26		
253	S253A	C21 Ring-C Monoaromatic Steroid	84.537	777	155		
253	S253B	C22 Monoaromatic steroid	87.012	656	103		
253	S253C	C27 Reg 5β(H),10β(CH3) 20S	96.932	504	83		
253	S253D	C27 Dia 10β(H),5β(CH3) 20S	97.106	248	54		
253	S253E	C27 Dia10βH,5βCH3 20R+Reg5βH,10βCH3 20R	98.587	204	58		
253	S253F	C27 Reg 5α(H),10β(CH3) 20S	98.709	435	82		
253	S253G	C28 Dia 10αH,5αCH3 20S+Reg5βH,10βCH3 20S	99.110	776	119		
253	S253H	C27 Reg 5α(H),10β(CH3) 20R	100.373	412	71		
253	S253I	C28 Reg 5α(H),10β(CH3) 20S	100.460	364	45		
253	S253J	C28 Dia 10αH,5αCH3 20R+Reg5βH,10βCH3 20R	100.722	408	82		
253	S253K	C29 Dia 10βH,5βCH3 20S+Reg5βH,10βCH3 20S	100.896	932	173		
253	S253L	C29 Reg 5α(H),10β(CH3) 20S	102.134	527	115		
253	S253M	C28 Reg 5α(H),10β(CH3) 20R	102.447	697	103		
253	S253N	C29 Dia 10βH,5βCH3 20R+Reg5βH,10βCH3 20R	102.569	643	94		
253	S253O	C29 Reg 5α(H),10β(CH3) 20R	104.243	363	57		

Company:	**CONOCOPHILLIPS**	**Client ID:**	**US132263**
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Sampling Point:		**File Name:**	**M1031260.D**

Miscellaneous Ratios	By Areas	By Heights
Triaromatic Steroids m/z 231		
(C20+C21)/Σ TAS	0.71	0.76
TAS #1 20/20+27	0.91	0.93
TAS #2 21/21+28	0.81	0.84
%26TAS	25.5	26.7
%27TAS	32.6	29.7
%28TAS	41.9	43.6
%29TAS		
C28/C26 20S TAS	1.85	1.55
C28/C27 20R TAS	1.28	1.47
Monoaromatic Steroids m/z 253		
Dia/Regular C27 MAS	0.49	0.65
%27 MAS	27.7	30.6
%28 MAS	34.5	30.7
%29 MAS	37.8	38.6
(C21+C22)/Σ MAS	0.18	0.19
TAS/(MAS+TAS)	0.57	0.62
TA28/(TA28+MA29)	0.35	0.35
Triaromatic Methylsteroids m/z 245		
Dinosteroid Index	0.28	0.31
C4/C3+C4 Mester	0.49	0.47
Phenanthrenes and Naphthalenes		
MPI-1	0.53	0.55
MPI-2	0.57	0.62
Rc(a) if Ro < 1.3 (Ro%)	0.69	0.70
Rc(b) if Ro > 1.3 (Ro%)	1.98	1.97
DNR-1	3.79	3.34
DNR-2	1.70	1.72
TNR1	0.74	0.85
TDE-1	5.01	5.04
TDE-2	0.24	0.26
MDR	1.87	1.86
Rm (Ro%)	0.70	0.70
MDR23	0.62	0.56
MDR1	0.46	0.52
DBT/Phenanthrene	0.05	0.05