

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-0-F1-01-00-PHC-S	97-0-F1-02-00-PHC-S	97-0-F1-03-00-PHC-S	97-0-F2-01-00-PHC-S
Lab ID	97C1364	97C1365	97C1366	97C1247
SDG	SDGS009	SDGS009	SDGS009	SDGS007
File	DZ2418.D	DZ2420.D	DZ2421.D	DZ2344.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	25.1 g	26.5 g	24.8 g	32.3 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BL-S-10PB	BL-S-10PB	BL-S-04PB
Field Date	7/16/1997	7/16/1997	7/16/1997	7/16/1997
Extract Date	8/8/1997	8/8/1997	8/8/1997	8/5/1997
Analysis Date	9/17/1997	9/17/1997	9/17/1997	9/13/1997
Min Reporting Limit	0.001	0.00094	0.001	0.00077
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00065 J	0.00043 J	0.00056 J	0.00023 J
S5-Diacholestane	0.00026 J	0.00035 J	0.00042 J	0.00014 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00054 J	0.0003 J	0.00043 J	0.0002 J
T12-Trisnorhopane(TM)	0.0026	0.0029	0.0029	0.0011 J
S24-Methylcholestane	0.0038	0.0035	0.004	0.0006 J
S25-Ethylcholestane	0.00045 J	0.0008 J	0.00067 J	0.00032 J
S28-Ethylcholestane	0.011	0.0096	0.011	0.0037
T15-Norhopane	0.018	0.017	0.018	0.0047
T18-Oleanane	0.0012	0.0011 J	0.00096 J	0.00037 J
T19-Hopane	0.0048	0.0046	0.0044	0.0019
T21-Homohopane	0.0019	0.002	0.0018	0.0011 J
T22-Homohopane	0.026	0.023	0.025	0.02
Total S/T	0.071	0.066	0.07	0.034
5B(H)-Cholane	92	69	72	68
D66-Dotriacontane	98	68	67	80

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Field ID	97-0-F2-02-00-PHC-S	97-0-F2-03-00-PHC-S	97-0-F4-01-00-PHC-S	97-0-F4-02-00-PHC-S
Lab ID	97C1246	97C1245	97C1345	97C1341
SDG	SDGS007	SDGS007	SDGS010	SDGS010
File	DZ2343.D	DZ2342.D	DZ2458.D	DZ2453.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	30.6 g	33.3 g	19.5 g	18.2 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BL-S-04PB	BL-S-13PB	BL-S-13PB
Field Date	7/16/1997	7/16/1997	7/15/1997	7/15/1997
Extract Date	8/5/1997	8/5/1997	8/11/1997	8/11/1997
Analysis Date	9/13/1997	9/13/1997	9/19/1997	9/19/1997
Min Reporting Limit	0.00082	0.00075	0.0013	0.0014
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00043 J	0.00019 J	0.00015 J	0.00028 J
S5-Diacholestane	0.00017 J	0.00012 J	0.00012 J	0.00013 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00028 J	0.0003 J	0.00022 J	0.00025 J
T12-Trisnorhopane(TM)	0.0014	0.0011	0.00042 J	0.00056 J
S24-Methylcholestane	0.00096 J	0.00068 J	0.00028 J	0.00062 J
S25-Ethylcholestane	0.00042 J	0.00036 J	0.00025 J	0.00028 J
S28-Ethylcholestane	0.0046	0.0034	0.0011 J	0.0012 J
T15-Norhopane	0.0055	0.0043	0.00083 J	0.0019 J
T18-Oleanane	0.00044 J	0.00038 J	0.00026 J	0.00042 J
T19-Hopane	0.0026	0.0018	0.0014 J	0.002 J
T21-Homohopane	0.0014	0.00096 J	0.0006 J	0.00089 J
T22-Homohopane	0.022	0.018	0.0017 J	0.0022
Total S/T	0.04	0.032	0.0073	0.011
5B(H)-Cholane	72	74	72	64
D66-Dotriacontane	85	90	66	80

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Field ID	97-0-F4-03-00-PHC-S	97-0-F5-01-00-PHC-S	97-0-F5-02-00-PHC-S	97-0-F5-03-00-PHC-S
Lab ID	97C1342	97C1343	97C1340	97C1344
SDG	SDGS010	SDGS010	SDGS010	SDGS010
File	DZ2454.D	DZ2455.D	DZ2452.D	DZ2456.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	20.2 g	17.6 g	16.3 g	18.2 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-13PB	BL-S-13PB	BL-S-13PB	BL-S-13PB
Field Date	7/15/1997	7/15/1997	7/15/1997	7/15/1997
Extract Date	8/11/1997	8/11/1997	8/11/1997	8/11/1997
Analysis Date	9/19/1997	9/19/1997	9/19/1997	9/19/1997
Min Reporting Limit	0.0012	0.0014	0.0015	0.0014
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00033 J	0.00035 J	0.00033 J	0.00028 J
S5-Diacholestane	0.00016 J	0.00023 J	0.00026 J	0.00015 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00024 J	0.00034 J	0.0003 J	0.00023 J
T12-Trisnorhopane(TM)	0.00051 J	0.00081 J	0.001 J	0.00058 J
S24-Methylcholestane	0.00052 J	0.00065 J	0.00042 J	0.00035 J
S25-Ethylcholestane	0.00022 J	0.00037 J	0.00044 J	0.00026 J
S28-Ethylcholestane	0.00082 J	0.0025	0.0039	0.0023
T15-Norhopane	0.0015 J	0.0017 J	0.0024	0.0014 J
T18-Oleanane	0.00037 J	0.00032 J	0.00027 J	0.00023 J
T19-Hopane	0.0016 J	0.002 J	0.0023	0.0015 J
T21-Homohopane	0.00097 J	0.00078 J	0.0012 J	0.00043 J
T22-Homohopane	0.0019	0.0054	0.0059	0.0045
Total S/T	0.0091	0.015	0.019	0.012
5B(H)-Cholane	67	65	66	65
D66-Dotriacontane	80	74	92	72

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Field ID	97-0-F6-01-00-PHC-S	97-0-F6-02-00-PHC-S	97-0-F6-03-00-PHC-S	97-0-F8-01-00-PHC-S
Lab ID	97C1351	97C1350	97C1349	97C1347
SDG	SDGS010	SDGS010	SDGS010	SDGS010
File	DZ2464.D	DZ2463.D	DZ2462.D	DZ2460.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	19.5 g	20.7 g	20.5 g	17 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-13PB	BL-S-13PB	BL-S-13PB	BL-S-13PB
Field Date	7/15/1997	7/15/1997	7/15/1997	7/15/1997
Extract Date	8/11/1997	8/11/1997	8/11/1997	8/11/1997
Analysis Date	9/19/1997	9/19/1997	9/19/1997	9/19/1997
Min Reporting Limit	0.0013	0.0012	0.0012	0.0015
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00022 J	0.00019 J	0.00018 J	0.00022 J
S5-Diacholestane	0.000098 J	0.00011 J	0.0001 J	0.00011 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00028 J	0.00019 J	0.00025 J	0.026
T12-Trisnorhopane(TM)	0.00057 J	0.00054 J	0.0006 J	0.00072 J
S24-Methylcholestane	0.00042 J	0.00022 J	0.00025 J	0.00023 J
S25-Ethylcholestane	0.00015 J	0.00015 J	0.00019 J	0.00019 J
S28-Ethylcholestane	0.0014 J	0.0016 J	0.0013 J	0.0013 J
T15-Norhopane	0.0011 J	0.0013 J	0.0015 J	0.0013 J
T18-Oleanane	0.0002 J	0.00013 J	0.00013 J	0.00023 J
T19-Hopane	0.0014 J	0.0014 J	0.0018	0.0016 J
T21-Homohopane	0.00088 J	0.0004 J	0.00081 J	0.00044 J
T22-Homohopane	0.0043	0.0041	0.0036	0.0039
Total S/T	0.011	0.01	0.011	0.036
5B(H)-Cholane	60	63	67	64
D66-Dotriacontane	61	70	71	62

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Lab ID	97C1346	97C1348	97C1357	97C1356
SDG	SDGS010	SDGS010	SDGS008	SDGS008
File	DZ2459.D	DZ2461.D	DZ2385.D	DZ2384.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	18.6 g	19.7 g	18.2 g	21.9 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-13PB	BL-S-13PB	BL-S-07PB	BL-S-07PB
Field Date	7/15/1997	7/15/1997	7/16/1997	7/16/1997
Extract Date	8/11/1997	8/11/1997	8/6/1997	8/6/1997
Analysis Date	9/19/1997	9/19/1997	9/15/1997	9/15/1997
Min Reporting Limit	0.0013	0.0013	0.0014	0.0011
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00028 J	0.00026 J	0.00056 J	0.0003 J
S5-Diacholestane	0.0002 J	0.00011 J	0.00026 J	0.00027 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00022 J	0.0002 J	0.00055 J	0.00042 J
T12-Trisnorhopane(TM)	0.00061 J	0.00058 J	0.0019 J	0.0012 J
S24-Methylcholestane	0.00039 J	0.00029 J	0.0019 J	0.0013 J
S25-Ethylcholestane	0.00019 J	0.0002 J	0.00055 J	0.00061 J
S28-Ethylcholestane	0.0017 J	0.0019	0.0048	0.0027
T15-Norhopane	0.0014 J	0.0014 J	0.011	0.0054
T18-Oleanane	0.00022 J	0.00026 J	0.00056 J	0.00056 J
T19-Hopane	0.0016 J	0.0014 J	0.0035	0.0024
T21-Homohopane	0.00072 J	0.00067 J	0.0016 J	0.0011 J
T22-Homohopane	0.0044	0.0039	0.019	0.013
Total S/T	0.012	0.011	0.046	0.029
5B(H)-Cholane	64	69	62	59
D66-Dotriacontane	67	74	58	57

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Field ID	97-0-F13-03-00-PHC-S	97-0-F14-01-00-PHC-S	97-0-F14-02-00-PHC-S	97-0-F14-03-00-PHC-S
Lab ID	97C1355	97C1352	97C1354	97C1353
SDG	SDGS008	SDGS008	SDGS008	SDGS008
File	DZ2383.D	DZ2380.D	DZ2382.D	DZ2381.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	27.9 g	16.3 g	17.3 g	20.6 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-07PB	BL-S-07PB	BL-S-07PB	BL-S-07PB
Field Date	7/16/1997	7/16/1997	7/16/1997	7/16/1997
Extract Date	8/6/1997	8/6/1997	8/6/1997	8/6/1997
Analysis Date	9/15/1997	9/15/1997	9/15/1997	9/15/1997
Min Reporting Limit	0.0009	0.0015	0.0014	0.0012
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00032 J	0.001 J	0.00078 J	0.00088 J
S5-Diacholestane	0.0002 J	0.00054 J	0.00045 J	0.00057 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00032 J	0.00078 J	0.00053 J	0.0006 J
T12-Trisnorhopane(TM)	0.0011 J	0.0024 J	0.0016 J	0.0022
S24-Methylcholestane	0.0014 J	0.0024 J	0.002 J	0.0031
S25-Ethylcholestane	0.00041 J	0.00058 J	0.00077 J	0.00078 J
S28-Ethylcholestane	0.0024	0.0068	0.0052	0.0041
T15-Norhopane	0.0049	0.0097	0.0073	0.01
T18-Oleanane	0.00053 J	0.0013 J	0.00058 J	0.00088 J
T19-Hopane	0.0022	0.0052	0.004	0.0052
T21-Homohopane	0.001 J	0.0022 J	0.0018 J	0.0022
T22-Homohopane	0.012	0.013	0.01	0.013
Total S/T	0.027	0.046	0.035	0.044
5B(H)-Cholane	59	59	60	58
D66-Dotriacontane	56	58	63	58

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Lab ID	97C1302	97C1287RE	97C1281RE	97C1280RE
SDG	SDGS007	SDGS006	SDGS006	SDGS006
File	DZ2347.D	DX6529.D	DX6523.D	DX6522.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	29.8 g	16.9 g	16.2 g	17.8 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BO-S-32PB	BO-S-32PB	BO-S-32PB
Field Date	7/14/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	8/5/1997	12/17/1997	12/17/1997	12/17/1997
Analysis Date	9/13/1997	1/9/1998	1/9/1998	1/9/1998
Min Reporting Limit	0.00084	0.0015	0.0015	0.0014
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	0.0003 J	0.00034 J	0.0003 J
S4-Diacholestane	0.00019 J	0.00036 J	0.00046 J	0.00042 J
S5-Diacholestane	0.00015 J	0.00025 J	0.00033 J	0.00031 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00022 J	0.00051 J	0.00051 J	0.00054 J
T12-Trisnorhopane(TM)	0.00064 J	0.00096 J	0.00085 J	0.001 J
S24-Methylcholestane	0.0006 J	0.00075 J	0.001 J	0.001 J
S25-Ethylcholestane	0.0003 J	0.00044 J	0.00051 J	0.00065 J
S28-Ethylcholestane	0.0016	0.0025	0.0028	0.003
T15-Norhopane	0.0016	0.0029	0.0033	0.004
T18-Oleanane	0.0004 J	0.00047 J	0.00057 J	0.00089 J
T19-Hopane	0.0018	0.0029	0.0029	0.003
T21-Homohopane	0.00088 J	0.0014 J	0.0016 J	0.0017
T22-Homohopane	0.0024	0.0067	0.0063	0.0074
Total S/T	0.011	0.02	0.021	0.024
5B(H)-Cholane	67	73	82	84
D66-Dotriacontane	77	70	79	90

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Lab ID	97C1297RE	97C1300	97C1303	97C1294RE
SDG	SDGS006	SDGS007	SDGS007	SDGS006
File	DX6539.D	DZ2345.D	DZ2349.D	DX6536.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	19.1 g	20.7 g	20.2 g	14.8 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BO-S-32PB	BL-S-04PB	BL-S-04PB	BO-S-32PB
Field Date	7/14/1997	7/14/1997	7/14/1997	7/14/1997
Extract Date	12/17/1997	8/5/1997	8/5/1997	12/17/1997
Analysis Date	1/10/1998	9/13/1997	9/13/1997	1/10/1998
Min Reporting Limit	0.0013	0.0012	0.0012	0.0017
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	0.00031 J	ND	ND	0.00045 J
S4-Diacholestane	0.00019 J	0.00036 J	0.00051 J	0.00064 J
S5-Diacholestane	0.00024 J	0.00021 J	0.00039 J	0.00038 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00032 J	0.00035 J	0.00085 J	0.00081 J
T12-Trisnorhopane(TM)	0.0005 J	0.00079 J	0.0016	0.0013 J
S24-Methylcholestane	0.00051 J	0.00092 J	0.0014 J	0.0017 J
S25-Ethylcholestane	0.0003 J	0.00042 J	0.00091 J	0.00079 J
S28-Ethylcholestane	0.0015 J	0.0018	0.0032	0.0024
T15-Norhopane	0.0019	0.0017 J	0.0042	0.0031
T18-Oleanane	0.00022 J	0.00047 J	0.0011 J	0.0013 J
T19-Hopane	0.0016 J	0.0024	0.0054	0.0048
T21-Homohopane	0.00081 J	0.0012 J	0.0016	0.0024
T22-Homohopane	0.0038	0.0017 J	0.0019	0.0031
Total S/T	0.012	0.012	0.023	0.023
5B(H)-Cholane	74	66	74	84
D66-Dotriacontane	62	75	85	75

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Lab ID	97C1243REX	97C1298RE	97C1301	97C1323
SDG	SDGS007	SDGS006	SDGS007	SDGS009
File	DZ2341.D	DX6540.D	DZ2346.D	DZ2407.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	30.9 g	18.6 g	32.4 g	26.3 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BO-S-32PB	BL-S-04PB	BL-S-10PB
Field Date	7/14/1997	7/14/1997	7/14/1997	7/13/1997
Extract Date	8/5/1997	12/17/1997	8/5/1997	8/8/1997
Analysis Date	9/13/1997	1/10/1998	9/13/1997	9/16/1997
Min Reporting Limit	0.00081	0.0013	0.00077	0.00095
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	0.00014 J	ND	ND
S4-Diacholestane	0.00029 J	0.00026 J	0.00021 J	0.0004 J
S5-Diacholestane	0.00015 J	0.00016 J	0.00014 J	0.00027 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.0002 J	0.0003 J	0.00018 J	0.00041 J
T12-Trisnorhopane(TM)	0.00065 J	0.00051 J	0.0006 J	0.00089 J
S24-Methylcholestane	0.00069 J	0.00053 J	0.0006 J	0.0015
S25-Ethylcholestane	0.00038 J	0.00035 J	0.00018 J	0.0006 J
S28-Ethylcholestane	0.0018	0.0018	0.0019	0.003
T15-Norhopane	0.0013	0.0018	0.0014	0.0029
T18-Oleanane	0.00034 J	0.00014 J	0.00026 J	0.00074 J
T19-Hopane	0.0017	0.0016	0.0016	0.0036
T21-Homohopane	0.00084 J	0.00078 J	0.00066 J	0.0018
T22-Homohopane	0.0051	0.0034	0.0045	0.0049
Total S/T	0.013	0.012	0.012	0.021
5B(H)-Cholane	71	85	62	73
D66-Dotriacontane	90	73	68	71

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-1-07-01-00-PHC-S	97-1-08-01-00-PHC-S	97-1-09-01-00-PHC-S	97-1-12-01-00-PHC-S
Lab ID	97C1282RE	97C1295RE	97C1296RE	97C1292RE
SDG	SDGS006	SDGS006	SDGS006	SDGS006
File	DX6524.D	DX6537.D	DX6538.D	DX6535.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	17.2 g	16.7 g	16 g	18.3 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BO-S-32PB	BO-S-32PB	BO-S-32PB	BO-S-32PB
Field Date	7/14/1997	7/14/1997	7/14/1997	7/14/1997
Extract Date	12/17/1997	12/17/1997	12/17/1997	12/17/1997
Analysis Date	1/9/1998	1/10/1998	1/10/1998	1/10/1998
Min Reporting Limit	0.0014	0.0015	0.0016	0.0014
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	0.00026 J	0.00033 J	0.00038 J	0.00023 J
S4-Diacholestane	0.00037 J	0.00035 J	0.00032 J	0.00033 J
S5-Diacholestane	0.0003 J	0.00023 J	0.00021 J	0.00034 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.0004 J	0.00051 J	0.00054 J	0.00047 J
T12-Trisnorhopane(TM)	0.00077 J	0.00087 J	0.00088 J	0.0008 J
S24-Methylcholestane	0.00065 J	0.00094 J	0.0012 J	0.00075 J
S25-Ethylcholestane	0.00049 J	0.00053 J	0.00054 J	0.00052 J
S28-Ethylcholestane	0.0019	0.0024	0.0022	0.002
T15-Norhopane	0.0021	0.0025	0.0022	0.0026
T18-Oleanane	0.0002 J	0.00044 J	0.0007 J	0.00021 J
T19-Hopane	0.0023	0.0029	0.0032	0.0023
T21-Homohopane	0.0011 J	0.0014 J	0.0016 J	0.0011 J
T22-Homohopane	0.0044	0.0035	0.0025	0.0044
Total S/T	0.015	0.017	0.016	0.016
5B(H)-Cholane	81	93	80	81
D66-Dotriacontane	79	82	72	72

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-1-13-01-00-PHC-S	97-1-14-01-00-PHC-S	97-1-15-01-00-PHC-S	97-1-15-02-00-PHC-S
Lab ID	97C1324	97C1283RE	97C1285RE	97C1290RE
SDG	SDGS009	SDGS006	SDGS006	SDGS006
File	DZ2408.D	DX6525.D	DX6527.D	DX6533.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	22.9 g	16.3 g	17.5 g	19 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BO-S-32PB	BO-S-32PB	BO-S-32PB
Field Date	7/13/1997	7/14/1997	7/13/1997	7/13/1997
Extract Date	8/8/1997	12/17/1997	12/17/1997	12/17/1997
Analysis Date	9/16/1997	1/9/1998	1/9/1998	1/10/1998
Min Reporting Limit	0.0011	0.0015	0.0014	0.0013
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	0.00029 J	0.00026 J	0.0002 J
S4-Diacholestane	0.00078 J	0.00046 J	0.00036 J	0.00029 J
S5-Diacholestane	0.00047 J	0.00037 J	0.00023 J	0.00025 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.0008 J	0.0005 J	0.00036 J	0.00039 J
T12-Trisnorhopane(TM)	0.0015 J	0.0008 J	0.00065 J	0.00061 J
S24-Methylcholestane	0.0023	0.0008 J	0.00078 J	0.00059 J
S25-Ethylcholestane	0.0015 J	0.00056 J	0.0004 J	0.00047 J
S28-Ethylcholestane	0.0042	0.0024	0.0019	0.002
T15-Norhopane	0.0044	0.0025	0.0028	0.0022
T18-Oleanane	0.0016 J	0.00026 J	0.0002 J	0.0004 J
T19-Hopane	0.0056	0.0029	0.0021	0.002
T21-Homohopane	0.0028	0.0013 J	0.0011 J	0.00097 J
T22-Homohopane	0.0041	0.0047	0.0048	0.0046
Total S/T	0.03	0.018	0.016	0.015
5B(H)-Cholane	64	76	82	80
D66-Dotriacontane	65	72	71	68

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-1-15-03-00-PHC-S	97-1-15-04-00-PHC-S	97-1-15-05-00-PHC-S	97-1-15-06-00-PHC-S
Lab ID	97C1291RE	97C1289RE	97C1288RE	97C1286RE
SDG	SDGS006	SDGS006	SDGS006	SDGS006
File	DX6534.D	DX6532.D	DX6530.D	DX6528.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	18.2 g	18.5 g	19.9 g	18.6 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BO-S-32PB	BO-S-32PB	BO-S-32PB	BO-S-32PB
Field Date	7/13/1997	7/13/1997	7/13/1997	7/13/1997
Extract Date	12/17/1997	12/17/1997	12/17/1997	12/17/1997
Analysis Date	1/10/1998	1/9/1998	1/9/1998	1/9/1998
Min Reporting Limit	0.0014	0.0014	0.0012	0.0013
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	0.00027 J	0.00023 J	0.00026 J	0.00027 J
S4-Diacholestane	0.00034 J	0.00037 J	0.0004 J	0.00041 J
S5-Diacholestane	0.00027 J	0.0003 J	0.00028 J	0.00027 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00043 J	0.00039 J	0.00045 J	0.00045 J
T12-Trisnorhopane(TM)	0.0006 J	0.00066 J	0.00073 J	0.00069 J
S24-Methylcholestane	0.00071 J	0.00076 J	0.0008 J	0.00072 J
S25-Ethylcholestane	0.00041 J	0.00041 J	0.00046 J	0.00048 J
S28-Ethylcholestane	0.0021	0.002	0.0024	0.0021
T15-Norhopane	0.0026	0.0024	0.0027	0.0032
T18-Oleanane	0.00029 J	0.00028 J	0.00041 J	0.00034 J
T19-Hopane	0.0022	0.0021	0.0026	0.0024
T21-Homohopane	0.0011 J	0.0011 J	0.0013 J	0.0011 J
T22-Homohopane	0.005	0.0045	0.0049	0.0051
Total S/T	0.016	0.016	0.018	0.018
5B(H)-Cholane	82	79	85	71
D66-Dotriacontane	71	67	80	72

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-1-15-07-00-PHC-S	97-1-18-01-00-PHC-S	97-1-20-01-00-PHC-S	97-2-01-01-00-PHC-S
Lab ID	97C1284RE	97C1299RE	97C1264	97C1420
SDG	SDGS006	SDGS006	SDGS008	SDGS003
File	DX6526.D	DX6541.D	DZ2376.D	DZ2125.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	19.1 g	17.4 g	18.8 g	25.6 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BO-S-32PB	BO-S-32PB	BL-S-07PB	BK-S-91PB
Field Date	7/13/1997	7/14/1997	7/14/1997	7/12/1997
Extract Date	12/17/1997	12/17/1997	8/6/1997	7/24/1997
Analysis Date	1/9/1998	1/10/1998	9/14/1997	8/28/1997
Min Reporting Limit	0.0013	0.0014	0.0013	0.00098
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	0.00027 J	0.00027 J	ND	ND
S4-Diacholestane	0.00043 J	0.00031 J	0.00037 J	0.00032 J
S5-Diacholestane	0.00036 J	0.00032 J	0.00013 J	0.0002 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00047 J	0.00037 J	0.00028 J	0.0002 J
T12-Trisnorhopane(TM)	0.00069 J	0.00072 J	0.00063 J	0.00053 J
S24-Methylcholestane	0.00067 J	0.0008 J	0.00065 J	0.00059 J
S25-Ethylcholestane	0.00043 J	0.00043 J	0.00035 J	0.00037 J
S28-Ethylcholestane	0.0022	0.0021	0.0018 J	0.002
T15-Norhopane	0.0026	0.0021	0.0018 J	0.0022
T18-Oleanane	0.00026 J	0.00023 J	0.00048 J	0.00041 J
T19-Hopane	0.0026	0.0023	0.002 J	0.0019
T21-Homohopane	0.0012 J	0.0011 J	0.00095 J	0.001 J
T22-Homohopane	0.0046	0.004	0.0052	0.0027
Total S/T	0.017	0.015	0.015	0.012
5B(H)-Cholane	78	75	60	59
D66-Dotriacontane	76	67	57	60

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-01-01-00-PHC-S	97-2-F1-01-00-PHC-S	97-2-F1-02-00-PHC-S	97-2-F1-03-00-PHC-S
Lab ID	97C1420DUP	97C1421	97C1417	97C1418
SDG	SDGS003	SDGS003	SDGS003	SDGS003
File	DZ2126.D	DZ2127.D	DZ2122.D	DZ2123.D
Sample Type	QC	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	25.3 g	24.2 g	21.4 g	21.8 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BK-S-91PB	BK-S-91PB	BK-S-91PB	BK-S-91PB
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	7/24/1997	7/24/1997	7/24/1997	7/24/1997
Analysis Date	8/28/1997	8/28/1997	8/28/1997	8/28/1997
Min Reporting Limit	0.99	0.001	0.0012	0.0011
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00027 J	0.00029 J	0.00019 J	0.00019 J
S5-Diacholestane	0.00021 J	0.00018 J	ND	0.00017 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00027 J	0.00029 J	0.00019 J	0.00024 J
T12-Trisnorhopane(TM)	0.0007 J	0.00069 J	0.00045 J	0.0007 J
S24-Methylcholestane	0.00052 J	0.00064 J	0.00041 J	0.00049 J
S25-Ethylcholestane	0.00029 J	0.00027 J	0.00014 J	0.00021 J
S28-Ethylcholestane	0.002	0.0015 J	0.001 J	0.0016 J
T15-Norhopane	0.0017	0.0022	0.0014 J	0.0019
T18-Oleanane	0.00039 J	0.00042 J	0.00033 J	0.00036 J
T19-Hopane	0.002	0.002	0.0014 J	0.0017
T21-Homohopane	0.0008 J	0.0008 J	0.00064 J	0.00073 J
T22-Homohopane	0.0029	0.0025	0.0017	0.0024
Total S/T	0.012	0.012	0.0078	0.011
5B(H)-Cholane	66	55	69	63
D66-Dotriacontane	67	53	65	68

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-02-01-00-PHC-S	97-2-F2-01-00-PHC-S	97-2-02-02-00-PHC-S	97-2-F2-02-00-PHC-S
Lab ID	97C1322	97C1383	97C1326	97C1380
SDG	SDGS009	SDGS009	SDGS009	SDGS009
File	DZ2405.D	DZ2417.D	DZ2410.D	DZ2414.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	25.5 g	22.2 g	26 g	21.6 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BL-S-10PB	BL-S-10PB	BL-S-10PB
Field Date	7/13/1997	7/9/1997	7/13/1997	7/9/1997
Extract Date	8/8/1997	8/8/1997	8/8/1997	8/8/1997
Analysis Date	9/16/1997	9/17/1997	9/16/1997	9/17/1997
Min Reporting Limit	0.00098	0.0011	0.00096	0.0012
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00073 J	0.00082 J	0.00081 J	0.00074 J
S5-Diacholestane	0.00042 J	0.00047 J	0.00052 J	0.00047 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00075 J	0.00074 J	0.0012 J	0.00073 J
T12-Trisnorhopane(TM)	0.0014 J	0.0016 J	0.0021	0.0014 J
S24-Methylcholestane	0.0022	0.0016 J	0.0021	0.0017
S25-Ethylcholestane	0.001 J	0.00081 J	0.00057 J	0.0012 J
S28-Ethylcholestane	0.0044	0.004	0.0037	0.0034
T15-Norhopane	0.0044	0.0048	0.0066	0.0034
T18-Oleanane	0.0013 J	0.001 J	0.0012 J	0.0013 J
T19-Hopane	0.0053	0.0055	0.0067	0.0052
T21-Homohopane	0.003	0.0027	0.0027	0.0027
T22-Homohopane	0.0055	0.0042	0.0054	0.0044
Total S/T	0.03	0.028	0.034	0.027
5B(H)-Cholane	64	62	67	77
D66-Dotriacontane	71	59	73	75

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-02-03-00-PHC-S	97-2-F2-03-00-PHC-S	97-2-02-04-00-PHC-S	97-2-02-05-00-PHC-S
Lab ID	97C1325	97C1385	97C1318	97C1321
SDG	SDGS009	SDGS010	SDGS009	SDGS009
File	DZ2409.D	DZ2466.D	DZ2401.D	DZ2404.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	24.5 g	11 g	25.1 g	24.5 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BL-S-13PB	BL-S-10PB	BL-S-10PB
Field Date	7/13/1997	7/9/1997	7/13/1997	7/13/1997
Extract Date	8/8/1997	8/11/1997	8/8/1997	8/8/1997
Analysis Date	9/16/1997	9/20/1997	9/16/1997	9/16/1997
Min Reporting Limit	0.001	0.0023	0.001	0.001
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00052 J	0.00052 J	0.00071 J	0.00069 J
S5-Diacholestane	0.00033 J	0.00041 J	0.00041 J	0.0003 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00053 J	0.0006 J	0.00052 J	0.00062 J
T12-Trisnorhopane(TM)	0.0011 J	0.0013 J	0.0013 J	0.0011 J
S24-Methylcholestane	0.0017	0.00095 J	0.0017	0.0015
S25-Ethylcholestane	0.00088 J	0.0007 J	0.00059 J	0.00068 J
S28-Ethylcholestane	0.0029	0.0029 J	0.0035	0.0036
T15-Norhopane	0.0029	0.003 J	0.0044	0.004
T18-Oleanane	0.00091 J	0.00063 J	0.0011 J	0.00097 J
T19-Hopane	0.0041	0.0043	0.0048	0.0046
T21-Homohopane	0.002	0.0021 J	0.0024	0.0022
T22-Homohopane	0.004	0.0032 J	0.0053	0.0043
Total S/T	0.022	0.021	0.027	0.024
5B(H)-Cholane	75	63	66	72
D66-Dotriacontane	74	67	78	77

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-02-06-00-PHC-S	97-2-02-07-00-PHC-S	97-2-03-01-00-PHC-S	97-2-04-01-00-PHC-S
Lab ID	97C1320	97C1317	97C1388	97C1319
SDG	SDGS009	SDGS009	SDGS010	SDGS009
File	DZ2403.D	DZ2400.D	DZ2469.D	DZ2402.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	24.3 g	24.7 g	13.8 g	29 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BL-S-10PB	BL-S-13PB	BL-S-10PB
Field Date	7/13/1997	7/13/1997	7/9/1997	7/13/1997
Extract Date	8/8/1997	8/8/1997	8/11/1997	8/8/1997
Analysis Date	9/16/1997	9/16/1997	9/20/1997	9/16/1997
Min Reporting Limit	0.001	0.001	0.0018	0.00086
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.0011 J	0.00057 J	0.00057 J	0.00044 J
S5-Diacholestane	0.00062 J	0.00037 J	0.00053 J	0.00025 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.0013 J	0.00034 J	0.00052 J	0.00028 J
T12-Trisnorhopane(TM)	0.0018	0.0011 J	0.0011 J	0.00095 J
S24-Methylcholestane	0.0029	0.0016	0.0013 J	0.0011 J
S25-Ethylcholestane	0.00097 J	0.00063 J	0.00069 J	0.0004 J
S28-Ethylcholestane	0.014	0.0037	0.0031	0.0031
T15-Norhopane	0.0069	0.0038	0.0026 J	0.0029
T18-Oleanane	0.0015	0.001 J	0.00059 J	0.00049 J
T19-Hopane	0.0075	0.0043	0.0038	0.0031
T21-Homohopane	0.0029	0.002	0.0017 J	0.0016
T22-Homohopane	0.0049	0.0044	0.0045	0.0064
Total S/T	0.046	0.024	0.021	0.021
5B(H)-Cholane	72	68	58	75
D66-Dotriacontane	84	84	62	80

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-05-01-00-PHC-S	97-2-06-01-00-PHC-S	97-2-07-01-00-PHC-S	97-2-08-01-00-PHC-S
Lab ID	97C1386	97C1414	97C1222	97C1220
SDG	SDGS010	SDGS004	SDGS008	SDGS008
File	DZ2467.D	DZ2322.D	DZ2366.D	DZ2365.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	12.1 g	25.4 g	12 g	10.9 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-13PB	BK-S-94PB	BL-S-07PB	BL-S-07PB
Field Date	7/10/1997	7/13/1997	7/9/1997	7/9/1997
Extract Date	8/11/1997	7/31/1997	8/6/1997	8/6/1997
Analysis Date	9/20/1997	9/11/1997	9/14/1997	9/14/1997
Min Reporting Limit	0.0021	0.00098	0.0021	0.0023
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00053 J	0.00025 J	0.00065 J	0.0012 J
S5-Diacholestane	0.00038 J	0.0002 J	0.00054 J	0.0008 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00049 J	0.00031 J	0.00059 J	0.0008 J
T12-Trisnorhopane(TM)	0.0011 J	0.00093 J	0.0012 J	0.0017 J
S24-Methylcholestane	0.001 J	0.00065 J	0.0016 J	0.0025 J
S25-Ethylcholestane	0.00061 J	0.00036 J	0.00098 J	0.0011 J
S28-Ethylcholestane	0.0029	0.0022	0.0046	0.0042
T15-Norhopane	0.0033	0.0018	0.0029 J	0.0042
T18-Oleanane	0.00056 J	0.0004 J	0.00092 J	0.00083 J
T19-Hopane	0.0038	0.0024	0.0051	0.0062
T21-Homohopane	0.0018 J	0.0011 J	0.0022 J	0.0032 J
T22-Homohopane	0.004	0.0042	0.0051	0.006
Total S/T	0.02	0.015	0.026	0.033
5B(H)-Cholane	79	55	63	60
D66-Dotriacontane	85	49	67	65

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-09-01-00-PHC-S	97-2-10-01-00-PHC-S	97-2-11-01-00-PHC-S	97-2-13-01-00-PHC-S
Lab ID	97C1422	97C1379	97C1384	97C1377
SDG	SDGS003	SDGS009	SDGS010	SDGS009
File	DZ2128.D	DZ2413.D	DZ2465.D	DZ2411.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	20.2 g	19.4 g	11.7 g	29.3 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BK-S-91PB	BL-S-10PB	BL-S-13PB	BL-S-10PB
Field Date	7/12/1997	7/9/1997	7/9/1997	7/13/1997
Extract Date	7/24/1997	8/8/1997	8/11/1997	8/8/1997
Analysis Date	8/28/1997	9/16/1997	9/20/1997	9/16/1997
Min Reporting Limit	0.0012	0.0013	0.0021	0.00085
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00032 J	0.00027 J	0.0005 J	0.0005 J
S5-Diacholestane	0.00026 J	0.00019 J	0.00026 J	0.00031 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00031 J	0.00033 J	0.0005 J	0.00044 J
T12-Trisnorhopane(TM)	0.00077 J	0.0008 J	0.0012 J	0.00072 J
S24-Methylcholestane	0.00074 J	0.00065 J	0.0014 J	0.00092 J
S25-Ethylcholestane	0.00032 J	0.00031 J	0.0006 J	0.00055 J
S28-Ethylcholestane	0.0015 J	0.002	0.0024 J	0.0022
T15-Norhopane	0.0023	0.0024	0.003	0.002
T18-Oleanane	0.00057 J	0.0004 J	0.00054 J	0.0003 J
T19-Hopane	0.0025	0.0024	0.0036	0.0028
T21-Homohopane	0.00095 J	0.0011 J	0.0017 J	0.0013 J
T22-Homohopane	0.0018	0.0028	0.0035	0.0041
Total S/T	0.012	0.014	0.019	0.016
5B(H)-Cholane	65	75	72	64
D66-Dotriacontane	63	73	73	64

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-2-14-01-00-PHC-S	97-2-15-01-00-PHC-S	97-2-22-01-00-PHC-S	97-3-01-01-00-PHC-S
Lab ID	97C1378	97C1404RE	97C1419	97C1266
SDG	SDGS009	SDGS006	SDGS003	SDGS008
File	DZ2412.D	DX6542.D	DZ2124.D	DZ2378.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	24.3 g	15.2 g	22 g	12.8 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-10PB	BO-S-32PB	BK-S-91PB	BL-S-07PB
Field Date	7/13/1997	7/13/1997	7/13/1997	7/10/1997
Extract Date	8/8/1997	12/17/1997	7/24/1997	8/6/1997
Analysis Date	9/16/1997	1/10/1998	8/28/1997	9/15/1997
Min Reporting Limit	0.001	0.0016	0.0011	0.002
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	0.00037 J	0.0046	ND
S4-Diacholestane	0.00059 J	0.00053 J	0.0017	0.00086 J
S5-Diacholestane	0.00035 J	0.0004 J	0.00095 J	0.00048 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00065 J	0.00059 J	0.0038	0.00067 J
T12-Trisnorhopane(TM)	0.0012 J	0.001 J	0.0059	0.0017 J
S24-Methylcholestane	0.0013 J	0.0011 J	0.004	0.0014 J
S25-Ethylcholestane	0.001 J	0.00053 J	0.0027	0.00088 J
S28-Ethylcholestane	0.0032	0.0024	0.01	0.0045
T15-Norhopane	0.0043	0.0028	0.019	0.0038
T18-Oleanane	0.00074 J	0.0003 J	0.0033	0.00072 J
T19-Hopane	0.0043	0.0032	0.021	0.0055
T21-Homohopane	0.0022	0.0014 J	0.0044	0.0028 J
T22-Homohopane	0.0049	0.0041	0.0059	0.0059
Total S/T	0.025	0.019	0.087	0.029
5B(H)-Cholane	74	83	63	58
D66-Dotriacontane	76	70	69	54

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Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-F1-01-00-PHC-S	97-3-F1-02-00-PHC-S	97-3-F1-03-00-PHC-S	97-3-02-01-00-PHC-S
Lab ID	97C1265	97C1382	97C1381	97C1261
SDG	SDGS008	SDGS009	SDGS009	SDGS008
File	DZ2377.D	DZ2416.D	DZ2415.D	DZ2372.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	17.2 g	19.9 g	20 g	12.1 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-07PB	BL-S-10PB	BL-S-10PB	BL-S-07PB
Field Date	7/10/1997	7/10/1997	7/10/1997	7/11/1997
Extract Date	8/6/1997	8/8/1997	8/8/1997	8/6/1997
Analysis Date	9/14/1997	9/17/1997	9/17/1997	9/14/1997
Min Reporting Limit	0.0014	0.0012	0.0012	0.0021
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00045 J	0.00058 J	0.00056 J	0.00074 J
S5-Diacholestane	0.00016 J	0.00037 J	0.0003 J	0.00056 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00022 J	0.0004 J	0.0004 J	0.00059 J
T12-Trisnorhopane(TM)	0.00063 J	0.0012 J	0.0013 J	0.0013 J
S24-Methylcholestane	0.0007 J	0.0014 J	0.0014 J	0.0014 J
S25-Ethylcholestane	0.00036 J	0.00069 J	0.00064 J	0.00066 J
S28-Ethylcholestane	0.0013 J	0.0034	0.0031	0.0041
T15-Norhopane	0.0013 J	0.0027	0.003	0.0046
T18-Oleanane	0.00028 J	0.00071 J	0.00079 J	0.00088 J
T19-Hopane	0.0022	0.0043	0.0043	0.0051
T21-Homohopane	0.00086 J	0.0021	0.002	0.0024 J
T22-Homohopane	0.0022	0.0046	0.0044	0.0049
Total S/T	0.011	0.022	0.022	0.027
5B(H)-Cholane	67	70	70	59
D66-Dotriacontane	60	65	69	55

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Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-F2-01-00-PHC-S	97-3-F2-02-00-PHC-S	97-3-F2-03-00-PHC-S	97-3-03-01-00-PHC-S
Lab ID	97C1387	97C1390	97C1389	97C1430
SDG	SDGS010	SDGS010	SDGS010	SDGS007
File	DZ2468.D	DZ2472.D	DZ2471.D	DZ2355.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	12.1 g	11.5 g	9.74 g	18.8 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-13PB	BL-S-13PB	BL-S-13PB	BL-S-04PB
Field Date	7/10/1997	7/10/1997	7/10/1997	7/12/1997
Extract Date	8/11/1997	8/11/1997	8/11/1997	8/5/1997
Analysis Date	9/20/1997	9/20/1997	9/20/1997	9/13/1997
Min Reporting Limit	0.0021	0.0022	0.0026	0.0013
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00074 J	0.00057 J	0.00078 J	0.00029 J
S5-Diacholestane	0.00047 J	0.00046 J	0.00044 J	0.00015 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00065 J	0.00054 J	0.00068 J	0.00029 J
T12-Trisnorhopane(TM)	0.0014 J	0.0012 J	0.0014 J	0.00087 J
S24-Methylcholestane	0.00094 J	0.00098 J	0.0011 J	0.00062 J
S25-Ethylcholestane	0.00095 J	0.00072 J	0.00079 J	0.00025 J
S28-Ethylcholestane	0.0032	0.0037	0.0028 J	0.0016 J
T15-Norhopane	0.0038	0.004	0.0038	0.0019
T18-Oleanane	0.00064 J	0.00065 J	0.00083 J	0.00034 J
T19-Hopane	0.0044	0.0046	0.0043	0.002
T21-Homohopane	0.0021 J	0.0021 J	0.0017 J	0.00082 J
T22-Homohopane	0.0041	0.0049	0.004	0.0018 J
Total S/T	0.023	0.024	0.023	0.011
5B(H)-Cholane	66	65	72	68
D66-Dotriacontane	65	63	69	65

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Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-04-01-00-PHC-S	97-3-05-01-00-PHC-S	97-3-06-01-00-PHC-S	97-3-08-01-00-PHC-S
Lab ID	97C1242	97C1425	97C1262	97C1258
SDG	SDGS007	SDGS007	SDGS008	SDGS008
File	DZ2340.D	DZ2350.D	DZ2373.D	DZ2369.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	19.8 g	15.8 g	11.5 g	11 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BL-S-04PB	BL-S-07PB	BL-S-07PB
Field Date	7/11/1997	7/12/1997	7/10/1997	7/12/1997
Extract Date	8/5/1997	8/5/1997	8/6/1997	8/6/1997
Analysis Date	9/13/1997	9/13/1997	9/14/1997	9/14/1997
Min Reporting Limit	0.0013	0.0016	0.0022	0.0023
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00033 J	0.00044 J	0.00066 J	0.0015 J
S5-Diacholestane	0.00026 J	0.00023 J	0.00039 J	0.00083 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00032 J	0.00032 J	0.00061 J	0.00071 J
T12-Trisnorhopane(TM)	0.00098 J	0.00095 J	0.0012 J	0.0018 J
S24-Methylcholestane	0.001 J	0.00097 J	0.00093 J	0.0019 J
S25-Ethylcholestane	0.00042 J	0.00071 J	0.0008 J	0.0011 J
S28-Ethylcholestane	0.0024	0.0021 J	0.0027 J	0.0054
T15-Norhopane	0.0027	0.0021 J	0.0032 J	0.0056
T18-Oleanane	0.00042 J	0.00039 J	0.00057 J	0.0009 J
T19-Hopane	0.0029	0.0026	0.0045	0.0071
T21-Homohopane	0.0013 J	0.00097 J	0.0021 J	0.0036 J
T22-Homohopane	0.0032	0.0024	0.0048	0.0065
Total S/T	0.016	0.014	0.022	0.037
5B(H)-Cholane	66	66	56	52
D66-Dotriacontane	87	72	55	58

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-09-01-00-PHC-S	97-3-10-01-00-PHC-S	97-3-11-01-00-PHC-S	97-3-12-01-00-PHC-S
Lab ID	97C1267	97C1259	97C1427	97C1260
SDG	SDGS008	SDGS008	SDGS007	SDGS008
File	DZ2379.D	DZ2370.D	DZ2352.D	DZ2371.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	14.2 g	9.52 g	18.5 g	9.66 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-07PB	BL-S-07PB	BL-S-04PB	BL-S-07PB
Field Date	7/11/1997	7/11/1997	7/12/1997	7/11/1997
Extract Date	8/6/1997	8/6/1997	8/5/1997	8/6/1997
Analysis Date	9/15/1997	9/14/1997	9/13/1997	9/14/1997
Min Reporting Limit	0.0018	0.0026	0.0014	0.0026
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00055 J	0.00084 J	0.00051 J	0.0012 J
S5-Diacholestane	0.00021 J	0.00044 J	0.00026 J	0.0005 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00036 J	0.00061 J	0.00044 J	0.00085 J
T12-Trisnorhopane(TM)	0.001 J	0.0015 J	0.0013 J	0.0018 J
S24-Methylcholestane	0.0011 J	0.0013 J	0.0014 J	0.0014 J
S25-Ethylcholestane	0.00052 J	0.00085 J	0.0007 J	0.0012 J
S28-Ethylcholestane	0.0025 J	0.0044	0.003	0.0052
T15-Norhopane	0.0021 J	0.0044	0.0034	0.0048 J
T18-Oleanane	0.00061 J	0.00074 J	0.00055 J	0.0011 J
T19-Hopane	0.0034	0.0056	0.0033	0.0071
T21-Homohopane	0.0016 J	0.0026 J	0.0016 J	0.0036 J
T22-Homohopane	0.0037	0.0057	0.0036	0.0079
Total S/T	0.018	0.029	0.02	0.037
5B(H)-Cholane	56	61	73	52
D66-Dotriacontane	52	61	76	52

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Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-13-01-00-PHC-S	97-3-13-02-00-PHC-S	97-3-13-03-00-PHC-S	97-3-13-04-00-PHC-S
Lab ID	97C1432	97C1428	97C1429	97C1434
SDG	SDGS007	SDGS007	SDGS007	SDGS007
File	DZ2357.D	DZ2353.D	DZ2354.D	DZ2359.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	18 g	19 g	18.3 g	19 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BL-S-04PB	BL-S-04PB	BL-S-04PB
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	8/5/1997	8/5/1997	8/5/1997	8/5/1997
Analysis Date	9/13/1997	9/13/1997	9/13/1997	9/14/1997
Min Reporting Limit	0.0014	0.0013	0.0014	0.0013
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00041 J	0.00042 J	0.00036 J	0.00033 J
S5-Diacholestane	0.00029 J	0.00027 J	0.00015 J	0.00033 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00024 J	0.00035 J	0.00026 J	0.00038 J
T12-Trisnorhopane(TM)	0.00095 J	0.0012 J	0.00095 J	0.00096 J
S24-Methylcholestane	0.00093 J	0.00076 J	0.00072 J	0.00092 J
S25-Ethylcholestane	0.00061 J	0.00042 J	0.00059 J	0.00048 J
S28-Ethylcholestane	0.0015 J	0.0016 J	0.0015 J	0.0015 J
T15-Norhopane	0.0025	0.0024	0.0026	0.0025 J
T18-Oleanane	0.00044 J	0.00053 J	0.00043 J	0.00048 J
T19-Hopane	0.0025	0.0027	0.0025	0.0029
T21-Homohopane	0.0014 J	0.0012 J	0.0012 J	0.0014 J
T22-Homohopane	0.0027	0.0029	0.0026	0.0033
Total S/T	0.014	0.015	0.014	0.015
5B(H)-Cholane	59	62	61	48
D66-Dotriacontane	63	64	59	51

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-13-05-00-PHC-S	97-3-13-06-00-PHC-S	97-3-13-07-00-PHC-S	97-3-14-01-00-PHC-S
Lab ID	97C1431	97C1433	97C1435	97C1426
SDG	SDGS007	SDGS007	SDGS007	SDGS007
File	DZ2356.D	DZ2358.D	DZ2360.D	DZ2351.D
Sample Type	SAMP	SAMP	SAMP	SAMP
Matrix	Sediment	Sediment	Sediment	Sediment
Sample Size	20.8 g	19 g	19.9 g	17.7 g
Weight Basis	DRY	DRY	DRY	DRY
Associated Blank	BL-S-04PB	BL-S-04PB	BL-S-04PB	BL-S-04PB
Field Date	7/12/1997	7/12/1997	7/12/1997	7/12/1997
Extract Date	8/5/1997	8/5/1997	8/5/1997	8/5/1997
Analysis Date	9/13/1997	9/13/1997	9/14/1997	9/13/1997
Min Reporting Limit	0.0012	0.0013	0.0012	0.0014
Units	ug/g	ug/g	ug/g	ug/g
BIOMARKER				
T4-C23Diterpane	ND	ND	ND	ND
S4-Diacholestane	0.00061 J	0.00045 J	0.00048 J	0.00053 J
S5-Diacholestane	0.00038 J	0.00025 J	0.00043 J	0.00023 J
T9-C29Tricyclitriterpane	ND	ND	ND	ND
T10-C29Tricyclitriterpane	ND	ND	ND	ND
T11-Trisnorhopane(TS)	0.00044 J	0.00045 J	0.00045 J	0.00033 J
T12-Trisnorhopane(TM)	0.0012 J	0.0012 J	0.0011 J	0.00085 J
S24-Methylcholestane	0.001 J	0.0011 J	0.001 J	0.00068 J
S25-Ethylcholestane	0.00049 J	0.00052 J	0.0005 J	0.00047 J
S28-Ethylcholestane	0.0025	0.0024	0.0021	0.0011 J
T15-Norhopane	0.0031	0.0032	0.0025	0.002 J
T18-Oleanane	0.00056 J	0.00057 J	0.00062 J	0.00043 J
T19-Hopane	0.0033	0.0032	0.0029	0.0022 J
T21-Homohopane	0.0014 J	0.0016 J	0.0013 J	0.00093 J
T22-Homohopane	0.0036	0.0036	0.0034	0.0022 J
Total S/T	0.018	0.018	0.017	0.012
5B(H)-Cholane	61	75	56	60
D66-Dotriacontane	58	76	56	63

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - Surface Sediment - BIOMARKER

Field ID	97-3-15-01-00-PHC-S	97-3-20-01-00-PHC-S
Lab ID	97C1424	97C1263
SDG	SDGS003	SDGS008
File	DZ2129.D	DZ2375.D
Sample Type	SAMP	SAMP
Matrix	Sediment	Sediment
Sample Size	19 g	16.1 g
Weight Basis	DRY	DRY
Associated Blank	BK-S-91PB	BL-S-07PB
Field Date	7/12/1997	7/11/1997
Extract Date	7/24/1997	8/6/1997
Analysis Date	8/28/1997	9/14/1997
Min Reporting Limit	0.0013	0.0016
Units	ug/g	ug/g
BIOMARKER		
T4-C23Diterpane	ND	ND
S4-Diacholestane	0.00027 J	0.0008 J
S5-Diacholestane	0.00013 J	0.00058 J
T9-C29Tricyclitriterpane	ND	ND
T10-C29Tricyclitriterpane	ND	ND
T11-Trisnorhopane(TS)	0.00032 J	0.0006 J
T12-Trisnorhopane(TM)	0.00098 J	0.0017 J
S24-Methylcholestane	0.00061 J	0.0013 J
S25-Ethylcholestane	0.00045 J	0.0013 J
S28-Ethylcholestane	0.0015 J	0.0053
T15-Norhopane	0.0019 J	0.0044
T18-Oleanane	0.00052 J	0.00065 J
T19-Hopane	0.0021	0.0064
T21-Homohopane	0.001 J	0.0033
T22-Homohopane	0.0024	0.0075
Total S/T	0.012	0.034
5B(H)-Cholane	62	55
D66-Dotriacontane	59	51