

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude				Cook Inlet Crude			
Lab ID	BM94				BM94			
SDG	SDGS002				SDGS001			
File	09199808.D				09189814.D			
Sample Type	CIC				CIC			
Matrix	Oil				Oil			
Sample Size	5.08 mg				5.08 mg			
Weight Basis	OIL				OIL			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	9/20/1998				9/19/1998			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
SHC								
nC9	5.9	6.4	-7.8		5.9	6.5	-9.2	
nC10	5.4	6.1	-11		4.8	6.4	-25	
nC11	5.7	6.7	-15		5.6	7.4	-24	
nC12	6.1	6.5	-6.2		5.3	6.9	-23	
nC13	6.8	6.9	-1.4		6.3	7.5	-16	
1380	1.2	1.8	-33		1.4	1.8	-22	
nC14	6.8	7.3	-6.8		7.2	8.1	-11	
1470	2.3	2.8	-18		2.4	2.9	-17	
nC15	6.7	6.8	-1.5		6	7.3	-18	
nC16	5.8	5.9	-1.7		5.3	6.2	-14	
1650	2	2.8	-28		2.5	3	-17	
nC17	6.4	5.5	16		5.3	5.8	-8.6	
pristane	4.3	4.6	-6.5		4.8	5	-4	
nC18	4.2	4.9	-14		4.3	5.2	-17	
phytane	1.8	1.8	0		1.6	1.8	-11	
nC19	3.7	4.5	-18		3.9	4.9	-20	
nC20	3.3	4.2	-21		3.6	4.6	-22	
nC21	3.3	3.5	-5.7		3.3	3.8	-13	
nC22	2.8	3.2	-12		2.8	3.4	-18	
nC23	2.7	3	-10		2.8	3.2	-12	
nC24	2.4	2.6	-7.7		2.6	2.8	-7.1	
nC25	2.4	2.5	-4		2.3	2.7	-15	
nC26	2	2.1	-4.8		1.9	2.2	-14	
nC27	1.7	1.8	-5.6		1.6	1.9	-16	
nC28	1.2	1.5	-20		1.2	1.6	-25	
nC29	1.3	1.4	-7.1		1.1	1.4	-21	
nC30	1.2	1.1	9.1		1	1.2	-17	
nC31	1	1	0		0.9	1.1	-18	
nC32	0.73	0.82	-11		0.68	0.88	-23	
nC33	0.57	0.56	1.8		0.45	0.57	-21	
nC34	0.46	0.51	-9.8		0.4	0.5	-20	
nC35	0.45	0.47	-4.2		0.38	0.49	-22	
nC36	0.25	0.26	-3.8		0.2	0.28	-28	
nC37	0.18 J	0.2	-10		0.14 J	0.21	-33	
nC38	0.2	0.19	5.3		0.13 J	0.19	-32	
nC39	0.13 J	0.13	0		0.1 J	0.13	-23	
nC40	0.12 J	0.13	-7.7		0.095 J	0.13	-27	
Total Resolved	240	300	-20		250	320	-22	
TPHC	710	730	-2.7		660	790	-16	
OTP	82				80			
5AA	82				83			
D50T	93				87			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude				Cook Inlet Crude			
Lab ID	BM94				BM94			
SDG	SDGS004				SDGS005			
File	10099807.D				10109827.D			
Sample Type	CIC				CIC			
Matrix	Oil				Oil			
Sample Size	5.08 mg				5.08 mg			
Weight Basis	OIL				OIL			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	10/10/1998				10/11/1998			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
SHC								
nC9	6.2	6.4	-3.1		6.2	6.4	-3.1	
nC10	5.2	6.1	-15		5.4	6.1	-11	
nC11	5.5	6.7	-18		5.5	6.7	-18	
nC12	5.9	6.5	-9.2		5.8	6.5	-11	
nC13	6.5	6.9	-5.8		6.1	6.9	-12	
1380	1.1	1.8	-39	&	1.6	1.8	-11	
nC14	6.2	7.3	-15		5.9	7.3	-19	
1470	2.6	2.8	-7.1		2.7	2.8	-3.6	
nC15	6.6	6.8	-2.9		6.3	6.8	-7.4	
nC16	5.6	5.9	-5.1		5.8	5.9	-1.7	
1650	2	2.8	-28		2.7	2.8	-3.6	
nC17	5.5	5.5	0		5.6	5.5	1.8	
pristane	4.7	4.6	2.2		4.5	4.6	-2.2	
nC18	4	4.9	-18		4.6	4.9	-6.1	
phytane	2.1	1.8	17		1.9	1.8	5.6	
nC19	4	4.5	-11		4.3	4.5	-4.4	
nC20	3.9	4.2	-7.1		3.5	4.2	-17	
nC21	3.6	3.5	2.8		3.4	3.5	-2.8	
nC22	3	3.2	-6.2		3	3.2	-6.2	
nC23	2.9	3	-3.3		2.8	3	-6.7	
nC24	2.6	2.6	0		2.5	2.6	-3.8	
nC25	2.5	2.5	0		2.4	2.5	-4	
nC26	2	2.1	-4.8		2	2.1	-4.8	
nC27	1.7	1.8	-5.6		1.6	1.8	-11	
nC28	1.3	1.5	-13		1.3	1.5	-13	
nC29	1.4	1.4	0		1.4	1.4	0	
nC30	1.1	1.1	0		1.1	1.1	0	
nC31	0.96	1	-4		0.96	1	-4	
nC32	0.72	0.82	-12		0.67	0.82	-18	
nC33	0.56	0.56	0		0.62	0.56	11	
nC34	0.45	0.51	-12		0.51	0.51	0	
nC35	0.46	0.47	-2.1		0.38	0.47	-19	
nC36	0.24	0.26	-7.7		0.24	0.26	-7.7	
nC37	0.19 J	0.2	-5		0.19 J	0.2	-5	
nC38	0.2	0.19	5.3		0.16 J	0.19	-16	
nC39	0.12 J	0.13	-7.7		0.14 J	0.13	7.7	
nC40	0.11 J	0.13	-15		0.12 J	0.13	-7.7	
Total Resolved	270	300	-10		260	300	-13	
TPHC	690	730	-5.5		680	730	-6.8	
OTP	89				95			
5AA	90				97			
D50T	97				97			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude			
Lab ID	BM94			
SDG	SDGS005			
File	10109828.D			
Sample Type	CIC			
Matrix	Oil			
Sample Size	5.08 mg			
Weight Basis	OIL			
Associated Blank	NA			
Field Date	NA			
Extract Date	NA			
Analysis Date	10/11/1998			
Min Reporting Limit	0.2			
Units	ug/mg	T	%D	Q
SHC				
nC9	6	6.4	-6.2	
nC10	4.9	6.1	-20	
nC11	5.5	6.7	-18	
nC12	5.8	6.5	-11	
nC13	6.1	6.9	-12	
1380	1.6	1.8	-11	
nC14	6.7	7.3	-8.2	
1470	2.6	2.8	-7.1	
nC15	6.1	6.8	-10	
nC16	5.6	5.9	-5.1	
1650	2.7	2.8	-3.6	
nC17	5.5	5.5	0	
pristane	4.4	4.6	-4.3	
nC18	4.8	4.9	-2	
phytane	1.7	1.8	-5.6	
nC19	3.8	4.5	-16	
nC20	3.6	4.2	-14	
nC21	3.3	3.5	-5.7	
nC22	2.9	3.2	-9.4	
nC23	2.9	3	-3.3	
nC24	2.5	2.6	-3.8	
nC25	2.4	2.5	-4	
nC26	1.9	2.1	-9.5	
nC27	1.6	1.8	-11	
nC28	1.3	1.5	-13	
nC29	1.4	1.4	0	
nC30	1	1.1	-9.1	
nC31	0.98	1	-2	
nC32	0.63	0.82	-23	
nC33	0.57	0.56	1.8	
nC34	0.47	0.51	-7.8	
nC35	0.46	0.47	-2.1	
nC36	0.26	0.26	0	
nC37	0.17 J	0.2	-15	
nC38	0.17 J	0.19	-10	
nC39	0.14 J	0.13	7.7	
nC40	0.13 J	0.13	0	
Total Resolved	280	300	-6.7	
TPHC	680	730	-6.8	
OTP	94			
5AA	98			
D50T	97			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude				Cook Inlet Crude			
Lab ID	BM94				BM94			
SDG	SDGS003				SDGS003			
File	10029816.D				10029843.D			
Sample Type	CIC				CIC			
Matrix	Oil				Oil			
Sample Size	5.08 mg				5.08 mg			
Weight Basis	OIL				OIL			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	10/3/1998				10/4/1998			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
SHC								
nC9	5.6	6.4	-12		6.1	6.4	-4.7	
nC10	4.7	6.1	-23		4.9	6.1	-20	
nC11	5.4	6.7	-19		6.1	6.7	-9	
nC12	5.1	6.5	-22		5.9	6.5	-9.2	
nC13	6.1	6.9	-12		6.4	6.9	-7.2	
1380	1.3	1.8	-28		1.2	1.8	-33	
nC14	7	7.3	-4.1		6.4	7.3	-12	
1470	2.4	2.8	-14		3.2	2.8	14	
nC15	5.8	6.8	-15		6.7	6.8	-1.5	
nC16	5	5.9	-15		5.6	5.9	-5.1	
1650	2.4	2.8	-14		2.6	2.8	-7.1	
nC17	4.9	5.5	-11		5.8	5.5	5.4	
pristane	4.5	4.6	-2.2		4.3	4.6	-6.5	
nC18	4.1	4.9	-16		4.5	4.9	-8.2	
phytane	1.6	1.8	-11		1.7	1.8	-5.6	
nC19	3.8	4.5	-16		4.2	4.5	-6.7	
nC20	3.7	4.2	-12		3.8	4.2	-9.5	
nC21	3.3	3.5	-5.7		3.4	3.5	-2.8	
nC22	2.8	3.2	-12		2.9	3.2	-9.4	
nC23	2.7	3	-10		2.8	3	-6.7	
nC24	2.6	2.6	0		2.4	2.6	-7.7	
nC25	2.3	2.5	-8		2.3	2.5	-8	
nC26	1.9	2.1	-9.5		1.9	2.1	-9.5	
nC27	1.6	1.8	-11		1.6	1.8	-11	
nC28	1.2	1.5	-20		1.3	1.5	-13	
nC29	1.2	1.4	-14		1.2	1.4	-14	
nC30	1	1.1	-9.1		1	1.1	-9.1	
nC31	0.85	1	-15		1	1	0	
nC32	0.65	0.82	-21		0.59	0.82	-28	
nC33	0.49	0.56	-12		0.44	0.56	-21	
nC34	0.38	0.51	-25		0.39	0.51	-24	
nC35	0.35	0.47	-26		0.35	0.47	-26	
nC36	0.2	0.26	-23		0.24	0.26	-7.7	
nC37	0.14 J	0.2	-30		0.15 J	0.2	-25	
nC38	0.13 J	0.19	-32		0.13 J	0.19	-32	
nC39	0.1 J	0.13	-23		0.099 J	0.13	-24	
nC40	0.1 J	0.13	-23		0.094 J	0.13	-28	
Total Resolved	240	300	-20		290	300	-3.3	
TPHC	640	730	-12		700	730	-4.1	
OTP	80				89			
5AA	84				92			
D50T	91				90			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude				Cook Inlet Crude			
Lab ID	BM94				BM94			
SDG	SDGS006				SDGS006			
File	10179808.D				10209822.D			
Sample Type	CIC				CIC			
Matrix	Oil				Oil			
Sample Size	5.08 mg				5.08 mg			
Weight Basis	OIL				OIL			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	10/17/1998				10/20/1998			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
SHC								
nC9	5.5	6.4	-14		6	6.4	-6.2	
nC10	4.7	6.1	-23		4.9	6.1	-20	
nC11	5.4	6.7	-19		5.5	6.7	-18	
nC12	5.8	6.5	-11		5.8	6.5	-11	
nC13	6	6.9	-13		6	6.9	-13	
1380	1.6	1.8	-11		1.7	1.8	-5.6	
nC14	6.6	7.3	-9.6		6.6	7.3	-9.6	
1470	2.5	2.8	-11		2.5	2.8	-11	
nC15	6	6.8	-12		6	6.8	-12	
nC16	5.5	5.9	-6.8		5.5	5.9	-6.8	
1650	2.6	2.8	-7.1		2.7	2.8	-3.6	
nC17	5.5	5.5	0		5.4	5.5	-1.8	
pristane	4.5	4.6	-2.2		4.6	4.6	0	
nC18	4.4	4.9	-10		4.6	4.9	-6.1	
phytane	1.4	1.8	-22		1.6	1.8	-11	
nC19	3.8	4.5	-16		3.9	4.5	-13	
nC20	3.5	4.2	-17		3.5	4.2	-17	
nC21	3.3	3.5	-5.7		3.3	3.5	-5.7	
nC22	2.9	3.2	-9.4		2.9	3.2	-9.4	
nC23	2.9	3	-3.3		2.9	3	-3.3	
nC24	2.5	2.6	-3.8		2.5	2.6	-3.8	
nC25	2.4	2.5	-4		2.4	2.5	-4	
nC26	2	2.1	-4.8		1.9	2.1	-9.5	
nC27	1.6	1.8	-11		1.6	1.8	-11	
nC28	1.3	1.5	-13		1.4	1.5	-6.7	
nC29	1.4	1.4	0		1.4	1.4	0	
nC30	1.1	1.1	0		1	1.1	-9.1	
nC31	1	1	0		1.1	1	10	
nC32	0.61	0.82	-26		0.62	0.82	-24	
nC33	0.56	0.56	0		0.5	0.56	-11	
nC34	0.45	0.51	-12		0.44	0.51	-14	
nC35	0.46	0.47	-2.1		0.44	0.47	-6.4	
nC36	0.27	0.26	3.8		0.24	0.26	-7.7	
nC37	0.18 J	0.2	-10		0.19 J	0.2	-5	
nC38	0.16 J	0.19	-16		0.16 J	0.19	-16	
nC39	0.15 J	0.13	15		0.14 J	0.13	7.7	
nC40	0.11 J	0.13	-15		0.13 J	0.13	0	
Total Resolved	260	300	-13		270	300	-10	
TPHC	660	730	-9.6		680	730	-6.8	
OTP	91				91			
5AA	96				96			
D50T	96				96			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Field ID	Cook Inlet Crude				Cook Inlet Crude			
Lab ID	BM94				BM94			
SDG	SDGW001				SDGO001			
File	10229830.D				11069828.D			
Sample Type	CIC				CIC			
Matrix	Oil				Oil			
Sample Size	5.08 mg				5.08 mg			
Weight Basis	OIL				OIL			
Associated Blank	NA				NA			
Field Date	NA				NA			
Extract Date	NA				NA			
Analysis Date	10/23/1998				11/7/1998			
Min Reporting Limit	0.2				0.2			
Units	ug/mg	T	%D	Q	ug/mg	T	%D	Q
SHC								
nC9	5.6	6.4	-12		5.9	6.4	-7.8	
nC10	4.8	6.1	-21		4.9	6.1	-20	
nC11	5.5	6.7	-18		5.7	6.7	-15	
nC12	5.8	6.5	-11		6	6.5	-7.7	
nC13	6.1	6.9	-12		6.2	6.9	-10	
1380	1.6	1.8	-11		1.6	1.8	-11	
nC14	6.8	7.3	-6.8		6.9	7.3	-5.5	
1470	2.7	2.8	-3.6		2.6	2.8	-7.1	
nC15	6.1	6.8	-10		6.3	6.8	-7.4	
nC16	5.5	5.9	-6.8		5.8	5.9	-1.7	
1650	2.6	2.8	-7.1		2.8	2.8	0	
nC17	5.6	5.5	1.8		5.7	5.5	3.6	
pristane	4.5	4.6	-2.2		4.7	4.6	2.2	
nC18	4.2	4.9	-14		4.2	4.9	-14	
phytane	1.5	1.8	-17		1.7	1.8	-5.6	
nC19	4	4.5	-11		3.8	4.5	-16	
nC20	3.5	4.2	-17		3.6	4.2	-14	
nC21	3.3	3.5	-5.7		3.4	3.5	-2.8	
nC22	2.8	3.2	-12		3	3.2	-6.2	
nC23	2.9	3	-3.3		2.9	3	-3.3	
nC24	2.5	2.6	-3.8		2.6	2.6	0	
nC25	2.4	2.5	-4		2.4	2.5	-4	
nC26	2	2.1	-4.8		2	2.1	-4.8	
nC27	1.7	1.8	-5.6		1.7	1.8	-5.6	
nC28	1.3	1.5	-13		1.3	1.5	-13	
nC29	1.3	1.4	-7.1		1.4	1.4	0	
nC30	1	1.1	-9.1		1.2	1.1	9.1	
nC31	1.2	1	20		1.2	1	20	
nC32	0.62	0.82	-24		0.65	0.82	-21	
nC33	0.57	0.56	1.8		0.54	0.56	-3.6	
nC34	0.44	0.51	-14		0.48	0.51	-5.9	
nC35	0.44	0.47	-6.4		0.48	0.47	2.1	
nC36	0.23	0.26	-12		0.23	0.26	-12	
nC37	0.15 J	0.2	-25		0.18 J	0.2	-10	
nC38	0.17 J	0.19	-10		0.17 J	0.19	-10	
nC39	0.13 J	0.13	0		0.13 J	0.13	0	
nC40	0.11 J	0.13	-15		0.12 J	0.13	-7.7	
Total Resolved	280	300	-6.7		260	300	-13	
TPHC	670	730	-8.2		NA			
OTP	89				93			
5AA	95				99			
D50T	95				96			

Arthur D. Little, Inc.

Environmental Monitoring and Analysis

Minerals Management Service - Shelikof Strait and Outermost Cook Inlet

1997 Final Data (Surrogate Corrected) - CIC - SHC

Cook Inlet Crude				
Field ID				
Lab ID	BM94			
SDG	SDGO001			
File	11099828.D			
Sample Type	CIC			
Matrix	Oil			
Sample Size	5.08 mg			
Weight Basis	OIL			
Associated Blank	NA			
Field Date	NA			
Extract Date	NA			
Analysis Date	11/10/1998			
Min Reporting Limit	0.2			
Units	ug/mg	T	%D	Q
SHC				
nC9	5.5	6.4	-14	
nC10	5	6.1	-18	
nC11	5.6	6.7	-16	
nC12	5.9	6.5	-9.2	
nC13	6.2	6.9	-10	
1380	1.6	1.8	-11	
nC14	6.8	7.3	-6.8	
1470	2.6	2.8	-7.1	
nC15	6.2	6.8	-8.8	
nC16	5.6	5.9	-5.1	
1650	2.7	2.8	-3.6	
nC17	5.7	5.5	3.6	
pristane	4.7	4.6	2.2	
nC18	4.5	4.9	-8.2	
phytane	1.5	1.8	-17	
nC19	3.9	4.5	-13	
nC20	3.6	4.2	-14	
nC21	3.4	3.5	-2.8	
nC22	2.8	3.2	-12	
nC23	2.9	3	-3.3	
nC24	2.5	2.6	-3.8	
nC25	2.5	2.5	0	
nC26	1.9	2.1	-9.5	
nC27	1.6	1.8	-11	
nC28	1.3	1.5	-13	
nC29	1.4	1.4	0	
nC30	1	1.1	-9.1	
nC31	1.1	1	10	
nC32	0.61	0.82	-26	
nC33	0.51	0.56	-8.9	
nC34	0.42	0.51	-18	
nC35	0.49	0.47	4.2	
nC36	0.27	0.26	3.8	
nC37	0.23	0.2	15	
nC38	0.16 J	0.19	-16	
nC39	0.12 J	0.13	-7.7	
nC40	0.12 J	0.13	-7.7	
Total Resolved	240	300	-20	
TPHC	NA			
OTP	96			
5AA	99			
D50T	98			