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DRAFT FINAL INSTALLATION RESTORATION REMEDIAL INVESTIGATION FEASIBILITY STUDY STAGE 2 VOLUME 5 OF 9 NAS FORT WORTH TX
4/1/1989
RADIAN CORPORATION

File: 17G
A.F.

NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 35

File: 117-10
D.B.

35

INSTALLATION RESTORATION PROGRAM
RI/FS STAGE 2

CARSWELL AFB, TEXAS

RADIAN CORPORATION
8501 MO-PAC BOULEVARD
P. O. BOX 201088
AUSTIN, TEXAS 78720-1088

APRIL 1989

FINAL DRAFT (9/87 - 9/88)
VOLUME 5: APPENDIX F-3
ANALYTICAL DATA, WORK ORDERS 03036-04017

PREPARED FOR:

HEADQUARTERS STRATEGIC AIR COMMAND
(HQ SAC/DE)
OFFUTT AIR FORCE BASE, NEBRASKA 68113-5001

UNITED STATES AIR FORCE
OCCUPATIONAL & ENVIRONMENTAL HEALTH LABORATORY
TECHNICAL SERVICES DIVISION (USAFOEHL/TS)
BROOKS AIR FORCE BASE, TEXAS 78235-5501

20th★★★★ Anniversary

RADIAN CORPORATION

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INSTALLATION RESTORATION PROGRAM

RI/FS STAGE 2

DRAFT FINAL
VOLUME 5: APPENDICES F-3

FOR

CARSWELL AFB, TEXAS

HEADQUARTERS STRATEGIC AIR COMMAND
(HQ SAC/DE)
OFFUTT AIR FORCE BASE, NEBRASKA 68113-5001

APRIL 1989

PREPARED BY

RADIAN CORPORATION
8501 MO-PAC BOULEVARD
P. O. BOX 201088
AUSTIN, TEXAS 78720-1088

USAF CONTRACT NO. F33615-87-D-4023, DELIVERY ORDER NO. 0004
RADIAN CONTRACT NO. 227-005-04

USAFOEHL TECHNICAL PROGRAM MANAGER

KARL W. RATZLAFF

USAF OCCUPATIONAL & ENVIRONMENTAL HEALTH LABORATORY (USAFOEHL)
TECHNICAL SERVICES DIVISION (TS)
BROOKS AIR FORCE BASE, TEXAS 78235-5501

APPENDIX F-3

Analytical Data,
Work Orders 03036-04017

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10A	03-22	N	S803014-02A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10A	03-22	N	S803014-02C	604	Phenols	E604
10A	03-22	N	S803014-02B	608	Organochlorine Pesticides	E608
10A	03-22	N	8803031-07C	AS_G	Metals	E206.2
10A	03-22	N	8803031-07A	CL_T	Chloride	E325.3
10A	03-22	N	8803029-09A	EPA601	Purgeable Halocarbons	E601
10A	03-22	N	8803029-09C	EPA602	Purgeable Aromatics	E602
10A	03-22	N	8803031-07A	F_SIE	Fluoride	E340.2
10A	03-22	N	8803031-07D	HC_IR	Petroleum Hydrocarbons	E418.1
10A	03-22	N	8803031-07C	HG_C	Metals	E245.1
10A	03-22	N	8803031-07C	ICP200	Metal Screen (ICP)	E200.7
10A	03-22	N	8803031-07E	NO2NO3	Nitrate	E353.1
10A	03-22	N	8803031-07D	ONG_IR	Oil & Grease	E413.2
10A	03-22	N	8803031-07A	OPO4	Orthophosphate	E365.4
10A	03-22	N	8803031-07C	PB_G	Metals	E239.2
10A	03-22	N	8803031-07C	SE_G	Metals	E270.2
10A	03-22	N	8803031-07A	SO4_N	Sulfate	E375.4
10A	03-22	N	8803031-07A	TDS	Total Dissolved Solids	E160.1
10A	03-22	N	8803029-09C	XYLENE	Purgeable Aromatics	E602
10A	04-50	N	S804076-01G	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10A	04-50	N	S804076-01A	604	Phenols	E604
10A	04-50	N	S804076-01E	608	Organochlorine Pesticides	E608
10A	04-50	N	8804064-03E	AS_G	Metals	E206.2
10A	04-50	N	8804064-03A	CL_T	Chloride	E325.3
10A	04-50	N	8804062-03A	EPA601	Purgeable Halocarbons	E601
10A	04-50	N	8804148-03A	EPA601	Purgeable Halocarbons	E601
10A	04-50	N	8804062-03C	EPA602	Purgeable Aromatics	E602
10A	04-50	N	8804064-03A	F_SIE	Fluoride	E340.2
10A	04-50	N	8804064-03E	HG_C	Metals	E245.1
10A	04-50	N	8804064-03E	ICP200	Metal Screen (ICP)	E200.7
10A	04-50	N	8804064-03B	NO2NO3	Nitrate	E353.1
10A	04-50	N	8804064-03D	ONG_IR	Oil & Grease	E413.2
10A	04-50	N	8804064-03A	OPO4	Orthophosphate	E365.4
10A	04-50	N	8804064-03E	PB_G	Metals	E239.2
10A	04-50	N	8804064-03E	SE_G	Metals	E270.2
10A	04-50	N	8804064-03A	SO4_N	Sulfate	E375.4
10A	04-50	N	8804064-03A	TDS	Total Dissolved Solids	E160.1
10A	04-50	N	8804062-03C	XYLENE	Purgeable Aromatics	E602
10A	04-51	TB	8804062-04A	EPA601	Purgeable Halocarbons	E601
10A	04-51	TB	8804062-04C	EPA602	Purgeable Aromatics	E602
10A	04-51	TB	8804148-04A	EPA602	Purgeable Aromatics	E602
10A	04-51	TB	8804148-04A	XYLENE	Purgeable Aromatics	E602
10A	04-51	TB	8804062-04C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10A	04-52	FB	8804062-05A	EPA601	Purgeable Halocarbons	E601
10A	04-52	FB	8804062-05C	EPA602	Purgeable Aromatics	E602
10A	04-52	FB	8804148-05A	EPA602	Purgeable Aromatics	E602
10A	04-52	FB	8804062-05C	XYLENE	Purgeable Aromatics	E602
10A	04-52	FB	8804148-05A	XYLENE	Purgeable Aromatics	E602
10B	03-28	N	S803019-01C	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10B	03-28	N	S803019-01A	604	Phenols	E604
10B	03-28	N	S803019-01B	608	Organochlorine Pesticides	E608
10B	03-28	N	8803035-06C	AS_G	Metals	E206.2
10B	03-28	N	8803035-06A	CL_T	Chloride	E325.3
10B	03-28	N	8803036-15A	EPA601	Purgeable Halocarbons	E601
10B	03-28	N	8803036-06A	EPA601	Purgeable Halocarbons	E601
10B	03-28	N	8803036-06C	EPA602	Purgeable Aromatics	E602
10B	03-28	N	8803035-06A	F_SIE	Fluoride	E340.2
10B	03-28	N	8803035-06D	HC_IR	Petroleum Hydrocarbons	E418.1
10B	03-28	N	8803035-06C	HG_C	Metals	E245.1
10B	03-28	N	8803035-06C	ICP200	Metal Screen (ICP)	E200.7
10B	03-28	N	8803035-06B	NO2NO3	Nitrate	E353.1
10B	03-28	N	8803035-06E	ONG_IR	Oil & Grease	E413.2
10B	03-28	N	8803035-06A	OPO4	Orthophosphate	E365.4
10B	03-28	N	8803035-06C	PB_G	Metals	E239.2
10B	03-28	N	8803035-06C	SE_G	Metals	E270.2
10B	03-28	N	8803035-06A	SO4_N	Sulfate	E375.4
10B	03-28	N	8803035-06A	TDS	Total Dissolved Solids	E160.1
10B	03-28	N	8803036-06C	XYLENE	Purgeable Aromatics	E602
10B	04-60	N	S804131-01C	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10B	04-60	N	S804083-01A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10B	04-60	N	S804131-01A	604	Phenols	E604
10B	04-60	N	S804083-01B	604	Phenols	E604
10B	04-60	N	S804131-01E	608	Organochlorine Pesticides	E608
10B	04-60	N	8804074-01D	AS_G	Metals	E206.2
10B	04-60	N	8804074-01A	CL_T	Chloride	E325.3
10B	04-60	N	8804075-02A	EPA601	Purgeable Halocarbons	E601
10B	04-60	N	8804145-02A	EPA601	Purgeable Halocarbons	E601
10B	04-60	N	8804075-02C	EPA602	Purgeable Aromatics	E602
10B	04-60	N	8804074-01A	F_SIE	Fluoride	E340.2
10B	04-60	N	8804077-05A	HC_IR	Petroleum Hydrocarbons	E418.1
10B	04-60	N	8804074-01D	HG_C	Metals	E245.1
10B	04-60	N	8804074-01D	ICP200	Metal Screen (ICP)	E200.7
10B	04-60	N	8804074-01B	NO2NO3	Nitrate	E353.1
10B	04-60	N	8804074-01C	ONG_IR	Oil & Grease	E413.2
10B	04-60	N	8804074-01A	OPO4	Orthophosphate	E365.4
10B	04-60	N	8804074-01D	PB_G	Metals	E239.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10B	04-60	N	8804074-01D	SE_G	Metals	E270.2
10B	04-60	N	8804074-01A	SO4_N	Sulfate	E375.4
10B	04-60	N	8804074-01A	TDS	Total Dissolved Solids	E160.1
10B	04-60	N	8804075-02C	XYLENE	Purgeable Aromatics	E602
10B	04-61	ER	S804083-02A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10B	04-61	ER	S804131-02A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10B	04-61	ER	S804083-02D	604	Phenols	E604
10B	04-61	ER	S804083-02B	608	Organochlorine Pesticides	E608
10B	04-61	ER	8804074-02D	AS_G	Metals	E206.2
10B	04-61	ER	8804074-02A	CL_T	Chloride	E325.3
10B	04-61	ER	8804145-03A	EPA601	Purgeable Halocarbons	E601
10B	04-61	ER	8804075-03A	EPA601	Purgeable Halocarbons	E601
10B	04-61	ER	8804075-03C	EPA602	Purgeable Aromatics	E602
10B	04-61	ER	8804145-03A	EPA602	Purgeable Aromatics	E602
10B	04-61	ER	8804074-02A	F_SIE	Fluoride	E340.2
10B	04-61	ER	8804077-02A	HC_IR	Petroleum Hydrocarbons	E418.1
10B	04-61	ER	8804074-02D	HG_C	Metals	E245.1
10B	04-61	ER	8804074-02D	ICP200	Metal Screen (ICP)	E200.7
10B	04-61	ER	8804074-02B	NO2NO3	Nitrate	E353.1
10B	04-61	ER	8804074-02C	ONG_IR	Oil & Grease	E413.2
10B	04-61	ER	8804074-02A	OPO4	Orthophosphate	E365.4
10B	04-61	ER	8804074-02D	PB_G	Metals	E239.2
10B	04-61	ER	8804074-02D	SE_G	Metals	E270.2
10B	04-61	ER	8804074-02A	SO4_N	Sulfate	E375.4
10B	04-61	ER	8804074-02A	TDS	Total Dissolved Solids	E160.1
10B	04-61	ER	8804145-03A	XYLENE	Purgeable Aromatics	E602
10B	04-61	ER	8804075-03C	XYLENE	Purgeable Aromatics	E602
10C	03-29	N	S803019-02C	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10C	03-29	N	S803019-02A	604	Phenols	E604
10C	03-29	N	S803019-02B	608	Organochlorine Pesticides	E608
10C	03-29	N	8803035-07C	AS_G	Metals	E206.2
10C	03-29	N	8803035-07A	CL_T	Chloride	E325.3
10C	03-29	N	8803036-07A	EPA601	Purgeable Halocarbons	E601
10C	03-29	N	8803036-07C	EPA602	Purgeable Aromatics	E602
10C	03-29	N	8803035-07A	F_SIE	Fluoride	E340.2
10C	03-29	N	8803035-07D	HC_IR	Petroleum Hydrocarbons	E418.1
10C	03-29	N	8803035-07C	HG_C	Metals	E245.1
10C	03-29	N	8803035-07C	ICP200	Metal Screen (ICP)	E200.7
10C	03-29	N	8803035-07B	NO2NO3	Nitrate	E353.1
10C	03-29	N	8803035-07E	ONG_IR	Oil & Grease	E413.2
10C	03-29	N	8803035-07A	OPO4	Orthophosphate	E365.4
10C	03-29	N	8803035-07C	PB_G	Metals	E239.2
10C	03-29	N	8803035-07C	SE_G	Metals	E270.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10C	03-29	N	8803035-07A	SO4_N	Sulfate	E375.4
10C	03-29	N	8803035-07A	TDS	Total Dissolved Solids	E160.1
10C	03-29	N	8803036-07C	XYLENE	Purgeable Aromatics	E602
10C	04-62	N	S804083-03A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10C	04-62	N	S804083-03E	604	Phenols	E604
10C	04-62	N	S804083-03C	608	Organochlorine Pesticides	E608
10C	04-62	N	8804074-03D	AS_G	Metals	E206.2
10C	04-62	N	8804074-03A	CL_T	Chloride	E325.3
10C	04-62	N	8804075-04A	EPA601	Purgeable Halocarbons	E601
10C	04-62	N	8804145-04A	EPA601	Purgeable Halocarbons	E601
10C	04-62	N	8804075-04C	EPA602	Purgeable Aromatics	E602
10C	04-62	N	8804074-03A	F_SIE	Fluoride	E340.2
10C	04-62	N	8804077-03A	HC_IR	Petroleum Hydrocarbons	E418.1
10C	04-62	N	8804074-03D	HG_C	Metals	E245.1
10C	04-62	N	8804074-03D	ICP200	Metal Screen (ICP)	E200.7
10C	04-62	N	8804074-03B	NO2NO3	Nitrate	E353.1
10C	04-62	N	8804074-03C	ONG_IR	Oil & Grease	E413.2
10C	04-62	N	8804074-03A	OPO4	Orthophosphate	E365.4
10C	04-62	N	8804074-03D	PB_G	Metals	E239.2
10C	04-62	N	8804074-03D	SE_G	Metals	E270.2
10C	04-62	N	8804074-03A	SO4_N	Sulfate	E375.4
10C	04-62	N	8804074-03A	TDS	Total Dissolved Solids	E160.1
10C	04-62	N	8804075-04C	XYLENE	Purgeable Aromatics	E602
10C	04-63	D	S804083-04A	509B	Chlorinated Phenoxy Acid Herbicides	A509B
10C	04-63	D	S804083-04E	604	Phenols	E604
10C	04-63	D	S804083-04C	608	Organochlorine Pesticides	E608
10C	04-63	D	8804074-04C	AS_G	Metals	E206.2
10C	04-63	D	8804074-04A	CL_T	Chloride	E325.3
10C	04-63	D	8804075-05A	EPA601	Purgeable Halocarbons	E601
10C	04-63	D	8804145-05A	EPA601	Purgeable Halocarbons	E601
10C	04-63	D	8804075-05C	EPA602	Purgeable Aromatics	E602
10C	04-63	D	8804074-04A	F_SIE	Fluoride	E340.2
10C	04-63	D	8804077-04A	HC_IR	Petroleum Hydrocarbons	E418.1
10C	04-63	D	8804074-04C	HG_C	Metals	E245.1
10C	04-63	D	8804074-04C	ICP200	Metal Screen (ICP)	E200.7
10C	04-63	D	8804074-04B	NO2NO3	Nitrate	E353.1
10C	04-63	D	8804077-04B	ONG_IR	Oil & Grease	E413.2
10C	04-63	D	8804074-04A	OPO4	Orthophosphate	E365.4
10C	04-63	D	8804074-04C	PB_G	Metals	E239.2
10C	04-63	D	8804074-04C	SE_G	Metals	E270.2
10C	04-63	D	8804074-04A	SO4_N	Sulfate	E375.4
10C	04-63	D	8804074-04A	TDS	Total Dissolved Solids	E160.1
10C	04-63	D	8804075-05C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10D	Car8-01-016	SN	S802002-01A	CL8240	Volatile Organic Compounds	SW8240
10D	Car8-01-017	SN	S802002-02A	CL8270	Semivolatile Organic Compounds	SW8270
10D	Car8-01-018	SN	8802004-01A	AS_G	Metals	E206.2
10D	Car8-01-018	SN	8802004-01A	HG_C	Metals	E245.1
10D	Car8-01-018	SN	8802004-01A	ICP200	Metal Screen (ICP)	E200.7
10D	Car8-01-018	SN	8802004-01A	ONG_IR	Oil & Grease	E413.2
10D	Car8-01-018	SN	8802004-01A	PB_G	Metals	E239.2
10D	Car8-01-018	SN	8802004-01A	SE_G	Metals	E270.2
10D	Car8-02-068	SN	8802115-01A	HC_IR	Petroleum Hydrocarbons	E418.1
10D	Car8-02-069	SN	S802069-01A	8080	Organochlorine Pesticides and PCBs	SW8080
10E	Car8-01-019	SN	S802002-03A	CL8240	Volatile Organic Compounds	SW8240
10E	Car8-01-020	SN	8802004-02A	AS_G	Metals	E206.2
10E	Car8-01-020	SN	8802004-02A	HG_C	Metals	E245.1
10E	Car8-01-020	SN	8802004-02A	ICP200	Metal Screen (ICP)	E200.7
10E	Car8-01-020	SN	8802004-02A	ONG_IR	Oil & Grease	E413.2
10E	Car8-01-020	SN	8802004-02A	PB_G	Metals	E239.2
10E	Car8-01-020	SN	8802004-02A	SE_G	Metals	E270.2
10E	Car8-01-021	SN	S802002-04A	CL8270	Semivolatile Organic Compounds	SW8270
10E	Car8-01-022	SN	S802002-05A	CL8240	Volatile Organic Compounds	SW8240
10E	Car8-01-023	SN	8802004-03A	AS_G	Metals	E206.2
10E	Car8-01-023	SN	8802004-03A	HG_C	Metals	E245.1
10E	Car8-01-023	SN	8802004-03A	ICP200	Metal Screen (ICP)	E200.7
10E	Car8-01-023	SN	8802004-03A	ONG_IR	Oil & Grease	E413.2
10E	Car8-01-023	SN	8802004-03A	PB_G	Metals	E239.2
10E	Car8-01-023	SN	8802004-03A	SE_G	Metals	E270.2
10E	Car8-01-024	SN	S802002-06A	CL8270	Semivolatile Organic Compounds	SW8270
10E	Car8-01-025	FB	S802002-07A	CL8240	Volatile Organic Compounds	SW8240
10E	Car8-02-070	SN	8802115-02A	HC_IR	Petroleum Hydrocarbons	E418.1
10E	Car8-02-071	SN	S802069-02A	8080	Organochlorine Pesticides and PCBs	SW8080
10E	Car8-02-072	SN	8802115-03A	HC_IR	Petroleum Hydrocarbons	E418.1
10E	Car8-02-073	SN	S802069-03A	8080	Organochlorine Pesticides and PCBs	SW8080
10F	Car8-01-026	SD	S802002-08A	CL8240	Volatile Organic Compounds	SW8240
10F	Car8-01-027	SD	S802002-09A	CL8240	Volatile Organic Compounds	SW8240
10F	Car8-01-028	SD	S802002-10A	CL8270	Semivolatile Organic Compounds	SW8270
10F	Car8-01-029	SD	S802002-11A	CL8270	Semivolatile Organic Compounds	SW8270
10F	Car8-01-030	SD	8802004-04A	AS_G	Metals	E206.2
10F	Car8-01-030	SD	8802004-04A	HG_C	Metals	E245.1
10F	Car8-01-030	SD	8802004-04A	ICP200	Metal Screen (ICP)	E200.7
10F	Car8-01-030	SD	8802004-04A	ONG_IR	Oil & Grease	E413.2
10F	Car8-01-030	SD	8802004-04A	PB_G	Metals	E239.2
10F	Car8-01-030	SD	8802004-04A	SE_G	Metals	E270.2
10F	Car8-01-031	SD	8802004-05A	AS_G	Metals	E206.2
10F	Car8-01-031	SD	8802004-05A	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
10F	Car8-01-031	SD	8802004-05A	ICP200	Metal Screen (ICP)	E200.7
10F	Car8-01-031	SD	8802004-05A	ONG_IR	Oil & Grease	E413.2
10F	Car8-01-031	SD	8802004-05A	PB_G	Metals	E239.2
10F	Car8-01-031	SD	8802004-05A	SE_G	Metals	E270.2
10F	Car8-02-074	SD	8802115-04A	HC_IR	Petroleum Hydrocarbons	E418.1
10F	Car8-02-075	SD	8802115-05A	HC_IR	Petroleum Hydrocarbons	E418.1
10F	Car8-02-076	SD	S802069-04A	8080	Organochlorine Pesticides and PCBs	SW8080
10F	Car8-02-077	SD	S802069-05A	8080	Organochlorine Pesticides and PCBs	SW8080
11A	02-151	N	8802136-02G	AS_G	Metals	E206.2
11A	02-151	N	S802090-02A	CL_625	Extractable Priority Pollutants	E625
11A	02-151	N	8802136-02I	CL_T	Chloride	E325.3
11A	02-151	N	8802136-02A	EPA601	Purgeable Halocarbons	E601
11A	02-151	N	8802136-02C	EPA602	Purgeable Aromatics	E602
11A	02-151	N	8802136-07A	EPA602	Purgeable Aromatics	E602
11A	02-151	N	8802136-02I	F_SIE	Fluoride	E340.2
11A	02-151	N	8802136-02H	HC_IR	Petroleum Hydrocarbons	E418.1
11A	02-151	N	8802136-02G	HG_C	Metals	E245.1
11A	02-151	N	8802136-02G	ICP200	Metal Screen (ICP)	E200.7
11A	02-151	N	8802136-02F	NO3	Nitrate	E353.2
11A	02-151	N	8802136-02I	OPO4	Orthophosphate	E365.4
11A	02-151	N	8802136-02G	PB_G	Metals	E239.2
11A	02-151	N	8802136-02G	SE_G	Metals	E270.2
11A	02-151	N	8802136-02I	SO4_N	Sulfate	E375.4
11A	02-151	N	8802136-02I	TDS	Total Dissolved Solids	E160.1
11A	02-151	N	8802136-07A	XYLENE	Purgeable Aromatics	E602
11A	02-151	N	8802136-02C	XYLENE	Purgeable Aromatics	E602
11A	04-02	N	8804014-02G	AS_G	Metals	E206.2
11A	04-02	N	S804017-02A	CL_625	Extractable Priority Pollutants	E625
11A	04-02	N	8804014-02F	CL_T	Chloride	E325.3
11A	04-02	N	8804014-02A	EPA601	Purgeable Halocarbons	E601
11A	04-02	N	8804014-02C	EPA602	Purgeable Aromatics	E602
11A	04-02	N	8804014-06A	EPA602	Purgeable Aromatics	E602
11A	04-02	N	8804014-02F	F_SIE	Fluoride	E340.2
11A	04-02	N	8804014-02H	HC_IR	Petroleum Hydrocarbons	E418.1
11A	04-02	N	8804014-02G	HG_C	Metals	E245.1
11A	04-02	N	8804014-02G	ICP200	Metal Screen (ICP)	E200.7
11A	04-02	N	8804014-02E	NO3	Nitrate	E353.2
11A	04-02	N	8804014-02F	OPO4	Orthophosphate	E365.4
11A	04-02	N	8804014-02G	SE_G	Metals	E270.2
11A	04-02	N	8804014-02F	SO4_N	Sulfate	E375.4
11A	04-02	N	8804014-02F	TDS	Total Dissolved Solids	E160.1
11A	04-02	N	8804014-06A	XYLENE	Purgeable Aromatics	E602
11A	04-02	N	8804014-02C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
11B	02-152	N	8802136-03G	AS_G	Metals	E206.2
11B	02-152	N	8802136-03I	CL_T	Chloride	E325.3
11B	02-152	N	8802136-03A	EPA601	Purgeable Halocarbons	E601
11B	02-152	N	8802136-03C	EPA602	Purgeable Aromatics	E602
11B	02-152	N	8802136-03I	F_SIE	Fluoride	E340.2
11B	02-152	N	8802136-03H	HC_IR	Petroleum Hydrocarbons	E418.1
11B	02-152	N	8802136-03G	HG_C	Metals	E245.1
11B	02-152	N	8802136-03G	ICP200	Metal Screen (ICP)	E200.7
11B	02-152	N	8802136-03F	NO3	Nitrate	E353.2
11B	02-152	N	8802136-03I	OPO4	Orthophosphate	E365.4
11B	02-152	N	8802136-03G	PB_G	Metals	E239.2
11B	02-152	N	8802136-03G	SE_G	Metals	E270.2
11B	02-152	N	8802136-03I	SO4_N	Sulfate	E375.4
11B	02-152	N	8802136-03I	TDS	Total Dissolved Solids	E160.1
11B	02-152	N	8802136-03C	XYLENE	Purgeable Aromatics	E602
11B	04-03	N	8804014-03G	AS_G	Metals	E206.2
11B	04-03	N	8804014-03F	CL_T	Chloride	E325.3
11B	04-03	N	8804014-03A	EPA601	Purgeable Halocarbons	E601
11B	04-03	N	8804014-07A	EPA602	Purgeable Aromatics	E602
11B	04-03	N	8804014-03C	EPA602	Purgeable Aromatics	E602
11B	04-03	N	8804014-03F	F_SIE	Fluoride	E340.2
11B	04-03	N	8804014-03H	HC_IR	Petroleum Hydrocarbons	E418.1
11B	04-03	N	8804014-03G	HG_C	Metals	E245.1
11B	04-03	N	8804014-03G	ICP200	Metal Screen (ICP)	E200.7
11B	04-03	N	8804014-03E	NO3	Nitrate	E353.2
11B	04-03	N	8804014-03F	OPO4	Orthophosphate	E365.4
11B	04-03	N	8804014-03G	SE_G	Metals	E270.2
11B	04-03	N	8804014-03F	SO4_N	Sulfate	E375.4
11B	04-03	N	8804014-03F	TDS	Total Dissolved Solids	E160.1
11B	04-03	N	8804014-03C	XYLENE	Purgeable Aromatics	E602
11B	04-03	N	8804014-07A	XYLENE	Purgeable Aromatics	E602
12A	02-154	N	8802191-01D	AS_G	Metals	E206.2
12A	02-154	N	S802099-01A	CL_625	Extractable Priority Pollutants	E625
12A	02-154	N	8802191-01E	CL_T	Chloride	E325.3
12A	02-154	N	8802190-01A	EPA601	Purgeable Halocarbons	E601
12A	02-154	N	8802190-01C	EPA602	Purgeable Aromatics	E602
12A	02-154	N	8802191-01E	F_SIE	Fluoride	E340.2
12A	02-154	N	8802191-01C	HC_IR	Petroleum Hydrocarbons	E418.1
12A	02-154	N	8802191-01D	HG_C	Metals	E245.1
12A	02-154	N	8802191-01D	ICP200	Metal Screen (ICP)	E200.7
12A	02-154	N	8802191-01B	NO2NO3	Nitrate	E353.1
12A	02-154	N	8802191-01E	OPO4	Orthophosphate	E365.4
12A	02-154	N	8802191-01D	PB_G	Metals	E239.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12A	02-154	N	8802191-01D	SE_G	Metals	E270.2
12A	02-154	N	8802191-01E	SO4_N	Sulfate	E375.4
12A	02-154	N	8802191-01E	TDS	Total Dissolved Solids	E160.1
12A	02-154	N	8802190-01C	XYLENE	Purgeable Aromatics	E602
12A	04-04	N	8804016-02D	AS_G	Metals	E206.2
12A	04-04	N	8804016-02B	CL_T	Chloride	E325.3
12A	04-04	N	8804017-10A	EPA601	Purgeable Halocarbons	E601
12A	04-04	N	8804017-01A	EPA601	Purgeable Halocarbons	E601
12A	04-04	N	8804017-01C	EPA602	Purgeable Aromatics	E602
12A	04-04	N	8804017-10A	EPA602	Purgeable Aromatics	E602
12A	04-04	N	8804016-02B	F_SIE	Fluoride	E340.2
12A	04-04	N	8804016-02A	HC_IR	Petroleum Hydrocarbons	E418.1
12A	04-04	N	8804016-02D	HG_C	Metals	E245.1
12A	04-04	N	8804016-02D	ICP200	Metal Screen (ICP)	E200.7
12A	04-04	N	8804016-02C	NO3	Nitrate	E353.2
12A	04-04	N	8804016-02B	OPO4	Orthophosphate	E365.4
12A	04-04	N	8804016-02D	SE_G	Metals	E270.2
12A	04-04	N	8804016-02B	SO4_N	Sulfate	E375.4
12A	04-04	N	8804016-02B	TDS	Total Dissolved Solids	E160.1
12A	04-04	N	8804017-01C	XYLENE	Purgeable Aromatics	E602
12A	04-04	N	8804017-10A	XYLENE	Purgeable Aromatics	E602
12B	03-24	N	8803035-02C	AS_G	Metals	E206.2
12B	03-24	N	8803035-02A	CL_T	Chloride	E325.3
12B	03-24	N	8803036-02A	EPA601	Purgeable Halocarbons	E601
12B	03-24	N	8803036-11A	EPA601	Purgeable Halocarbons	E601
12B	03-24	N	8803036-02C	EPA602	Purgeable Aromatics	E602
12B	03-24	N	8803035-02A	F_SIE	Fluoride	E340.2
12B	03-24	N	8803035-02D	HC_IR	Petroleum Hydrocarbons	E418.1
12B	03-24	N	8803035-02C	HG_C	Metals	E245.1
12B	03-24	N	8803035-02C	ICP200	Metal Screen (ICP)	E200.7
12B	03-24	N	8803035-02B	NO2NO3	Nitrate	E353.1
12B	03-24	N	8803035-02A	OPO4	Orthophosphate	E365.4
12B	03-24	N	8803035-02C	PB_G	Metals	E239.2
12B	03-24	N	8803035-02C	SE_G	Metals	E270.2
12B	03-24	N	8803035-02A	SO4_N	Sulfate	E375.4
12B	03-24	N	8803035-02A	TDS	Total Dissolved Solids	E160.1
12B	03-24	N	8803036-02C	XYLENE	Purgeable Aromatics	E602
12B	03-25	D	8803035-03C	AS_G	Metals	E206.2
12B	03-25	D	8803035-03A	CL_T	Chloride	E325.3
12B	03-25	D	8803036-03A	EPA601	Purgeable Halocarbons	E601
12B	03-25	D	8803036-12A	EPA601	Purgeable Halocarbons	E601
12B	03-25	D	8803036-03C	EPA602	Purgeable Aromatics	E602
12B	03-25	D	8803035-03A	F_SIE	Fluoride	E340.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12B	03-25	D	8803035-03D	HC_IR	Petroleum Hydrocarbons	E418.1
12B	03-25	D	8803035-03C	HG_C	Metals	E245.1
12B	03-25	D	8803035-03C	ICP200	Metal Screen (ICP)	E200.7
12B	03-25	D	8803035-03B	NO2NO3	Nitrate	E353.1
12B	03-25	D	8803035-03A	OPO4	Orthophosphate	E365.4
12B	03-25	D	8803035-03C	PB_G	Metals	E239.2
12B	03-25	D	8803035-03C	SE_G	Metals	E270.2
12B	03-25	D	8803035-03A	SO4_N	Sulfate	E375.4
12B	03-25	D	8803035-03A	TDS	Total Dissolved Solids	E160.1
12B	03-25	D	8803036-03C	XYLENE	Purgeable Aromatics	E602
12B	04-57	N	8804064-06D	AS_G	Metals	E206.2
12B	04-57	N	8804064-06A	CL_T	Chloride	E325.3
12B	04-57	N	8804148-09A	EPA601	Purgeable Halocarbons	E601
12B	04-57	N	8804062-10A	EPA601	Purgeable Halocarbons	E601
12B	04-57	N	8804062-10C	EPA602	Purgeable Aromatics	E602
12B	04-57	N	8804064-06A	F_SIE	Fluoride	E340.2
12B	04-57	N	8804064-06C	HC_IR	Petroleum Hydrocarbons	E418.1
12B	04-57	N	8804064-06D	HG_C	Metals	E245.1
12B	04-57	N	8804064-06D	ICP200	Metal Screen (ICP)	E200.7
12B	04-57	N	8804064-06B	NO2NO3	Nitrate	E353.1
12B	04-57	N	8804064-06A	OPO4	Orthophosphate	E365.4
12B	04-57	N	8804064-06D	SE_G	Metals	E270.2
12B	04-57	N	8804064-06A	SO4_N	Sulfate	E375.4
12B	04-57	N	8804064-06A	TDS	Total Dissolved Solids	E160.1
12B	04-57	N	8804062-10C	XYLENE	Purgeable Aromatics	E602
12C	03-26	N	8803035-04C	AS_G	Metals	E206.2
12C	03-26	N	8803035-04A	CL_T	Chloride	E325.3
12C	03-26	N	8803036-04A	EPA601	Purgeable Halocarbons	E601
12C	03-26	N	8803036-04C	EPA602	Purgeable Aromatics	E602
12C	03-26	N	8803036-13A	EPA602	Purgeable Aromatics	E602
12C	03-26	N	8803035-04A	F_SIE	Fluoride	E340.2
12C	03-26	N	8803035-04D	HC_IR	Petroleum Hydrocarbons	E418.1
12C	03-26	N	8803035-04C	HG_C	Metals	E245.1
12C	03-26	N	8803035-04C	ICP200	Metal Screen (ICP)	E200.7
12C	03-26	N	8803035-04B	NO2NO3	Nitrate	E353.1
12C	03-26	N	8803035-04A	OPO4	Orthophosphate	E365.4
12C	03-26	N	8803035-04C	PB_G	Metals	E239.2
12C	03-26	N	8803035-04C	SE_G	Metals	E270.2
12C	03-26	N	8803035-04A	SO4_N	Sulfate	E375.4
12C	03-26	N	8803035-04A	TDS	Total Dissolved Solids	E160.1
12C	03-26	N	8803036-04C	XYLENE	Purgeable Aromatics	E602
12C	03-26	N	8803036-13A	XYLENE	Purgeable Aromatics	E602
12C	04-59	N	8804064-08D	AS_G	Metals	E206.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12C	04-59	N	S804076-02A	CL_625	Extractable Priority Pollutants	E625
12C	04-59	N	8804064-08A	CL_T	Chloride	E325.3
12C	04-59	N	8804063-02A	EPA601	Purgeable Halocarbons	E601
12C	04-59	N	8804063-05A	EPA601	Purgeable Halocarbons	E601
12C	04-59	N	8804063-02C	EPA602	Purgeable Aromatics	E602
12C	04-59	N	8804063-05A	EPA602	Purgeable Aromatics	E602
12C	04-59	N	8804064-08A	F_SIE	Fluoride	E340.2
12C	04-59	N	8804064-08C	HC_IR	Petroleum Hydrocarbons	E418.1
12C	04-59	N	8804064-08D	HG_C	Metals	E245.1
12C	04-59	N	8804064-08D	ICP20D	Metal Screen (ICP)	E200.7
12C	04-59	N	8804064-08B	NO2NO3	Nitrate	E353.1
12C	04-59	N	8804064-08A	OPO4	Orthophosphate	E365.4
12C	04-59	N	8804064-08D	SE_G	Metals	E270.2
12C	04-59	N	8804064-08A	SO4_N	Sulfate	E375.4
12C	04-59	N	8804064-08A	TOS	Total Dissolved Solids	E160.1
12C	04-59	N	8804063-05A	XYLENE	Purgeable Aromatics	E602
12C	04-59	N	8804063-02C	XYLENE	Purgeable Aromatics	E602
12D	03-23	N	8803035-01C	AS_G	Metals	E206.2
12D	03-23	N	8803035-01A	CL_T	Chloride	E325.3
12D	03-23	N	8803036-01A	EPA601	Purgeable Halocarbons	E601
12D	03-23	N	8803036-10A	EPA602	Purgeable Aromatics	E602
12D	03-23	N	8803036-01C	EPA602	Purgeable Aromatics	E602
12D	03-23	N	8803035-01A	F_SIE	Fluoride	E340.2
12D	03-23	N	8803035-01D	HC_IR	Petroleum Hydrocarbons	E418.1
12D	03-23	N	8803035-01C	HG_C	Metals	E245.1
12D	03-23	N	8803035-01C	ICP200	Metal Screen (ICP)	E200.7
12D	03-23	N	8803035-01B	NO2NO3	Nitrate	E353.1
12D	03-23	N	8803035-01A	OPO4	Orthophosphate	E365.4
12D	03-23	N	8803035-01C	PB_G	Metals	E239.2
12D	03-23	N	8803035-01C	SE_G	Metals	E270.2
12D	03-23	N	8803035-01A	SO4_N	Sulfate	E375.4
12D	03-23	N	8803035-01A	TDS	Total Dissolved Solids	E160.1
12D	03-23	N	8803036-01C	XYLENE	Purgeable Aromatics	E602
12D	03-23	N	8803036-10A	XYLENE	Purgeable Aromatics	E602
12D	04-53	N	8804064-04D	AS_G	Metals	E206.2
12D	04-53	N	8804064-04A	CL_T	Chloride	E325.3
12D	04-53	N	8804148-06A	EPA601	Purgeable Halocarbons	E601
12D	04-53	N	8804062-06A	EPA601	Purgeable Halocarbons	E601
12D	04-53	N	8804062-06C	EPA602	Purgeable Aromatics	E602
12D	04-53	N	8804148-06A	EPA602	Purgeable Aromatics	E602
12D	04-53	N	8804064-04A	F_SIE	Fluoride	E340.2
12D	04-53	N	8804064-04C	HC_IR	Petroleum Hydrocarbons	E418.1
12D	04-53	N	8804064-04D	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12D	04-53	N	8804064-04D	ICP200	Metal Screen (ICP)	E200.7
12D	04-53	N	8804064-04B	NO2NO3	Nitrate	E353.1
12D	04-53	N	8804064-04A	OPO4	Orthophosphate	E365.4
12D	04-53	N	8804064-04D	SE_G	Metals	E270.2
12D	04-53	N	8804064-04A	SO4_N	Sulfate	E375.4
12D	04-53	N	8804064-04A	TDS	Total Dissolved Solids	E160.1
12D	04-53	N	8804062-06C	XYLENE	Purgeable Aromatics	E602
12D	04-53	N	8804148-06A	XYLENE	Purgeable Aromatics	E602
12D	04-54	TB	8804062-07A	EPA601	Purgeable Halocarbons	E601
12D	04-54	TB	8804062-07C	EPA602	Purgeable Aromatics	E602
12D	04-54	TB	8804062-07C	XYLENE	Purgeable Aromatics	E602
12D	04-55	FB	8804062-08A	EPA601	Purgeable Halocarbons	E601
12D	04-55	FB	8804062-08C	EPA602	Purgeable Aromatics	E602
12D	04-55	FB	8804148-07A	EPA602	Purgeable Aromatics	E602
12D	04-55	FB	8804148-07A	XYLENE	Purgeable Aromatics	E602
12D	04-55	FB	8804062-08C	XYLENE	Purgeable Aromatics	E602
12D	Car8-02-080	SN	S802070-03A	CL8240	Volatile Organic Compounds	SW8240
12D	Car8-02-081	SN	S802070-04A	CL8270	Semivolatile Organic Compounds	SW8270
12D	Car8-02-081	SN	S802070-04A	DRY_WT	Soil Moisture	UNK
12D	Car8-02-082	SN	8802115-06A	HC_IR	Petroleum Hydrocarbons	E418.1
12D	Car8-02-082	SN	8802115-06A	ICP200	Metal Screen (ICP)	E200.7
12D	Car8-02-083	SN	S802070-01A	CL8240	Volatile Organic Compounds	SW8240
12D	Car8-02-084	SN	S802070-02A	CL8270	Semivolatile Organic Compounds	SW8270
12D	Car8-02-084	SN	S802070-02A	DRY_WT	Soil Moisture	UNK
12D	Car8-02-085	SN	8802115-07A	HC_IR	Petroleum Hydrocarbons	E418.1
12D	Car8-02-085	SN	8802115-07A	ICP200	Metal Screen (ICP)	E200.7
12E	03-27	N	8803035-05C	AS_G	Metals	E206.2
12E	03-27	N	8803035-05A	CL_T	Chloride	E325.3
12E	03-27	N	8803036-05A	EPA601	Purgeable Halocarbons	E601
12E	03-27	N	8803036-14A	EPA602	Purgeable Aromatics	E602
12E	03-27	N	8803036-05C	EPA602	Purgeable Aromatics	E602
12E	03-27	N	8803035-05A	F_SIE	Fluoride	E340.2
12E	03-27	N	8803035-05D	HC_IR	Petroleum Hydrocarbons	E418.1
12E	03-27	N	8803035-05C	HG_C	Metals	E245.1
12E	03-27	N	8803035-05C	ICP200	Metal Screen (ICP)	E200.7
12E	03-27	N	8803035-05B	NO2NO3	Nitrate	E353.1
12E	03-27	N	8803035-05A	OPO4	Orthophosphate	E365.4
12E	03-27	N	8803035-05C	PB_G	Metals	E239.2
12E	03-27	N	8803035-05C	SE_G	Metals	E270.2
12E	03-27	N	8803035-05A	SO4_N	Sulfate	E375.4
12E	03-27	N	8803035-05A	TDS	Total Dissolved Solids	E160.1
12E	03-27	N	8803036-14A	XYLENE	Purgeable Aromatics	E602
12E	03-27	N	8803036-05C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12E	04-56	N	8804064-05D	AS_G	Metals	E206.2
12E	04-56	N	8804064-05A	CL_T	Chloride	E325.3
12E	04-56	N	8804148-08A	EPA601	Purgeable Halocarbons	E601
12E	04-56	N	8804062-09A	EPA601	Purgeable Halocarbons	E601
12E	04-56	N	8804148-08A	EPA602	Purgeable Aromatics	E602
12E	04-56	N	8804062-09C	EPA602	Purgeable Aromatics	E602
12E	04-56	N	8804064-05A	F_SIE	Fluoride	E340.2
12E	04-56	N	8804064-05C	HC_IR	Petroleum Hydrocarbons	E418.1
12E	04-56	N	8804064-05D	HG_C	Metals	E245.1
12E	04-56	N	8804064-05D	ICP200	Metal Screen (ICP)	E200.7
12E	04-56	N	8804064-05B	NO2NO3	Nitrate	E353.1
12E	04-56	N	8804064-05A	OPO4	Orthophosphate	E365.4
12E	04-56	N	8804064-05D	SE_G	Metals	E270.2
12E	04-56	N	8804064-05A	SO4_N	Sulfate	E375.4
12E	04-56	N	8804064-05A	TDS	Total Dissolved Solids	E160.1
12E	04-56	N	8804062-09C	XYLENE	Purgeable Aromatics	E602
12E	04-56	N	8804148-08A	XYLENE	Purgeable Aromatics	E602
12E	04-58	ER	8804064-07D	AS_G	Metals	E206.2
12E	04-58	ER	8804064-07A	CL_T	Chloride	E325.3
12E	04-58	ER	8804063-04A	EPA601	Purgeable Halocarbons	E601
12E	04-58	ER	8804063-01A	EPA601	Purgeable Halocarbons	E601
12E	04-58	ER	8804063-01C	EPA602	Purgeable Aromatics	E602
12E	04-58	ER	8804063-04A	EPA602	Purgeable Aromatics	E602
12E	04-58	ER	8804064-07A	F_SIE	Fluoride	E340.2
12E	04-58	ER	8804064-07C	HC_IR	Petroleum Hydrocarbons	E418.1
12E	04-58	ER	8804064-07D	HG_C	Metals	E245.1
12E	04-58	ER	8804064-07D	ICP200	Metal Screen (ICP)	E200.7
12E	04-58	ER	8804064-07B	NO2NO3	Nitrate	E353.1
12E	04-58	ER	8804064-07A	OPO4	Orthophosphate	E365.4
12E	04-58	ER	8804064-07D	SE_G	Metals	E270.2
12E	04-58	ER	8804064-07A	SO4_N	Sulfate	E375.4
12E	04-58	ER	8804064-07A	TDS	Total Dissolved Solids	E160.1
12E	04-58	ER	8804063-01C	XYLENE	Purgeable Aromatics	E602
12E	04-58	ER	8804063-04A	XYLENE	Purgeable Aromatics	E602
12E	Car8-02-092	SN	S802084-05A	CL8240	Volatile Organic Compounds	SW8240
12E	Car8-02-093	SN	8802130-03A	HC_IR	Petroleum Hydrocarbons	E418.1
12E	Car8-02-093	SN	8802130-03A	ICP200	Metal Screen (ICP)	E200.7
12E	Car8-02-094	SN	S802084-06A	CL8270	Semivolatile Organic Compounds	SW8270
12E	Car8-02-094	SN	S802084-06A	DRY_WT	Soil Moisture	UNK
12E	Car8-02-095	SN	S802084-07A	CL8240	Volatile Organic Compounds	SW8240
12E	Car8-02-096	SN	8802130-04A	HC_IR	Petroleum Hydrocarbons	E418.1
12E	Car8-02-096	SN	8802130-04A	ICP200	Metal Screen (ICP)	E200.7
12E	Car8-02-097	SN	S802084-08A	CL8270	Semivolatile Organic Compounds	SW8270

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12E	Car8-02-097	SN	S802084-08A	DRY_WT	Soil Moisture	UNK
12E	Car8-02-098	SN	S802084-09A	CL8240	Volatile Organic Compounds	SW8240
12E	Car8-02-099	SN	8802130-05A	HC_IR	Petroleum Hydrocarbons	E418.1
12E	Car8-02-099	SN	8802130-05A	ICP200	Metal Screen (ICP)	E200.7
12E	Car8-02-100	SN	S802084-10A	CL8270	Semivolatile Organic Compounds	SW8270
12E	Car8-02-100	SN	S802084-10A	DRY_WT	Soil Moisture	UNK
12E	Car8-02-101	FB	S802084-11A	CL8240	Volatile Organic Compounds	SW8240
12G	Car8-02-086	SN	S802084-01A	CL8240	Volatile Organic Compounds	SW8240
12G	Car8-02-087	SN	S802084-02A	CL8270	Semivolatile Organic Compounds	SW8270
12G	Car8-02-087	SN	S802084-02A	DRY_WT	Soil Moisture	UNK
12G	Car8-02-088	SN	8802130-01A	HC_IR	Petroleum Hydrocarbons	E418.1
12G	Car8-02-088	SN	8802130-01A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-102	SN	S802084-12A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-103	SN	S802084-13A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-103	SN	S802084-13A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-104	SN	8802130-06A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-104	SN	8802130-06A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-105	SD	S802084-14A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-106	SD	S802084-15A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-106	SD	S802084-15A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-107	SD	8802130-07A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-107	SD	8802130-07A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-108	SD	S802084-16A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-109	SD	S802084-17A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-109	SD	S802084-17A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-110	SD	8802130-08A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-110	SD	8802130-08A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-111	SN	S802084-18A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-112	SN	S802085-01A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-112	SN	S802085-01A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-113	SN	8802130-09A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-113	SN	8802130-09A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-114	SN	S802085-02A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-115	SN	S802085-03A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-115	SN	S802085-03A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-116	SN	8802130-10A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-116	SN	8802130-10A	ICP200	Metal Screen (ICP)	E200.7
12H	Car8-02-117	SN	S802085-04A	CL8240	Volatile Organic Compounds	SW8240
12H	Car8-02-118	SN	S802085-05A	CL8270	Semivolatile Organic Compounds	SW8270
12H	Car8-02-118	SN	S802085-05A	DRY_WT	Soil Moisture	UNK
12H	Car8-02-119	SN	8802130-11A	HC_IR	Petroleum Hydrocarbons	E418.1
12H	Car8-02-119	SN	8802130-11A	ICP200	Metal Screen (ICP)	E200.7
12I	Car8-02-120	SN	S802088-01A	CL8240	Volatile Organic Compounds	SW8240

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
12I	Car8-02-121	SN	S802088-02A	CL8270	Semivolatile Organic Compounds	SW8270
12I	Car8-02-121	SN	S802088-02A	DRY_WT	Soil Moisture	UNK
12I	Car8-02-122	SN	8802135-01A	HC_IR	Petroleum Hydrocarbons	E418.1
12I	Car8-02-122	SN	8802135-01A	ICP200	Metal Screen (ICP)	E200.7
12I	Car8-02-123	SN	S802088-03A	CL8240	Volatile Organic Compounds	SW8240
12I	Car8-02-124	SN	S802088-04A	CL8270	Semivolatile Organic Compounds	SW8270
12I	Car8-02-124	SN	S802088-04A	DRY_WT	Soil Moisture	UNK
12I	Car8-02-125	SN	8802135-02A	HC_IR	Petroleum Hydrocarbons	E418.1
12I	Car8-02-125	SN	8802135-02A	ICP200	Metal Screen (ICP)	E200.7
12I	Car8-02-126	SN	S802088-05A	CL8240	Volatile Organic Compounds	SW8240
12I	Car8-02-127	SN	S802088-06A	CL8270	Semivolatile Organic Compounds	SW8270
12I	Car8-02-127	SN	S802088-06A	DRY_WT	Soil Moisture	UNK
12I	Car8-02-128	SN	8802135-03A	HC_IR	Petroleum Hydrocarbons	E418.1
12I	Car8-02-128	SN	8802135-03A	ICP200	Metal Screen (ICP)	E200.7
12J	Car8-02-129	SD	S802088-07A	CL8240	Volatile Organic Compounds	SW8240
12J	Car8-02-130	SD	S802088-08A	CL8270	Semivolatile Organic Compounds	SW8270
12J	Car8-02-130	SD	S802088-08A	DRY_WT	Soil Moisture	UNK
12J	Car8-02-131	SD	8802135-04A	HC_IR	Petroleum Hydrocarbons	E418.1
12J	Car8-02-131	SD	8802135-04A	ICP200	Metal Screen (ICP)	E200.7
12J	Car8-02-132	SD	S802088-09A	CL8240	Volatile Organic Compounds	SW8240
12J	Car8-02-133	SD	S802088-10A	CL8270	Semivolatile Organic Compounds	SW8270
12J	Car8-02-133	SD	S802088-10A	DRY_WT	Soil Moisture	UNK
12J	Car8-02-134	SD	8802135-05A	HC_IR	Petroleum Hydrocarbons	E418.1
12J	Car8-02-134	SD	8802135-05A	ICP200	Metal Screen (ICP)	E200.7
12J	Car8-02-135	SN	S802088-11A	CL8240	Volatile Organic Compounds	SW8240
12J	Car8-02-136	SN	S802088-12A	CL8270	Semivolatile Organic Compounds	SW8270
12J	Car8-02-136	SN	S802088-12A	DRY_WT	Soil Moisture	UNK
12J	Car8-02-137	SN	8802135-06A	HC_IR	Petroleum Hydrocarbons	E418.1
12J	Car8-02-137	SN	8802135-06A	ICP200	Metal Screen (ICP)	E200.7
12J	Car8-02-138	SN	S802088-13A	CL8240	Volatile Organic Compounds	SW8240
12J	Car8-02-139	SN	S802088-14A	CL8270	Semivolatile Organic Compounds	SW8270
12J	Car8-02-139	SN	S802088-14A	DRY_WT	Soil Moisture	UNK
12J	Car8-02-140	SN	8802135-07A	HC_IR	Petroleum Hydrocarbons	E418.1
12J	Car8-02-140	SN	8802135-07A	ICP200	Metal Screen (ICP)	E200.7
12K	Car8-02-089	SN	S802084-03A	CL8240	Volatile Organic Compounds	SW8240
12K	Car8-02-090	SN	S802084-04A	CL8270	Semivolatile Organic Compounds	SW8270
12K	Car8-02-090	SN	S802084-04A	DRY_WT	Soil Moisture	UNK
12K	Car8-02-091	SN	8802130-02A	HC_IR	Petroleum Hydrocarbons	E418.1
12K	Car8-02-091	SN	8802130-02A	ICP200	Metal Screen (ICP)	E200.7
13	CAR8-03-067	TB	S804009-07A	CL8240	Volatile Organic Compounds	SW8240
13G	CAR8-03-039		S803027-01B	CL8240	Volatile Organic Compounds	SW8240
13G	CAR8-03-039		S803027-01A	CL8270	Semivolatile Organic Compounds	SW8270
13G	CAR8-03-039		S803027-01A	DRY_WT	Soil Moisture	UNK

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
13G	CAR8-03-039		8803042-01A	HC_IR	Petroleum Hydrocarbons	E418.1
13G	CAR8-03-039		8803042-01A	HG_C	Metals	E245.1
13G	CAR8-03-039		8803042-01A	ICP200	Metal Screen (ICP)	E200.7
13G	CAR8-03-061	SN	S804009-01A	CL8240	Volatile Organic Compounds	SW8240
13G	CAR8-03-061	SN	S804009-10A	CL8270	Semivolatile Organic Compounds	SW8270
13G	CAR8-03-061	SN	S804009-10A	DRY_WT	Soil Moisture	UNK
13G	CAR8-03-061	SN	8804003-01A	HC_IR	Petroleum Hydrocarbons	E418.1
13G	CAR8-03-061	SN	8804003-01A	HG_C	Metals	E245.1
13G	CAR8-03-061	SN	8804003-01A	ICP200	Metal Screen (ICP)	E200.7
13G	CAR8-03-062	SD	S804009-02A	CL8240	Volatile Organic Compounds	SW8240
13G	CAR8-03-062	SD	S804009-11A	CL8270	Semivolatile Organic Compounds	SW8270
13G	CAR8-03-062	SD	S804009-11A	DRY_WT	Soil Moisture	UNK
13G	CAR8-03-062	SD	8804003-02A	HC_IR	Petroleum Hydrocarbons	E418.1
13G	CAR8-03-062	SD	8804003-02A	HG_C	Metals	E245.1
13G	CAR8-03-062	SD	8804003-02A	ICP200	Metal Screen (ICP)	E200.7
13H	CAR8-03-041		S803027-03B	CL8240	Volatile Organic Compounds	SW8240
13H	CAR8-03-041		S803027-03A	CL8270	Semivolatile Organic Compounds	SW8270
13H	CAR8-03-041		S803027-03A	DRY_WT	Soil Moisture	UNK
13H	CAR8-03-041		8803042-03A	HC_IR	Petroleum Hydrocarbons	E418.1
13H	CAR8-03-041		8803042-03A	HG_C	Metals	E245.1
13H	CAR8-03-041		8803042-03A	ICP200	Metal Screen (ICP)	E200.7
13H	CAR8-03-064	SN	S804009-04A	CL8240	Volatile Organic Compounds	SW8240
13H	CAR8-03-064	SN	S804009-13A	CL8270	Semivolatile Organic Compounds	SW8270
13H	CAR8-03-064	SN	S804009-13A	DRY_WT	Soil Moisture	UNK
13H	CAR8-03-064	SN	8804003-04A	HC_IR	Petroleum Hydrocarbons	E418.1
13H	CAR8-03-064	SN	8804003-04A	HG_C	Metals	E245.1
13H	CAR8-03-064	SN	8804003-04A	ICP200	Metal Screen (ICP)	E200.7
13I	CAR8-03-043		S803027-05B	CL8240	Volatile Organic Compounds	SW8240
13I	CAR8-03-043		S803027-05A	CL8270	Semivolatile Organic Compounds	SW8270
13I	CAR8-03-043		S803027-05A	DRY_WT	Soil Moisture	UNK
13I	CAR8-03-043		8803042-05A	HC_IR	Petroleum Hydrocarbons	E418.1
13I	CAR8-03-043		8803042-05A	HG_C	Metals	E245.1
13I	CAR8-03-043		8803042-05A	ICP200	Metal Screen (ICP)	E200.7
13I	CAR8-03-066	SN	S804009-06A	CL8240	Volatile Organic Compounds	SW8240
13I	CAR8-03-066	SN	S804009-15A	CL8270	Semivolatile Organic Compounds	SW8270
13I	CAR8-03-066	SN	S804009-15A	DRY_WT	Soil Moisture	UNK
13I	CAR8-03-066	SN	8804003-06A	HC_IR	Petroleum Hydrocarbons	E418.1
13I	CAR8-03-066	SN	8804003-06A	HG_C	Metals	E245.1
13I	CAR8-03-066	SN	8804003-06A	ICP200	Metal Screen (ICP)	E200.7
13J	CAR8-03-042		S803027-04B	CL8240	Volatile Organic Compounds	SW8240
13J	CAR8-03-042		S803027-04A	CL8270	Semivolatile Organic Compounds	SW8270
13J	CAR8-03-042		S803027-04A	DRY_WT	Soil Moisture	UNK
13J	CAR8-03-042		8803042-04A	HC_IR	Petroleum Hydrocarbons	E418.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
13J	CAR8-03-042		8803042-04A	HG_C	Metals	E245.1
13J	CAR8-03-042		8803042-04A	ICP200	Metal Screen (ICP)	E200.7
13J	CAR8-03-065	SN	S804009-05A	CL8240	Volatile Organic Compounds	SW8240
13J	CAR8-03-065	SN	S804009-14A	CL8270	Semivolatile Organic Compounds	SW8270
13J	CAR8-03-065	SN	S804009-14A	DRY_WT	Soil Moisture	UNK
13J	CAR8-03-065	SN	8804003-05A	HC_IR	Petroleum Hydrocarbons	E418.1
13J	CAR8-03-065	SN	8804003-05A	HG_C	Metals	E245.1
13J	CAR8-03-065	SN	8804003-05A	ICP200	Metal Screen (ICP)	E200.7
13K	CAR8-03-040		S803027-02B	CL8240	Volatile Organic Compounds	SW8240
13K	CAR8-03-040		S803027-02A	CL8270	Semivolatile Organic Compounds	SW8270
13K	CAR8-03-040		S803027-02A	DRY_WT	Soil Moisture	UNK
13K	CAR8-03-040		8803042-02A	HC_IR	Petroleum Hydrocarbons	E418.1
13K	CAR8-03-040		8803042-02A	HG_C	Metals	E245.1
13K	CAR8-03-040		8803042-02A	ICP200	Metal Screen (ICP)	E200.7
13K	CAR8-03-063	SN	S804009-03A	CL8240	Volatile Organic Compounds	SW8240
13K	CAR8-03-063	SN	S804009-12A	CL8270	Semivolatile Organic Compounds	SW8270
13K	CAR8-03-063	SN	S804009-12A	DRY_WT	Soil Moisture	UNK
13K	CAR8-03-063	SN	8804003-03A	HC_IR	Petroleum Hydrocarbons	E418.1
13K	CAR8-03-063	SN	8804003-03A	HG_C	Metals	E245.1
13K	CAR8-03-063	SN	8804003-03A	ICP200	Metal Screen (ICP)	E200.7
15D	CAR8-03-068	SN	S804010-01B	8080	Organochlorine Pesticides and PCBs	SW8080
15D	CAR8-03-068	SN	S804010-01A	8150	Chlorinated Phenoxy Herbicides	SW8150
15E	CAR8-03-045	SN	S803135-01B	8080	Organochlorine Pesticides and PCBs	SW8080
15E	CAR8-03-045	SN	S803135-01A	8150	Chlorinated Phenoxy Herbicides	SW8150
15F	CAR8-03-046	SN	S803135-02B	8080	Organochlorine Pesticides and PCBs	SW8080
15F	CAR8-03-046	SN	S803135-02A	8150	Chlorinated Phenoxy Herbicides	SW8150
15G	CAR8-03-069	SN	S804010-02B	8080	Organochlorine Pesticides and PCBs	SW8080
15G	CAR8-03-069	SN	S804010-02A	8150	Chlorinated Phenoxy Herbicides	SW8150
15H	CAR8-03-070	SN	S804010-03B	8080	Organochlorine Pesticides and PCBs	SW8080
15H	CAR8-03-070	SN	S804010-03A	8150	Chlorinated Phenoxy Herbicides	SW8150
15I	CAR8-03-071	SN	S804010-04B	8080	Organochlorine Pesticides and PCBs	SW8080
15I	CAR8-03-071	SN	S804010-04A	8150	Chlorinated Phenoxy Herbicides	SW8150
15J	CAR8-03-072	SN	S804010-05B	8080	Organochlorine Pesticides and PCBs	SW8080
15J	CAR8-03-072	SN	S804010-05A	8150	Chlorinated Phenoxy Herbicides	SW8150
15J	CAR8-03-073	SD	S804010-06B	8080	Organochlorine Pesticides and PCBs	SW8080
15J	CAR8-03-073	SD	S804010-06A	8150	Chlorinated Phenoxy Herbicides	SW8150
16	03-06	TB	8803017-07A	EPA601	Purgeable Halocarbons	E601
16	03-06	TB	8803080-05A	EPA601	Purgeable Halocarbons	E601
16	03-06	TB	8803017-07C	EPA602	Purgeable Aromatics	E602
16	03-06	TB	8803017-07C	XYLENE	Purgeable Aromatics	E602
16	03-07	FB	8803017-08A	EPA601	Purgeable Halocarbons	E601
16	03-07	FB	8803080-06A	EPA601	Purgeable Halocarbons	E601
16	03-07	FB	8803080-06B	EPA602	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
16	03-07	FB	8803017-08C	EPA602	Purgeable Aromatics	E602
16	03-07	FB	8803017-08C	XYLENE	Purgeable Aromatics	E602
16	03-07	FB	8803080-06B	XYLENE	Purgeable Aromatics	E602
16DN3	03-03	N	8803016-03D	AS_G	Metals	E206.2
16DN3	03-03	N	8803016-03A	CL_T	Chloride	E325.3
16DN3	03-03	N	8803080-02B	EPA601	Purgeable Halocarbons	E601
16DN3	03-03	N	8803017-04A	EPA601	Purgeable Halocarbons	E601
16DN3	03-03	N	8803080-02A	EPA602	Purgeable Aromatics	E602
16DN3	03-03	N	8803017-04C	EPA602	Purgeable Aromatics	E602
16DN3	03-03	N	8803016-03A	F_SIE	Fluoride	E340.2
16DN3	03-03	N	8803016-03D	HG_C	Metals	E245.1
16DN3	03-03	N	8803016-03D	ICP200	Metal Screen (ICP)	E200.7
16DN3	03-03	N	8803016-03E	NO2NO3	Nitrate	E353.1
16DN3	03-03	N	8803016-03C	ONG_IR	Oil & Grease	E413.2
16DN3	03-03	N	8803016-03A	OPO4	Orthophosphate	E365.4
16DN3	03-03	N	8803016-03D	PB_G	Metals	E239.2
16DN3	03-03	N	8803016-03D	SE_G	Metals	E270.2
16DN3	03-03	N	8803016-03A	SO4_N	Sulfate	E375.4
16DN3	03-03	N	8803016-03A	TDS	Total Dissolved Solids	E160.1
16DN3	03-03	N	8803080-02A	XYLENE	Purgeable Aromatics	E602
16DN3	03-03	N	8803017-04C	XYLENE	Purgeable Aromatics	E602
16DN3	04-24	N	8804040-04B	AS_G	Metals	E206.2
16DN3	04-24	N	8804040-04C	CL_T	Chloride	E325.3
16DN3	04-24	N	8804041-04A	EPA601	Purgeable Halocarbons	E601
16DN3	04-24	N	8804041-04C	EPA602	Purgeable Aromatics	E602
16DN3	04-24	N	8804040-04C	F_SIE	Fluoride	E340.2
16DN3	04-24	N	8804040-04B	HG_C	Metals	E245.1
16DN3	04-24	N	8804040-04B	ICP200	Metal Screen (ICP)	E200.7
16DN3	04-24	N	8804040-04A	NO3	Nitrate	E353.2
16DN3	04-24	N	8804040-04D	ONG_IR	Oil & Grease	E413.2
16DN3	04-24	N	8804040-04C	OPO4	Orthophosphate	E365.4
16DN3	04-24	N	8804040-04B	PB_G	Metals	E239.2
16DN3	04-24	N	8804040-04B	SE_G	Metals	E270.2
16DN3	04-24	N	8804040-04C	SO4_N	Sulfate	E375.4
16DN3	04-24	N	8804040-04C	TDS	Total Dissolved Solids	E160.1
16DN3	04-24	N	8804041-04C	XYLENE	Purgeable Aromatics	E602
16DN4	03-04	N	8803016-04D	AS_G	Metals	E206.2
16DN4	03-04	N	8803016-04A	CL_T	Chloride	E325.3
16DN4	03-04	N	8803017-05A	EPA601	Purgeable Halocarbons	E601
16DN4	03-04	N	8803080-03A	EPA601	Purgeable Halocarbons	E601
16DN4	03-04	N	8803017-05C	EPA602	Purgeable Aromatics	E602
16DN4	03-04	N	8803016-04A	F_SIE	Fluoride	E340.2
16DN4	03-04	N	8803016-04D	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
16DN4	03-04	N	8803016-04D	ICP200	Metal Screen (ICP)	E200.7
16DN4	03-04	N	8803016-04E	NO2NO3	Nitrate	E353.1
16DN4	03-04	N	8803016-04C	ONG_IR	Oil & Grease	E413.2
16DN4	03-04	N	8803016-04A	OPO4	Orthophosphate	E365.4
16DN4	03-04	N	8803016-04D	PB_G	Metals	E239.2
16DN4	03-04	N	8803016-04D	SE_G	Metals	E270.2
16DN4	03-04	N	8803016-04A	SO4_N	Sulfate	E375.4
16DN4	03-04	N	8803016-04A	TDS	Total Dissolved Solids	E160.1
16DN4	03-04	N	8803017-05C	XYLENE	Purgeable Aromatics	E602
16DN4	03-05	D	8803016-05D	AS_G	Metals	E206.2
16DN4	03-05	D	8803016-05A	CL_T	Chloride	E325.3
16DN4	03-05	D	8803080-04A	EPA601	Purgeable Halocarbons	E601
16DN4	03-05	D	8803017-06A	EPA601	Purgeable Halocarbons	E601
16DN4	03-05	D	8803017-06C	EPA602	Purgeable Aromatics	E602
16DN4	03-05	D	8803080-04B	EPA602	Purgeable Aromatics	E602
16DN4	03-05	D	8803016-05A	F_SIE	Fluoride	E340.2
16DN4	03-05	D	8803016-05D	HG_C	Metals	E245.1
16DN4	03-05	D	8803016-05D	ICP200	Metal Screen (ICP)	E200.7
16DN4	03-05	D	8803016-05E	NO2NO3	Nitrate	E353.1
16DN4	03-05	D	8803016-05C	ONG_IR	Oil & Grease	E413.2
16DN4	03-05	D	8803016-05A	OPO4	Orthophosphate	E365.4
16DN4	03-05	D	8803016-05D	PB_G	Metals	E239.2
16DN4	03-05	D	8803016-05D	SE_G	Metals	E270.2
16DN4	03-05	D	8803016-05A	SO4_N	Sulfate	E375.4
16DN4	03-05	D	8803016-05A	TDS	Total Dissolved Solids	E160.1
16DN4	03-05	D	8803080-04B	XYLENE	Purgeable Aromatics	E602
16DN4	03-05	D	8803017-06C	XYLENE	Purgeable Aromatics	E602
16DN4	04-25	N	8804040-05B	AS_G	Metals	E206.2
16DN4	04-25	N	8804040-05C	CL_T	Chloride	E325.3
16DN4	04-25	N	8804041-05A	EPA601	Purgeable Halocarbons	E601
16DN4	04-25	N	8804041-11A	EPA601	Purgeable Halocarbons	E601
16DN4	04-25	N	8804041-05C	EPA602	Purgeable Aromatics	E602
16DN4	04-25	N	8804040-05C	F_SIE	Fluoride	E340.2
16DN4	04-25	N	8804040-05B	HG_C	Metals	E245.1
16DN4	04-25	N	8804040-05B	ICP200	Metal Screen (ICP)	E200.7
16DN4	04-25	N	8804040-05A	NO3	Nitrate	E353.2
16DN4	04-25	N	8804040-05D	ONG_IR	Oil & Grease	E413.2
16DN4	04-25	N	8804040-05C	OPO4	Orthophosphate	E365.4
16DN4	04-25	N	8804040-05B	PB_G	Metals	E239.2
16DN4	04-25	N	8804040-05B	SE_G	Metals	E270.2
16DN4	04-25	N	8804040-05C	SO4_N	Sulfate	E375.4
16DN4	04-25	N	8804040-05C	TDS	Total Dissolved Solids	E160.1
16DN4	04-25	N	8804041-05C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
16UP1	03-01	N	8803016-01D	AS_G	Metals	E206.2
16UP1	03-01	N	8803016-01A	CL_T	Chloride	E325.3
16UP1	03-01	N	8803017-02A	EPA601	Purgeable Halocarbons	E601
16UP1	03-01	N	8803080-01A	EPA602	Purgeable Aromatics	E602
16UP1	03-01	N	8803017-02C	EPA602	Purgeable Aromatics	E602
16UP1	03-01	N	8803016-01A	F_SIE	Fluoride	E340.2
16UP1	03-01	N	8803016-01D	HG_C	Metals	E245.1
16UP1	03-01	N	8803016-01D	ICP200	Metal Screen (ICP)	E200.7
16UP1	03-01	N	8803016-01E	NO2NO3	Nitrate	E353.1
16UP1	03-01	N	8803016-01C	ONG_IR	Oil & Grease	E413.2
16UP1	03-01	N	8803016-01A	OPO4	Orthophosphate	E365.4
16UP1	03-01	N	8803016-01D	PB_G	Metals	E239.2
16UP1	03-01	N	8803016-01D	SE_G	Metals	E270.2
16UP1	03-01	N	8803016-01A	SO4_N	Sulfate	E375.4
16UP1	03-01	N	8803016-01A	TDS	Total Dissolved Solids	E160.1
16UP1	03-01	N	8803080-01A	XYLENE	Purgeable Aromatics	E602
16UP1	03-01	N	8803017-02C	XYLENE	Purgeable Aromatics	E602
16UP1	04-22	N	8804040-02B	AS_G	Metals	E206.2
16UP1	04-22	N	8804040-02C	CL_T	Chloride	E325.3
16UP1	04-22	N	8804041-02A	EPA601	Purgeable Halocarbons	E601
16UP1	04-22	N	8804041-09A	EPA602	Purgeable Aromatics	E602
16UP1	04-22	N	8804041-02C	EPA602	Purgeable Aromatics	E602
16UP1	04-22	N	8804040-02C	F_SIE	Fluoride	E340.2
16UP1	04-22	N	8804040-02B	HG_C	Metals	E245.1
16UP1	04-22	N	8804040-02B	ICP200	Metal Screen (ICP)	E200.7
16UP1	04-22	N	8804040-02A	NO3	Nitrate	E353.2
16UP1	04-22	N	8804040-02D	ONG_IR	Oil & Grease	E413.2
16UP1	04-22	N	8804040-02C	OPO4	Orthophosphate	E365.4
16UP1	04-22	N	8804040-02B	PB_G	Metals	E239.2
16UP1	04-22	N	8804040-02B	SE_G	Metals	E270.2
16UP1	04-22	N	8804040-02C	SO4_N	Sulfate	E375.4
16UP1	04-22	N	8804040-02C	TDS	Total Dissolved Solids	E160.1
16UP1	04-22	N	8804041-09A	XYLENE	Purgeable Aromatics	E602
16UP1	04-22	N	8804041-02C	XYLENE	Purgeable Aromatics	E602
16UP2	03-02	N	8803016-02D	AS_G	Metals	E206.2
16UP2	03-02	N	8803016-02A	CL_T	Chloride	E325.3
16UP2	03-02	N	8803017-03A	EPA601	Purgeable Halocarbons	E601
16UP2	03-02	N	8803017-03C	EPA602	Purgeable Aromatics	E602
16UP2	03-02	N	8803016-02A	F_SIE	Fluoride	E340.2
16UP2	03-02	N	8803016-02D	HG_C	Metals	E245.1
16UP2	03-02	N	8803016-02D	ICP200	Metal Screen (ICP)	E200.7
16UP2	03-02	N	8803016-02E	NO2NO3	Nitrate	E353.1
16UP2	03-02	N	8803016-02C	ONG_IR	Oil & Grease	E413.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
16UP2	03-02	N	8803016-02A	OPO4	Orthophosphate	E365.4
16UP2	03-02	N	8803016-02D	PB_G	Metals	E239.2
16UP2	03-02	N	8803016-02D	SE_G	Metals	E270.2
16UP2	03-02	N	8803016-02A	SO4_N	Sulfate	E375.4
16UP2	03-02	N	8803016-02A	TDS	Total Dissolved Solids	E160.1
16UP2	03-02	N	8803017-03C	XYLENE	Purgeable Aromatics	E602
16UP2	04-23	N	8804040-03B	AS_G	Metals	E206.2
16UP2	04-23	N	8804040-03C	CL_T	Chloride	E325.3
16UP2	04-23	N	8804041-03A	EPA601	Purgeable Halocarbons	E601
16UP2	04-23	N	8804041-03C	EPA602	Purgeable Aromatics	E602
16UP2	04-23	N	8804041-10A	EPA602	Purgeable Aromatics	E602
16UP2	04-23	N	8804040-03C	F_SIE	Fluoride	E340.2
16UP2	04-23	N	8804040-03B	HG_C	Metals	E245.1
16UP2	04-23	N	8804040-03B	ICP200	Metal Screen (ICP)	E200.7
16UP2	04-23	N	8804040-03A	NO3	Nitrate	E353.2
16UP2	04-23	N	8804040-03D	ONG_IR	Oil & Grease	E413.2
16UP2	04-23	N	8804040-03C	OPO4	Orthophosphate	E365.4
16UP2	04-23	N	8804040-03B	PB_G	Metals	E239.2
16UP2	04-23	N	8804040-03B	SE_G	Metals	E270.2
16UP2	04-23	N	8804040-03C	SO4_N	Sulfate	E375.4
16UP2	04-23	N	8804040-03C	TDS	Total Dissolved Solids	E160.1
16UP2	04-23	N	8804041-10A	XYLENE	Purgeable Aromatics	E602
16UP2	04-23	N	8804041-03C	XYLENE	Purgeable Aromatics	E602
17	Car8-02-141	SN	S802089-01A	CL8240	Volatile Organic Compounds	SW8240
17	Car8-02-142	SN	S802089-02A	CL8270	Semivolatile Organic Compounds	SW8270
17	Car8-02-142	SN	S802089-02A	DRY_WT	Soil Moisture	UNK
17	Car8-02-143	SN	S802094-01B	8080	Organochlorine Pesticides and PCBs	SW8080
17	Car8-02-143	SN	S802094-01C	8150	Chlorinated Phenoxy Herbicides	SW8150
17	Car8-02-143	SN	S802094-01A	AG_EM	Metal Screen (ICP)	E200.7
17	Car8-02-143	SN	S802094-01A	AS_GF	Metals	E206.2
17	Car8-02-143	SN	S802094-01A	BA_EM	Metal Screen (ICP)	E200.7
17	Car8-02-143	SN	S802094-01A	CD_EM	Metal Screen (ICP)	E200.7
17	Car8-02-143	SN	S802094-01A	CR_EM	Metal Screen (ICP)	E200.7
17	Car8-02-143	SN	S802094-01A	HG_CV	Metals	E245.1
17	Car8-02-143	SN	S802094-01A	PB_G	Metals	E239.2
17	Car8-02-143	SN	S802094-01A	SE_GF	Metals	E270.2
17I	03-08	N	8803016-06D	AS_G	Metals	E206.2
17I	03-08	N	S803006-01A	CL_625	Extractable Priority Pollutants	E625
17I	03-08	N	8803016-06A	CL_T	Chloride	E325.3
17I	03-08	N	8803017-09A	EPA601	Purgeable Halocarbons	E601
17I	03-08	N	8803017-09C	EPA602	Purgeable Aromatics	E602
17I	03-08	N	8803016-06A	F_SIE	Fluoride	E340.2
17I	03-08	N	8803016-06C	HC_IR	Petroleum Hydrocarbons	E418.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17I	D3-08	N	8803016-06D	HG_C	Metals	E245.1
17I	03-08	N	8803016-06D	ICP200	Metal Screen (ICP)	E200.7
17I	03-08	N	8803016-06E	NO2NO3	Nitrate	E353.1
17I	03-08	N	8803016-06A	OPO4	Orthophosphate	E365.4
17I	03-08	N	8803016-06D	PB_G	Metals	E239.2
17I	03-08	N	8803016-06D	SE_G	Metals	E270.2
17I	03-08	N	8803016-06A	SO4_N	Sulfate	E375.4
17I	03-08	N	8803016-06A	TDS	Total Dissolved Solids	E160.1
17I	03-08	N	8803017-09C	XYLENE	Purgeable Aromatics	E602
17I	03-09	TB	8803017-10A	EPA601	Purgeable Halocarbons	E601
17I	03-09	TB	8803080-07A	EPA601	Purgeable Halocarbons	E601
17I	03-09	TB	8803017-10C	EPA602	Purgeable Aromatics	E602
17I	03-09	TB	8803080-07B	EPA602	Purgeable Aromatics	E602
17I	03-09	TB	8803017-10C	XYLENE	Purgeable Aromatics	E602
17I	03-09	TB	8803080-07B	XYLENE	Purgeable Aromatics	E602
17I	03-10	FB	8803018-06A	EPA601	Purgeable Halocarbons	E601
17I	03-10	FB	8803018-01A	EPA601	Purgeable Halocarbons	E601
17I	03-10	FB	8803018-01C	EPA602	Purgeable Aromatics	E602
17I	03-10	FB	8803018-01C	XYLENE	Purgeable Aromatics	E602
17I	04-64	N	8804074-05D	AS_G	Metals	E206.2
17I	04-64	N	S804083-05A	CL_625	Extractable Priority Pollutants	E625
17I	04-64	N	8804074-05A	CL_T	Chloride	E325.3
17I	04-64	N	8804075-06A	EPA601	Purgeable Halocarbons	E601
17I	04-64	N	8804075-06C	EPA602	Purgeable Aromatics	E602
17I	04-64	N	8804074-05A	F_SIE	Fluoride	E340.2
17I	04-64	N	8804074-05C	HC_IR	Petroleum Hydrocarbons	E418.1
17I	04-64	N	8804074-05D	HG_C	Metals	E245.1
17I	04-64	N	8804074-05D	ICP200	Metal Screen (ICP)	E200.7
17I	04-64	N	8804074-05B	NO2NO3	Nitrate	E353.1
17I	04-64	N	8804074-05A	OPO4	Orthophosphate	E365.4
17I	04-64	N	8804074-05D	PB_G	Metals	E239.2
17I	04-64	N	8804074-05A	SO4_N	Sulfate	E375.4
17I	04-64	N	8804074-05A	TDS	Total Dissolved Solids	E160.1
17I	04-64	N	8804075-06C	XYLENE	Purgeable Aromatics	E602
17I	Car8-02-053	SN	S802056-14A	CL8240	Volatile Organic Compounds	SW8240
17I	Car8-02-054	SN	8802084-10A	HC_IR	Petroleum Hydrocarbons	E418.1
17I	Car8-02-054	SN	8802084-10A	PB_G	Metals	E239.2
17I	Car8-02-055	SN	S802056-15A	CL8240	Volatile Organic Compounds	SW8240
17I	Car8-02-056	SN	8802084-11A	HC_IR	Petroleum Hydrocarbons	E418.1
17I	Car8-02-056	SN	8802084-11A	PB_G	Metals	E239.2
17J	03-13	N	8803016-09D	AS_G	Metals	E206.2
17J	03-13	N	8803016-09A	CL_T	Chloride	E325.3
17J	03-13	N	8803018-04A	EPA601	Purgeable Halocarbons	E601

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17J	03-13	N	8803018-04C	EPA602	Purgeable Aromatics	E602
17J	03-13	N	8803016-09A	F_SIE	Fluoride	E340.2
17J	03-13	N	8803016-09C	HC_IR	Petroleum Hydrocarbons	E418.1
17J	03-13	N	8803016-09D	HG_C	Metals	E245.1
17J	03-13	N	8803016-09D	ICP200	Metal Screen (ICP)	E200.7
17J	03-13	N	8803016-09E	NO2NO3	Nitrate	E353.1
17J	03-13	N	8803016-09A	OPO4	Orthophosphate	E365.4
17J	03-13	N	8803016-09D	PB_G	Metals	E239.2
17J	03-13	N	8803016-09D	SE_G	Metals	E270.2
17J	03-13	N	8803016-09A	SO4_N	Sulfate	E375.4
17J	03-13	N	8803016-09A	TDS	Total Dissolved Solids	E160.1
17J	03-13	N	8803018-04C	XYLENE	Purgeable Aromatics	E602
17J	04-69	N	8804079-01C	AS_G	Metals	E206.2
17J	04-69	N	8804079-01A	CL_T	Chloride	E325.3
17J	04-69	N	8804080-01A	EPA601	Purgeable Halocarbons	E601
17J	04-69	N	8804080-01C	EPA602	Purgeable Aromatics	E602
17J	04-69	N	8804079-01A	F_SIE	Fluoride	E340.2
17J	04-69	N	8804079-01D	HC_IR	Petroleum Hydrocarbons	E418.1
17J	04-69	N	8804079-01C	HG_C	Metals	E245.1
17J	04-69	N	8804079-01C	ICP200	Metal Screen (ICP)	E200.7
17J	04-69	N	8804079-01B	NO2NO3	Nitrate	E353.1
17J	04-69	N	8804079-01A	OPO4	Orthophosphate	E365.4
17J	04-69	N	8804079-01C	PB_G	Metals	E239.2
17J	04-69	N	8804079-01A	SO4_N	Sulfate	E375.4
17J	04-69	N	8804079-01A	TDS	Total Dissolved Solids	E160.1
17J	04-69	N	8804080-01C	XYLENE	Purgeable Aromatics	E602
17J	04-70	D	8804079-02C	AS_G	Metals	E206.2
17J	04-70	D	8804079-02C	AS_G	Metals	E206.2
17J	04-70	D	8804079-02A	CL_T	Chloride	E325.3
17J	04-70	D	8804079-02A	CL_T	Chloride	E325.3
17J	04-70	D	8804080-02A	EPA601	Purgeable Halocarbons	E601
17J	04-70	D	8804080-02A	EPA601	Purgeable Halocarbons	E601
17J	04-70	D	8804080-02C	EPA602	Purgeable Aromatics	E602
17J	04-70	D	8804080-02C	EPA602	Purgeable Aromatics	E602
17J	04-70	D	8804079-02A	F_SIE	Fluoride	E340.2
17J	04-70	D	8804079-02A	F_SIE	Fluoride	E340.2
17J	04-70	D	8804079-02D	HC_IR	Petroleum Hydrocarbons	E418.1
17J	04-70	D	8804079-02D	HC_IR	Petroleum Hydrocarbons	E418.1
17J	04-70	D	8804079-02C	HG_C	Metals	E245.1
17J	04-70	D	8804079-02C	HG_C	Metals	E245.1
17J	04-70	D	8804079-02C	ICP200	Metal Screen (ICP)	E200.7
17J	04-70	D	8804079-02C	ICP200	Metal Screen (ICP)	E200.7
17J	04-70	D	8804079-02B	NO2NO3	Nitrate	E353.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17J	04-70	D	8804079-02B	NO2NO3	Nitrate	E353.1
17J	04-70	D	8804079-02A	OPO4	Orthophosphate	E365.4
17J	04-70	D	8804079-02A	OPO4	Orthophosphate	E365.4
17J	04-70	D	8804079-02C	PB_G	Metals	E239.2
17J	04-70	D	8804079-02C	PB_G	Metals	E239.2
17J	04-70	D	8804079-02A	SO4_N	Sulfate	E375.4
17J	04-70	D	8804079-02A	SO4_N	Sulfate	E375.4
17J	04-70	D	8804079-02A	TDS	Total Dissolved Solids	E160.1
17J	04-70	D	8804079-02A	TDS	Total Dissolved Solids	E160.1
17J	04-70	D	8804080-02C	XYLENE	Purgeable Aromatics	E602
17J	04-70	D	8804080-02C	XYLENE	Purgeable Aromatics	E602
17J	04-71	ER	8804079-03C	AS_G	Metals	E206.2
17J	04-71	ER	8804079-03A	CL_T	Chloride	E325.3
17J	04-71	ER	8804080-03A	EPA601	Purgeable Halocarbons	E601
17J	04-71	ER	8804080-07A	EPA602	Purgeable Aromatics	E602
17J	04-71	ER	8804080-03C	EPA602	Purgeable Aromatics	E602
17J	04-71	ER	8804079-03A	F_SIE	Fluoride	E340.2
17J	04-71	ER	8804079-03D	HC_IR	Petroleum Hydrocarbons	E418.1
17J	04-71	ER	8804079-03C	HG_C	Metals	E245.1
17J	04-71	ER	8804079-03C	ICP200	Metal Screen (ICP)	E200.7
17J	04-71	ER	8804079-03B	NO2NO3	Nitrate	E353.1
17J	04-71	ER	8804079-03E	ONG_IR	Oil & Grease	E413.2
17J	04-71	ER	8804079-03A	OPO4	Orthophosphate	E365.4
17J	04-71	ER	8804079-03C	PB_G	Metals	E239.2
17J	04-71	ER	8804079-03C	SE_G	Metals	E270.2
17J	04-71	ER	8804079-03A	SO4_N	Sulfate	E375.4
17J	04-71	ER	8804079-03A	TDS	Total Dissolved Solids	E160.1
17J	04-71	ER	8804080-07A	XYLENE	Purgeable Aromatics	E602
17J	04-71	ER	8804080-03C	XYLENE	Purgeable Aromatics	E602
17J	Car8-02-065	SN	S802064-05A	CL8240	Volatile Organic Compounds	SW8240
17J	Car8-02-066	SN	8802111-05A	HC_IR	Petroleum Hydrocarbons	E418.1
17J	Car8-02-066	SN	8802111-05A	PB_G	Metals	E239.2
17J	Car8-02-067	FB	S802064-06A	CL8240	Volatile Organic Compounds	SW8240
17K	03-11	N	8803016-07D	AS_G	Metals	E206.2
17K	03-11	N	8803016-07A	CL_T	Chloride	E325.3
17K	03-11	N	8803018-02A	EPA601	Purgeable Halocarbons	E601
17K	03-11	N	8803018-07A	EPA602	Purgeable Aromatics	E602
17K	03-11	N	8803018-02C	EPA602	Purgeable Aromatics	E602
17K	03-11	N	8803016-07A	F_SIE	Fluoride	E340.2
17K	03-11	N	8803016-07C	HC_IR	Petroleum Hydrocarbons	E418.1
17K	03-11	N	8803016-07D	HG_C	Metals	E245.1
17K	03-11	N	8803016-07D	ICP200	Metal Screen (ICP)	E200.7
17K	03-11	N	8803016-07E	NO2NO3	Nitrate	E353.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17K	03-11	N	8803016-07A	OPO4	Orthophosphate	E365.4
17K	03-11	N	8803016-07D	PB_G	Metals	E239.2
17K	03-11	N	8803016-07D	SE_G	Metals	E270.2
17K	03-11	N	8803016-07A	SO4_N	Sulfate	E375.4
17K	03-11	N	8803016-07A	TDS	Total Dissolved Solids	E160.1
17K	03-11	N	8803018-07A	XYLENE	Purgeable Aromatics	E602
17K	03-11	N	8803018-02C	XYLENE	Purgeable Aromatics	E602
17K	04-68	N	8804074-09D	AS_G	Metals	E206.2
17K	04-68	N	8804074-09A	CL_T	Chloride	E325.3
17K	04-68	N	8804145-08A	EPA601	Purgeable Halocarbons	E601
17K	04-68	N	8804075-10A	EPA601	Purgeable Halocarbons	E601
17K	04-68	N	8804145-08A	EPA602	Purgeable Aromatics	E602
17K	04-68	N	8804075-10C	EPA602	Purgeable Aromatics	E602
17K	04-68	N	8804074-09A	F_SIE	Fluoride	E340.2
17K	04-68	N	8804074-09C	HC_IR	Petroleum Hydrocarbons	E418.1
17K	04-68	N	8804074-09D	HG_C	Metals	E245.1
17K	04-68	N	8804074-09D	ICP200	Metal Screen (ICP)	E200.7
17K	04-68	N	8804074-09B	NO2NO3	Nitrate	E353.1
17K	04-68	N	8804074-09A	OPO4	Orthophosphate	E365.4
17K	04-68	N	8804074-09D	PB_G	Metals	E239.2
17K	04-68	N	8804074-09A	SO4_N	Sulfate	E375.4
17K	04-68	N	8804074-09A	TDS	Total Dissolved Solids	E160.1
17K	04-68	N	8804075-10C	XYLENE	Purgeable Aromatics	E602
17K	04-68	N	8804145-08A	XYLENE	Purgeable Aromatics	E602
17K	Car8-02-057	SD	S802064-01A	CL8240	Volatile Organic Compounds	SW8240
17K	Car8-02-058	SD	S802064-02A	CL8240	Volatile Organic Compounds	SW8240
17K	Car8-02-059	SD	8802111-01A	HC_IR	Petroleum Hydrocarbons	E418.1
17K	Car8-02-059	SD	8802111-01A	PB_G	Metals	E239.2
17K	Car8-02-060	SD	8802111-02A	HC_IR	Petroleum Hydrocarbons	E418.1
17K	Car8-02-060	SD	8802111-02A	PB_G	Metals	E239.2
17L	03-12	N	8803016-08D	AS_G	Metals	E206.2
17L	03-12	N	8803016-08A	CL_T	Chloride	E325.3
17L	03-12	N	8803018-03A	EPA601	Purgeable Halocarbons	E601
17L	03-12	N	8803018-03C	EPA602	Purgeable Aromatics	E602
17L	03-12	N	8803016-08A	F_SIE	Fluoride	E340.2
17L	03-12	N	8803016-08C	HC_IR	Petroleum Hydrocarbons	E418.1
17L	03-12	N	8803016-08D	HG_C	Metals	E245.1
17L	03-12	N	8803016-08D	ICP200	Metal Screen (ICP)	E200.7
17L	03-12	N	8803016-08E	NO2NO3	Nitrate	E353.1
17L	03-12	N	8803016-08A	OPO4	Orthophosphate	E365.4
17L	03-12	N	8803016-08D	PB_G	Metals	E239.2
17L	03-12	N	8803016-08D	SE_G	Metals	E270.2
17L	03-12	N	8803016-08A	SO4_N	Sulfate	E375.4

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17L	03-12	N	8803016-08A	TDS	Total Dissolved Solids	E160.1
17L	03-12	N	8803018-03C	XYLENE	Purgeable Aromatics	E602
17L	04-72	N	8804079-04C	AS_G	Metals	E206.2
17L	04-72	N	8804079-04A	CL_T	Chloride	E325.3
17L	04-72	N	8804080-04A	EPA601	Purgeable Halocarbons	E601
17L	04-72	N	8804080-04C	EPA602	Purgeable Aromatics	E602
17L	04-72	N	8804079-04A	F_SIE	Fluoride	E340.2
17L	04-72	N	8804079-04D	HC_IR	Petroleum Hydrocarbons	E418.1
17L	04-72	N	8804079-04C	HG_C	Metals	E245.1
17L	04-72	N	8804079-04C	ICP200	Metal Screen (ICP)	E200.7
17L	04-72	N	8804079-04B	NO2NO3	Nitrate	E353.1
17L	04-72	N	8804079-04A	OPO4	Orthophosphate	E365.4
17L	04-72	N	8804079-04C	PB_G	Metals	E239.2
17L	04-72	N	8804079-04A	SO4_N	Sulfate	E375.4
17L	04-72	N	8804079-04A	TDS	Total Dissolved Solids	E160.1
17L	04-72	N	8804080-04C	XYLENE	Purgeable Aromatics	E602
17L	04-73	ER	8804079-05C	AS_G	Metals	E206.2
17L	04-73	ER	8804079-05A	CL_T	Chloride	E325.3
17L	04-73	ER	8804080-08A	EPA601	Purgeable Halocarbons	E601
17L	04-73	ER	8804080-05A	EPA601	Purgeable Halocarbons	E601
17L	04-73	ER	8804080-08A	EPA602	Purgeable Aromatics	E602
17L	04-73	ER	8804080-05C	EPA602	Purgeable Aromatics	E602
17L	04-73	ER	8804079-05A	F_SIE	Fluoride	E340.2
17L	04-73	ER	8804079-05C	HG_C	Metals	E245.1
17L	04-73	ER	8804079-05C	ICP200	Metal Screen (ICP)	E200.7
17L	04-73	ER	8804079-05B	NO2NO3	Nitrate	E353.1
17L	04-73	ER	8804079-05A	OPO4	Orthophosphate	E365.4
17L	04-73	ER	8804079-05C	PB_G	Metals	E239.2
17L	04-73	ER	8804079-05A	SO4_N	Sulfate	E375.4
17L	04-73	ER	8804079-05A	TDS	Total Dissolved Solids	E160.1
17L	04-73	ER	8804080-05C	XYLENE	Purgeable Aromatics	E602
17L	04-73	ER	8804080-08A	XYLENE	Purgeable Aromatics	E602
17L	Car8-02-063	SN	S802064-04A	CL8240	Volatile Organic Compounds	SW8240
17L	Car8-02-064	SN	8802111-04A	HC_IR	Petroleum Hydrocarbons	E418.1
17L	Car8-02-064	SN	8802111-04A	PB_G	Metals	E239.2
17M	03-14	N	8803031-01C	AS_G	Metals	E206.2
17M	03-14	N	8803031-01A	CL_T	Chloride	E325.3
17M	03-14	N	8803029-01A	EPA601	Purgeable Halocarbons	E601
17M	03-14	N	8803029-01C	EPA602	Purgeable Aromatics	E602
17M	03-14	N	8803031-01A	F_SIE	Fluoride	E340.2
17M	03-14	N	8803031-01D	HC_IR	Petroleum Hydrocarbons	E418.1
17M	03-14	N	8803031-01C	HG_C	Metals	E245.1
17M	03-14	N	8803031-01C	ICP200	Metal Screen (ICP)	E200.7

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
17M	03-14	N	8803031-01E	NO2NO3	Nitrate	E353.1
17M	03-14	N	8803031-01A	OPO4	Orthophosphate	E365.4
17M	03-14	N	8803031-01C	PB_G	Metals	E239.2
17M	03-14	N	8803031-01C	SE_G	Metals	E270.2
17M	03-14	N	8803031-01A	SO4_N	Sulfate	E375.4
17M	03-14	N	8803031-01A	TDS	Total Dissolved Solids	E160.1
17M	03-14	N	8803029-01C	XYLENE	Purgeable Aromatics	E602
17M	04-65	N	8804074-06D	AS_G	Metals	E206.2
17M	04-65	N	8804074-06A	CL_T	Chloride	E325.3
17M	04-65	N	8804075-07A	EPA601	Purgeable Halocarbons	E601
17M	04-65	N	8804075-07C	EPA602	Purgeable Aromatics	E602
17M	04-65	N	8804074-06A	F_SIE	Fluoride	E340.2
17M	04-65	N	8804074-06C	HC_IR	Petroleum Hydrocarbons	E418.1
17M	04-65	N	8804074-06D	HG_C	Metals	E245.1
17M	04-65	N	8804074-06D	ICP200	Metal Screen (ICP)	E200.7
17M	04-65	N	8804074-06B	NO2NO3	Nitrate	E353.1
17M	04-65	N	8804074-06A	OPO4	Orthophosphate	E365.4
17M	04-65	N	8804074-06D	PB_G	Metals	E239.2
17M	04-65	N	8804074-06A	SO4_N	Sulfate	E375.4
17M	04-65	N	8804074-06A	TDS	Total Dissolved Solids	E160.1
17M	04-65	N	8804075-07C	XYLENE	Purgeable Aromatics	E602
17M	Car8-02-061	SN	S802064-03A	CL8240	Volatile Organic Compounds	SW8240
17M	Car8-02-062	SN	8802111-03A	HC_IR	Petroleum Hydrocarbons	E418.1
17M	Car8-02-062	SN	8802111-03A	PB_G	Metals	E239.2
1A	02-159	N	8802191-05D	AS_G	Metals	E206.2
1A	02-159	N	S802099-03A	CL_625	Extractable Priority Pollutants	E625
1A	02-159	N	8802191-05E	CL_T	Chloride	E325.3
1A	02-159	N	8802190-05A	EPA601	Purgeable Halocarbons	E601
1A	02-159	N	8802190-05C	EPA602	Purgeable Aromatics	E602
1A	02-159	N	8802191-05E	F_SIE	Fluoride	E340.2
1A	02-159	N	8802191-05D	HG_C	Metals	E245.1
1A	02-159	N	8802191-05D	ICP200	Metal Screen (ICP)	E200.7
1A	02-159	N	8802191-05B	NO2NO3	Nitrate	E353.1
1A	02-159	N	8802191-05C	ONG_IR	Oil & Grease	E413.2
1A	02-159	N	8802191-05E	OPO4	Orthophosphate	E365.4
1A	02-159	N	8802191-05D	PB_G	Metals	E239.2
1A	02-159	N	8802191-05D	SE_G	Metals	E270.2
1A	02-159	N	8802191-05E	SO4_N	Sulfate	E375.4
1A	02-159	N	8802191-05E	TDS	Total Dissolved Solids	E160.1
1A	02-159	N	8802190-05C	XYLENE	Purgeable Aromatics	E602
1A	04-12	N	8804029-01B	AS_G	Metals	E206.2
1A	04-12	N	8804029-01C	CL_T	Chloride	E325.3
1A	04-12	N	8804030-01A	EPA601	Purgeable Halocarbons	E601

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1A	04-12	N	8804030-10A	EPA602	Purgeable Aromatics	E602
1A	04-12	N	8804030-01C	EPA602	Purgeable Aromatics	E602
1A	04-12	N	8804029-01C	F_SIE	Fluoride	E340.2
1A	04-12	N	8804029-01B	HG_C	Metals	E245.1
1A	04-12	N	8804029-01B	ICP200	Metal Screen (ICP)	E200.7
1A	04-12	N	8804029-01A	NO3	Nitrate	E353.2
1A	04-12	N	8804029-01D	ONG_IR	Oil & Grease	E413.2
1A	04-12	N	8804029-01C	OPO4	Orthophosphate	E365.4
1A	04-12	N	8804029-01B	PB_G	Metals	E239.2
1A	04-12	N	8804029-01B	SE_G	Metals	E270.2
1A	04-12	N	8804029-01C	SO4_N	Sulfate	E375.4
1A	04-12	N	8804029-01C	TDS	Total Dissolved Solids	E160.1
1A	04-12	N	8804030-01C	XYLENE	Purgeable Aromatics	E602
1A	04-12	N	8804030-10A	XYLENE	Purgeable Aromatics	E602
1A	04-13	TB	8804030-02A	EPA601	Purgeable Halocarbons	E601
1A	04-13	TB	8804030-02C	EPA602	Purgeable Aromatics	E602
1A	04-13	TB	8804030-02C	XYLENE	Purgeable Aromatics	E602
1A	04-14	FB	8804030-03A	EPA601	Purgeable Halocarbons	E601
1A	04-14	FB	8804030-03C	EPA602	Purgeable Aromatics	E602
1A	04-14	FB	8804030-03C	XYLENE	Purgeable Aromatics	E602
1B	02-158	N	8803017-01A	EPA602	Purgeable Aromatics	E602
1B	02-158	N	8803017-01A	EPA602	Purgeable Aromatics	E602
1B	02-158	N	8803017-01A	XYLENE	Purgeable Aromatics	E602
1B	02-158	N	8803017-01A	XYLENE	Purgeable Aromatics	E602
1B	04-15	N	8804075-01A	EPA601	Purgeable Halocarbons	E601
1B	04-15	N	8804145-01A	EPA601	Purgeable Halocarbons	E601
1B	04-15	N	8804075-01B	EPA602	Purgeable Aromatics	E602
1B	04-15	N	8804075-01B	XYLENE	Purgeable Aromatics	E602
1C	02-160	N	8802191-06D	AS_G	Metals	E206.2
1C	02-160	N	8802191-06E	CL_T	Chloride	E325.3
1C	02-160	N	8802190-06A	EPA601	Purgeable Halocarbons	E601
1C	02-160	N	8802190-06C	EPA602	Purgeable Aromatics	E602
1C	02-160	N	8802190-13A	EPA602	Purgeable Aromatics	E602
1C	02-160	N	8802191-06E	F_SIE	Fluoride	E340.2
1C	02-160	N	8802191-06D	HG_C	Metals	E245.1
1C	02-160	N	8802191-06D	ICP200	Metal Screen (ICP)	E200.7
1C	02-160	N	8802191-06B	NO2NO3	Nitrate	E353.1
1C	02-160	N	8802191-06C	ONG_IR	Oil & Grease	E413.2
1C	02-160	N	8802191-06E	OPO4	Orthophosphate	E365.4
1C	02-160	N	8802191-06D	PB_G	Metals	E239.2
1C	02-160	N	8802191-06D	SE_G	Metals	E270.2
1C	02-160	N	8802191-06E	SO4_N	Sulfate	E375.4
1C	02-160	N	8802191-06E	TDS	Total Dissolved Solids	E160.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1C	02-160	N	8802190-13A	XYLENE	Purgeable Aromatics	E602
1C	02-160	N	8802190-06C	XYLENE	Purgeable Aromatics	E602
1C	04-17	N	8804029-03B	AS_G	Metals	E206.2
1C	04-17	N	8804029-03C	CL_T	Chloride	E325.3
1C	04-17	N	8804030-05A	EPA601	Purgeable Halocarbons	E601
1C	04-17	N	8804030-11A	EPA602	Purgeable Aromatics	E602
1C	04-17	N	8804030-05C	EPA602	Purgeable Aromatics	E602
1C	04-17	N	8804029-03C	F_SIE	Fluoride	E340.2
1C	04-17	N	8804029-03B	HG_C	Metals	E245.1
1C	04-17	N	8804029-03B	ICP200	Metal Screen (ICP)	E200.7
1C	04-17	N	8804029-03A	NO3	Nitrate	E353.2
1C	04-17	N	8804029-03D	ONG_IR	Oil & Grease	E413.2
1C	04-17	N	8804029-03C	OPO4	Orthophosphate	E365.4
1C	04-17	N	8804029-03B	PB_G	Metals	E239.2
1C	04-17	N	8804029-03B	SE_G	Metals	E270.2
1C	04-17	N	8804029-03C	SO4_N	Sulfate	E375.4
1C	04-17	N	8804029-03C	TDS	Total Dissolved Solids	E160.1
1C	04-17	N	8804030-05C	XYLENE	Purgeable Aromatics	E602
1C	04-17	N	8804030-11A	XYLENE	Purgeable Aromatics	E602
1D	02-161	N	8802191-07D	AS_G	Metals	E206.2
1D	02-161	N	8802191-07E	CL_T	Chloride	E325.3
1D	02-161	N	8802190-07A	EPA601	Purgeable Halocarbons	E601
1D	02-161	N	8802190-07C	EPA602	Purgeable Aromatics	E602
1D	02-161	N	8802191-07E	F_SIE	Fluoride	E340.2
1D	02-161	N	8802191-07D	HG_C	Metals	E245.1
1D	02-161	N	8802191-07D	ICP200	Metal Screen (ICP)	E200.7
1D	02-161	N	8802191-07B	NO2NO3	Nitrate	E353.1
1D	02-161	N	8802191-07C	ONG_IR	Oil & Grease	E413.2
1D	02-161	N	8802191-07E	OPO4	Orthophosphate	E365.4
1D	02-161	N	8802191-07D	PB_G	Metals	E239.2
1D	02-161	N	8802191-07D	SE_G	Metals	E270.2
1D	02-161	N	8802191-07E	SO4_N	Sulfate	E375.4
1D	02-161	N	8802191-07E	TDS	Total Dissolved Solids	E160.1
1D	02-161	N	8802190-07C	XYLENE	Purgeable Aromatics	E602
1D	04-16	N	8804029-02B	AS_G	Metals	E206.2
1D	04-16	N	8804029-02C	CL_T	Chloride	E325.3
1D	04-16	N	8804030-04A	EPA601	Purgeable Halocarbons	E601
1D	04-16	N	8804030-04C	EPA602	Purgeable Aromatics	E602
1D	04-16	N	8804029-02C	F_SIE	Fluoride	E340.2
1D	04-16	N	8804029-02B	HG_C	Metals	E245.1
1D	04-16	N	8804029-02B	ICP200	Metal Screen (ICP)	E200.7
1D	04-16	N	8804029-02A	NO3	Nitrate	E353.2
1D	04-16	N	8804029-02D	ONG_IR	Oil & Grease	E413.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1D	04-16	N	8804029-02C	OPO4	Orthophosphate	E365.4
1D	04-16	N	8804029-02B	PB_G	Metals	E239.2
1D	04-16	N	8804029-02B	SE_G	Metals	E270.2
1D	04-16	N	8804029-02C	SO4_N	Sulfate	E375.4
1D	04-16	N	8804029-02C	TDS	Total Dissolved Solids	E160.1
1D	04-16	N	8804030-04C	XYLENE	Purgeable Aromatics	E602
1E	02-163	N	8802191-09D	AS_G	Metals	E206.2
1E	02-163	N	8802191-09E	CL_T	Chloride	E325.3
1E	02-163	N	8802190-09A	EPA601	Purgeable Halocarbons	E601
1E	02-163	N	8802190-09C	EPA602	Purgeable Aromatics	E602
1E	02-163	N	8802191-09E	F_SIE	Fluoride	E340.2
1E	02-163	N	8802191-09D	HG_C	Metals	E245.1
1E	02-163	N	8802191-09D	ICP200	Metal Screen (ICP)	E200.7
1E	02-163	N	8802191-09B	NO2NO3	Nitrate	E353.1
1E	02-163	N	8802191-09C	ONG_IR	Oil & Grease	E413.2
1E	02-163	N	8802191-09E	OPO4	Orthophosphate	E365.4
1E	02-163	N	8802191-09D	PB_G	Metals	E239.2
1E	02-163	N	8802191-09D	SE_G	Metals	E270.2
1E	02-163	N	8802191-09E	SO4_N	Sulfate	E375.4
1E	02-163	N	8802191-09E	TDS	Total Dissolved Solids	E160.1
1E	02-163	N	8802190-09C	XYLENE	Purgeable Aromatics	E602
1E	04-18	N	8804029-04B	AS_G	Metals	E206.2
1E	04-18	N	S804038-01A	CL_625	Extractable Priority Pollutants	E625
1E	04-18	N	8804029-04C	CL_T	Chloride	E325.3
1E	04-18	N	8804030-06A	EPA601	Purgeable Halocarbons	E601
1E	04-18	N	8804030-12A	EPA602	Purgeable Aromatics	E602
1E	04-18	N	8804030-06C	EPA602	Purgeable Aromatics	E602
1E	04-18	N	8804029-04C	F_SIE	Fluoride	E340.2
1E	04-18	N	8804029-04B	HG_C	Metals	E245.1
1E	04-18	N	8804029-04B	ICP200	Metal Screen (ICP)	E200.7
1E	04-18	N	8804029-04A	NO3	Nitrate	E353.2
1E	04-18	N	8804029-04D	ONG_IR	Oil & Grease	E413.2
1E	04-18	N	8804029-04C	OPO4	Orthophosphate	E365.4
1E	04-18	N	8804029-04B	PB_G	Metals	E239.2
1E	04-18	N	8804029-04B	SE_G	Metals	E270.2
1E	04-18	N	8804029-04C	SO4_N	Sulfate	E375.4
1E	04-18	N	8804029-04C	TDS	Total Dissolved Solids	E160.1
1E	04-18	N	8804030-12A	XYLENE	Purgeable Aromatics	E602
1E	04-18	N	8804030-06C	XYLENE	Purgeable Aromatics	E602
1E	04-20	D	8804029-06B	AS_G	Metals	E206.2
1E	04-20	D	S804038-02A	CL_625	Extractable Priority Pollutants	E625
1E	04-20	D	8804029-06C	CL_T	Chloride	E325.3
1E	04-20	D	8804030-08A	EPA601	Purgeable Halocarbons	E601

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1E	04-20	D	8804030-08C	EPA602	Purgeable Aromatics	E602
1E	04-20	D	8804029-06C	F_SIE	Fluoride	E340.2
1E	04-20	D	8804029-06B	HG_C	Metals	E245.1
1E	04-20	D	8804029-06B	ICP200	Metal Screen (ICP)	E200.7
1E	04-20	D	8804029-06A	NO3	Nitrate	E353.2
1E	04-20	D	8804029-06D	ONG_IR	Oil & Grease	E413.2
1E	04-20	D	8804029-06C	OPO4	Orthophosphate	E365.4
1E	04-20	D	8804029-06B	PB_G	Metals	E239.2
1E	04-20	D	8804029-06B	SE_G	Metals	E270.2
1E	04-20	D	8804029-06C	SO4_N	Sulfate	E375.4
1E	04-20	D	8804029-06C	TDS	Total Dissolved Solids	E160.1
1E	04-20	D	8804030-08C	XYLENE	Purgeable Aromatics	E602
1E	Car8-02-031	SN	S802056-01A	CL8240	Volatile Organic Compounds	SW8240
1E	Car8-02-032	SN	S802056-02A	CL8270	Semivolatile Organic Compounds	SW8270
1E	Car8-02-032	SN	S802056-02A	DRY_WT	Soil Moisture	UNK
1E	Car8-02-033	SN	8802084-01A	AS_G	Metals	E206.2
1E	Car8-02-033	SN	8802084-01A	HG_C	Metals	E245.1
1E	Car8-02-033	SN	8802084-01A	ICP200	Metal Screen (ICP)	E200.7
1E	Car8-02-033	SN	8802084-01A	ONG_IR	Oil & Grease	E413.2
1E	Car8-02-033	SN	8802084-01A	SE_G	Metals	E270.2
1E	Car8-02-034	SN	S802056-03A	CL8240	Volatile Organic Compounds	SW8240
1E	Car8-02-035	SN	S802056-04A	CL8270	Semivolatile Organic Compounds	SW8270
1E	Car8-02-035	SN	S802056-04A	DRY_WT	Soil Moisture	UNK
1E	Car8-02-036	SN	8802084-02A	AS_G	Metals	E206.2
1E	Car8-02-036	SN	8802084-02A	HG_C	Metals	E245.1
1E	Car8-02-036	SN	8802084-02A	ICP200	Metal Screen (ICP)	E200.7
1E	Car8-02-036	SN	8802084-02A	ONG_IR	Oil & Grease	E413.2
1E	Car8-02-036	SN	8802084-02A	SE_G	Metals	E270.2
1F	02-162	N	8802191-08D	AS_G	Metals	E206.2
1F	02-162	N	8802191-08E	CL_T	Chloride	E325.3
1F	02-162	N	8802190-08A	EPA601	Purgeable Halocarbons	E601
1F	02-162	N	8802190-08C	EPA602	Purgeable Aromatics	E602
1F	02-162	N	8802190-14A	EPA602	Purgeable Aromatics	E602
1F	02-162	N	8802191-08E	F_SIE	Fluoride	E340.2
1F	02-162	N	8802191-08D	HG_C	Metals	E245.1
1F	02-162	N	8802191-08D	ICP200	Metal Screen (ICP)	E200.7
1F	02-162	N	8802191-08B	NO2NO3	Nitrate	E353.1
1F	02-162	N	8802191-08C	ONG_IR	Oil & Grease	E413.2
1F	02-162	N	8802191-08E	OPO4	Orthophosphate	E365.4
1F	02-162	N	8802191-08D	PB_G	Metals	E239.2
1F	02-162	N	8802191-08D	SE_G	Metals	E270.2
1F	02-162	N	8802191-08E	SO4_N	Sulfate	E375.4
1F	02-162	N	8802191-08E	TDS	Total Dissolved Solids	E160.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1F	02-162	N	8802190-08C	XYLENE	Purgeable Aromatics	E602
1F	02-162	N	8802190-14A	XYLENE	Purgeable Aromatics	E602
1F	04-19	N	8804029-05B	AS_G	Metals	E206.2
1F	04-19	N	8804029-05C	CL_T	Chloride	E325.3
1F	04-19	N	8804030-07A	EPA601	Purgeable Halocarbons	E601
1F	04-19	N	8804030-13A	EPA602	Purgeable Aromatics	E602
1F	04-19	N	8804030-07C	EPA602	Purgeable Aromatics	E602
1F	04-19	N	8804029-05C	F_SIE	Fluoride	E340.2
1F	04-19	N	8804029-05B	HG_C	Metals	E245.1
1F	04-19	N	8804029-05B	ICP200	Metal Screen (ICP)	E200.7
1F	04-19	N	8804029-05A	NO3	Nitrate	E353.2
1F	04-19	N	8804029-05D	ONG_IR	Oil & Grease	E413.2
1F	04-19	N	8804029-05C	OPO4	Orthophosphate	E365.4
1F	04-19	N	8804029-05B	PB_G	Metals	E239.2
1F	04-19	N	8804029-05B	SE_G	Metals	E270.2
1F	04-19	N	8804029-05C	SO4_N	Sulfate	E375.4
1F	04-19	N	8804029-05C	TDS	Total Dissolved Solids	E160.1
1F	04-19	N	8804030-07C	XYLENE	Purgeable Aromatics	E602
1F	04-19	N	8804030-13A	XYLENE	Purgeable Aromatics	E602
1F	04-21	ER	8804040-01B	AS_G	Metals	E206.2
1F	04-21	ER	8804040-01C	CL_T	Chloride	E325.3
1F	04-21	ER	8804041-01A	EPA601	Purgeable Halocarbons	E601
1F	04-21	ER	8804041-01C	EPA602	Purgeable Aromatics	E602
1F	04-21	ER	8804041-08A	EPA602	Purgeable Aromatics	E602
1F	04-21	ER	8804040-01C	F_SIE	Fluoride	E340.2
1F	04-21	ER	8804040-01B	HG_C	Metals	E245.1
1F	04-21	ER	8804040-01B	ICP200	Metal Screen (ICP)	E200.7
1F	04-21	ER	8804040-01A	NO3	Nitrate	E353.2
1F	04-21	ER	8804040-01D	ONG_IR	Oil & Grease	E413.2
1F	04-21	ER	8804040-01C	OPO4	Orthophosphate	E365.4
1F	04-21	ER	8804040-01B	PB_G	Metals	E239.2
1F	04-21	ER	8804040-01B	SE_G	Metals	E270.2
1F	04-21	ER	8804040-01C	SO4_N	Sulfate	E375.4
1F	04-21	ER	8804041-01C	XYLENE	Purgeable Aromatics	E602
1F	04-21	ER	8804041-08A	XYLENE	Purgeable Aromatics	E602
1F	Car8-02-037	SN	S802056-05A	CL8240	Volatile Organic Compounds	SW8240
1F	Car8-02-038	SN	S802056-06A	CL8270	Semivolatile Organic Compounds	SW8270
1F	Car8-02-038	SN	S802056-06A	DRY_WT	Soil Moisture	UNK
1F	Car8-02-039	SN	8802084-03A	AS_G	Metals	E206.2
1F	Car8-02-039	SN	8802084-03A	HG_C	Metals	E245.1
1F	Car8-02-039	SN	8802084-03A	ICP200	Metal Screen (ICP)	E200.7
1F	Car8-02-039	SN	8802084-03A	ONG_IR	Oil & Grease	E413.2
1F	Car8-02-039	SN	8802084-03A	SE_G	Metals	E270.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
1F	Car8-02-040	SN	S802056-07A	CL8240	Volatile Organic Compounds	SW8240
1F	Car8-02-041	SN	S802056-08A	CL8270	Semivolatile Organic Compounds	SW8270
1F	Car8-02-041	SN	S802056-08A	DRY_WT	Soil Moisture	UNK
1F	Car8-02-042	SN	8802084-04A	AS_G	Metals	E206.2
1F	Car8-02-042	SN	8802084-04A	HG_C	Metals	E245.1
1F	Car8-02-042	SN	8802084-04A	ICP200	Metal Screen (ICP)	E200.7
1F	Car8-02-042	SN	8802084-04A	ONG_IR	Oil & Grease	E413.2
1F	Car8-02-042	SN	8802084-04A	SE_G	Metals	E270.2
3A	Car8-01-001	SN	S801166-01A	CL8240	Volatile Organic Compounds	SW8240
3A	Car8-01-002	SN	S801166-02A	CL8270	Semivolatile Organic Compounds	SW8270
3A	Car8-01-002	SN	S801166-02A	DRY_WT	Soil Moisture	UNK
3A	Car8-01-003	SN	8801151-01A	AS_G	Metals	E206.2
3A	Car8-01-003	SN	8801151-01A	HG_C	Metals	E245.1
3A	Car8-01-003	SN	8801151-01A	ICP200	Metal Screen (ICP)	E200.7
3A	Car8-01-003	SN	8801151-01A	ONG_IR	Oil & Grease	E413.2
3A	Car8-01-003	SN	8801151-01A	SE_G	Metals	E270.2
3B	Car8-01-004	SN	S801166-03A	CL8240	Volatile Organic Compounds	SW8240
3B	Car8-01-005	SN	S801166-04A	CL8270	Semivolatile Organic Compounds	SW8270
3B	Car8-01-005	SN	S801166-04A	DRY_WT	Soil Moisture	UNK
3B	Car8-01-006	SN	8801151-02A	AS_G	Metals	E206.2
3B	Car8-01-006	SN	8801151-02A	HG_C	Metals	E245.1
3B	Car8-01-006	SN	8801151-02A	ICP200	Metal Screen (ICP)	E200.7
3B	Car8-01-006	SN	8801151-02A	ONG_IR	Oil & Grease	E413.2
3B	Car8-01-006	SN	8801151-02A	SE_G	Metals	E270.2
3C	Car8-01-007	SN	S801166-05A	CL8240	Volatile Organic Compounds	SW8240
3C	Car8-01-008	SN	S801166-06A	CL8270	Semivolatile Organic Compounds	SW8270
3C	Car8-01-008	SN	S801166-06A	DRY_WT	Soil Moisture	UNK
3C	Car8-01-009	SN	8801151-03A	AS_G	Metals	E206.2
3C	Car8-01-009	SN	8801151-03A	HG_C	Metals	E245.1
3C	Car8-01-009	SN	8801151-03A	ICP200	Metal Screen (ICP)	E200.7
3C	Car8-01-009	SN	8801151-03A	ONG_IR	Oil & Grease	E413.2
3C	Car8-01-009	SN	8801151-03A	SE_G	Metals	E270.2
3D	02-150	N	S802090-01D	509B	Chlorinated Phenoxy Acid Herbicides	A509B
3D	02-150	N	S802090-01A	604	Phenols	E604
3D	02-150	N	S802090-01B	608	Organochlorine Pesticides	E608
3D	02-150	N	8802136-01G	AS_G	Metals	E206.2
3D	02-150	N	S802090-01C	CL_625	Extractable Priority Pollutants	E625
3D	02-150	N	8802136-01J	CL_T	Chloride	E325.3
3D	02-150	N	8802136-06A	EPA601	Purgeable Halocarbons	E601
3D	02-150	N	8802136-01A	EPA601	Purgeable Halocarbons	E601
3D	02-150	N	8802136-01C	EPA602	Purgeable Aromatics	E602
3D	02-150	N	8802136-01J	F_SIE	Fluoride	E340.2
3D	02-150	N	8802136-01H	HC_IR	Petroleum Hydrocarbons	E418.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
3D	02-150	N	8802136-01G	HG_C	Metals	E245.1
3D	02-150	N	8802136-01G	ICP200	Metal Screen (ICP)	E200.7
3D	02-150	N	8802136-01F	NO3	Nitrate	E353.2
3D	02-150	N	8802136-01I	ONG_IR	Oil & Grease	E413.2
3D	02-150	N	8802136-01J	OPO4	Orthophosphate	E365.4
3D	02-150	N	8802136-01G	PB_G	Metals	E239.2
3D	02-150	N	8802136-01G	SE_G	Metals	E270.2
3D	02-150	N	8802136-01J	SO4_N	Sulfate	E375.4
3D	02-150	N	8802136-01J	TDS	Total Dissolved Solids	E160.1
3D	02-150	N	8802136-01C	XYLENE	Purgeable Aromatics	E602
3D	03-44		8803042-06A	ONG_IR	Oil & Grease	E413.2
3D	04-01	N	S804017-01G	509B	Chlorinated Phenoxy Acid Herbicides	A509B
3D	04-01	N	S804017-01C	604	Phenols	E604
3D	04-01	N	S804017-01E	608	Organochlorine Pesticides	E608
3D	04-01	N	8804014-01G	AS_G	Metals	E206.2
3D	04-01	N	S804017-01A	CL_625	Extractable Priority Pollutants	E625
3D	04-01	N	8804014-01F	CL_T	Chloride	E325.3
3D	04-01	N	8804014-05A	EPA601	Purgeable Halocarbons	E601
3D	04-01	N	8804014-01A	EPA601	Purgeable Halocarbons	E601
3D	04-01	N	8804014-01C	EPA602	Purgeable Aromatics	E602
3D	04-01	N	8804014-05A	EPA602	Purgeable Aromatics	E602
3D	04-01	N	8804014-01F	F_SIE	Fluoride	E340.2
3D	04-01	N	8804016-01A	HC_IR	Petroleum Hydrocarbons	E418.1
3D	04-01	N	8804014-01G	HG_C	Metals	E245.1
3D	04-01	N	8804014-01G	ICP200	Metal Screen (ICP)	E200.7
3D	04-01	N	8804014-01E	NO3	Nitrate	E353.2
3D	04-01	N	8804077-01A	ONG_IR	Oil & Grease	E413.2
3D	04-01	N	8804014-01F	OPO4	Orthophosphate	E365.4
3D	04-01	N	8804014-01G	PB_G	Metals	E239.2
3D	04-01	N	8804014-01G	SE_G	Metals	E270.2
3D	04-01	N	8804014-01F	SO4_N	Sulfate	E375.4
3D	04-01	N	8804014-01F	TDS	Total Dissolved Solids	E160.1
3D	04-01	N	8804014-01C	XYLENE	Purgeable Aromatics	E602
3D	04-01	N	8804014-05A	XYLENE	Purgeable Aromatics	E602
3D	Car8-01-010	SN	S801166-07A	CL8240	Volatile Organic Compounds	SW8240
3D	Car8-01-011	SN	S801166-08A	CL8270	Semivolatile Organic Compounds	SW8270
3D	Car8-01-011	SN	S801166-08A	DRY_WT	Soil Moisture	UNK
3D	Car8-01-012	SN	8801151-04A	AS_G	Metals	E206.2
3D	Car8-01-012	SN	8801151-04A	HG_C	Metals	E245.1
3D	Car8-01-012	SN	8801151-04A	ICP200	Metal Screen (ICP)	E200.7
3D	Car8-01-012	SN	8801151-04A	ONG_IR	Oil & Grease	E413.2
3D	Car8-01-012	SN	8801151-04A	SE_G	Metals	E270.2
3E	Car8-01-013	SN	S801166-09A	CL8240	Volatile Organic Compounds	SW8240

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
3E	Car8-01-014	SN	S801166-10A	CL8270	Semivolatile Organic Compounds	SW8270
3E	Car8-01-014	SN	S801166-10A	DRY_WT	Soil Moisture	UNK
3E	Car8-01-015	SN	8801151-05A	AS_G	Metals	E206.2
3E	Car8-01-015	SN	8801151-05A	HG_C	Metals	E245.1
3E	Car8-01-015	SN	8801151-05A	ICP200	Metal Screen (ICP)	E200.7
3E	Car8-01-015	SN	8801151-05A	ONG_IR	Oil & Grease	E413.2
3E	Car8-01-015	SN	8801151-05A	SE_G	Metals	E270.2
4A	02-157	N	8802191-04C	AS_G	Metals	E206.2
4A	02-157	N	8802191-04D	CL_T	Chloride	E325.3
4A	02-157	N	8802190-12A	EPA601	Purgeable Halocarbons	E601
4A	02-157	N	8802190-04A	EPA601	Purgeable Halocarbons	E601
4A	02-157	N	8802190-12A	EPA602	Purgeable Aromatics	E602
4A	02-157	N	8802190-04C	EPA602	Purgeable Aromatics	E602
4A	02-157	N	8802191-04D	F_SIE	Fluoride	E340.2
4A	02-157	N	8802191-04C	HG_C	Metals	E245.1
4A	02-157	N	8802191-04C	ICP200	Metal Screen (ICP)	E200.7
4A	02-157	N	8802191-04B	NO2NO3	Nitrate	E353.1
4A	02-157	N	8802191-04D	OPO4	Orthophosphate	E365.4
4A	02-157	N	8802191-04C	PB_G	Metals	E239.2
4A	02-157	N	8802191-04C	SE_G	Metals	E270.2
4A	02-157	N	8802191-04D	SO4_N	Sulfate	E375.4
4A	02-157	N	8802191-04D	TDS	Total Dissolved Solids	E160.1
4A	02-157	N	8802190-04C	XYLENE	Purgeable Aromatics	E602
4A	02-157	N	8802190-12A	XYLENE	Purgeable Aromatics	E602
4A	04-06	N	8804016-04C	AS_G	Metals	E206.2
4A	04-06	N	S804030-02A	CL_625	Extractable Priority Pollutants	E625
4A	04-06	N	8804016-04A	CL_T	Chloride	E325.3
4A	04-06	N	8804017-12A	EPA601	Purgeable Halocarbons	E601
4A	04-06	N	8804017-03A	EPA601	Purgeable Halocarbons	E601
4A	04-06	N	8804017-03C	EPA602	Purgeable Aromatics	E602
4A	04-06	N	8804016-04A	F_SIE	Fluoride	E340.2
4A	04-06	N	8804016-04C	HG_C	Metals	E245.1
4A	04-06	N	8804016-04C	ICP200	Metal Screen (ICP)	E200.7
4A	04-06	N	8804016-04B	NO3	Nitrate	E353.2
4A	04-06	N	8804016-04A	OPO4	Orthophosphate	E365.4
4A	04-06	N	8804016-04C	SE_G	Metals	E270.2
4A	04-06	N	8804016-04A	SO4_N	Sulfate	E375.4
4A	04-06	N	8804016-04A	TDS	Total Dissolved Solids	E160.1
4A	04-06	N	8804017-03C	XYLENE	Purgeable Aromatics	E602
4A	04-07	TB	8804017-04A	EPA601	Purgeable Halocarbons	E601
4A	04-07	TB	8804017-13A	EPA602	Purgeable Aromatics	E602
4A	04-07	TB	8804017-04C	EPA602	Purgeable Aromatics	E602
4A	04-07	TB	8804017-04C	XYLENE	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4A	04-07	TB	8804017-13A	XYLENE	Purgeable Aromatics	E602
4A	04-08	FB	8804017-05A	EPA601	Purgeable Halocarbons	E601
4A	04-08	FB	8804017-14A	EPA602	Purgeable Aromatics	E602
4A	04-08	FB	8804017-05C	EPA602	Purgeable Aromatics	E602
4A	04-08	FB	8804017-05C	XYLENE	Purgeable Aromatics	E602
4A	04-08	FB	8804017-14A	XYLENE	Purgeable Aromatics	E602
4B	02-156	N	8802191-03C	AS_G	Metals	E206.2
4B	02-156	N	S802099-02A	CL_625	Extractable Priority Pollutants	E625
4B	02-156	N	8802191-03D	CL_T	Chloride	E325.3
4B	02-156	N	8802190-03A	EPA601	Purgeable Halocarbons	E601
4B	02-156	N	8802190-03C	EPA602	Purgeable Aromatics	E602
4B	02-156	N	8802191-03D	F_SIE	Fluoride	E340.2
4B	02-156	N	8802191-03C	HG_C	Metals	E245.1
4B	02-156	N	8802191-03C	ICP200	Metal Screen (ICP)	E200.7
4B	02-156	N	8802191-03B	NO2NO3	Nitrate	E353.1
4B	02-156	N	8802191-03D	OPO4	Orthophosphate	E365.4
4B	02-156	N	8802191-03C	PB_G	Metals	E239.2
4B	02-156	N	8802191-03C	SE_G	Metals	E270.2
4B	02-156	N	8802191-03D	SO4_N	Sulfate	E375.4
4B	02-156	N	8802191-03D	TDS	Total Dissolved Solids	E160.1
4B	02-156	N	8802190-03C	XYLENE	Purgeable Aromatics	E602
4B	04-09	N	8804016-05C	AS_G	Metals	E206.2
4B	04-09	N	8804016-05A	CL_T	Chloride	E325.3
4B	04-09	N	8804017-06A	EPA601	Purgeable Halocarbons	E601
4B	04-09	N	8804017-06C	EPA602	Purgeable Aromatics	E602
4B	04-09	N	8804016-05A	F_SIE	Fluoride	E340.2
4B	04-09	N	8804016-05C	HG_C	Metals	E245.1
4B	04-09	N	8804016-05C	ICP200	Metal Screen (ICP)	E200.7
4B	04-09	N	8804016-05B	NO3	Nitrate	E353.2
4B	04-09	N	8804016-05A	OPO4	Orthophosphate	E365.4
4B	04-09	N	8804016-05C	SE_G	Metals	E270.2
4B	04-09	N	8804016-05A	SO4_N	Sulfate	E375.4
4B	04-09	N	8804016-05A	TDS	Total Dissolved Solids	E160.1
4B	04-09	N	8804017-06C	XYLENE	Purgeable Aromatics	E602
4B	04-10	ER	8804016-06C	AS_G	Metals	E206.2
4B	04-10	ER	8804016-06A	CL_T	Chloride	E325.3
4B	04-10	ER	8804017-07A	EPA601	Purgeable Halocarbons	E601
4B	04-10	ER	8804017-15A	EPA602	Purgeable Aromatics	E602
4B	04-10	ER	8804017-07C	EPA602	Purgeable Aromatics	E602
4B	04-10	ER	8804016-06A	F_SIE	Fluoride	E340.2
4B	04-10	ER	8804016-06C	HG_C	Metals	E245.1
4B	04-10	ER	8804016-06C	ICP200	Metal Screen (ICP)	E200.7
4B	04-10	ER	8804016-06B	NO3	Nitrate	E353.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4B	04-10	ER	8804016-06A	OPO4	Orthophosphate	E365.4
4B	04-10	ER	8804016-06C	SE_G	Metals	E270.2
4B	04-10	ER	8804016-06A	SO4_N	Sulfate	E375.4
4B	04-10	ER	8804016-06A	TDS	Total Dissolved Solids	E160.1
4B	04-10	ER	8804017-07C	XYLENE	Purgeable Aromatics	E602
4B	04-10	ER	8804017-15A	XYLENE	Purgeable Aromatics	E602
4C	02-164	N	8803006-01C	AS_G	Metals	E206.2
4C	02-164	N	8803006-01D	CL_T	Chloride	E325.3
4C	02-164	N	8803005-01A	EPA601	Purgeable Halocarbons	E601
4C	02-164	N	8803005-08A	EPA601	Purgeable Halocarbons	E601
4C	02-164	N	8803005-01C	EPA602	Purgeable Aromatics	E602
4C	02-164	N	8803006-01D	F_SIE	Fluoride	E340.2
4C	02-164	N	8803006-01C	HG_C	Metals	E245.1
4C	02-164	N	8803006-01C	ICP200	Metal Screen (ICP)	E200.7
4C	02-164	N	8803006-01B	NO2NO3	Nitrate	E353.1
4C	02-164	N	8803006-01D	OPO4	Orthophosphate	E365.4
4C	02-164	N	8803006-01C	PB_G	Metals	E239.2
4C	02-164	N	8803006-01C	SE_G	Metals	E270.2
4C	02-164	N	8803006-01D	SO4_N	Sulfate	E375.4
4C	02-164	N	8803006-01D	TDS	Total Dissolved Solids	E160.1
4C	02-164	N	8803005-01C	XYLENE	Purgeable Aromatics	E602
4C	04-26	N	8804040-06B	AS_G	Metals	E206.2
4C	04-26	N	8804040-06C	CL_T	Chloride	E325.3
4C	04-26	N	8804041-06A	EPA601	Purgeable Halocarbons	E601
4C	04-26	N	8804041-12A	EPA601	Purgeable Halocarbons	E601
4C	04-26	N	8804041-06C	EPA602	Purgeable Aromatics	E602
4C	04-26	N	8804041-12A	EPA602	Purgeable Aromatics	E602
4C	04-26	N	8804040-06C	F_SIE	Fluoride	E340.2
4C	04-26	N	8804040-06B	HG_C	Metals	E245.1
4C	04-26	N	8804040-06B	ICP200	Metal Screen (ICP)	E200.7
4C	04-26	N	8804040-06A	NO3	Nitrate	E353.2
4C	04-26	N	8804040-06C	OPO4	Orthophosphate	E365.4
4C	04-26	N	8804040-06B	SE_G	Metals	E270.2
4C	04-26	N	8804040-06C	SO4_N	Sulfate	E375.4
4C	04-26	N	8804040-06C	TDS	Total Dissolved Solids	E160.1
4C	04-26	N	8804041-06C	XYLENE	Purgeable Aromatics	E602
4C	04-26	N	8804041-12A	XYLENE	Purgeable Aromatics	E602
4D	03-33		8803041-03A	AS_G	Metals	E206.2
4D	03-33		8803041-03B	CL_T	Chloride	E325.3
4D	03-33		8803040-03A	EPA601	Purgeable Halocarbons	E601
4D	03-33		8803040-03C	EPA602	Purgeable Aromatics	E602
4D	03-33		8803041-03B	F_SIE	Fluoride	E340.2
4D	03-33		8803041-03A	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4D	03-33		8803041-03A	ICP200	Metal Screen (ICP)	E200.7
4D	03-33		8803041-03C	NO2NO3	Nitrate	E353.1
4D	03-33		8803041-03B	OPO4	Orthophosphate	E365.4
4D	03-33		8803041-03A	SE_G	Metals	E270.2
4D	03-33		8803041-03B	SO4_N	Sulfate	E375.4
4D	03-33		8803041-03B	TDS	Total Dissolved Solids	E160.1
4D	03-33		8803040-03C	XYLENE	Purgeable Aromatics	E602
4D	04-36	N	8804056-01C	AS_G	Metals	E206.2
4D	04-36	N	8804056-01A	CL_T	Chloride	E325.3
4D	04-36	N	8805006-01A	EPA601	Purgeable Halocarbons	E601
4D	04-36	N	8804057-01A	EPA601	Purgeable Halocarbons	E601
4D	04-36	N	8804057-01C	EPA602	Purgeable Aromatics	E602
4D	04-36	N	8804056-01A	F_SIE	Fluoride	E340.2
4D	04-36	N	8804056-01C	HG_C	Metals	E245.1
4D	04-36	N	8804056-01C	ICP200	Metal Screen (ICP)	E200.7
4D	04-36	N	8804056-01B	NO2NO3	Nitrate	E353.1
4D	04-36	N	8804056-01A	OPO4	Orthophosphate	E365.4
4D	04-36	N	8804056-01C	SE_G	Metals	E270.2
4D	04-36	N	8804056-01A	SO4_N	Sulfate	E375.4
4D	04-36	N	8804056-01A	TDS	Total Dissolved Solids	E160.1
4D	04-36	N	8804057-01C	XYLENE	Purgeable Aromatics	E602
4D	04-37	ER	8804056-02C	AS_G	Metals	E206.2
4D	04-37	ER	8804056-02A	CL_T	Chloride	E325.3
4D	04-37	ER	8805006-02A	EPA601	Purgeable Halocarbons	E601
4D	04-37	ER	8804057-02A	EPA601	Purgeable Halocarbons	E601
4D	04-37	ER	8804057-02C	EPA602	Purgeable Aromatics	E602
4D	04-37	ER	8805006-02A	EPA602	Purgeable Aromatics	E602
4D	04-37	ER	8804056-02A	F_SIE	Fluoride	E340.2
4D	04-37	ER	8804056-02C	HG_C	Metals	E245.1
4D	04-37	ER	8804056-02C	ICP200	Metal Screen (ICP)	E200.7
4D	04-37	ER	8804056-02B	NO2NO3	Nitrate	E353.1
4D	04-37	ER	8804056-02A	OPO4	Orthophosphate	E365.4
4D	04-37	ER	8804056-02C	SE_G	Metals	E270.2
4D	04-37	ER	8804056-02A	SO4_N	Sulfate	E375.4
4D	04-37	ER	8804056-02A	TDS	Total Dissolved Solids	E160.1
4D	04-37	ER	8805006-02A	XYLENE	Purgeable Aromatics	E602
4D	04-37	ER	8804057-02C	XYLENE	Purgeable Aromatics	E602
4E	03-31		8803041-01A	AS_G	Metals	E206.2
4E	03-31		8803041-01B	CL_T	Chloride	E325.3
4E	03-31		8803040-01A	EPA601	Purgeable Halocarbons	E601
4E	03-31		8803040-01C	EPA602	Purgeable Aromatics	E602
4E	03-31		8803041-01B	F_SIE	Fluoride	E340.2
4E	03-31		8803041-01A	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4E	03-31		8803041-01A	ICP200	Metal Screen (ICP)	E200.7
4E	03-31		8803041-01C	NO2NO3	Nitrate	E353.1
4E	03-31		8803041-01B	OPO4	Orthophosphate	E365.4
4E	03-31		8803041-01A	SE_G	Metals	E270.2
4E	03-31		8803041-01B	SO4_N	Sulfate	E375.4
4E	03-31		8803041-01B	TDS	Total Dissolved Solids	E160.1
4E	03-31		8803040-01C	XYLENE	Purgeable Aromatics	E602
4E	03-32		8803041-02A	AS_G	Metals	E206.2
4E	03-32		8803041-02B	CL_T	Chloride	E325.3
4E	03-32		8803040-02A	EPA601	Purgeable Halocarbons	E601
4E	03-32		8803040-02C	EPA602	Purgeable Aromatics	E602
4E	03-32		8803041-02B	F_SIE	Fluoride	E340.2
4E	03-32		8803041-02A	HG_C	Metals	E245.1
4E	03-32		8803041-02A	ICP200	Metal Screen (ICP)	E200.7
4E	03-32		8803041-02C	NO2NO3	Nitrate	E353.1
4E	03-32		8803041-02B	OPO4	Orthophosphate	E365.4
4E	03-32		8803041-02A	SE_G	Metals	E270.2
4E	03-32		8803041-02B	SO4_N	Sulfate	E375.4
4E	03-32		8803041-02B	TDS	Total Dissolved Solids	E160.1
4E	03-32		8803040-02C	XYLENE	Purgeable Aromatics	E602
4E	04-35	N	8804046-05C	AS_G	Metals	E206.2
4E	04-35	N	8804046-05A	CL_T	Chloride	E325.3
4E	04-35	N	8804045-09A	EPA601	Purgeable Halocarbons	E601
4E	04-35	N	8804076-09A	EPA601	Purgeable Halocarbons	E601
4E	04-35	N	8804045-09C	EPA602	Purgeable Aromatics	E602
4E	04-35	N	8804046-05A	F_SIE	Fluoride	E340.2
4E	04-35	N	8804046-05C	HG_C	Metals	E245.1
4E	04-35	N	8804046-05C	ICP200	Metal Screen (ICP)	E200.7
4E	04-35	N	8804046-05B	NO3	Nitrate	E353.2
4E	04-35	N	8804046-05A	OPO4	Orthophosphate	E365.4
4E	04-35	N	8804046-05C	SE_G	Metals	E270.2
4E	04-35	N	8804046-05A	SO4_N	Sulfate	E375.4
4E	04-35	N	8804046-05A	TDS	Total Dissolved Solids	E160.1
4E	04-35	N	8804045-09C	XYLENE	Purgeable Aromatics	E602
4F	04-38	N	8804056-03C	AS_G	Metals	E206.2
4F	04-38	N	8804056-03A	CL_T	Chloride	E325.3
4F	04-38	N	8804057-03A	EPA601	Purgeable Halocarbons	E601
4F	04-38	N	8805006-03A	EPA601	Purgeable Halocarbons	E601
4F	04-38	N	8804057-03C	EPA602	Purgeable Aromatics	E602
4F	04-38	N	8804056-03A	F_SIE	Fluoride	E340.2
4F	04-38	N	8804056-03C	HG_C	Metals	E245.1
4F	04-38	N	8804056-03C	ICP200	Metal Screen (ICP)	E200.7
4F	04-38	N	8804056-03B	NO2NO3	Nitrate	E353.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4F	04-38	N	8804056-03A	OPO4	Orthophosphate	E365.4
4F	04-38	N	8804056-03C	SE_G	Metals	E270.2
4F	04-38	N	8804056-03A	SO4_N	Sulfate	E375.4
4F	04-38	N	8804056-03A	TDS	Total Dissolved Solids	E160.1
4F	04-38	N	8804057-03C	XYLENE	Purgeable Aromatics	E602
4F	04-39	D	8804056-04C	AS_G	Metals	E206.2
4F	04-39	D	8804056-04A	CL_T	Chloride	E325.3
4F	04-39	D	8805006-04A	EPA601	Purgeable Halocarbons	E601
4F	04-39	D	8804057-04A	EPA601	Purgeable Halocarbons	E601
4F	04-39	D	8804057-04C	EPA602	Purgeable Aromatics	E602
4F	04-39	D	8804056-04A	F_SIE	Fluoride	E340.2
4F	04-39	D	8804056-04C	HG_C	Metals	E245.1
4F	04-39	D	8804056-04C	ICP200	Metal Screen (ICP)	E200.7
4F	04-39	D	8804056-04B	NO2NO3	Nitrate	E353.1
4F	04-39	D	8804056-04A	OPO4	Orthophosphate	E365.4
4F	04-39	D	8804056-04C	SE_G	Metals	E270.2
4F	04-39	D	8804056-04A	SO4_N	Sulfate	E375.4
4F	04-39	D	8804056-04A	TDS	Total Dissolved Solids	E160.1
4F	04-39	D	8804057-04C	XYLENE	Purgeable Aromatics	E602
4F	04-40	TB	8804057-05A	EPA601	Purgeable Halocarbons	E601
4F	04-40	TB	8805006-05A	EPA602	Purgeable Aromatics	E602
4F	04-40	TB	8804057-05C	EPA602	Purgeable Aromatics	E602
4F	04-40	TB	8804057-05C	XYLENE	Purgeable Aromatics	E602
4F	04-40	TB	8805006-05A	XYLENE	Purgeable Aromatics	E602
4F	04-41	FB	8804057-06A	EPA601	Purgeable Halocarbons	E601
4F	04-41	FB	8805006-06A	EPA602	Purgeable Aromatics	E602
4F	04-41	FB	8804057-06C	EPA602	Purgeable Aromatics	E602
4F	04-41	FB	8805006-06A	XYLENE	Purgeable Aromatics	E602
4F	04-41	FB	8804057-06C	XYLENE	Purgeable Aromatics	E602
4F	04-42	ER	8804056-05C	AS_G	Metals	E206.2
4F	04-42	ER	8804056-05A	CL_T	Chloride	E325.3
4F	04-42	ER	8804057-07A	EPA601	Purgeable Halocarbons	E601
4F	04-42	ER	8805006-07A	EPA601	Purgeable Halocarbons	E601
4F	04-42	ER	8804057-07C	EPA602	Purgeable Aromatics	E602
4F	04-42	ER	8805006-07A	EPA602	Purgeable Aromatics	E602
4F	04-42	ER	8804056-05A	F_SIE	Fluoride	E340.2
4F	04-42	ER	8804056-05C	HG_C	Metals	E245.1
4F	04-42	ER	8804056-05C	ICP200	Metal Screen (ICP)	E200.7
4F	04-42	ER	8804056-05B	NO2NO3	Nitrate	E353.1
4F	04-42	ER	8804056-05A	OPO4	Orthophosphate	E365.4
4F	04-42	ER	8804056-05C	SE_G	Metals	E270.2
4F	04-42	ER	8804056-05A	SO4_N	Sulfate	E375.4
4F	04-42	ER	8804056-05A	TDS	Total Dissolved Solids	E160.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4F	04-42	ER	8804057-07C	XYLENE	Purgeable Aromatics	E602
4F	04-42	ER	8805006-07A	XYLENE	Purgeable Aromatics	E602
4F	Car8-02-025	SD	S802040-11A	CL8240	Volatile Organic Compounds	SW8240
4F	Car8-02-026	SD	S802040-12A	CL8240	Volatile Organic Compounds	SW8240
4F	Car8-02-027	SD	S802040-13A	CL8270	Semivolatile Organic Compounds	SW8270
4F	Car8-02-027	SD	S802040-13A	DRY_WT	Soil Moisture	UNK
4F	Car8-02-028	SD	S802040-14A	CL8270	Semivolatile Organic Compounds	SW8270
4F	Car8-02-028	SD	S802040-14A	DRY_WT	Soil Moisture	UNK
4F	Car8-02-029	SD	8802072-06A	AS_G	Metals	E206.2
4F	Car8-02-029	SD	8802072-06A	HG_C	Metals	E245.1
4F	Car8-02-029	SD	8802072-06A	ICP200	Metal Screen (ICP)	E200.7
4F	Car8-02-029	SD	8802072-06A	ONG_IR	Oil & Grease	E413.2
4F	Car8-02-029	SD	8802072-06A	SE_G	Metals	E270.2
4F	Car8-02-030	SD	8802072-07A	AS_G	Metals	E206.2
4F	Car8-02-030	SD	8802072-07A	HG_C	Metals	E245.1
4F	Car8-02-030	SD	8802072-07A	ICP200	Metal Screen (ICP)	E200.7
4F	Car8-02-030	SD	8802072-07A	ONG_IR	Oil & Grease	E413.2
4F	Car8-02-030	SD	8802072-07A	SE_G	Metals	E270.2
4G	02-166	N	8803006-03C	AS_G	Metals	E206.2
4G	02-166	N	8803006-03D	CL_T	Chloride	E325.3
4G	02-166	N	8803005-03A	EPA601	Purgeable Halocarbons	E601
4G	02-166	N	8803005-10A	EPA601	Purgeable Halocarbons	E601
4G	02-166	N	8803005-03C	EPA602	Purgeable Aromatics	E602
4G	02-166	N	8803006-03D	F_SIE	Fluoride	E340.2
4G	02-166	N	8803006-03C	HG_C	Metals	E245.1
4G	02-166	N	8803006-03C	ICP200	Metal Screen (ICP)	E200.7
4G	02-166	N	8803006-03B	NO2NO3	Nitrate	E353.1
4G	02-166	N	8803006-03D	OPO4	Orthophosphate	E365.4
4G	02-166	N	8803006-03C	PB_G	Metals	E239.2
4G	02-166	N	8803006-03C	SE_G	Metals	E270.2
4G	02-166	N	8803006-03D	SO4_N	Sulfate	E375.4
4G	02-166	N	8803006-03D	TDS	Total Dissolved Solids	E160.1
4G	02-166	N	8803005-03C	XYLENE	Purgeable Aromatics	E602
4G	02-167	D	8803006-04C	AS_G	Metals	E206.2
4G	02-167	D	8803006-04D	CL_T	Chloride	E325.3
4G	02-167	D	8803005-04A	EPA601	Purgeable Halocarbons	E601
4G	02-167	D	8803005-11A	EPA601	Purgeable Halocarbons	E601
4G	02-167	D	8803005-11A	EPA602	Purgeable Aromatics	E602
4G	02-167	D	8803005-04C	EPA602	Purgeable Aromatics	E602
4G	02-167	D	8803006-04D	F_SIE	Fluoride	E340.2
4G	02-167	D	8803006-04C	HG_C	Metals	E245.1
4G	02-167	D	8803006-04C	ICP200	Metal Screen (ICP)	E200.7
4G	02-167	D	8803006-04B	NO2NO3	Nitrate	E353.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4G	02-167	D	8803006-04D	OPO4	Orthophosphate	E365.4
4G	02-167	D	8803006-04C	PB_G	Metals	E239.2
4G	02-167	D	8803006-04C	SE_G	Metals	E270.2
4G	02-167	D	8803006-04D	SO4_N	Sulfate	E375.4
4G	02-167	D	8803006-04D	TDS	Total Dissolved Solids	E160.1
4G	02-167	D	8803005-04C	XYLENE	Purgeable Aromatics	E602
4G	02-167	D	8803005-11A	XYLENE	Purgeable Aromatics	E602
4G	04-30	N	8804046-02C	AS_G	Metals	E206.2
4G	04-30	N	8804046-02A	CL_T	Chloride	E325.3
4G	04-30	N	8804076-04A	EPA601	Purgeable Halocarbons	E601
4G	04-30	N	8804045-04A	EPA601	Purgeable Halocarbons	E601
4G	04-30	N	8804045-04C	EPA602	Purgeable Aromatics	E602
4G	04-30	N	8804046-02A	F_SIE	Fluoride	E340.2
4G	04-30	N	8804046-02C	HG_C	Metals	E245.1
4G	04-30	N	8804046-02C	ICP200	Metal Screen (ICP)	E200.7
4G	04-30	N	8804046-02B	NO3	Nitrate	E353.2
4G	04-30	N	8804046-02A	OPO4	Orthophosphate	E365.4
4G	04-30	N	8804046-02C	SE_G	Metals	E270.2
4G	04-30	N	8804046-02A	SO4_N	Sulfate	E375.4
4G	04-30	N	8804046-02A	TDS	Total Dissolved Solids	E160.1
4G	04-30	N	8804045-04C	XYLENE	Purgeable Aromatics	E602
4G	Car8-02-007	SN	S802009-07A	CL8240	Volatile Organic Compounds	SW8240
4G	Car8-02-008	SN	S802009-08A	CL8270	Semivolatile Organic Compounds	SW8270
4G	Car8-02-008	SN	S802009-08A	DRY_WT	Soil Moisture	UNK
4G	Car8-02-009	SN	8802028-04A	AS_G	Metals	E206.2
4G	Car8-02-009	SN	8802028-04A	HG_C	Metals	E245.1
4G	Car8-02-009	SN	8802028-04A	ICP200	Metal Screen (ICP)	E200.7
4G	Car8-02-009	SN	8802028-04A	ONG_IR	Oil & Grease	E413.2
4G	Car8-02-009	SN	8802028-04A	SE_G	Metals	E270.2
4H	02-165	N	8803006-02C	AS_G	Metals	E206.2
4H	02-165	N	8803006-02D	CL_T	Chloride	E325.3
4H	02-165	N	8803005-09A	EPA601	Purgeable Halocarbons	E601
4H	02-165	N	8803005-02A	EPA601	Purgeable Halocarbons	E601
4H	02-165	N	8803005-02C	EPA602	Purgeable Aromatics	E602
4H	02-165	N	8803005-09A	EPA602	Purgeable Aromatics	E602
4H	02-165	N	8803006-02D	F_SIE	Fluoride	E340.2
4H	02-165	N	8803006-02C	HG_C	Metals	E245.1
4H	02-165	N	8803006-02C	ICP200	Metal Screen (ICP)	E200.7
4H	02-165	N	8803006-02B	NO2NO3	Nitrate	E353.1
4H	02-165	N	8803006-02D	OPO4	Orthophosphate	E365.4
4H	02-165	N	8803006-02C	PB_G	Metals	E239.2
4H	02-165	N	8803006-02C	SE_G	Metals	E270.2
4H	02-165	N	8803006-02D	SO4_N	Sulfate	E375.4

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
4H	02-165	N	8803006-02D	TDS	Total Dissolved Solids	E160.1
4H	02-165	N	8803005-02C	XYLENE	Purgeable Aromatics	E602
4H	02-165	N	8803005-09A	XYLENE	Purgeable Aromatics	E602
4H	04-27	N	8804046-01C	AS_G	Metals	E206.2
4H	04-27	N	8804046-01A	CL_T	Chloride	E325.3
4H	04-27	N	8804045-01A	EPA601	Purgeable Halocarbons	E601
4H	04-27	N	8804076-01A	EPA601	Purgeable Halocarbons	E601
4H	04-27	N	8804045-01C	EPA602	Purgeable Aromatics	E602
4H	04-27	N	8804076-01A	EPA602	Purgeable Aromatics	E602
4H	04-27	N	8804046-01A	F_SIE	Fluoride	E340.2
4H	04-27	N	8804046-01C	HG_C	Metals	E245.1
4H	04-27	N	8804046-01C	ICP200	Metal Screen (ICP)	E200.7
4H	04-27	N	8804046-01B	NO3	Nitrate	E353.2
4H	04-27	N	8804046-01A	OPO4	Orthophosphate	E365.4
4H	04-27	N	8804046-01C	SE_G	Metals	E270.2
4H	04-27	N	8804046-01A	SO4_N	Sulfate	E375.4
4H	04-27	N	8804046-01A	TDS	Total Dissolved Solids	E160.1
4H	04-27	N	8804045-01C	XYLENE	Purgeable Aromatics	E602
4H	04-27	N	8804076-01A	XYLENE	Purgeable Aromatics	E602
4H	04-28	TB	8804045-02A	EPA601	Purgeable Halocarbons	E601
4H	04-28	TB	8804045-02C	EPA602	Purgeable Aromatics	E602
4H	04-28	TB	8804076-02A	EPA602	Purgeable Aromatics	E602
4H	04-28	TB	8804045-02C	XYLENE	Purgeable Aromatics	E602
4H	04-28	TB	8804076-02A	XYLENE	Purgeable Aromatics	E602
4H	04-29	FB	8804045-03A	EPA601	Purgeable Halocarbons	E601
4H	04-29	FB	8804076-03A	EPA602	Purgeable Aromatics	E602
4H	04-29	FB	8804045-03C	EPA602	Purgeable Aromatics	E602
4H	04-29	FB	8804076-03A	XYLENE	Purgeable Aromatics	E602
4H	04-29	FB	8804045-03C	XYLENE	Purgeable Aromatics	E602
4H	Car8-02-022	SN	S802040-09A	CL8240	Volatile Organic Compounds	SW8240
4H	Car8-02-023	SN	S802040-10A	CL8270	Semivolatile Organic Compounds	SW8270
4H	Car8-02-023	SN	S802040-10A	DRY_WT	Soil Moisture	UNK
4H	Car8-02-024	SN	8802072-05A	AS_G	Metals	E206.2
4H	Car8-02-024	SN	8802072-05A	HG_C	Metals	E245.1
4H	Car8-02-024	SN	8802072-05A	ICP200	Metal Screen (ICP)	E200.7
4H	Car8-02-024	SN	8802072-05A	ONG_IR	Oil & Grease	E413.2
4H	Car8-02-024	SN	8802072-05A	SE_G	Metals	E270.2
5A	03-16	N	8803031-03C	AS_G	Metals	E206.2
5A	03-16	N	S803014-01A	CL_625	Extractable Priority Pollutants	E625
5A	03-16	N	8803031-03A	CL_T	Chloride	E325.3
5A	03-16	N	8803029-12A	EPA601	Purgeable Halocarbons	E601
5A	03-16	N	8803029-03A	EPA601	Purgeable Halocarbons	E601
5A	03-16	N	8803029-03C	EPA602	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5A	03-16	N	8803031-03A	F_SIE	Fluoride	E340.2
5A	03-16	N	8803031-03C	HG_C	Metals	E245.1
5A	03-16	N	8803031-03C	ICP200	Metal Screen (ICP)	E200.7
5A	03-16	N	8803031-03D	NO2NO3	Nitrate	E353.1
5A	03-16	N	8803031-03A	OPO4	Orthophosphate	E365.4
5A	03-16	N	8803031-03C	PB_G	Metals	E239.2
5A	03-16	N	8803031-03C	SE_G	Metals	E270.2
5A	03-16	N	8803031-03A	SO4_N	Sulfate	E375.4
5A	03-16	N	8803031-03A	TDS	Total Dissolved Solids	E160.1
5A	03-16	N	8803029-03C	XYLENE	Purgeable Aromatics	E602
5A	03-17	TB	8803029-04A	EPA601	Purgeable Halocarbons	E601
5A	03-17	TB	8803029-04C	EPA602	Purgeable Aromatics	E602
5A	03-17	TB	8803029-04C	XYLENE	Purgeable Aromatics	E602
5A	03-18	FB	8803029-13A	EPA601	Purgeable Halocarbons	E601
5A	03-18	FB	8803029-05A	EPA601	Purgeable Halocarbons	E601
5A	03-18	FB	8803029-05C	EPA602	Purgeable Aromatics	E602
5A	03-18	FB	8803029-13A	EPA602	Purgeable Aromatics	E602
5A	03-18	FB	8803029-05C	XYLENE	Purgeable Aromatics	E602
5A	03-18	FB	8803029-13A	XYLENE	Purgeable Aromatics	E602
5A	04-46	N	8804056-09C	AS_G	Metals	E206.2
5A	04-46	N	8804056-09A	CL_T	Chloride	E325.3
5A	04-46	N	8804057-11A	EPA601	Purgeable Halocarbons	E601
5A	04-46	N	8805006-10A	EPA601	Purgeable Halocarbons	E601
5A	04-46	N	8804057-11C	EPA602	Purgeable Aromatics	E602
5A	04-46	N	8804056-09A	F_SIE	Fluoride	E340.2
5A	04-46	N	8804056-09C	HG_C	Metals	E245.1
5A	04-46	N	8804056-09C	ICP200	Metal Screen (ICP)	E200.7
5A	04-46	N	8804056-09B	NO2NO3	Nitrate	E353.1
5A	04-46	N	8804056-09A	OPO4	Orthophosphate	E365.4
5A	04-46	N	8804056-09C	SE_G	Metals	E270.2
5A	04-46	N	8804056-09A	SO4_N	Sulfate	E375.4
5A	04-46	N	8804056-09A	TDS	Total Dissolved Solids	E160.1
5A	04-46	N	8804057-11C	XYLENE	Purgeable Aromatics	E602
5A	04-47	D	8804056-10C	AS_G	Metals	E206.2
5A	04-47	D	8804056-10A	CL_T	Chloride	E325.3
5A	04-47	D	8804057-12A	EPA601	Purgeable Halocarbons	E601
5A	04-47	D	8804057-12C	EPA602	Purgeable Aromatics	E602
5A	04-47	D	8804056-10A	F_SIE	Fluoride	E340.2
5A	04-47	D	8804056-10C	HG_C	Metals	E245.1
5A	04-47	D	8804056-10C	ICP200	Metal Screen (ICP)	E200.7
5A	04-47	D	8804056-10B	NO2NO3	Nitrate	E353.1
5A	04-47	D	8804056-10A	OPO4	Orthophosphate	E365.4
5A	04-47	D	8804056-10C	SE_G	Metals	E270.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5A	04-47	D	8804056-10A	SO4_N	Sulfate	E375.4
5A	04-47	D	8804056-10A	TDS	Total Dissolved Solids	E160.1
5A	04-47	D	8804057-12C	XYLENE	Purgeable Aromatics	E602
5B	03-30	N	8803035-08C	AS_G	Metals	E206.2
5B	03-30	N	8803035-08A	CL_T	Chloride	E325.3
5B	03-30	N	8803036-08A	EPA601	Purgeable Halocarbons	E601
5B	03-30	N	8803036-08C	EPA602	Purgeable Aromatics	E602
5B	03-30	N	8803035-08A	F_SIE	Fluoride	E340.2
5B	03-30	N	8803035-08C	HG_C	Metals	E245.1
5B	03-30	N	8803035-08C	ICP200	Metal Screen (ICP)	E200.7
5B	03-30	N	8803035-08B	NO2NO3	Nitrate	E353.1
5B	03-30	N	8803035-08A	OPO4	Orthophosphate	E365.4
5B	03-30	N	8803035-08C	PB_G	Metals	E239.2
5B	03-30	N	8803035-08C	SE_G	Metals	E270.2
5B	03-30	N	8803035-08A	SO4_N	Sulfate	E375.4
5B	03-30	N	8803035-08A	TDS	Total Dissolved Solids	E160.1
5B	03-30	N	8803036-08C	XYLENE	Purgeable Aromatics	E602
5B	04-44	N	8804056-07C	AS_G	Metals	E206.2
5B	04-44	N	8804056-07A	CL_T	Chloride	E325.3
5B	04-44	N	8804057-09A	EPA601	Purgeable Halocarbons	E601
5B	04-44	N	8804057-09C	EPA602	Purgeable Aromatics	E602
5B	04-44	N	8804056-07A	F_SIE	Fluoride	E340.2
5B	04-44	N	8804056-07C	HG_C	Metals	E245.1
5B	04-44	N	8804056-07C	ICP200	Metal Screen (ICP)	E200.7
5B	04-44	N	8804056-07B	NO2NO3	Nitrate	E353.1
5B	04-44	N	8804056-07A	OPO4	Orthophosphate	E365.4
5B	04-44	N	8804056-07C	SE_G	Metals	E270.2
5B	04-44	N	8804056-07A	SO4_N	Sulfate	E375.4
5B	04-44	N	8804056-07A	TDS	Total Dissolved Solids	E160.1
5B	04-44	N	8804057-09C	XYLENE	Purgeable Aromatics	E602
5C	03-15	N	8803031-02C	AS_G	Metals	E206.2
5C	03-15	N	8803031-02A	CL_T	Chloride	E325.3
5C	03-15	N	8803029-02A	EPA601	Purgeable Halocarbons	E601
5C	03-15	N	8803029-11A	EPA601	Purgeable Halocarbons	E601
5C	03-15	N	8803029-02C	EPA602	Purgeable Aromatics	E602
5C	03-15	N	8803031-02A	F_SIE	Fluoride	E340.2
5C	03-15	N	8803031-02C	HG_C	Metals	E245.1
5C	03-15	N	8803031-02C	ICP200	Metal Screen (ICP)	E200.7
5C	03-15	N	8803031-02D	NO2NO3	Nitrate	E353.1
5C	03-15	N	8803031-02A	OPO4	Orthophosphate	E365.4
5C	03-15	N	8803031-02C	PB_G	Metals	E239.2
5C	03-15	N	8803031-02C	SE_G	Metals	E270.2
5C	03-15	N	8803031-02A	SO4_N	Sulfate	E375.4

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5C	03-15	N	8803031-02A	TDS	Total Dissolved Solids	E160.1
5C	03-15	N	8803029-02C	XYLENE	Purgeable Aromatics	E602
5C	04-48	ER	8804064-01C	AS_G	Metals	E206.2
5C	04-48	ER	8804064-01A	CL_T	Chloride	E325.3
5C	04-48	ER	8804148-01A	EPA601	Purgeable Halocarbons	E601
5C	04-48	ER	8804062-01A	EPA601	Purgeable Halocarbons	E601
5C	04-48	ER	8804062-01C	EPA602	Purgeable Aromatics	E602
5C	04-48	ER	8804148-01A	EPA602	Purgeable Aromatics	E602
5C	04-48	ER	8804064-01A	F_SIE	Fluoride	E340.2
5C	04-48	ER	8804064-01C	HG_C	Metals	E245.1
5C	04-48	ER	8804064-01C	ICP200	Metal Screen (ICP)	E200.7
5C	04-48	ER	8804064-01B	NO2NO3	Nitrate	E353.1
5C	04-48	ER	8804064-01A	OPO4	Orthophosphate	E365.4
5C	04-48	ER	8804064-01C	SE_G	Metals	E270.2
5C	04-48	ER	8804064-01A	SO4_N	Sulfate	E375.4
5C	04-48	ER	8804064-01A	TDS	Total Dissolved Solids	E160.1
5C	04-48	ER	8804148-01A	XYLENE	Purgeable Aromatics	E602
5C	04-48	ER	8804062-01C	XYLENE	Purgeable Aromatics	E602
5C	04-49	N	8804064-02C	AS_G	Metals	E206.2
5C	04-49	N	8804064-02A	CL_T	Chloride	E325.3
5C	04-49	N	8804062-02A	EPA601	Purgeable Halocarbons	E601
5C	04-49	N	8804148-02A	EPA601	Purgeable Halocarbons	E601
5C	04-49	N	8804062-02C	EPA602	Purgeable Aromatics	E602
5C	04-49	N	8804064-02A	F_SIE	Fluoride	E340.2
5C	04-49	N	8804064-02C	HG_C	Metals	E245.1
5C	04-49	N	8804064-02C	ICP200	Metal Screen (ICP)	E200.7
5C	04-49	N	8804064-02B	NO2NO3	Nitrate	E353.1
5C	04-49	N	8804064-02A	OPO4	Orthophosphate	E365.4
5C	04-49	N	8804064-02C	SE_G	Metals	E270.2
5C	04-49	N	8804064-02A	SO4_N	Sulfate	E375.4
5C	04-49	N	8804064-02A	TDS	Total Dissolved Solids	E160.1
5C	04-49	N	8804062-02C	XYLENE	Purgeable Aromatics	E602
5D	03-19	N	8803031-04C	AS_G	Metals	E206.2
5D	03-19	N	8803031-04A	CL_T	Chloride	E325.3
5D	03-19	N	8803029-06A	EPA601	Purgeable Halocarbons	E601
5D	03-19	N	8803029-06C	EPA602	Purgeable Aromatics	E602
5D	03-19	N	8803031-04A	F_SIE	Fluoride	E340.2
5D	03-19	N	8803031-04C	HG_C	Metals	E245.1
5D	03-19	N	8803031-04C	ICP200	Metal Screen (ICP)	E200.7
5D	03-19	N	8803031-04D	NO2NO3	Nitrate	E353.1
5D	03-19	N	8803031-04A	OPO4	Orthophosphate	E365.4
5D	03-19	N	8803031-04C	PB_G	Metals	E239.2
5D	03-19	N	8803031-04C	SE_G	Metals	E270.2

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5D	03-19	N	8803031-04A	SO4_N	Sulfate	E375.4
5D	03-19	N	8803031-04A	TDS	Total Dissolved Solids	E160.1
5D	03-19	N	8803029-06C	XYLENE	Purgeable Aromatics	E602
5D	03-20	ER	8803031-05C	AS_G	Metals	E206.2
5D	03-20	ER	8803031-05A	CL_T	Chloride	E325.3
5D	03-20	ER	8803029-14A	EPA601	Purgeable Halocarbons	E601
5D	03-20	ER	8803029-07A	EPA601	Purgeable Halocarbons	E601
5D	03-20	ER	8803029-07C	EPA602	Purgeable Aromatics	E602
5D	03-20	ER	8803031-05A	F_SIE	Fluoride	E340.2
5D	03-20	ER	8803031-05C	HG_C	Metals	E245.1
5D	03-20	ER	8803031-05C	ICP200	Metal Screen (ICP)	E200.7
5D	03-20	ER	8803031-05D	NO2NO3	Nitrate	E353.1
5D	03-20	ER	8803031-05A	OPO4	Orthophosphate	E365.4
5D	03-20	ER	8803031-05C	PB_G	Metals	E239.2
5D	03-20	ER	8803031-05C	SE_G	Metals	E270.2
5D	03-20	ER	8803031-05A	SO4_N	Sulfate	E375.4
5D	03-20	ER	8803031-05A	TDS	Total Dissolved Solids	E160.1
5D	03-20	ER	8803029-07C	XYLENE	Purgeable Aromatics	E602
5D	04-43	N	8804056-06C	AS_G	Metals	E206.2
5D	04-43	N	8804056-06A	CL_T	Chloride	E325.3
5D	04-43	N	8804057-08A	EPA601	Purgeable Halocarbons	E601
5D	04-43	N	8805006-08A	EPA601	Purgeable Halocarbons	E601
5D	04-43	N	8804057-08C	EPA602	Purgeable Aromatics	E602
5D	04-43	N	8804056-06A	F_SIE	Fluoride	E340.2
5D	04-43	N	8804056-06C	HG_C	Metals	E245.1
5D	04-43	N	8804056-06C	ICP200	Metal Screen (ICP)	E200.7
5D	04-43	N	8804056-06B	NO2NO3	Nitrate	E353.1
5D	04-43	N	8804056-06A	OPO4	Orthophosphate	E365.4
5D	04-43	N	8804056-06C	SE_G	Metals	E270.2
5D	04-43	N	8804056-06A	SO4_N	Sulfate	E375.4
5D	04-43	N	8804056-06A	TDS	Total Dissolved Solids	E160.1
5D	04-43	N	8804057-08C	XYLENE	Purgeable Aromatics	E602
5D	Car8-01-032	SN	S802009-01A	CL8240	Volatile Organic Compounds	SW8240
5D	Car8-01-033	SN	S802009-02A	CL8270	Semivolatile Organic Compounds	SW8270
5D	Car8-01-033	SN	S802009-02A	DRY_WT	Soil Moisture	UNK
5D	Car8-01-034	SN	8802028-01A	AS_G	Metals	E206.2
5D	Car8-01-034	SN	8802028-01A	HG_C	Metals	E245.1
5D	Car8-01-034	SN	8802028-01A	ICP200	Metal Screen (ICP)	E200.7
5D	Car8-01-034	SN	8802028-01A	ONG_IR	Oil & Grease	E413.2
5D	Car8-01-034	SN	8802028-01A	SE_G	Metals	E270.2
5E	03-21	N	8803031-06C	AS_G	Metals	E206.2
5E	03-21	N	8803031-06A	CL_T	Chloride	E325.3
5E	03-21	N	8803029-08A	EPA601	Purgeable Halocarbons	E601

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5E	03-21	N	8803029-08C	EPA602	Purgeable Aromatics	E602
5E	03-21	N	8803031-06A	F_SIE	Fluoride	E340.2
5E	03-21	N	8803031-06C	HG_C	Metals	E245.1
5E	03-21	N	8803031-06C	ICP200	Metal Screen (ICP)	E200.7
5E	03-21	N	8803031-06D	NO2NO3	Nitrate	E353.1
5E	03-21	N	8803031-06A	OPO4	Orthophosphate	E365.4
5E	03-21	N	8803031-06C	PB_G	Metals	E239.2
5E	03-21	N	8803031-06C	SE_G	Metals	E270.2
5E	03-21	N	8803031-06A	SO4_N	Sulfate	E375.4
5E	03-21	N	8803031-06A	TDS	Total Dissolved Solids	E160.1
5E	03-21	N	8803029-08C	XYLENE	Purgeable Aromatics	E602
5E	04-45	N	8804056-08C	AS_G	Metals	E206.2
5E	04-45	N	8804056-08A	CL_T	Chloride	E325.3
5E	04-45	N	8804057-10A	EPA601	Purgeable Halocarbons	E601
5E	04-45	N	8805006-09A	EPA601	Purgeable Halocarbons	E601
5E	04-45	N	8804057-10C	EPA602	Purgeable Aromatics	E602
5E	04-45	N	8804056-08A	F_SIE	Fluoride	E340.2
5E	04-45	N	8804056-08C	HG_C	Metals	E245.1
5E	04-45	N	8804056-08C	ICP200	Metal Screen (ICP)	E200.7
5E	04-45	N	8804056-08B	NO2NO3	Nitrate	E353.1
5E	04-45	N	8804056-08A	OPO4	Orthophosphate	E365.4
5E	04-45	N	8804056-08C	SE_G	Metals	E270.2
5E	04-45	N	8804056-08A	SO4_N	Sulfate	E375.4
5E	04-45	N	8804056-08A	TDS	Total Dissolved Solids	E160.1
5E	04-45	N	8804057-10C	XYLENE	Purgeable Aromatics	E602
5E	Car8-02-001	SN	S802009-03A	CL8240	Volatile Organic Compounds	SW8240
5E	Car8-02-002	SN	S802009-04A	CL8270	Semivolatile Organic Compounds	SW8270
5E	Car8-02-002	SN	S802009-04A	DRY_WT	Soil Moisture	UNK
5E	Car8-02-003	SN	8802028-02A	AS_G	Metals	E206.2
5E	Car8-02-003	SN	8802028-02A	HG_C	Metals	E245.1
5E	Car8-02-003	SN	8802028-02A	ICP200	Metal Screen (ICP)	E200.7
5E	Car8-02-003	SN	8802028-02A	ONG_IR	Oil & Grease	E413.2
5E	Car8-02-003	SN	8802028-02A	SE_G	Metals	E270.2
5E	Car8-02-004	SN	S802009-05A	CL8240	Volatile Organic Compounds	SW8240
5E	Car8-02-005	SN	S802009-06A	CL8270	Semivolatile Organic Compounds	SW8270
5E	Car8-02-005	SN	S802009-06A	DRY_WT	Soil Moisture	UNK
5E	Car8-02-006	SN	8802028-03A	AS_G	Metals	E206.2
5E	Car8-02-006	SN	8802028-03A	HG_C	Metals	E245.1
5E	Car8-02-006	SN	8802028-03A	ICP200	Metal Screen (ICP)	E200.7
5E	Car8-02-006	SN	8802028-03A	ONG_IR	Oil & Grease	E413.2
5E	Car8-02-006	SN	8802028-03A	SE_G	Metals	E270.2
5F	03-37		8803041-07A	AS_G	Metals	E206.2
5F	03-37		8803041-07B	CL_T	Chloride	E325.3

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5F	03-37		8803040-07A	EPA601	Purgeable Halocarbons	E601
5F	03-37		8803040-07C	EPA602	Purgeable Aromatics	E602
5F	03-37		8803041-07B	F_SIE	Fluoride	E340.2
5F	03-37		8803041-07A	HG_C	Metals	E245.1
5F	03-37		8803041-07A	ICP200	Metal Screen (ICP)	E200.7
5F	03-37		8803041-07C	NO2NO3	Nitrate	E353.1
5F	03-37		8803041-07B	OPO4	Orthophosphate	E365.4
5F	03-37		8803041-07A	SE_G	Metals	E270.2
5F	03-37		8803041-07B	SO4_N	Sulfate	E375.4
5F	03-37		8803041-07B	TDS	Total Dissolved Solids	E160.1
5F	03-37		8803040-07C	XYLENE	Purgeable Aromatics	E602
5F	03-38		8803041-08A	AS_G	Metals	E206.2
5F	03-38		8803041-08B	CL_T	Chloride	E325.3
5F	03-38		8803040-08A	EPA601	Purgeable Halocarbons	E601
5F	03-38		8803040-08C	EPA602	Purgeable Aromatics	E602
5F	03-38		8803041-08B	F_SIE	Fluoride	E340.2
5F	03-38		8803041-08A	HG_C	Metals	E245.1
5F	03-38		8803041-08A	ICP200	Metal Screen (ICP)	E200.7
5F	03-38		8803041-08C	NO2NO3	Nitrate	E353.1
5F	03-38		8803041-08B	OPO4	Orthophosphate	E365.4
5F	03-38		8803041-08A	SE_G	Metals	E270.2
5F	03-38		8803041-08B	SO4_N	Sulfate	E375.4
5F	03-38		8803041-08B	TDS	Total Dissolved Solids	E160.1
5F	03-38		8803040-08C	XYLENE	Purgeable Aromatics	E602
5F	04-66	N	8804074-07C	AS_G	Metals	E206.2
5F	04-66	N	8804074-07A	CL_T	Chloride	E325.3
5F	04-66	N	8804075-08A	EPA601	Purgeable Halocarbons	E601
5F	04-66	N	8804145-06A	EPA601	Purgeable Halocarbons	E601
5F	04-66	N	8804075-08C	EPA602	Purgeable Aromatics	E602
5F	04-66	N	8804074-07A	F_SIE	Fluoride	E340.2
5F	04-66	N	8804074-07C	HG_C	Metals	E245.1
5F	04-66	N	8804074-07C	ICP200	Metal Screen (ICP)	E200.7
5F	04-66	N	8804074-07B	NO2NO3	Nitrate	E353.1
5F	04-66	N	8804074-07A	OPO4	Orthophosphate	E365.4
5F	04-66	N	8804074-07C	SE_G	Metals	E270.2
5F	04-66	N	8804074-07A	SO4_N	Sulfate	E375.4
5F	04-66	N	8804074-07A	TDS	Total Dissolved Solids	E160.1
5F	04-66	N	8804075-08C	XYLENE	Purgeable Aromatics	E602
5F	04-67	ER	8804074-08C	AS_G	Metals	E206.2
5F	04-67	ER	8804074-08A	CL_T	Chloride	E325.3
5F	04-67	ER	8804145-07A	EPA601	Purgeable Halocarbons	E601
5F	04-67	ER	8804075-09A	EPA601	Purgeable Halocarbons	E601
5F	04-67	ER	8804075-09C	EPA602	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5F	04-67	ER	8804074-08A	F_SIE	Fluoride	E340.2
5F	04-67	ER	8804074-08C	HG_C	Metals	E245.1
5F	04-67	ER	8804074-08C	ICP200	Metal Screen (ICP)	E200.7
5F	04-67	ER	8804074-08B	NO2NO3	Nitrate	E353.1
5F	04-67	ER	8804074-08A	OPO4	Orthophosphate	E365.4
5F	04-67	ER	8804074-08C	SE_G	Metals	E270.2
5F	04-67	ER	8804074-08A	SO4_N	Sulfate	E375.4
5F	04-67	ER	8804074-08A	TDS	Total Dissolved Solids	E160.1
5F	04-67	ER	8804075-09C	XYLENE	Purgeable Aromatics	E602
5F	Car8-02-016	SN	S802040-05A	CL8240	Volatile Organic Compounds	SW8240
5F	Car8-02-017	SN	S802040-06A	CL8270	Semivolatile Organic Compounds	SW8270
5F	Car8-02-017	SN	S802040-06A	DRY_WT	Soil Moisture	UNK
5F	Car8-02-018	SN	8802072-03A	AS_G	Metals	E206.2
5F	Car8-02-018	SN	8802072-03A	HG_C	Metals	E245.1
5F	Car8-02-018	SN	8802072-03A	ICP200	Metal Screen (ICP)	E200.7
5F	Car8-02-018	SN	8802072-03A	ONG_IR	Oil & Grease	E413.2
5F	Car8-02-018	SN	8802072-03A	SE_G	Metals	E270.2
5F	Car8-02-019	SN	S802040-07A	CL8240	Volatile Organic Compounds	SW8240
5F	Car8-02-020	SN	S802040-08A	CL8270	Semivolatile Organic Compounds	SW8270
5F	Car8-02-020	SN	S802040-08A	DRY_WT	Soil Moisture	UNK
5F	Car8-02-021	SN	8802072-04A	AS_G	Metals	E206.2
5F	Car8-02-021	SN	8802072-04A	HG_C	Metals	E245.1
5F	Car8-02-021	SN	8802072-04A	ICP200	Metal Screen (ICP)	E200.7
5F	Car8-02-021	SN	8802072-04A	ONG_IR	Oil & Grease	E413.2
5F	Car8-02-021	SN	8802072-04A	SE_G	Metals	E270.2
5G	02-168	N	8803006-05C	AS_G	Metals	E206.2
5G	02-168	N	8803006-05D	CL_T	Chloride	E325.3
5G	02-168	N	8803005-05A	EPA601	Purgeable Halocarbons	E601
5G	02-168	N	8803005-12A	EPA601	Purgeable Halocarbons	E601
5G	02-168	N	8803005-05C	EPA602	Purgeable Aromatics	E602
5G	02-168	N	8803006-05D	F_SIE	Fluoride	E340.2
5G	02-168	N	8803006-05C	HG_C	Metals	E245.1
5G	02-168	N	8803006-05C	ICP200	Metal Screen (ICP)	E200.7
5G	02-168	N	8803006-05B	NO2NO3	Nitrate	E353.1
5G	02-168	N	8803006-05D	OPO4	Orthophosphate	E365.4
5G	02-168	N	8803006-05C	PB_G	Metals	E239.2
5G	02-168	N	8803006-05C	SE_G	Metals	E270.2
5G	02-168	N	8803006-05D	SO4_N	Sulfate	E375.4
5G	02-168	N	8803006-05D	TDS	Total Dissolved Solids	E160.1
5G	02-168	N	8803005-05C	XYLENE	Purgeable Aromatics	E602
5G	04-32	N	8804046-04C	AS_G	Metals	E206.2
5G	04-32	N	8804046-04A	CL_T	Chloride	E325.3
5G	04-32	N	8804045-06A	EPA601	Purgeable Halocarbons	E601

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5G	04-32	N	8804076-06A	EPA601	Purgeable Halocarbons	E601
5G	04-32	N	8804045-06C	EPA602	Purgeable Aromatics	E602
5G	04-32	N	8804046-04A	F_SIE	Fluoride	E340.2
5G	04-32	N	8804046-04C	HG_C	Metals	E245.1
5G	04-32	N	8804046-04C	ICP200	Metal Screen (ICP)	E200.7
5G	04-32	N	8804046-04B	NO3	Nitrate	E353.2
5G	04-32	N	8804046-04A	OPO4	Orthophosphate	E365.4
5G	04-32	N	8804046-04C	SE_G	Metals	E270.2
5G	04-32	N	8804046-04A	SO4_N	Sulfate	E375.4
5G	04-32	N	8804046-04A	TDS	Total Dissolved Solids	E160.1
5G	04-32	N	8804045-06C	XYLENE	Purgeable Aromatics	E602
5G	04-33	TB	8804045-07A	EPA601	Purgeable Halocarbons	E601
5G	04-33	TB	8804045-07C	EPA602	Purgeable Aromatics	E602
5G	04-33	TB	8804076-07A	EPA602	Purgeable Aromatics	E602
5G	04-33	TB	8804045-07C	XYLENE	Purgeable Aromatics	E602
5G	04-33	TB	8804076-07A	XYLENE	Purgeable Aromatics	E602
5G	04-34	FB	8804045-08A	EPA601	Purgeable Halocarbons	E601
5G	04-34	FB	8804045-08C	EPA602	Purgeable Aromatics	E602
5G	04-34	FB	8804076-08A	EPA602	Purgeable Aromatics	E602
5G	04-34	FB	8804076-08A	XYLENE	Purgeable Aromatics	E60[illegible]
5G	04-34	FB	8804045-08C	XYLENE	Purgeable Aromatics	E6[illegible]2
5G	Car8-02-010	SN	S802040-01A	CL8240	Volatile Organic Compounds	S[illegible]240
5G	Car8-02-011	SN	S802040-02A	CL8270	Semivolatile Organic Compounds	S[illegible]8270
5G	Car8-02-011	SN	S802040-02A	DRY_WT	Soil Moisture	[illegible]NK
5G	Car8-02-012	SN	8802072-01A	AS_G	Metals	[illegible]206.2
5G	Car8-02-012	SN	8802072-01A	HG_C	Metals	E245.1
5G	Car8-02-012	SN	8802072-01A	ICP200	Metal Screen (ICP)	E200.7
5G	Car8-02-012	SN	8802072-01A	ONG_IR	Oil & Grease	E413.2
5G	Car8-02-012	SN	8802072-01A	SE_G	Metals	E270.2
5H	02-169	N	8803006-06C	AS_G	Metals	E206.2
5H	02-169	N	8803006-06D	CL_T	Chloride	E325.3
5H	02-169	N	8803005-06A	EPA601	Purgeable Halocarbons	E601
5H	02-169	N	8803005-13A	EPA601	Purgeable Halocarbons	E601
5H	02-169	N	8803005-06C	EPA602	Purgeable Aromatics	E602
5H	02-169	N	8803005-13A	EPA602	Purgeable Aromatics	E602
5H	02-169	N	8803006-06D	F_SIE	Fluoride	E340.2
5H	02-169	N	8803006-06C	HG_C	Metals	E245.1
5H	02-169	N	8803006-06C	ICP200	Metal Screen (ICP)	E200.7
5H	02-169	N	8803006-06B	NO2NO3	Nitrate	E353.1
5H	02-169	N	8803006-06D	OPO4	Orthophosphate	E365.4
5H	02-169	N	8803006-06C	PB_G	Metals	E239.2
5H	02-169	N	8803006-06C	SE_G	Metals	E270.2
5H	02-169	N	8803006-06D	SO4_N	Sulfate	E375.4

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
5H	02-169	N	8803006-06D	TDS	Total Dissolved Solids	E160.1
5H	02-169	N	8803005-13A	XYLENE	Purgeable Aromatics	E602
5H	02-169	N	8803005-06C	XYLENE	Purgeable Aromatics	E602
5H	04-31	N	8804046-03C	AS_G	Metals	E206.2
5H	04-31	N	8804046-03A	CL_T	Chloride	E325.3
5H	04-31	N	8804045-05A	EPA601	Purgeable Halocarbons	E601
5H	04-31	N	8804076-05A	EPA601	Purgeable Halocarbons	E601
5H	04-31	N	8804045-05C	EPA602	Purgeable Aromatics	E602
5H	04-31	N	8804046-03A	F_SIE	Fluoride	E340.2
5H	04-31	N	8804046-03C	HG_C	Metals	E245.1
5H	04-31	N	8804046-03C	ICP200	Metal Screen (ICP)	E200.7
5H	04-31	N	8804046-03B	NO3	Nitrate	E353.2
5H	04-31	N	8804046-03A	OPO4	Orthophosphate	E365.4
5H	04-31	N	8804046-03C	SE_G	Metals	E270.2
5H	04-31	N	8804046-03A	SO4_N	Sulfate	E375.4
5H	04-31	N	8804046-03A	TDS	Total Dissolved Solids	E160.1
5H	04-31	N	8804045-05C	XYLENE	Purgeable Aromatics	E602
5H	Car8-02-013	SN	S802040-03A	CL8240	Volatile Organic Compounds	SW8240
5H	Car8-02-014	SN	S802040-04A	CL8270	Semivolatile Organic Compounds	SW8270
5H	Car8-02-014	SN	S802040-04A	DRY_WT	Soil Moisture	UNK
5H	Car8-02-015	SN	8802072-02A	AS_G	Metals	E206.2
5H	Car8-02-015	SN	8802072-02A	HG_C	Metals	E245.1
5H	Car8-02-015	SN	8802072-02A	ICP200	Metal Screen (ICP)	E200.7
5H	Car8-02-015	SN	8802072-02A	ONG_IR	Oil & Grease	E413.2
5H	Car8-02-015	SN	8802072-02A	SE_G	Metals	E270.2
BSS	Car8-02-144	SN	S802089-03A	CL8240	Volatile Organic Compounds	SW8240
BSS	Car8-02-145	SN	S802089-04A	CL8270	Semivolatile Organic Compounds	SW8270
BSS	Car8-02-145	SN	S802089-04A	DRY_WT	Soil Moisture	UNK
BSS	Car8-02-146	SN	S802094-02B	8080	Organochlorine Pesticides and PCBs	SW8080
BSS	Car8-02-146	SN	S802094-02C	8150	Chlorinated Phenoxy Herbicides	SW8150
BSS	Car8-02-146	SN	S802094-02A	AG_EM	Metal Screen (ICP)	E200.7
BSS	Car8-02-146	SN	S802094-02A	AS_GF	Metals	E206.2
BSS	Car8-02-146	SN	S802094-02A	BA_EM	Metal Screen (ICP)	E200.7
BSS	Car8-02-146	SN	S802094-02A	CD_EM	Metal Screen (ICP)	E200.7
BSS	Car8-02-146	SN	S802094-02A	CR_EM	Metal Screen (ICP)	E200.7
BSS	Car8-02-146	SN	S802094-02A	HG_CV	Metals	E245.1
BSS	Car8-02-146	SN	S802094-02A	PB_G	Metals	E239.2
BSS	Car8-02-146	SN	S802094-02A	SE_GF	Metals	E270.2
BSSA	03-34		8803041-04A	AS_G	Metals	E206.2
BSSA	03-34		8803040-04A	EPA601	Purgeable Halocarbons	E601
BSSA	03-34		8803040-10A	EPA602	Purgeable Aromatics	E602
BSSA	03-34		8803040-04C	EPA602	Purgeable Aromatics	E602
BSSA	03-34		8803041-04C	HC_IR	Petroleum Hydrocarbons	E418.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
BSSA	03-34		8803041-04A	HG_C	Metals	E245.1
BSSA	03-34		8803041-04A	ICP200	Metal Screen (ICP)	E200.7
BSSA	03-34		8803041-04A	PB_G	Metals	E239.2
BSSA	03-34		8803041-04A	SE_G	Metals	E270.2
BSSA	03-34		8803041-04B	TDS	Total Dissolved Solids	E160.1
BSSA	03-34		8803040-04C	XYLENE	Purgeable Aromatics	E602
BSSA	03-34		8803040-10A	XYLENE	Purgeable Aromatics	E602
BSSA	04-77	N	8804081-04A	AS_G	Metals	E206.2
BSSA	04-77	N	8804082-04A	EPA601	Purgeable Halocarbons	E601
BSSA	04-77	N	8804082-11A	EPA601	Purgeable Halocarbons	E601
BSSA	04-77	N	8804082-04C	EPA602	Purgeable Aromatics	E602
BSSA	04-77	N	8804081-04B	HC_IR	Petroleum Hydrocarbons	E418.1
BSSA	04-77	N	8804081-04A	HG_C	Metals	E245.1
BSSA	04-77	N	8804081-04A	ICP200	Metal Screen (ICP)	E200.7
BSSA	04-77	N	8804081-04A	PB_G	Metals	E239.2
BSSA	04-77	N	8804081-04A	SE_G	Metals	E270.2
BSSA	04-77	N	8804081-04C	TDS	Total Dissolved Solids	E160.1
BSSA	04-77	N	8804082-04C	XYLENE	Purgeable Aromatics	E602
BSSA	04-78	ER	8804081-05A	AS_G	Metals	E206.2
BSSA	04-78	ER	8804082-05A	EPA601	Purgeable Halocarbons	E601
BSSA	04-78	ER	8804082-05C	EPA602	Purgeable Aromatics	E602
BSSA	04-78	ER	8804081-05B	HC_IR	Petroleum Hydrocarbons	E418.1
BSSA	04-78	ER	8804081-05A	HG_C	Metals	E245.1
BSSA	04-78	ER	8804081-05A	ICP200	Metal Screen (ICP)	E200.7
BSSA	04-78	ER	8804081-05A	PB_G	Metals	E239.2
BSSA	04-78	ER	8804081-05A	SE_G	Metals	E270.2
BSSA	04-78	ER	8804082-05C	XYLENE	Purgeable Aromatics	E602
BSSA	Car8-02-049	SN	S802056-12A	CL8240	Volatile Organic Compounds	SW8240
BSSA	Car8-02-050	SD	8802084-08A	HC_IR	Petroleum Hydrocarbons	E418.1
BSSA	Car8-02-050	SD	8802084-08A	PB_G	Metals	E239.2
BSSA	Car8-02-051	SN	S802056-13A	CL8240	Volatile Organic Compounds	SW8240
BSSA	Car8-02-052	SD	8802084-09A	HC_IR	Petroleum Hydrocarbons	E418.1
BSSA	Car8-02-052	SD	8802084-09A	PB_G	Metals	E239.2
BSSB	03-35		8803041-05A	AS_G	Metals	E206.2
BSSB	03-35		8803040-05A	EPA601	Purgeable Halocarbons	E601
BSSB	03-35		8803040-11A	EPA602	Purgeable Aromatics	E602
BSSB	03-35		8803040-05C	EPA602	Purgeable Aromatics	E602
BSSB	03-35		8803041-05C	HC_IR	Petroleum Hydrocarbons	E418.1
BSSB	03-35		8803041-05A	HG_C	Metals	E245.1
BSSB	03-35		8803041-05A	ICP200	Metal Screen (ICP)	E200.7
BSSB	03-35		8803041-05A	PB_G	Metals	E239.2
BSSB	03-35		8803041-05A	SE_G	Metals	E270.2
BSSB	03-35		8803041-05B	TDS	Total Dissolved Solids	E160.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
BSSB	03-35		8803040-05C	XYLENE	Purgeable Aromatics	E602
BSSB	03-35		8803040-11A	XYLENE	Purgeable Aromatics	E602
BSSB	04-74	N	8804081-01A	AS_G	Metals	E206.2
BSSB	04-74	N	8804082-09A	EPA601	Purgeable Halocarbons	E601
BSSB	04-74	N	8804082-01A	EPA601	Purgeable Halocarbons	E601
BSSB	04-74	N	8804082-01C	EPA602	Purgeable Aromatics	E602
BSSB	04-74	N	8804082-09A	EPA602	Purgeable Aromatics	E602
BSSB	04-74	N	8804081-01B	HC_IR	Petroleum Hydrocarbons	E418.1
BSSB	04-74	N	8804081-01A	HG_C	Metals	E245.1
BSSB	04-74	N	8804081-01A	ICP200	Metal Screen (ICP)	E200.7
BSSB	04-74	N	8804081-01A	PB_G	Metals	E239.2
BSSB	04-74	N	8804081-01A	SE_G	Metals	E270.2
BSSB	04-74	N	8804081-01C	TDS	Total Dissolved Solids	E160.1
BSSB	04-74	N	8804082-09A	XYLENE	Purgeable Aromatics	E602
BSSB	04-74	N	8804082-01C	XYLENE	Purgeable Aromatics	E602
BSSB	04-75	D	8804081-02A	AS_G	Metals	E206.2
BSSB	04-75	D	8804082-10A	EPA601	Purgeable Halocarbons	E601
BSSB	04-75	D	8804082-02A	EPA601	Purgeable Halocarbons	E601
BSSB	04-75	D	8804082-10A	EPA602	Purgeable Aromatics	E602
BSSB	04-75	D	8804082-02C	EPA602	Purgeable Aromatics	E602
BSSB	04-75	D	8804081-02B	HC_IR	Petroleum Hydrocarbons	E418.1
BSSB	04-75	D	8804081-02A	HG_C	Metals	E245.1
BSSB	04-75	D	8804081-02A	ICP200	Metal Screen (ICP)	E200.7
BSSB	04-75	D	8804081-02A	PB_G	Metals	E239.2
BSSB	04-75	D	8804081-02A	SE_G	Metals	E270.2
BSSB	04-75	D	8804081-02C	TDS	Total Dissolved Solids	E160.1
BSSB	04-75	D	8804082-02C	XYLENE	Purgeable Aromatics	E602
BSSB	04-75	D	8804082-10A	XYLENE	Purgeable Aromatics	E602
BSSB	04-79	FB	8804082-06A	EPA601	Purgeable Halocarbons	E601
BSSB	04-79	FB	8804082-06C	EPA602	Purgeable Aromatics	E602
BSSB	04-79	FB	8804082-06C	XYLENE	Purgeable Aromatics	E602
BSSB	04-80	TB	8804082-07A	EPA601	Purgeable Halocarbons	E601
BSSB	04-80	TB	8804082-07C	EPA602	Purgeable Aromatics	E602
BSSB	04-80	TB	8804082-07C	XYLENE	Purgeable Aromatics	E602
BSSB	Car8-02-047	SN	S802056-11A	CL8240	Volatile Organic Compounds	SW8240
BSSB	Car8-02-048	SN	8802084-07A	HC_IR	Petroleum Hydrocarbons	E418.1
BSSB	Car8-02-048	SN	8802084-07A	PB_G	Metals	E239.2
BSSC	03-36		8803041-06A	AS_G	Metals	E206.2
BSSC	03-36		8803040-06A	EPA601	Purgeable Halocarbons	E601
BSSC	03-36		8803040-06C	EPA602	Purgeable Aromatics	E602
BSSC	03-36		8803040-12A	EPA602	Purgeable Aromatics	E602
BSSC	03-36		8803041-06C	HC_IR	Petroleum Hydrocarbons	E418.1
BSSC	03-36		8803041-06A	HG_C	Metals	E245.1

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
BSSC	03-36		8803041-06A	ICP200	Metal Screen (ICP)	E200.7
BSSC	03-36		8803041-06A	PB_G	Metals	E239.2
BSSC	03-36		8803041-06A	SE_G	Metals	E270.2
BSSC	03-36		8803041-06B	TDS	Total Dissolved Solids	E160.1
BSSC	03-36		8803040-06C	XYLENE	Purgeable Aromatics	E602
BSSC	03-36		8803040-12A	XYLENE	Purgeable Aromatics	E602
BSSC	04-76	N	8804081-03A	AS_G	Metals	E206.2
BSSC	04-76	N	8804082-03A	EPA601	Purgeable Halocarbons	E601
BSSC	04-76	N	8804082-03C	EPA602	Purgeable Aromatics	E602
BSSC	04-76	N	8804081-03B	HC_IR	Petroleum Hydrocarbons	E418.1
BSSC	04-76	N	8804081-03A	HG_C	Metals	E245.1
BSSC	04-76	N	8804081-03A	ICP200	Metal Screen (ICP)	E200.7
BSSC	04-76	N	8804081-03A	PB_G	Metals	E239.2
BSSC	04-76	N	8804081-03A	SE_G	Metals	E270.2
BSSC	04-76	N	8804081-03C	TDS	Total Dissolved Solids	E160.1
BSSC	04-76	N	8804082-03C	XYLENE	Purgeable Aromatics	E602
BSSC	Car8-02-043	SN	S802056-09A	CL8240	Volatile Organic Compounds	SW8240
BSSC	Car8-02-044	SN	8802084-05A	HC_IR	Petroleum Hydrocarbons	E418.1
BSSC	Car8-02-044	SN	8802084-05A	PB_G	Metals	E239.2
BSSD	Car8-02-045	SN	S802056-10A	CL8240	Volatile Organic Compounds	SW8240
BSSD	Car8-02-046	SN	8802084-06A	HC_IR	Petroleum Hydrocarbons	E418.1
BSSD	Car8-02-046	SN	8802084-06A	PB_G	Metals	E239.2
P1	02-153	N	8802136-04G	AS_G	Metals	E206.2
P1	02-153	N	8802136-04H	CL_T	Chloride	E325.3
P1	02-153	N	8802136-04A	EPA601	Purgeable Halocarbons	E601
P1	02-153	N	8802136-04C	EPA602	Purgeable Aromatics	E602
P1	02-153	N	8802136-08A	EPA602	Purgeable Aromatics	E602
P1	02-153	N	8802136-04H	F_SIE	Fluoride	E340.2
P1	02-153	N	8802136-04G	HG_C	Metals	E245.1
P1	02-153	N	8802136-04G	ICP200	Metal Screen (ICP)	E200.7
P1	02-153	N	8802136-04F	NO3	Nitrate	E353.2
P1	02-153	N	8802136-04H	OPO4	Orthophosphate	E365.4
P1	02-153	N	8802136-04G	PB_G	Metals	E239.2
P1	02-153	N	8802136-04G	SE_G	Metals	E270.2
P1	02-153	N	8802136-04H	SO4_N	Sulfate	E375.4
P1	02-153	N	8802136-04H	TDS	Total Dissolved Solids	E160.1
P1	02-153	N	8802136-04C	XYLENE	Purgeable Aromatics	E602
P1	02-153	N	8802136-08A	XYLENE	Purgeable Aromatics	E602
P1	04-05	N	8804016-03C	AS_G	Metals	E206.2
P1	04-05	N	S804030-01A	CL_625	Extractable Priority Pollutants	E625
P1	04-05	N	8804016-03A	CL_T	Chloride	E325.3
P1	04-05	N	8804017-02A	EPA601	Purgeable Halocarbons	E601
P1	04-05	N	8804017-11A	EPA602	Purgeable Aromatics	E602

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
P1	04-05	N	8804017-02C	EPA602	Purgeable Aromatics	E602
P1	04-05	N	8804016-03A	F_SIE	Fluoride	E340.2
P1	04-05	N	8804016-03C	HG_C	Metals	E245.1
P1	04-05	N	8804016-03C	ICP200	Metal Screen (ICP)	E200.7
P1	04-05	N	8804016-03B	NO3	Nitrate	E353.2
P1	04-05	N	8804016-03A	OPO4	Orthophosphate	E365.4
P1	04-05	N	8804016-03C	SE_G	Metals	E270.2
P1	04-05	N	8804016-03A	SO4_N	Sulfate	E375.4
P1	04-05	N	8804016-03A	TDS	Total Dissolved Solids	E160.1
P1	04-05	N	8804017-02C	XYLENE	Purgeable Aromatics	E602
P1	04-05	N	8804017-11A	XYLENE	Purgeable Aromatics	E602
P2	02-155	N	8802191-02C	AS_G	Metals	E206.2
P2	02-155	N	8802191-02D	CL_T	Chloride	E325.3
P2	02-155	N	8802190-02A	EPA601	Purgeable Halocarbons	E601
P2	02-155	N	8802190-11A	EPA602	Purgeable Aromatics	E602
P2	02-155	N	8802190-02C	EPA602	Purgeable Aromatics	E602
P2	02-155	N	8802191-02D	F_SIE	Fluoride	E340.2
P2	02-155	N	8802191-02C	HG_C	Metals	E245.1
P2	02-155	N	8802191-02C	ICP200	Metal Screen (ICP)	E200.7
P2	02-155	N	8802191-02B	NO2NO3	Nitrate	E353.1
P2	02-155	N	8802191-02D	OPO4	Orthophosphate	E365.4
P2	02-155	N	8802191-02C	PB_G	Metals	E239.2
P2	02-155	N	8802191-02C	SE_G	Metals	E270.2
P2	02-155	N	8802191-02D	SO4_N	Sulfate	E375.4
P2	02-155	N	8802191-02D	TDS	Total Dissolved Solids	E160.1
P2	02-155	N	8802190-02C	XYLENE	Purgeable Aromatics	E602
P2	02-155	N	8802190-11A	XYLENE	Purgeable Aromatics	E602
P2	04-11	N	8804016-07C	AS_G	Metals	E206.2
P2	04-11	N	8804016-07A	CL_T	Chloride	E325.3
P2	04-11	N	8804017-08A	EPA601	Purgeable Halocarbons	E601
P2	04-11	N	8804017-16A	EPA602	Purgeable Aromatics	E602
P2	04-11	N	8804017-08C	EPA602	Purgeable Aromatics	E602
P2	04-11	N	8804016-07A	F_SIE	Fluoride	E340.2
P2	04-11	N	8804016-07C	HG_C	Metals	E245.1
P2	04-11	N	8804016-07C	ICP200	Metal Screen (ICP)	E200.7
P2	04-11	N	8804016-07B	NO3	Nitrate	E353.2
P2	04-11	N	8804016-07A	OPO4	Orthophosphate	E365.4
P2	04-11	N	8804016-07C	SE_G	Metals	E270.2
P2	04-11	N	8804016-07A	SO4_N	Sulfate	E375.4
P2	04-11	N	8804016-07A	TDS	Total Dissolved Solids	E160.1
P2	04-11	N	8804017-08C	XYLENE	Purgeable Aromatics	E602
P2	04-11	N	8804017-16A	XYLENE	Purgeable Aromatics	E602
WSA	CAR8-03-060	TB	S803133-04A	CL8240	Volatile Organic Compounds	SW8240

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
WSAD	CAR8-03-059	SN	S803133-03A	CL8240	Volatile Organic Compounds	SW8240
WSAD	CAR8-03-059	SN	S803134-13A	CL8270	Semivolatile Organic Compounds	SW8270
WSAD	CAR8-03-059	SN	S803134-13A	DRY_WT	Soil Moisture	UNK
WSAD	CAR8-03-059	SN	8803173-13A	ICP200	Metal Screen (ICP)	E200.7
WSAE	CAR8-03-057	SN	S803133-02A	CL8240	Volatile Organic Compounds	SW8240
WSAE	CAR8-03-057	SN	S803134-11A	CL8270	Semivolatile Organic Compounds	SW8270
WSAE	CAR8-03-057	SN	S803134-11A	DRY_WT	Soil Moisture	UNK
WSAE	CAR8-03-057	SN	8803173-11A	ICP200	Metal Screen (ICP)	E200.7
WSAE	CAR8-03-058	SD	S803134-12A	CL8270	Semivolatile Organic Compounds	SW8270
WSAE	CAR8-03-058	SD	S803134-12A	DRY_WT	Soil Moisture	UNK
WSAE	CAR8-03-058	SD	8803173-12A	ICP200	Metal Screen (ICP)	E200.7
WSAF	CAR8-03-056	SN	S803133-01A	CL8240	Volatile Organic Compounds	SW8240
WSAF	CAR8-03-056	SN	S803134-10A	CL8270	Semivolatile Organic Compounds	SW8270
WSAF	CAR8-03-056	SN	S803134-10A	DRY_WT	Soil Moisture	UNK
WSAF	CAR8-03-056	SN	8803173-10A	ICP200	Metal Screen (ICP)	E200.7
WSAG	CAR8-03-055	SN	S803133-13A	CL8240	Volatile Organic Compounds	SW8240
WSAG	CAR8-03-055	SN	S803134-09A	CL8270	Semivolatile Organic Compounds	SW8270
WSAG	CAR8-03-055	SN	S803134-09A	DRY_WT	Soil Moisture	UNK
WSAG	CAR8-03-055	SN	8803173-09A	ICP200	Metal Screen (ICP)	E200.7
WSAH	CAR8-03-053	SD	S803133-11A	CL8240	Volatile Organic Compounds	SW8240
WSAH	CAR8-03-053	SD	S803134-07A	CL8270	Semivolatile Organic Compounds	SW8270
WSAH	CAR8-03-053	SD	S803134-07A	DRY_WT	Soil Moisture	UNK
WSAH	CAR8-03-053	SD	8803173-07A	ICP200	Metal Screen (ICP)	E200.7
WSAH	CAR8-03-054	SD	S803133-12A	CL8240	Volatile Organic Compounds	SW8240
WSAH	CAR8-03-054	SD	S803134-08A	CL8270	Semivolatile Organic Compounds	SW8270
WSAH	CAR8-03-054	SD	S803134-08A	DRY_WT	Soil Moisture	UNK
WSAH	CAR8-03-054	SD	8803173-08A	ICP200	Metal Screen (ICP)	E200.7
WSAI	CAR8-03-051	SN	S803133-09A	CL8240	Volatile Organic Compounds	SW8240
WSAI	CAR8-03-051	SN	S803134-05A	CL8270	Semivolatile Organic Compounds	SW8270
WSAI	CAR8-03-051	SN	S803134-05A	DRY_WT	Soil Moisture	UNK
WSAI	CAR8-03-051	SN	8803173-05A	ICP200	Metal Screen (ICP)	E200.7
WSAI	CAR8-03-052	SN	S803133-10A	CL8240	Volatile Organic Compounds	SW8240
WSAI	CAR8-03-052	SN	S803134-06A	CL8270	Semivolatile Organic Compounds	SW8270
WSAI	CAR8-03-052	SN	S803134-06A	DRY_WT	Soil Moisture	UNK
WSAI	CAR8-03-052	SN	8803173-06A	ICP200	Metal Screen (ICP)	E200.7
WSAJ	CAR8-03-049	SN	S803133-07A	CL8240	Volatile Organic Compounds	SW8240
WSAJ	CAR8-03-049	SN	S803134-03A	CL8270	Semivolatile Organic Compounds	SW8270
WSAJ	CAR8-03-049	SN	S803134-03A	DRY_WT	Soil Moisture	UNK
WSAJ	CAR8-03-049	SN	8803173-03A	ICP200	Metal Screen (ICP)	E200.7
WSAJ	CAR8-03-050	SN	S803133-08A	CL8240	Volatile Organic Compounds	SW8240
WSAJ	CAR8-03-050	SN	S803134-04A	CL8270	Semivolatile Organic Compounds	SW8270
WSAJ	CAR8-03-050	SN	S803134-04A	DRY_WT	Soil Moisture	UNK
WSAJ	CAR8-03-050	SN	8803173-04A	ICP200	Metal Screen (ICP)	E200.7

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

SAMPLE CROSS-REFERENCE INDEX FOR CARSWELL AFB IRP - STAGE 2

Location ID	Sample ID	Sample Type	Lab ID	Method Code	Method	IRP Method
WSAK	CAR8-03-047	SN	S803133-05A	CL8240	Volatile Organic Compounds	SW8240
WSAK	CAR8-03-047	SN	S803134-01A	CL8270	Semivolatile Organic Compounds	SW8270
WSAK	CAR8-03-047	SN	S803134-01A	DRY_WT	Soil Moisture	UNK
WSAK	CAR8-03-047	SN	8803173-01A	ICP200	Metal Screen (ICP)	E200.7
WSAK	CAR8-03-048	SN	S803133-06A	CL8240	Volatile Organic Compounds	SW8240
WSAK	CAR8-03-048	SN	S803134-02A	CL8270	Semivolatile Organic Compounds	SW8270
WSAK	CAR8-03-048	SN	S803134-02A	DRY_WT	Soil Moisture	UNK
WSAK	CAR8-03-048	SN	8803173-02A	ICP200	Metal Screen (ICP)	E200.7

NOTE: Refer to Lab ID to locate original chemical analysis data sheets for individual method results.

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8803036-01A	12D	03-23	N	EPA601	Purgeable Halocarbons
8803036-01C	12D	03-23	N	EPA602	Purgeable Aromatics
8803036-01C	12D	03-23	N	XYLENE	Purgeable Aromatics
8803036-02A	12B	03-24	N	EPA601	Purgeable Halocarbons
8803036-02C	12B	03-24	N	EPA602	Purgeable Aromatics
8803036-02C	12B	03-24	N	XYLENE	Purgeable Aromatics
8803036-03A	12B	03-25	D	EPA601	Purgeable Halocarbons
8803036-03C	12B	03-25	D	EPA602	Purgeable Aromatics
8803036-03C	12B	03-25	D	XYLENE	Purgeable Aromatics
8803036-04A	12C	03-26	N	EPA601	Purgeable Halocarbons
8803036-04C	12C	03-26	N	EPA602	Purgeable Aromatics
8803036-04C	12C	03-26	N	XYLENE	Purgeable Aromatics
8803036-05A	12E	03-27	N	EPA601	Purgeable Halocarbons
8803036-05C	12E	03-27	N	EPA602	Purgeable Aromatics
8803036-05C	12E	03-27	N	XYLENE	Purgeable Aromatics
8803036-06A	10B	03-28	N	EPA601	Purgeable Halocarbons
8803036-06C	10B	03-28	N	EPA602	Purgeable Aromatics
8803036-06C	10B	03-28	N	XYLENE	Purgeable Aromatics
8803036-07A	10C	03-29	N	EPA601	Purgeable Halocarbons
8803036-07C	10C	03-29	N	EPA602	Purgeable Aromatics
8803036-07C	10C	03-29	N	XYLENE	Purgeable Aromatics
8803036-08A	5B	03-30	N	EPA601	Purgeable Halocarbons
8803036-08C	5B	03-30	N	EPA602	Purgeable Aromatics
8803036-08C	5B	03-30	N	XYLENE	Purgeable Aromatics
8803036-10A	12D	03-23	N	EPA602	Purgeable Aromatics
8803036-10A	12D	03-23	N	XYLENE	Purgeable Aromatics
8803036-11A	12B	03-24	N	EPA601	Purgeable Halocarbons
8803036-12A	12B	03-25	D	EPA601	Purgeable Halocarbons
8803036-13A	12C	03-26	N	EPA602	Purgeable Aromatics
8803036-13A	12C	03-26	N	XYLENE	Purgeable Aromatics
8803036-14A	12E	03-27	N	EPA602	Purgeable Aromatics
8803036-14A	12E	03-27	N	XYLENE	Purgeable Aromatics
8803036-15A	10B	03-28	N	EPA601	Purgeable Halocarbons
8803040-01A	4E	03-31		EPA601	Purgeable Halocarbons
8803040-01C	4E	03-31		EPA602	Purgeable Aromatics
8803040-01C	4E	03-31		XYLENE	Purgeable Aromatics
8803040-02A	4E	03-32		EPA601	Purgeable Halocarbons
8803040-02C	4E	03-32		EPA602	Purgeable Aromatics
8803040-02C	4E	03-32		XYLENE	Purgeable Aromatics
8803040-03A	4D	03-33		EPA601	Purgeable Halocarbons
8803040-03C	4D	03-33		EPA602	Purgeable Aromatics
8803040-03C	4D	03-33		XYLENE	Purgeable Aromatics
8803040-04A	BSSA	03-34		EPA601	Purgeable Halocarbons
8803040-04C	BSSA	03-34		EPA602	Purgeable Aromatics
8803040-04C	BSSA	03-34		XYLENE	Purgeable Aromatics
8803040-05A	BSSB	03-35		EPA601	Purgeable Halocarbons

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8803040-05C	BSSB	03-35		EPA602	Purgeable Aromatics
8803040-05C	BSSB	03-35		XYLENE	Purgeable Aromatics
8803040-06A	BSSC	03-36		EPA601	Purgeable Halocarbons
8803040-06C	BSSC	03-36		EPA602	Purgeable Aromatics
8803040-06C	BSSC	03-36		XYLENE	Purgeable Aromatics
8803040-07A	5F	03-37		EPA601	Purgeable Halocarbons
8803040-07C	5F	03-37		EPA602	Purgeable Aromatics
8803040-07C	5F	03-37		XYLENE	Purgeable Aromatics
8803040-08A	5F	03-38		EPA601	Purgeable Halocarbons
8803040-08C	5F	03-38		EPA602	Purgeable Aromatics
8803040-08C	5F	03-38		XYLENE	Purgeable Aromatics
8803040-10A	BSSA	03-34		EPA602	Purgeable Aromatics
8803040-10A	BSSA	03-34		XYLENE	Purgeable Aromatics
8803040-11A	BSSB	03-35		EPA602	Purgeable Aromatics
8803040-11A	BSSB	03-35		XYLENE	Purgeable Aromatics
8803040-12A	BSSC	03-36		EPA602	Purgeable Aromatics
8803040-12A	BSSC	03-36		XYLENE	Purgeable Aromatics
8803041-01A	4E	03-31		AS_G	Metals
8803041-01A	4E	03-31		HG_C	Metals
8803041-01A	4E	03-31		ICP200	Metal Screen (ICP)
8803041-01A	4E	03-31		SE_G	Metals
8803041-01B	4E	03-31		CL_T	Chloride
8803041-01B	4E	03-31		F_SIE	Fluoride
8803041-01B	4E	03-31		OPO4	Orthophosphate
8803041-01B	4E	03-31		SO4_N	Sulfate
8803041-01B	4E	03-31		TDS	Total Dissolved Solids
8803041-01C	4E	03-31		NO2NO3	Nitrate
8803041-02A	4E	03-32		AS_G	Metals
8803041-02A	4E	03-32		SE_G	Metals
8803041-02A	4E	03-32		HG_C	Metals
8803041-02A	4E	03-32		ICP200	Metal Screen (ICP)
8803041-02B	4E	03-32		CL_T	Chloride
8803041-02B	4E	03-32		F_SIE	Fluoride
8803041-02B	4E	03-32		OPO4	Orthophosphate
8803041-02B	4E	03-32		SO4_N	Sulfate
8803041-02B	4E	03-32		TDS	Total Dissolved Solids
8803041-02C	4E	03-32		NO2NO3	Nitrate
8803041-03A	4D	03-33		HG_C	Metals
8803041-03A	4D	03-33		ICP200	Metal Screen (ICP)
8803041-03A	4D	03-33		AS_G	Metals
8803041-03A	4D	03-33		SE_G	Metals
8803041-03B	4D	03-33		CL_T	Chloride
8803041-03B	4D	03-33		F_SIE	Fluoride
8803041-03B	4D	03-33		OPO4	Orthophosphate
8803041-03B	4D	03-33		SO4_N	Sulfate
8803041-03B	4D	03-33		TDS	Total Dissolved Solids

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8803041-03C	4D	03-33		NO2NO3	Nitrate
8803041-04A	BSSA	03-34		HG_C	Metals
8803041-04A	BSSA	03-34		ICP200	Metal Screen (ICP)
8803041-04A	BSSA	03-34		PB_G	Metals
8803041-04A	BSSA	03-34		AS_G	Metals
8803041-04A	BSSA	03-34		SE_G	Metals
8803041-04B	BSSA	03-34		TDS	Total Dissolved Solids
8803041-04C	BSSA	03-34		HC_IR	Petroleum Hydrocarbons
8803041-05A	BSSB	03-35		AS_G	Metals
8803041-05A	BSSB	03-35		HG_C	Metals
8803041-05A	BSSB	03-35		ICP200	Metal Screen (ICP)
8803041-05A	BSSB	03-35		PB_G	Metals
8803041-05A	BSSB	03-35		SE_G	Metals
8803041-05B	BSSB	03-35		TDS	Total Dissolved Solids
8803041-05C	BSSB	03-35		HC_IR	Petroleum Hydrocarbons
8803041-06A	BSSC	03-36		AS_G	Metals
8803041-06A	BSSC	03-36		SE_G	Metals
8803041-06A	BSSC	03-36		HG_C	Metals
8803041-06A	BSSC	03-36		ICP200	Metal Screen (ICP)
8803041-06A	BSSC	03-36		PB_G	Metals
8803041-06B	BSSC	03-36		TDS	Total Dissolved Solids
8803041-06C	BSSC	03-36		HC_IR	Petroleum Hydrocarbons
8803041-07A	5F	03-37		AS_G	Metals
8803041-07A	5F	03-37		HG_C	Metals
8803041-07A	5F	03-37		ICP200	Metal Screen (ICP)
8803041-07A	5F	03-37		SE_G	Metals
8803041-07B	5F	03-37		F_SIE	Fluoride
8803041-07B	5F	03-37		CL_T	Chloride
8803041-07B	5F	03-37		OPO4	Orthophosphate
8803041-07B	5F	03-37		TDS	Total Dissolved Solids
8803041-07B	5F	03-37		SO4_N	Sulfate
8803041-07C	5F	03-37		NO2NO3	Nitrate
8803041-08A	5F	03-38		AS_G	Metals
8803041-08A	5F	03-38		HG_C	Metals
8803041-08A	5F	03-38		ICP200	Metal Screen (ICP)
8803041-08A	5F	03-38		SE_G	Metals
8803041-08B	5F	03-38		F_SIE	Fluoride
8803041-08B	5F	03-38		CL_T	Chloride
8803041-08B	5F	03-38		OPO4	Orthophosphate
8803041-08B	5F	03-38		TDS	Total Dissolved Solids
8803041-08B	5F	03-38		SO4_N	Sulfate
8803041-08C	5F	03-38		NO2NO3	Nitrate
8803042-01A	13G	CAR8-03-039		HC_IR	Petroleum Hydrocarbons
8803042-01A	13G	CAR8-03-039		HG_C	Metals
8803042-01A	13G	CAR8-03-039		ICP200	Metal Screen (ICP)
8803042-02A	13K	CAR8-03-040		HC_IR	Petroleum Hydrocarbons

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8803042-02A	13K	CAR8-03-040		HG_C	Metals
8803042-02A	13K	CAR8-03-040		ICP200	Metal Screen (ICP)
8803042-03A	13H	CAR8-03-041		HG_C	Metals
8803042-03A	13H	CAR8-03-041		HC_IR	Petroleum Hydrocarbons
8803042-03A	13H	CAR8-03-041		ICP200	Metal Screen (ICP)
8803042-04A	13J	CAR8-03-042		HC_IR	Petroleum Hydrocarbons
8803042-04A	13J	CAR8-03-042		HG_C	Metals
8803042-04A	13J	CAR8-03-042		ICP200	Metal Screen (ICP)
8803042-05A	13I	CAR8-03-043		HC_IR	Petroleum Hydrocarbons
8803042-05A	13I	CAR8-03-043		HG_C	Metals
8803042-05A	13I	CAR8-03-043		ICP200	Metal Screen (ICP)
8803042-06A	3D	03-44		ONG_IR	Oil & Grease
8803080-01A	16UP1	03-01	N	EPA602	Purgeable Aromatics
8803080-01A	16UP1	03-01	N	XYLENE	Purgeable Aromatics
8803080-02A	16DN3	03-03	N	EPA602	Purgeable Aromatics
8803080-02A	16DN3	03-03	N	XYLENE	Purgeable Aromatics
8803080-02B	16DN3	03-03	N	EPA601	Purgeable Halocarbons
8803080-03A	16DN4	03-04	N	EPA601	Purgeable Halocarbons
8803080-04A	16DN4	03-05	D	EPA601	Purgeable Halocarbons
8803080-04B	16DN4	03-05	D	EPA602	Purgeable Aromatics
8803080-04B	16DN4	03-05	D	XYLENE	Purgeable Aromatics
8803080-05A	16	03-06	TB	EPA601	Purgeable Halocarbons
8803080-06A	16	03-07	FB	EPA601	Purgeable Halocarbons
8803080-06B	16	03-07	FB	EPA602	Purgeable Aromatics
8803080-06B	16	03-07	FB	XYLENE	Purgeable Aromatics
8803080-07A	17I	03-09	TB	EPA601	Purgeable Halocarbons
8803080-07B	17I	03-09	TB	EPA602	Purgeable Aromatics
8803080-07B	17I	03-09	TB	XYLENE	Purgeable Aromatics
8803173-01A	WSAK	CAR8-03-047	SN	ICP200	Metal Screen (ICP)
8803173-02A	WSAK	CAR8-03-048	SN	ICP200	Metal Screen (ICP)
8803173-03A	WSAJ	CAR8-03-049	SN	ICP200	Metal Screen (ICP)
8803173-04A	WSAJ	CAR8-03-050	SN	ICP200	Metal Screen (ICP)
8803173-05A	WSAI	CAR8-03-051	SN	ICP200	Metal Screen (ICP)
8803173-06A	WSAI	CAR8-03-052	SN	ICP200	Metal Screen (ICP)
8803173-07A	WSAH	CAR8-03-053	SD	ICP200	Metal Screen (ICP)
8803173-08A	WSAH	CAR8-03-054	SD	ICP200	Metal Screen (ICP)
8803173-09A	WSAG	CAR8-03-055	SN	ICP200	Metal Screen (ICP)
8803173-10A	WSAF	CAR8-03-056	SN	ICP200	Metal Screen (ICP)
8803173-11A	WSAE	CAR8-03-057	SN	ICP200	Metal Screen (ICP)
8803173-12A	WSAE	CAR8-03-058	SD	ICP200	Metal Screen (ICP)
8803173-13A	WSAD	CAR8-03-059	SN	ICP200	Metal Screen (ICP)
8804003-01A	13G	CAR8-03-061	SN	HC_IR	Petroleum Hydrocarbons
8804003-01A	13G	CAR8-03-061	SN	HG_C	Metals
8804003-01A	13G	CAR8-03-061	SN	ICP200	Metal Screen (ICP)
8804003-02A	13G	CAR8-03-062	SD	HG_C	Metals
8804003-02A	13G	CAR8-03-062	SD	HC_IR	Petroleum Hydrocarbons

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8804003-02A	13G	CAR8-03-062	SD	ICP200	Metal Screen (ICP)
8804003-03A	13K	CAR8-03-063	SN	HC_IR	Petroleum Hydrocarbons
8804003-03A	13K	CAR8-03-063	SN	HG_C	Metals
8804003-03A	13K	CAR8-03-063	SN	ICP200	Metal Screen (ICP)
8804003-04A	13H	CAR8-03-064	SN	HC_IR	Petroleum Hydrocarbons
8804003-04A	13H	CAR8-03-064	SN	HG_C	Metals
8804003-04A	13H	CAR8-03-064	SN	ICP200	Metal Screen (ICP)
8804003-05A	13J	CAR8-03-065	SN	HC_IR	Petroleum Hydrocarbons
8804003-05A	13J	CAR8-03-065	SN	HG_C	Metals
8804003-05A	13J	CAR8-03-065	SN	ICP200	Metal Screen (ICP)
8804003-06A	13I	CAR8-03-066	SN	HC_IR	Petroleum Hydrocarbons
8804003-06A	13I	CAR8-03-066	SN	ICP200	Metal Screen (ICP)
8804003-06A	13I	CAR8-03-066	SN	HG_C	Metals
8804014-01A	3D	04-01	N	EPA601	Purgeable Halocarbons
8804014-01C	3D	04-01	N	EPA602	Purgeable Aromatics
8804014-01C	3D	04-01	N	XYLENE	Purgeable Aromatics
8804014-01E	3D	04-01	N	NO3	Nitrate
8804014-01F	3D	04-01	N	CL_T	Chloride
8804014-01F	3D	04-01	N	F_SIE	Fluoride
8804014-01F	3D	04-01	N	OPO4	Orthophosphate
8804014-01F	3D	04-01	N	SO4_N	Sulfate
8804014-01F	3D	04-01	N	TDS	Total Dissolved Solids
8804014-01G	3D	04-01	N	AS_G	Metals
8804014-01G	3D	04-01	N	SE_G	Metals
8804014-01G	3D	04-01	N	HG_C	Metals
8804014-01G	3D	04-01	N	ICP200	Metal Screen (ICP)
8804014-01G	3D	04-01	N	PB_G	Metals
8804014-02A	11A	04-02	N	EPA601	Purgeable Halocarbons
8804014-02C	11A	04-02	N	EPA602	Purgeable Aromatics
8804014-02C	11A	04-02	N	XYLENE	Purgeable Aromatics
8804014-02E	11A	04-02	N	NO3	Nitrate
8804014-02F	11A	04-02	N	CL_T	Chloride
8804014-02F	11A	04-02	N	F_SIE	Fluoride
8804014-02F	11A	04-02	N	TDS	Total Dissolved Solids
8804014-02F	11A	04-02	N	OPO4	Orthophosphate
8804014-02F	11A	04-02	N	SO4_N	Sulfate
8804014-02G	11A	04-02	N	AS_G	Metals
8804014-02G	11A	04-02	N	HG_C	Metals
8804014-02G	11A	04-02	N	ICP200	Metal Screen (ICP)
8804014-02G	11A	04-02	N	SE_G	Metals
8804014-02H	11A	04-02	N	HC_IR	Petroleum Hydrocarbons
8804014-03A	11B	04-03	N	EPA601	Purgeable Halocarbons
8804014-03C	11B	04-03	N	EPA602	Purgeable Aromatics
8804014-03C	11B	04-03	N	XYLENE	Purgeable Aromatics
8804014-03E	11B	04-03	N	NO3	Nitrate
8804014-03F	11B	04-03	N	CL_T	Chloride

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8804014-03F	11B	04-03	N	TDS	Total Dissolved Solids
8804014-03F	11B	04-03	N	F_SIE	Fluoride
8804014-03F	11B	04-03	N	OPO4	Orthophosphate
8804014-03F	11B	04-03	N	SO4_N	Sulfate
8804014-03G	11B	04-03	N	AS_G	Metals
8804014-03G	11B	04-03	N	HG_C	Metals
8804014-03G	11B	04-03	N	ICP200	Metal Screen (ICP)
8804014-03G	11B	04-03	N	SE_G	Metals
8804014-03H	11B	04-03	N	HC_IR	Petroleum Hydrocarbons
8804014-05A	3D	04-01	N	EPA601	Purgeable Halocarbons
8804014-05A	3D	04-01	N	XYLENE	Purgeable Aromatics
8804014-05A	3D	04-01	N	EPA602	Purgeable Aromatics
8804014-06A	11A	04-02	N	EPA602	Purgeable Aromatics
8804014-06A	11A	04-02	N	XYLENE	Purgeable Aromatics
8804014-07A	11B	04-03	N	EPA602	Purgeable Aromatics
8804014-07A	11B	04-03	N	XYLENE	Purgeable Aromatics
8804016-01A	3D	04-01	N	HC_IR	Petroleum Hydrocarbons
8804016-02A	12A	04-04	N	HC_IR	Petroleum Hydrocarbons
8804016-02B	12A	04-04	N	F_SIE	Fluoride
8804016-02B	12A	04-04	N	CL_T	Chloride
8804016-02B	12A	04-04	N	OPO4	Orthophosphate
8804016-02B	12A	04-04	N	TDS	Total Dissolved Solids
8804016-02B	12A	04-04	N	SO4_N	Sulfate
8804016-02C	12A	04-04	N	NO3	Nitrate
8804016-02D	12A	04-04	N	AS_G	Metals
8804016-02D	12A	04-04	N	HG_C	Metals
8804016-02D	12A	04-04	N	ICP200	Metal Screen (ICP)
8804016-02D	12A	04-04	N	SE_G	Metals
8804016-03A	P1	04-05	N	F_SIE	Fluoride
8804016-03A	P1	04-05	N	CL_T	Chloride
8804016-03A	P1	04-05	N	OPO4	Orthophosphate
8804016-03A	P1	04-05	N	TDS	Total Dissolved Solids
8804016-03A	P1	04-05	N	SO4_N	Sulfate
8804016-03B	P1	04-05	N	NO3	Nitrate
8804016-03C	P1	04-05	N	AS_G	Metals
8804016-03C	P1	04-05	N	HG_C	Metals
8804016-03C	P1	04-05	N	ICP200	Metal Screen (ICP)
8804016-03C	P1	04-05	N	SE_G	Metals
8804016-04A	4A	04-06	N	CL_T	Chloride
8804016-04A	4A	04-06	N	F_SIE	Fluoride
8804016-04A	4A	04-06	N	OPO4	Orthophosphate
8804016-04A	4A	04-06	N	SO4_N	Sulfate
8804016-04A	4A	04-06	N	TDS	Total Dissolved Solids
8804016-04B	4A	04-06	N	NO3	Nitrate
8804016-04C	4A	04-06	N	AS_G	Metals
8804016-04C	4A	04-06	N	HG_C	Metals

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8804016-04C	4A	04-06	N	ICP200	Metal Screen (ICP)
8804016-04C	4A	04-06	N	SE_G	Metals
8804016-05A	4B	04-09	N	CL_T	Chloride
8804016-05A	4B	04-09	N	F_SIE	Fluoride
8804016-05A	4B	04-09	N	OPO4	Orthophosphate
8804016-05A	4B	04-09	N	SO4_N	Sulfate
8804016-05A	4B	04-09	N	TDS	Total Dissolved Solids
8804016-05B	4B	04-09	N	NO3	Nitrate
8804016-05C	4B	04-09	N	AS_G	Metals
8804016-05C	4B	04-09	N	HG_C	Metals
8804016-05C	4B	04-09	N	ICP200	Metal Screen (ICP)
8804016-05C	4B	04-09	N	SE_G	Metals
8804016-06A	4B	04-10	ER	CL_T	Chloride
8804016-06A	4B	04-10	ER	F_SIE	Fluoride
8804016-06A	4B	04-10	ER	OPO4	Orthophosphate
8804016-06A	4B	04-10	ER	SO4_N	Sulfate
8804016-06A	4B	04-10	ER	TDS	Total Dissolved Solids
8804016-06B	4B	04-10	ER	NO3	Nitrate
8804016-06C	4B	04-10	ER	AS_G	Metals
8804016-06C	4B	04-10	ER	SE_G	Metals
8804016-06C	4B	04-10	ER	HG_C	Metals
8804016-06C	4B	04-10	ER	ICP200	Metal Screen (ICP)
8804016-07A	P2	04-11	N	CL_T	Chloride
8804016-07A	P2	04-11	N	F_SIE	Fluoride
8804016-07A	P2	04-11	N	OPO4	Orthophosphate
8804016-07A	P2	04-11	N	SO4_N	Sulfate
8804016-07A	P2	04-11	N	TDS	Total Dissolved Solids
8804016-07B	P2	04-11	N	NO3	Nitrate
8804016-07C	P2	04-11	N	AS_G	Metals
8804016-07C	P2	04-11	N	SE_G	Metals
8804016-07C	P2	04-11	N	HG_C	Metals
8804016-07C	P2	04-11	N	ICP200	Metal Screen (ICP)
8804017-01A	12A	04-04	N	EPA601	Purgeable Halocarbons
8804017-01C	12A	04-04	N	EPA602	Purgeable Aromatics
8804017-01C	12A	04-04	N	XYLENE	Purgeable Aromatics
8804017-02A	P1	04-05	N	EPA601	Purgeable Halocarbons
8804017-02C	P1	04-05	N	EPA602	Purgeable Aromatics
8804017-02C	P1	04-05	N	XYLENE	Purgeable Aromatics
8804017-03A	4A	04-06	N	EPA601	Purgeable Halocarbons
8804017-03C	4A	04-06	N	EPA602	Purgeable Aromatics
8804017-03C	4A	04-06	N	XYLENE	Purgeable Aromatics
8804017-04A	4A	04-07	TB	EPA601	Purgeable Halocarbons
8804017-04C	4A	04-07	TB	EPA602	Purgeable Aromatics
8804017-04C	4A	04-07	TB	XYLENE	Purgeable Aromatics
8804017-05A	4A	04-08	FB	EPA601	Purgeable Halocarbons
8804017-05C	4A	04-08	FB	EPA602	Purgeable Aromatics

Lab ID	Location ID	Sample ID	Sample Type	Method Code	Method
8804017-05C	4A	04-08	FB	XYLENE	Purgeable Aromatics
8804017-06A	4B	04-09	N	EPA601	Purgeable Halocarbons
8804017-06C	4B	04-09	N	EPA602	Purgeable Aromatics
8804017-06C	4B	04-09	N	XYLENE	Purgeable Aromatics
8804017-07A	4B	04-10	ER	EPA601	Purgeable Halocarbons
8804017-07C	4B	04-10	ER	EPA602	Purgeable Aromatics
8804017-07C	4B	04-10	ER	XYLENE	Purgeable Aromatics
8804017-08A	P2	04-11	N	EPA601	Purgeable Halocarbons
8804017-08C	P2	04-11	N	EPA602	Purgeable Aromatics
8804017-08C	P2	04-11	N	XYLENE	Purgeable Aromatics
8804017-10A	12A	04-04	N	EPA601	Purgeable Halocarbons
8804017-10A	12A	04-04	N	EPA602	Purgeable Aromatics
8804017-10A	12A	04-04	N	XYLENE	Purgeable Aromatics
8804017-11A	P1	04-05	N	EPA602	Purgeable Aromatics
8804017-11A	P1	04-05	N	XYLENE	Purgeable Aromatics
8804017-12A	4A	04-06	N	EPA601	Purgeable Halocarbons
8804017-13A	4A	04-07	TB	EPA602	Purgeable Aromatics
8804017-13A	4A	04-07	TB	XYLENE	Purgeable Aromatics
8804017-14A	4A	04-08	FB	EPA602	Purgeable Aromatics
8804017-14A	4A	04-08	FB	XYLENE	Purgeable Aromatics
8804017-15A	4B	04-10	ER	EPA602	Purgeable Aromatics
8804017-15A	4B	04-10	ER	XYLENE	Purgeable Aromatics
8804017-16A	P2	04-11	N	EPA602	Purgeable Aromatics
8804017-16A	P2	04-11	N	XYLENE	Purgeable Aromatics

CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 03/25/88 07:56:34

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 15
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: 05-10-12
TAKEN: RP, GM
TRANS: Fed Ex
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

2nd column confirmations run on 601 -02, -03, -06 and 602 -01, -04, -05. ** Possible interferences.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	03-23
02	03-24
03	03-25
04	03-26
05	03-27
06	03-28
07	03-29
08	03-30
09	reagent blank
10	2nd col conf 03-23
11	2nd col conf 03-24
12	2nd col conf 03-25
13	2nd col conf 03-26
14	2nd col conf 03-27
15	2nd col conf 03-28

TEST CODES and NAMES used on this report

EPA601	EPA method 601
EPA602	EPA method 602
XYLENE	Xylenes, EPA 602

CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-23 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST RW
INSTRMT G
INJECTD 03/05/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	7.5
74-83-9	Bromomethane	ND	30
75-01-4	Vinyl chloride	ND	5.0
75-00-3	Chloroethane	ND	13
75-09-2	Methylene chloride	ND	7.5
75-69-4	Trichlorofluoromethane	ND	2.5
75-35-4	1,1-Dichloroethene	ND	2.5
75-34-3	1,1-Dichloroethane	ND	2.3
156-60-5	trans-1,2-Dichloroethene	ND	5.0
67-66-3	Chloroform	ND	1.3
107-06-2	1,2-Dichloroethane	ND	0.75
71-55-6	1,1,1-Trichloroethane	ND	2.3
56-23-5	Carbon tetrachloride	ND	2.5
75-27-4	Bromodichloromethane	ND	2.5

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-23 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	2.5
10061-02-6	trans-1,3-Dichloropropene-A	ND	7.5
79-01-6	Trichloroethene	48	5.0
124-48-1	Dibromochloromethane-B	ND	5.0
79-00-5	1,1,2-Trichloroethane-B	ND	1.8
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	5.0
75-25-2	Bromoform	ND	7.5
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	3.0
127-18-4	Tetrachloroethene-C	ND	0.75
108-90-7	Chlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	7.5
95-50-1	1,2-Dichlorobenzene	ND	13
106-46-7	1,4-Dichlorobenzene	ND	10

SURROGATES

74-97-5	Bromochloromethane	102	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-23 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 108 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-23 FRACTION 01C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/10/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	7.6	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	9.% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-23

FRACTION 01C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-23 FRACTION 01C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTD 03/10/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 93% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-24 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST RW
INSTRMT G
INJECTD 03/05/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	7.5
74-83-9	Bromomethane	ND	30
75-01-4	Vinyl chloride	ND	5.0
75-00-3	Chloroethane	ND	13
75-09-2	Methylene chloride	ND	7.5
75-69-4	Trichlorofluoromethane	ND	2.5
75-35-4	1,1-Dichloroethene	ND	2.5
75-34-3	1,1-Dichloroethane	ND	2.3
156-60-5	trans-1,2-Dichloroethene	ND	5.0
67-66-3	Chloroform	ND	1.3
107-06-2	1,2-Dichloroethane	ND	0.75
71-55-6	1,1,1-Trichloroethane	ND	2.3
56-23-5	Carbon tetrachloride	ND	2.5
75-27-4	Bromodichloromethane	ND	2.5

SAMPLE ID 03-24 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	2.5
10061-02-6	trans-1,3-Dichloropropene-A	ND	7.5
79-01-6	Trichloroethene	110	5.0
124-48-1	Dibromochloromethane-B	ND	5.0
79-00-5	1,1,2-Trichloroethane-B	ND	1.8
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	5.0
75-25-2	Bromoform	ND	7.5
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	3.0
127-18-4	Tetrachloroethene-C	42	0.75
108-90-7	Chlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	7.5
95-50-1	1,2-Dichlorobenzene	ND	13
106-46-7	1,4-Dichlorobenzene	ND	10

SURROGATES

74-97-5	Bromochloromethane	99	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-24 FRACTION 02A · TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 112 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-24

FRACTION 02C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/10/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	5
108-88-3	Toluene	9.0*	5
100-41-4	Ethylbenzene	ND	8
108-90-7	Chlorobenzene-A	ND	8
106-46-7	1,4-Dichlorobenzene	ND	8
541-73-1	1,3-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	101% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-24 FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-24

FRACTION 02C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

FILE #

INJECTD 03/10/88

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	5
108-38-3	m-Xylene-A	ND	5
95-47-6	o-Xylene	ND	3

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 101% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-25 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST RW
INSTRMT G
INJECTD 03/05/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	7.5
74-83-9	Bromomethane	ND	30
75-01-4	Vinyl chloride	ND	5.0
75-00-3	Chloroethane	ND	13
75-09-2	Methylene chloride	ND	7.5
75-69-4	Trichlorofluoromethane	ND	2.5
75-35-4	1,1-Dichloroethene	ND	2.5
75-34-3	1,1-Dichloroethane	ND	2.3
156-60-5	trans-1,2-Dichloroethene	ND	5.0
67-66-3	Chloroform	ND	1.3
107-06-2	1,2-Dichloroethane	ND	0.75
71-55-6	1,1,1-Trichloroethane	ND	2.3
56-23-5	Carbon tetrachloride	ND	2.5
75-27-4	Bromodichloromethane	ND	2.5

SAMPLE ID 03-25 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	2.5
10061-02-6	trans-1,3-Dichloropropene-A	ND	7.5
79-01-6	Trichloroethene	110	5.0
124-48-1	Dibromochloromethane-B	ND	5.0
79-00-5	1,1,2-Trichloroethane-B	ND	1.8
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	5.0
75-25-2	Bromoform	ND	7.5
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	3.0
127-18-4	Tetrachloroethene-C	43	0.75
108-90-7	Chlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	7.5
95-50-1	1,2-Dichlorobenzene	ND	13
106-46-7	1,4-Dichlorobenzene	ND	10

SURROGATES

74-97-5	Bromochloromethane	101	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-25 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 113 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-25

FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	5
108-88-3	Toluene	ND	5
100-41-4	Ethylbenzene	ND	8
108-90-7	Chlorobenzene-A	ND	8
106-46-7	1,4-Dichlorobenzene	ND	8
541-73-1	1,3-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	106% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

KADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-25

FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-25

FRACTION 03C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTD 03/11/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	5
108-38-3	m-Xylene-A	ND	5
95-47-6	o-Xylene	ND	3

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	106% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 03-26 FRACTION 04A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT G INJECTD 03/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	18	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	3.2	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	0.3*	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 03-26 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	3.0	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	2.5	0.030
108-90-7	Chlorobenzene	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	1.5
95-50-1	1,2-Dichlorobenzene	ND	2.5
106-46-7	1,4-Dichlorobenzene	ND	2.0

SURROGATES

74-97-5	Bromochloromethane	117	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-26 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 128** % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/04/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-26 FRACTION 04C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	17	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 112% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-26 FRACTION 04C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-26 FRACTION 04C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/11/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	112% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-27 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST RW
INSTRMT G
INJECTD 03/08/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	3.4	0.20
75-00-3	Chloroethane	1.5*	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	0.8	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 03-27 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.8*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	2.6	0.40

SURROGATES

74-97-5	Bromochloromethane	127**	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-27 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 101 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-27

FRACTION 05C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	47	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	5.2	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	98% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-27 FRACTION 05C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/04/88

Results by Sample

SAMPLE ID 03-27 FRACTION 05C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/11/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	98% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-28

FRACTION 06A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW

INSTRMT G

INJECTD 03/08/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	300
74-83-9	Bromomethane	ND	1200
75-01-4	Vinyl chloride	ND	200
75-00-3	Chloroethane	ND	500
75-09-2	Methylene chloride	ND	300
75-69-4	Trichlorofluoromethane	ND	100
75-35-4	1,1-Dichloroethene	ND	100
75-34-3	1,1-Dichloroethane	ND	90
156-60-5	trans-1,2-Dichloroethene	ND	200
67-66-3	Chloroform	ND	50
107-06-2	1,2-Dichloroethane	ND	30
71-55-6	1,1,1-Trichloroethane	ND	90
56-23-5	Carbon tetrachloride	ND	100
75-27-4	Bromodichloromethane	ND	100

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-28 FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	100
10061-02-6	trans-1,3-Dichloropropene-A	ND	300
79-01-6	Trichloroethene	11000	200
124-48-1	Dibromochloromethane-B	ND	200
79-00-5	1,1,2-Trichloroethane-B	ND	70
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	200
75-25-2	Bromoform	ND	300
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	120
127-18-4	Tetrachloroethene-C	ND	30
108-90-7	Chlorobenzene	ND	300
541-73-1	1,3-Dichlorobenzene	ND	300
95-50-1	1,2-Dichlorobenzene	ND	500
106-46-7	1,4-Dichlorobenzene	ND	400

SURROGATES

74-97-5	Bromochloromethane	105	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-28 FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 113 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-28 FRACTION 06C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-28 FRACTION 06C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

CORPORATION

Received: 03/04/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-28

FRACTION 06C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTD 03/11/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 03-29 FRACTION 07A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT G INJECTD 03/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	75
74-83-9	Bromomethane	ND	300
75-01-4	Vinyl chloride	ND	50
75-00-3	Chloroethane	850	130
75-09-2	Methylene chloride	ND	75
75-69-4	Trichlorofluoromethane	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	23
156-60-5	trans-1,2-Dichloroethene	ND	50
67-66-3	Chloroform	ND	13
107-06-2	1,2-Dichloroethane	ND	7.5
71-55-6	1,1,1-Trichloroethane	ND	23
56-23-5	Carbon tetrachloride	ND	25
75-27-4	Bromodichloromethane	ND	25

SAMPLE ID 03-29 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	25
10061-02-6	trans-1,3-Dichloropropene-A	ND	75
79-01-6	Trichloroethene	1900	50
124-48-1	Dibromochloromethane-B	ND	50
79-00-5	1,1,2-Trichloroethane-B	ND	18
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	50
75-25-2	Bromoform	ND	75
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	30
127-18-4	Tetrachloroethene-C	ND	7.5
108-90-7	Chlorobenzene	ND	75
541-73-1	1,3-Dichlorobenzene	ND	75
95-50-1	1,2-Dichlorobenzene	ND	130
106-46-7	1,4-Dichlorobenzene	ND	100

SURROGATES

74-97-5	Bromochloromethane	104	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-29 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 110 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-29

FRACTION 07C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	103% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-29 FRACTION 07C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-29 FRACTION 07C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTD 03/11/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	103% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-30 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST CL
INSTRMT G
INJECTD 03/09/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	75
74-83-9	Bromomethane	ND	300
75-01-4	Vinyl chloride	ND	50
75-00-3	Chloroethane	ND	130
75-09-2	Methylene chloride	ND	75
75-69-4	Trichlorofluoromethane	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	23
156-60-5	trans-1,2-Dichloroethene	ND	50
67-66-3	Chloroform	ND	13
107-06-2	1,2-Dichloroethane	ND	7.5
71-55-6	1,1,1-Trichloroethane	ND	23
56-23-5	Carbon tetrachloride	ND	25
75-27-4	Bromodichloromethane	ND	25

SAMPLE ID 03-30 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	25
10061-02-6	trans-1,3-Dichloropropene-A	ND	75
79-01-6	Trichloroethene	ND	50
124-48-1	Dibromochloromethane-B	ND	50
79-00-5	1,1,2-Trichloroethane-B	ND	18
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	50
75-25-2	Bromoform	ND	75
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	30
127-18-4	Tetrachloroethene-C	ND	7.5
108-90-7	Chlorobenzene	ND	75
541-73-1	1,3-Dichlorobenzene	ND	75
95-50-1	1,2-Dichlorobenzene	ND	130
106-46-7	1,4-Dichlorobenzene	ND	100

SURROGATES

74-97-5	Bromochloromethane	105	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

KADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-30 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene 99 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 03-30 FRACTION OBC TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

KADIAN CORPORATION

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 03-30

FRACTION OBC TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/04/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-036

SAMPLE ID 03-30

FRACTION 08C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTD 03/11/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
G = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT G INJECTD 03/09/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID reagent blank FRACTION 09A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/11/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 2nd col conf 03-23 FRACTION 10A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 03/14/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	12	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 2nd col conf 03-23 FRACTION 10A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KAPLAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 2nd col conf 03-23 FRACTION 10A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/14/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID 2nd col conf 03-24 FRACTION 11A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

ANALYST CL VERIFIED CL
INSTRMT B INJECTD 03/09/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	7.5
74-83-9	Bromomethane	ND	30
75-01-4	Vinyl chloride	ND	5.0
75-00-3	Chloroethane	ND	13
75-09-2	Methylene chloride	ND	7.5
75-69-4	Trichlorofluoromethane	ND	2.5
75-35-4	1,1-Dichloroethene	ND	2.5
75-34-3	1,1-Dichloroethane	ND	2.3
156-60-5	trans-1,2-Dichloroethene	ND	5.0
67-66-3	Chloroform	ND	1.3
107-06-2	1,2-Dichloroethane	ND	0.75
71-55-6	1,1,1-Trichloroethane	ND	2.3
56-23-5	Carbon tetrachloride	ND	2.5
75-27-4	Bromodichloromethane	ND	2.5

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample Continued From Above

SAMPLE ID 2nd col conf 03-24 FRACTION 11A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	2.5
10061-02-6	trans-1,3-Dichloropropene-A	ND	7.5
79-01-6	Trichloroethene	150	5.0
124-48-1	Dibromochloromethane-B	ND	5.0
79-00-5	1,1,2-Trichloroethane-B	ND	1.8
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	5.0
75-25-2	Bromoform	ND	7.5
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	3.0
127-18-4	Tetrachloroethene-C	52	0.75
108-90-7	Chlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	7.5
95-50-1	1,2-Dichlorobenzene	ND	13
106-46-7	1,4-Dichlorobenzene	ND	10

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 2nd col conf 03-24 FRACTION 11A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 2nd col conf 03-25 FRACTION 12A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

ANALYST CL VERIFIED CL

INSTRMT B INJECTD 03/09/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	7.5
74-83-9	Bromomethane	ND	30
75-01-4	Vinyl chloride	ND	5.0
75-00-3	Chloroethane	ND	13
75-09-2	Methylene chloride	ND	7.5
75-69-4	Trichlorofluoromethane	ND	2.5
75-35-4	1,1-Dichloroethene	ND	2.5
75-34-3	1,1-Dichloroethane	ND	2.3
156-60-5	trans-1,2-Dichloroethene	ND	5.0
67-66-3	Chloroform	ND	1.3
107-06-2	1,2-Dichloroethane	ND	0.75
71-55-6	1,1,1-Trichloroethane	ND	2.3
56-23-5	Carbon tetrachloride	ND	2.5
75-27-4	Bromodichloromethane	ND	2.5

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036
Continued From Above

SAMPLE ID 2nd col conf 03-25 FRACTION 12A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	2.5
10061-02-6	trans-1,3-Dichloropropene-A	ND	7.5
79-01-6	Trichloroethene	180	5.0
124-48-1	Dibromochloromethane-B	ND	5.0
79-00-5	1,1,2-Trichloroethane-B	ND	1.8
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	5.0
75-25-2	Bromoform	ND	7.5
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	3.0
127-18-4	Tetrachloroethene-C	60	0.75
108-90-7	Chlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	7.5
95-50-1	1,2-Dichlorobenzene	ND	13
106-46-7	1,4-Dichlorobenzene	ND	10

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036
Received: 03/04/88 Results by Sample Continued From Above

SAMPLE ID 2nd col conf 03-25 FRACTION 12A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 2nd col conf 03-26 FRACTION 13A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/14/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	9.7	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 2nd col conf 03-26 FRACTION 13A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 2nd col conf 03-26 FRACTION 13A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/14/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 03/04/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-036

SAMPLE ID 2nd col conf 03-26 FRACTION 13A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/14/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID 2nd col conf 03-27 FRACTION 14A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/03/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample

SAMPLE ID 2nd col conf 03-27 FRACTION 14A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/03/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/14/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-036

Received: 03/04/88

Results by Sample

SAMPLE ID 2nd col conf 03-28 FRACTION 15A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

ANALYST CL VERIFIED CL

INSTRMT B INJECTD 03/09/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	300
74-83-9	Bromomethane	ND	1200
75-01-4	Vinyl chloride	ND	200
75-00-3	Chloroethane	ND	500
75-09-2	Methylene chloride	ND	300
75-69-4	Trichlorofluoromethane	ND	100
75-35-4	1,1-Dichloroethene	ND	100
75-34-3	1,1-Dichloroethane	ND	90
156-60-5	trans-1,2-Dichloroethene	ND	200
67-66-3	Chloroform	ND	50
107-06-2	1,2-Dichloroethane	ND	30
71-55-6	1,1,1-Trichloroethane	ND	90
56-23-5	Carbon tetrachloride	ND	100
75-27-4	Bromodichloromethane	ND	100

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-036

Received: 03/04/88 Results by Sample Continued From Above

SAMPLE ID 2nd col conf 03-28 FRACTION 15A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/03/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	100
10061-02-6	trans-1,3-Dichloropropene-A	ND	300
79-01-6	Trichloroethene	11000	200
124-48-1	Dibromochloromethane-B	ND	200
79-00-5	1,1,2-Trichloroethane-B	ND	70
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	200
75-25-2	Bromoform	ND	300
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	120
127-18-4	Tetrachloroethene-C	ND	30
108-90-7	Chlorobenzene	ND	300
541-73-1	1,3-Dichlorobenzene	ND	300
95-50-1	1,2-Dichlorobenzene	ND	500
106-46-7	1,4-Dichlorobenzene	ND	400

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 2nd col conf 03-28 FRACTION 15A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/03/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	SPR601	01D	SPR602
02B	SPR601	02D	SPR602
03B	SPR601	03D	SPR602
04B	SPR601	04D	SPR602
05B	SPR601	05D	SPR602
06B	SPR601	06D	SPR602
07B	SPR601	07D	SPR602
08B	SPR601	08D	SPR602

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 03/28/88 10:29:36

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 12
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: 05,04,30
TAKEN: W. G. McIntyre/R. Petrossian
TRANS: FED EX
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

2nd column confirmations run on 602 -04, -05, -06. Unknown compounds present in 602 -05, -06. P and o-xylenes confirmed on 602 -05, -06 but not quantitated due to coelution.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	03-31
02	03-32
03	03-33
03	03/33
04	03-34
05	03-35
06	03-36
07	03-37
08	03-38
09	reagent blank
10	2nd col conf 03-34
11	2nd col conf 03-35
12	2nd col conf 03-36

TEST CODES and NAMES used on this report

EPA601	EPA method 601
EPA602	EPA method 602
XYLENE	Xylenes, EPA 602

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-31 FRACTION 01A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/04/88 Category

ANALYST RW

INSTRMT G

INJECTD 03/12/88

FILE #

VERIFIED CL

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	150
74-83-9	Bromomethane	ND	600
75-01-4	Vinyl chloride	ND	100
75-00-3	Chloroethane	ND	250
75-09-2	Methylene chloride	ND	150
75-69-4	Trichlorofluoromethane	ND	50
75-35-4	1,1-Dichloroethene	ND	50
75-34-3	1,1-Dichloroethane	ND	45
156-60-5	trans-1,2-Dichloroethene	ND	100
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	15
71-55-6	1,1,1-Trichloroethane	ND	45
56-23-5	Carbon tetrachloride	ND	50
75-27-4	Bromodichloromethane	ND	50

SAMPLE ID 03-31 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	50
10061-02-6	trans-1,3-Dichloropropene-A	ND	150
79-01-6	Trichloroethene	4200	100
124-48-1	Dibromochloromethane-B	ND	100
79-00-5	1,1,2-Trichloroethane-B	ND	35
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	100
75-25-2	Bromoform	ND	150
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	60
127-18-4	Tetrachloroethene-C	ND	15
108-90-7	Chlorobenzene	ND	150
541-73-1	1,3-Dichlorobenzene	ND	150
95-50-1	1,2-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	200

SURROGATES

74-97-5	Bromochloromethane	89	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

KADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-31 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 102 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-31 FRACTION 01C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 03/11/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

KADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-31 FRACTION 01C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-31 FRACTION 01C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTD 03/11/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-32 FRACTION 02A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/04/88 Category

ANALYST RW VERIFIED CL

INSTRMT G INJECTD 03/12/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	150
74-83-9	Bromomethane	ND	600
75-01-4	Vinyl chloride	ND	100
75-00-3	Chloroethane	ND	250
75-09-2	Methylene chloride	ND	150
75-69-4	Trichlorofluoromethane	ND	50
75-35-4	1,1-Dichloroethene	ND	50
75-34-3	1,1-Dichloroethane	ND	45
156-60-5	trans-1,2-Dichloroethene	ND	100
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	15
71-55-6	1,1,1-Trichloroethane	ND	45
56-23-5	Carbon tetrachloride	ND	50
75-27-4	Bromodichloromethane	ND	50

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-32 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	50
10061-02-6	trans-1,3-Dichloropropene-A	ND	150
79-01-6	Trichloroethene	3900	100
124-48-1	Dibromochloromethane-B	ND	100
79-00-5	1,1,2-Trichloroethane-B	ND	35
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	100
75-25-2	Bromoform	ND	150
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	60
127-18-4	Tetrachloroethene-C	ND	15
108-90-7	Chlorobenzene	ND	150
541-73-1	1,3-Dichlorobenzene	ND	150
95-50-1	1,2-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	200
	SURROGATES		
74-97-5	Bromochloromethane	105	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-32 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 116 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-32 FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTED 03/11/88
FILE #
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

KADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-32 FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

CORPORATION

Received: 03/05/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-32

FRACTION 02C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTD 03/11/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-33 FRACTION 03A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT Q INJECTD 03/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	150
74-83-9	Bromomethane	ND	600
75-01-4	Vinyl chloride	ND	100
75-00-3	Chloroethane	ND	250
75-09-2	Methylene chloride	ND	150
75-69-4	Trichlorofluoromethane	ND	50
75-35-4	1,1-Dichloroethene	ND	50
75-34-3	1,1-Dichloroethane	ND	45
156-60-5	trans-1,2-Dichloroethene	ND	100
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	15
71-55-6	1,1,1-Trichloroethane	ND	45
56-23-5	Carbon tetrachloride	ND	50
75-27-4	Bromodichloromethane	ND	50

SAMPLE ID 03-33 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	50
10061-02-6	trans-1,3-Dichloropropene-A	ND	150
79-01-6	Trichloroethene	2700	100
124-48-1	Dibromochloromethane-B	ND	100
79-00-5	1,1,2-Trichloroethane-B	ND	35
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	100
75-25-2	Bromoform	ND	150
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	60
127-18-4	Tetrachloroethene-C	ND	15
108-90-7	Chlorobenzene	ND	150
541-73-1	1,3-Dichlorobenzene	ND	150
95-50-1	1,2-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	200

SURROGATES

74-97-5	Bromochloromethane	102	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-33 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 103 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-33 FRACTION 03C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 101% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

KADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-33 FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-33 FRACTION 03C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTD 03/11/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND,@	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 101% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-34 FRACTION 04A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/04/88 Category

ANALYST RW VERIFIED CL

INSTRMT G INJECTD 03/12/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	1.1	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-34

FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.9*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	100	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-34 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 110 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/05/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-34 FRACTION 04C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/11/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	6.5	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 108% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 03-34 FRACTION 04C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

SAMPLE ID 03-34 FRACTION 04C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW FILE #
INSTRMT D INJECTD 03/11/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 108% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-35

FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

ANALYST RW
INSTRMT B

INJECTD 03/15/88

FILE #

VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	8.1	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 03-35 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.2*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	0.5	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	116	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-35 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 117 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-35

FRACTION 05C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/12/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	4400	50
108-88-3	Toluene	12000	50
100-41-4	Ethylbenzene	1900	80
108-90-7	Chlorobenzene-A	ND	80
106-46-7	1,4-Dichlorobenzene	ND	80
541-73-1	1,3-Dichlorobenzene	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-35

FRACTION OSC TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-35

FRACTION 05C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/12/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	2500	50
108-38-3	m-Xylene-A	5500	50
95-47-6	o-Xylene	3500	30

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-36 FRACTION 06A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT B INJECTD 03/15/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	0.2*	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-36

FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	107	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-36

FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 114 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-36 FRACTION 06C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 03/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	37	2
108-88-3	Toluene	17	2
100-41-4	Ethylbenzene	21	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-36

FRACTION 06C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-36

FRACTION 06C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

FILE #

INJECTD 03/12/88

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	7.1	0.2
108-38-3	m-Xylene-A	2.4	0.2
95-47-6	o-Xylene	3.6	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-37

FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

ANALYST RW
INSTRMT B
INJECTD 03/15/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	150
74-83-9	Bromomethane	ND	600
75-01-4	Vinyl chloride	ND	100
75-00-3	Chloroethane	ND	250
75-09-2	Methylene chloride	ND	150
75-69-4	Trichlorofluoromethane	ND	50
75-35-4	1,1-Dichloroethene	ND	50
75-34-3	1,1-Dichloroethane	ND	45
156-60-5	trans-1,2-Dichloroethene	890	100
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	15
71-55-6	1,1,1-Trichloroethane	ND	45
56-23-5	Carbon tetrachloride	ND	50
75-27-4	Bromodichloromethane	ND	50

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-37 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	50
10061-02-6	trans-1,3-Dichloropropene-A	ND	150
79-01-6	Trichloroethene	3700	100
124-48-1	Dibromochloromethane-B	ND	100
79-00-5	1,1,2-Trichloroethane-B	ND	35
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	100
75-25-2	Bromoform	ND	150
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	60
127-18-4	Tetrachloroethene-C	ND	15
108-90-7	Chlorobenzene	ND	150
541-73-1	1,3-Dichlorobenzene	ND	150
95-50-1	1,2-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	200

SURROGATES

74-97-5	Bromochloromethane	114	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-37 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 119 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-37

FRACTION 07C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/12/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 107% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-37

FRACTION 07C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-37

FRACTION 07C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTD 03/12/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 107% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 03-38

FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST RW
INSTRMT B

INJECTD 03/15/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	150
74-83-9	Bromomethane	ND	600
75-01-4	Vinyl chloride	ND	100
75-00-3	Chloroethane	ND	250
75-09-2	Methylene chloride	ND	150
75-69-4	Trichlorofluoromethane	ND	50
75-35-4	1,1-Dichloroethene	ND	50
75-34-3	1,1-Dichloroethane	ND	45
156-60-5	trans-1,2-Dichloroethene	910	100
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	15
71-55-6	1,1,1-Trichloroethane	ND	45
56-23-5	Carbon tetrachloride	ND	50
75-27-4	Bromodichloromethane	ND	50

SAMPLE ID 03-38 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	50
10061-02-6	trans-1,3-Dichloropropene-A	ND	150
79-01-6	Trichloroethene	3800	100
124-48-1	Dibromochloromethane-B	ND	100
79-00-5	1,1,2-Trichloroethane-B	ND	35
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	100
75-25-2	Bromoform	ND	150
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	60
127-18-4	Tetrachloroethene-C	ND	15
108-90-7	Chlorobenzene	ND	150
541-73-1	1,3-Dichlorobenzene	ND	150
95-50-1	1,2-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	200

SURROGATES

74-97-5	Bromochloromethane	110	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-38

FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/04/88 Category

460-00-4 1-Bromo-4-fluorobenzene 114 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 03-38 FRACTION 08C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 03/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	20
108-88-3	Toluene	ND	20
100-41-4	Ethylbenzene	ND	30
108-90-7	Chlorobenzene-A	ND	30
106-46-7	1,4-Dichlorobenzene	ND	30
541-73-1	1,3-Dichlorobenzene	ND	40
95-50-1	1,2-Dichlorobenzene	ND	40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	106% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 03-38

FRACTION 08C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID 03-38 FRACTION OBC TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	20
108-38-3	m-Xylene-A	ND	20
95-47-6	o-Xylene	ND	10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 106% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected not specified Category

ANALYST CL VERIFIED CL

INSTRMT B INJECTD 03/15/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/05/88 Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 03/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID reagent blank

FRACTION 09A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-040

Received: 03/05/88

Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 03/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 2nd col conf 03-34 FRACTION 10A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 03/14/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	4.8	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

SAMPLE ID 2nd col conf 03-34 FRACTION 10A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 2nd col conf 03-34

FRACTION 10A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTD 03/14/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 2nd col conf 03-35 FRACTION 11A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 03/14/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	5200	50
108-88-3	Toluene	14000	50
100-41-4	Ethylbenzene	2100	80
108-90-7	Chlorobenzene-A	ND	80
106-46-7	1,4-Dichlorobenzene	ND	80
541-73-1	1,3-Dichlorobenzene	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 2nd col conf 03-35 FRACTION 11A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 2nd col conf 03-35 FRACTION 11A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/14/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	50
108-38-3	m-Xylene-A	ND	50
95-47-6	o-Xylene	3900	30

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-040

Received: 03/05/88 Results by Sample

SAMPLE ID 2nd col conf 03-36 FRACTION 12A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 03/14/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	150	0.2
108-88-3	Toluene	52	0.2
100-41-4	Ethylbenzene	32	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040
Continued From Above

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Received: 03/05/88

SAMPLE ID 2nd col conf 03-36

FRACTION 12A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/04/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-040

SAMPLE ID 2nd col conf 03-36 FRACTION 12A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/04/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 03/14/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	10	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	!	SPR601	01D	!	SPR602
02B	!	SPR601	02D	!	SPR602
03B	!	SPR601			
03D	!	SPR602			
04B	!	SPR601	04D	!	SPR602
05B	!	SPR601	05D	!	SPR602
06B	!	SPR601	06D	!	SPR602
07B	!	SPR601	07D	!	SPR602
08B	!	SPR601	08D	!	SPR602

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-041

Received: 03/05/88 06/17/88 14:24:05

REPORT TO: Radian, Bl. 4, Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 8

COMPANY: Carswell AFB

FACILITY: IRP

PREPARED BY: Radian Analytical Services, 8501 Mo-pac Bl., PO Box 201088, Austin, TX 78720-1088

ATTEN:

PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

WORK ID: 05,04,30

TAKEN: W. G. McIntyre/R. Petrossian

TRANS: FED EX

TYPE:

P.O. #: 227-005-04-40

INVOICE: under separate cover

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	03-31
02	03-32
03	03-33
04	03-34
05	03-35
06	03-36
07	03-37
08	03-38

TEST CODES and NAMES used on this report

AS G	Arsenic, graphite AA
CL T	Chloride
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
F SIE	Fluoride, SIE
HC IR	Hydrocarbons
HG C	Mercury, cold vapor
ICP200	ICPES, EPA 200.7 elements
NO2NO3	Nitrate + nitrite
OPO4	Orthophosphate
PB G	Lead, graphite AA
SE G	Selenium, graphite AA
SO4 N	Sulfate, nephelometry
TDS	Total dissolved solids

RAS - Austin REPORT

Work Order # 88-03-041

Received: 03/05/88

Results By Test

SAMPLE Sample Id	Test: AS G ug/ml	Test: CL T mg/L	Test: DG3020 date complete	Test: DG6010 date complete	Test: F SIE mg/L
01 03-31	0.006*R	21	03/08/88	03/10/88	0.31
02 03-32	0.006*	18	03/08/88	03/10/88	0.26@
03 03-33	<0.004	21	03/08/88	03/10/88	0.27
04 03-34	<0.004		03/08/88	03/10/88	
05 03-35	0.010*		03/08/88	03/10/88	
06 03-36	0.45		03/08/88	03/10/88	
07 03-37	0.006*	21	03/08/88	03/10/88	0.30
08 03-38	<0.004	21	03/08/88	03/10/88	0.25

SAMPLE Sample Id	Test: HC IR mg/L	Test: NO2NO3 mg/L as N	Test: PB G ug/ml	Test: SE G ug/ml	Test: SO4 N mg/L
01 03-31		3.0B		<0.005R	47
02 03-32		4.0		<0.005	50
03 03-33		0.82		<0.02@	48
04 03-34	0.4*		0.058	<0.005	

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results By Test

Work Order # 88-03-041
Continued From Above

SAMPLE Sample Id	Test: HC IR mg/L	Test: NO2NO3 mg/L as N	Test: PB G ug/ml	Test: SE G ug/ml	Test: SO4 N mg/L
05 03-35	30		0.140	<0.005	
06 03-36	0.5*		0.024	<0.005	
07 03-37		1.6		<0.005	55
08 03-38		1.3		<0.005	34

Page 4
Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-31

FRACTION 01A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-31

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	12	0.10
Al	Aluminum	35	0.20	Mn	Manganese	0.61	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	23	0.080
Ba	Barium	0.20	0.0090	Ni	Nickel	0.066*	0.020
Be	Beryllium	<0.001	0.0010	Pb	Lead	<0.05	0.050
Ca	Calcium	500	0.060	Sb	Antimony	0.079*	0.060
Cd	Cadmium	<0.003	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	0.013*	0.010	Si	Silicon	68	0.30
Cr	Chromium	0.059	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	<0.01	0.010	V	Vanadium	0.10	0.020
Fe	Iron	59	0.030	Zn	Zinc	0.075	0.0060
K	Potassium	6.6	0.30				

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-31

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 03-31 FRACTION 01B TEST CODE OPO4 NAME Orthophosphate
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 03/05/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.06*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-31 FRACTION 01B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	640	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

SAMPLE ID 03-31 FRACTION 01B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-32 FRACTION 02A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 03/23/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-32

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	8.3	0.10
Al	Aluminum	11	0.20	Mn	Manganese	4.2	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	22	0.080
Ba	Barium	0.37	0.0090	Ni	Nickel	0.026*	0.020
Be	Beryllium	<0.001	0.0010	Pb	Lead	<0.05	0.050
Ca	Calcium	300	0.060	Sb	Antimony	0.061*	0.060
Cd	Cadmium	<0.003	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	<0.01	0.010	Si	Silicon	27	0.30
Cr	Chromium	0.034*	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	<0.01	0.010	V	Vanadium	0.025*	0.020
Fe	Iron	25	0.030	Zn	Zinc	0.035	0.0060
K	Potassium	4.1	0.30				

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-32

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 03-32 FRACTION 02B TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 03/05/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.05*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-32 FRACTION 02B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	550	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-32 FRACTION 02B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-33 FRACTION 03A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 03/23/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	0.0002*	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

BRADBURY CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-33 FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	0.011*	0.0090	Mg	Magnesium	40	0.10
Al	Aluminum	90B	0.20	Mn	Manganese	28B	0.0030
As	Arsenic	<0.3R	0.30	Mo	Molybdenum	<0.05R	0.050
B	Boron	<0.6R	0.60	Na	Sodium	25	0.080
Ba	Barium	1.9	0.0090	Ni	Nickel	0.33	0.020
Be	Beryllium	0.003*	0.0010	Pb	Lead	0.24*	0.050
Ca	Calcium	3700B	0.60	Sb	Antimony	0.79R^	0.060
Cd	Cadmium	0.02	0.0030	Se	Selenium	0.34*R	0.30
Co	Cobalt	0.13	0.010	Si	Silicon	130B	0.30
Cr	Chromium	0.24	0.0090	Tl	Thallium	0.11*R	0.090
Cu	Copper	0.20	0.010	V	Vanadium	0.91	0.020
Fe	Iron	300B	0.030	Zn	Zinc	0.34	0.0060
K	Potassium	13	0.30				

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-33

FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-33 FRACTION 03B TEST CODE OPO4 NAME Orthophosphate
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 03/05/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	ND	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-33 FRACTION 03B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	550	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-33 FRACTION 03B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-34 FRACTION 04A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403
ANALYZED 03/23/88
UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

BRADBURN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-34

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	22	0.10
Al	Aluminum	60	0.20	Mn	Manganese	5.8	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	52	0.080
Ba	Barium	0.88	0.0090	Ni	Nickel	0.22	0.020
Be	Beryllium	<0.001	0.0010	Pb	Lead	0.12*	0.050
Ca	Calcium	1400	0.12	Sb	Antimony	0.39	0.060
Cd	Cadmium	0.004*	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	0.074	0.010	Si	Silicon	100	0.30
Cr	Chromium	0.18	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	0.060	0.010	V	Vanadium	0.46	0.020
Fe	Iron	210	0.030	Zn	Zinc	0.34	0.0060
K	Potassium	9.6	0.30				

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-34

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-34 FRACTION 04B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 03/14/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	660	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-35 FRACTION 05A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-35

FRACTION 05A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-35

FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	32	0.10
Al	Aluminum	85	0.20	Mn	Manganese	2.1	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	85	0.080
Ba	Barium	0.64	0.0090	Ni	Nickel	0.24	0.020
Be	Beryllium	0.002*	0.0010	Pb	Lead	0.22*	0.050
Ca	Calcium	970	0.12	Sb	Antimony	0.24*	0.060
Cd	Cadmium	0.005*	0.0030	Se	Selenium	0.31*	0.30
Co	Cobalt	0.07	0.010	Si	Silicon	120	0.30
Cr	Chromium	0.22	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	0.12	0.010	V	Vanadium	0.51	0.020
Fe	Iron	190	0.030	Zn	Zinc	0.39	0.0060
K	Potassium	12	0.30				

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-35

FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-35 FRACTION 05B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 03/14/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	830	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-36 FRACTION 06A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-36

FRACTION 06A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-36 FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	14	0.10
Al	Aluminum	21	0.20	Mn	Manganese	5.5	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	44	0.080
Ba	Barium	0.93	0.0090	Ni	Nickel	0.069*	0.020
Be	Beryllium	<0.001	0.0010	Pb	Lead	0.12*	0.050
Ca	Calcium	510	0.060	Sb	Antimony	0.16*	0.060
Cd	Cadmium	<0.003	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	0.03*	0.010	Si	Silicon	58	0.30
Cr	Chromium	0.066	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	<0.01	0.010	V	Vanadium	0.11	0.020
Fe	Iron	190	0.030	Zn	Zinc	0.046	0.0060
K	Potassium	3.6	0.30				

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-36

FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 03-36 FRACTION 06B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	570	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-37 FRACTION 07A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 03/23/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-37

FRACTION 07A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-37

FRACTION 07A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	19	0.10
Al	Aluminum	24	0.20	Mn	Manganese	2.6	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	20	0.080
Ba	Barium	0.49	0.0090	Ni	Nickel	0.05*	0.020
Be	Beryllium	<0.001	0.0010	Pb	Lead	0.071*	0.050
Ca	Calcium	1800	0.24	Sb	Antimony	0.35	0.060
Cd	Cadmium	<0.003	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	0.014*	0.010	Si	Silicon	50	0.30
Cr	Chromium	0.098	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	0.011*	0.010	V	Vanadium	0.12	0.020
Fe	Iron	48	0.030	Zn	Zinc	0.071	0.0060
K	Potassium	4.5	0.30				

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-37

FRACTION 07A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 03-37 FRACTION 07B TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 03/05/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.04*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-37 FRACTION 07B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	600	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-37 FRACTION 07B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-38 FRACTION 08A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/04/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041

SAMPLE ID 03-38

FRACTION 08A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	<0.009	0.0090	Mg	Magnesium	28	0.10
Al	Aluminum	69	0.20	Mn	Manganese	4.9	0.0030
As	Arsenic	<0.3	0.30	Mo	Molybdenum	<0.05	0.050
B	Boron	<0.6	0.60	Na	Sodium	19	0.080
Ba	Barium	0.75	0.0090	Ni	Nickel	0.18	0.020
Be	Beryllium	0.001*	0.0010	Pb	Lead	0.18*	0.050
Ca	Calcium	2100	0.24	Sb	Antimony	0.35	0.060
Cd	Cadmium	<0.003	0.0030	Se	Selenium	<0.3	0.30
Co	Cobalt	0.076	0.010	Si	Silicon	120	0.30
Cr	Chromium	0.21	0.0090	Tl	Thallium	<0.09	0.090
Cu	Copper	0.099	0.010	V	Vanadium	0.38	0.020
Fe	Iron	170	0.030	Zn	Zinc	0.29	0.0060
K	Potassium	12	0.30				

SAMPLE ID 03-38 FRACTION 08A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/04/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 03-38 FRACTION 08B TEST CODE OPO4 NAME Orthophosphate
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 03/05/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.04*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 03-38 FRACTION 08B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 03/14/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	610	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 03/05/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-041
Continued From Above

SAMPLE ID 03-38 FRACTION 08B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 03/04/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT

07/20/88 09:36:42

Work Order # 88-03-042

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 6
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: 13.03
TAKEN: R. Petrossian/W. G. McInture
TRANS: R. Petrossian
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	03-39
02	03-40
03	03-41
04	03-42
05	03-43
06	03-44

TEST CODES and NAMES used on this report

D3050P	Digestion, method 3050, ICP
HC IR	Hydrocarbons, Total
HG C	Mercury, cold vapor
ICP200	ICPES, EPA 200.7 elements
ONG IR	Oil and grease, infrared
PREP W	Special preparation

RAS - Austin REPORT

Work Order # 88-03-042

Received: 03/07/88

Results By Test

SAMPLE Sample Id	Test: D3050P date complete	Test: HC IR mg/L	Test: ONG IR mg/L	Test: PREP W date complete
01 03-39	03/13/88	1130 ug/g		03/10/88
02 03-40	03/13/88	34 ug/g		03/10/88
03 03-41	03/13/88	1320 ug/g		03/10/88
04 03-42	03/13/88	420 ug/g		03/10/88
05 03-43	03/13/88	960 ug/g		03/10/88
06 03-44			<0.2	

BRAUDIAAN CORPORATION

Page 3
Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-39

FRACTION Q1A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-39

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.76	Mg	Magnesium	1600	8.5
Al	Aluminum	9500B+	17	Mn	Manganese	130R+	0.25
As	Arsenic	50*R	25	Mo	Molybdenum	ND	4.2
B	Boron	ND,B	51	Na	Sodium	70	6.8
Ba	Barium	63R+	0.76	Ni	Nickel	6*	1.7
Be	Beryllium	0.21*	0.085	Pb	Lead	64R	4.2
Ca	Calcium	86000B	10	Sb	Antimony	13*R	5.1
Cd	Cadmium	0.7*	0.25	Se	Selenium	40*R	25
Co	Cobalt	2.9*	0.85	Si	Silicon	200R	25
Cr	Chromium	27	0.76	Tl	Thallium	ND	7.6
Cu	Copper	4.8	0.85	V	Vanadium	23	1.7
Fe	Iron	6900B	2.5	Zn	Zinc	33	0.51
K	Potassium	1100	25				

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042
Continued From Above

SAMPLE ID 03-39

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

GUARDIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-40

FRACTION 02A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RALPHMANN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-40

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

VERIFIED RHH
UNITS ug/g

ANALYST DES

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.84	Mg	Magnesium	1900	9.3
Al	Aluminum	12000	19	Mn	Manganese	200^	0.28
As	Arsenic	70*	28	Mo	Molybdenum	ND	4.7
B	Boron	ND	56	Na	Sodium	67^	7.5
Ba	Barium	630^	0.84	Ni	Nickel	10*	1.9
Be	Beryllium	0.23*	0.093	Pb	Lead	14*	4.7
Ca	Calcium	85000	11	Sb	Antimony	14*	5.6
Cd	Cadmium	1.2*	0.28	Se	Selenium	50*	28
Co	Cobalt	5.1	0.93	Si	Silicon	200	28
Cr	Chromium	16	0.84	Tl	Thallium	20*	8.4
Cu	Copper	5.4	0.93	V	Vanadium	29	1.9
Fe	Iron	15000^	2.8	Zn	Zinc	34^	0.56
K	Potassium	1700	28				

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042
Continued From Above

SAMPLE ID 03-40

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-41

FRACTION 03A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 03/23/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-41

FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.3*	0.89	Mg	Magnesium	1400	9.9
Al	Aluminum	10000	20	Mn	Manganese	86	0.30
As	Arsenic	60*	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	35*	7.9
Ba	Barium	160	0.89	Ni	Nickel	6*	2.0
Be	Beryllium	0.21*	0.099	Pb	Lead	31	5.0
Ca	Calcium	45000	9.9	Sb	Antimony	15*	5.9
Cd	Cadmium	0.6*	0.30	Se	Selenium	30*	30
Co	Cobalt	2.5*	0.99	Si	Silicon	290	30
Cr	Chromium	17	0.89	Tl	Thallium	23*	8.9
Cu	Copper	5.3	0.99	V	Vanadium	18	2.0
Fe	Iron	6000	3.0	Zn	Zinc	34	0.59
K	Potassium	1200	30				

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042
Continued From Above

SAMPLE ID 03-41

FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-42 FRACTION 04A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 03/23/88 UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	0.065*	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-42

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.0*	0.82	Mg	Magnesium	1500	9.1
Al	Aluminum	8200	18	Mn	Manganese	150	0.27
As	Arsenic	60*	27	Mo	Molybdenum	ND	4.5
B	Boron	ND	55	Na	Sodium	110	7.3
Ba	Barium	310	0.82	Ni	Nickel	7*	1.8
Be	Beryllium	0.21*	0.091	Pb	Lead	58	4.5
Ca	Calcium	88000	11	Sb	Antimony	20*	5.5
Cd	Cadmium	3.0	0.27	Se	Selenium	30*	27
Co	Cobalt	3.3*	0.91	Si	Silicon	310	27
Cr	Chromium	26	0.82	Tl	Thallium	21*	8.2
Cu	Copper	18	0.91	V	Vanadium	24	1.8
Fe	Iron	7400	2.7	Zn	Zinc	58	0.55
K	Potassium	930	27				

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042
Continued From Above

SAMPLE ID 03-42

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 03/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-042

SAMPLE ID 03-43 FRACTION 05A TEST CODE HG C NAME Mercury, cold vapor

Date & Time Collected 03/05/88 Category

VERIFIED RHH

ANALYST KCP

INSTRMT 403 ANALYZED 03/23/88 UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

 RAS - Austin REPORT Work Order # 88-03-042

Received: 03/07/88 Results by Sample

SAMPLE ID 03-43 FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/05/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.83	Mg	Magnesium	1700	9.3
Al	Aluminum	13000	19	Mn	Manganese	160	0.28
As	Arsenic	ND	28	Mo	Molybdenum	ND	4.6
B	Boron	ND	56	Na	Sodium	88	7.4
Ba	Barium	55	0.83	Ni	Nickel	9*	1.9
Be	Beryllium	0.29*	0.093	Pb	Lead	21*	4.6
Ca	Calcium	61000	5.6	Sb	Antimony	10*	5.6
Cd	Cadmium	0.6*	0.28	Se	Selenium	40*	28
Co	Cobalt	4.5*	0.93	Si	Silicon	250	28
Cr	Chromium	15	0.83	Tl	Thallium	26*	8.3
Cu	Copper	4.1*	0.93	V	Vanadium	26	1.9
Fe	Iron	8300	2.8	Zn	Zinc	47	0.56
K	Potassium	1400	28				

RADIAN CORPORATION

Received: 03/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-042
Continued From Above

SAMPLE ID 03-43

FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-080

Received: 03/02/88 03/30/88 16:12:43

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 7
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: 1,16,17,stream:2nd col.conf.
TAKEN: RP,GM
TRANS: Fed Ex
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY: Carl Scott

CONTACT: SMITH

Q - Daily Quality Control out of 95% confidence limits of EPA check standards.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	03-01
02	03-03
03	03-04
04	03-05
05	03-06
06	03-07
07	03-09

TEST CODES and NAMES used on this report

EPA601	EPA method 601
EPA602	EPA method 602
XYLENE	Xylenes, EPA 602

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-01

FRACTION 01A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/09/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	20	1
108-88-3	Toluene	27	1
100-41-4	Ethylbenzene	ND	2
108-90-7	Chlorobenzene-A	ND	2
106-46-7	1,4-Dichlorobenzene	ND	2
541-73-1	1,3-Dichlorobenzene	ND	2
95-50-1	1,2-Dichlorobenzene	ND	2

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-01

FRACTION 01A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-01

FRACTION 01A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTD 03/09/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	1
108-38-3	m-Xylene-A	ND	1
95-47-6	o-Xylene	ND	0.5

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-03 FRACTION 02B TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

ANALYST CL
INSTRMT B
INJECTD 03/08/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KRAUSMAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-03 FRACTION 02B TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-03 FRACTION 02B TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-03

FRACTION 02A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

FILE #

INJECTED 03/09/88

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	2
108-88-3	Toluene	5.6	2
100-41-4	Ethylbenzene	ND	3
108-90-7	Chlorobenzene-A	ND	3
106-46-7	1,4-Dichlorobenzene	ND	3
541-73-1	1,3-Dichlorobenzene	ND	4
95-50-1	1,2-Dichlorobenzene	ND	4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-03

FRACTION 02A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-03

FRACTION 02A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

FILE #

INJECTD 03/09/88

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	2
108-38-3	m-Xylene-A	ND	2
95-47-6	o-Xylene	ND	1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-03-080

Received: 03/02/88

Results by Sample

SAMPLE ID 03-04 FRACTION 03A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW

INSTRMT B

INJECTD 03/08/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-04 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	0.9	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 03-04 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-05

FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

ANALYST RW
INSTRMT B

INJECTD 03/08/88

FILE #

VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-05 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	0.7	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-05 FRACTION Q4A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-080

Received: 03/02/88 Results by Sample

SAMPLE ID 03-05 FRACTION 04B TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 03/09/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	11	1
108-88-3	Toluene	22	1
100-41-4	Ethylbenzene	ND	2
108-90-7	Chlorobenzene-A	ND	2
106-46-7	1,4-Dichlorobenzene	ND	2
541-73-1	1,3-Dichlorobenzene	ND	2
95-50-1	1,2-Dichlorobenzene	ND	2

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

IRADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-05

FRACTION 04B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-05

FRACTION 04B TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

FILE #

INJECTD 03/09/88

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	1
108-38-3	m-Xylene-A	ND	1
95-47-6	o-Xylene	ND	0.5

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-06

FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

ANALYST RW
INSTRMT B
INJECTD 03/08/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	0.2*	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-06 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40
	SURROGATES		
74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-06 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-07

FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

ANALYST RW
INSTRMT B
INJECTD 03/08/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	3.2	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	1.2	0.10

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-07

FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	0.5*	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-07 FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-03-080

Received: 03/02/88

Results by Sample

SAMPLE ID 03-07

FRACTION 06B TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 03/09/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	2.9	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	2.8	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-07

FRACTION 06B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-07

FRACTION 06B TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTD 03/09/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-080

Received: 03/02/88 Results by Sample

SAMPLE ID 03-09 FRACTION 07A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 03/01/88 Category

ANALYST RW VERIFIED CL

INSTRMT B INJECTD 03/08/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	0.2*	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KRAUSMANN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-09 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N\A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-09

FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 03/01/88 Category

460-00-4 1-Bromo-4-fluorobenzene N\A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080

SAMPLE ID 03-09

FRACTION 07B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

FILE #

INJECTED 03/09/88

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	2
108-88-3	Toluene	28	2
100-41-4	Ethylbenzene	ND	3
108-90-7	Chlorobenzene-A	ND	3
106-46-7	1,4-Dichlorobenzene	ND	3
541-73-1	1,3-Dichlorobenzene	ND	4
95-50-1	1,2-Dichlorobenzene	ND	4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

Received: 03/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-080
Continued From Above

SAMPLE ID 03-09

FRACTION 07B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 03/01/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-080

Received: 03/02/88 Results by Sample

SAMPLE ID 03-09 FRACTION 07B TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 03/01/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTD 03/09/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	2
108-38-3	m-Xylene-A	ND	2
95-47-6	o-Xylene	ND	1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT

04/27/88 15:44:03

Work Order # S8-03-133

REPORT TO
Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN Larry French

CLIENT CARSWELL AFB SAMPLES 14
COMPANY Carswell AFB.
FACILITY Headquarters, SAC
Offutt, Nebraska 68113

WORK ID Stage 2, Weapons Storage Area
TAKEN 03/29-03/30/88
TRANS Federal 5910117986/5910117975
TYPE Soil-VOA ONLY
P.O. # 227-005-04-40
INVOICE under separate cover

PREPARED BY
Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN

PHONE 916-362-5332

Lucas A. Pitkoper
CERTIFIED BY

CONTACT LARRY FRENCH

SAMPLE IDENTIFICATION

01 CAR8-03-056
02 CAR8-03-057
03 CAR8-03-059
04 CAR8-03-060
05 CAR8-03-047
06 CAR8-03-048
07 CAR8-03-049
08 CAR8-03-050
09 CAR8-03-051
10 CAR8-03-052
11 CAR8-03-053
12 CAR8-03-054
13 CAR8-03-055
14 REAGENT BLANK

TEST CODES and NAMES used on this report

CL8240 Purgeable Organics - Soil
VOA S Volatiles Screen Analysis

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results By Test

Work Order # S8-03-133

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
VOA_S date completed	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED

TEST CODE default units	Sample 06 (entered units)	Sample 07 (entered units)	Sample 08 (entered units)	Sample 09 (entered units)	Sample 10 (entered units)
VOA_S date completed	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED

TEST CODE default units	Sample 11 (entered units)	Sample 12 (entered units)	Sample 13 (entered units)
VOA_S date completed	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED	03/31/88 DATE COMPLETED

RAS Sacramento REPORT

Work Order # S8-03-133

Received: 03/31/88

Results By Test

SAMPLE Sample Id	Test: VOA 5 date completed
01 CAR8-03-056	03/31/88 DATE COMPLETED
02 CAR8-03-057	03/31/88 DATE COMPLETED
03 CAR8-03-059	03/31/88 DATE COMPLETED
04 CAR8-03-060	03/31/88 DATE COMPLETED
05 CAR8-03-047	03/31/88 DATE COMPLETED
06 CAR8-03-048	03/31/88 DATE COMPLETED
07 CAR8-03-049	03/31/88 DATE COMPLETED
08 CAR8-03-050	03/31/88 DATE COMPLETED
09 CAR8-03-051	03/31/88 DATE COMPLETED
10 CAR8-03-052	03/31/88 DATE COMPLETED
11 CAR8-03-053	03/31/88 DATE COMPLETED
12 CAR8-03-054	03/31/88 DATE COMPLETED
13 CAR8-03-055	03/31/88 DATE COMPLETED

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-056

SAMPLE # 01 FRACTIONS: A,B
Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # SB-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAK8-03-056 FRACTION 01A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313301A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	6.0
	74-83-9	bromomethane	ND	6.0
	75-01-4	vinyl chloride	ND	6.0
	75-00-3	chloroethane	ND	6.0
	75-09-2	methylene chloride	ND	3.4
128	67-64-1	acetone	15	9.0
	75-15-0	carbon disulfide	ND	2.0
	75-69-4	trichlorofluoromethane	ND	6.0
	75-35-4	1,1-dichloroethene	ND	5.6
	75-34-3	1,1-dichloroethane	ND	3.4
	156-60-5	trans-1,2-dichloroethene	ND	1.9
	67-66-3	chloroform	ND	1.9
	107-06-2	1,2-dichloroethane	ND	3.4
	78-93-3	2-butanone	ND	30
	71-55-6	1,1,1-trichloroethane	ND	4.6
	56-23-5	carbon tetrachloride	ND	3.4
	108-05-4	vinyl acetate	ND	8.3
	75-27-4	bromodichloromethane	ND	2.6
	78-87-5	1,2-dichloropropane	ND	7.2
	10061-01-5	cis-1,3-dichloropropene	ND	6.0
	79-01-6	trichloroethene	ND	2.3
	124-48-1	dibromochloromethane	ND	3.7
	79-00-5	1,1,2-trichloroethane	ND	6.0
	71-43-2	benzene	ND	5.3
	10061-02-6	trans-1,3-dichloropropene	ND	6.0
	110-75-8	2-chloroethylvinyl ether	ND	6.0
	75-25-2	bromoform	ND	5.6
	591-78-6	2-hexanone	ND	43

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-056

FRACTION Q1A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	55
	127-18-4	tetrachloroethene	ND	4.9
	79-34-5	1,1,2,2-tetrachloroethane	ND	8.3
	108-88-3	toluene	ND	7.2
	108-90-7	chlorobenzene	ND	7.2
	100-41-4	ethylbenzene	ND	8.6
	100-42-5	styrene	ND	3.6
	95-47-6	total xylenes	ND	5.5

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	95 %
384	Toluene-d8	101 %
475	BFB	100 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-057

SAMPLE # 02 FRACTIONS: A,B
Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-057 FRACTION 02A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313302A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	6.0
	74-83-9	bromomethane	ND	6.0
	75-01-4	vinyl chloride	ND	6.0
	75-00-3	chloroethane	ND	6.0
	75-09-2	methylene chloride	ND	3.3
124	67-64-1	acetone	13	8.9
	75-15-0	carbon disulfide	ND	2.0
	75-69-4	trichlorofluoromethane	ND	6.0
	75-35-4	1,1-dichloroethene	ND	5.6
	75-34-3	1,1-dichloroethane	ND	3.3
	156-60-5	trans-1,2-dichloroethene	ND	1.9
	67-66-3	chloroform	ND	1.9
	107-06-2	1,2-dichloroethane	ND	3.3
	78-93-3	2-butanone	ND	30
	71-55-6	1,1,1-trichloroethane	ND	4.5
	56-23-5	carbon tetrachloride	ND	3.3
	108-05-4	vinyl acetate	ND	8.2
	75-27-4	bromodichloromethane	ND	2.6
	78-87-5	1,2-dichloropropane	ND	7.1
	10061-01-5	cis-1,3-dichloropropene	ND	6.0
	79-01-6	trichloroethene	ND	2.3
	124-48-1	dibromochloromethane	ND	3.7
	79-00-5	1,1,2-trichloroethane	ND	6.0
290	71-43-2	benzene	1.2 J	5.2
	10061-02-6	trans-1,3-dichloropropene	ND	6.0
	110-75-8	2-chloroethylvinyl ether	ND	6.0
	75-25-2	bromoform	ND	5.6
	591-78-6	2-hexanone	ND	43

SAMPLE ID CAR8-03-057 FRACTION 02A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	55
	127-18-4	tetrachloroethene	ND	4.9
	79-34-5	1,1,2,2-tetrachloroethane	ND	8.2
	108-88-3	toluene	ND	7.1
	108-90-7	chlorobenzene	ND	7.1
	100-41-4	ethylbenzene	ND	8.6
	100-42-5	styrene	ND	3.6
	95-47-6	total xylenes	ND	5.5

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	92 %
385	Toluene-d8	101 %
476	BFB	99 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-059

SAMPLE # 03 FRACTIONS: A, B
Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAK8-03-059 FRACTION 03A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313303A
INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.7
	74-83-9	bromomethane	ND	5.7
	75-01-4	vinyl chloride	ND	5.7
	75-00-3	chloroethane	ND	5.7
	75-09-2	methylene chloride	ND	3.2
123	67-64-1	acetone	9.6	8.6
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.7
	75-35-4	1,1-dichloroethene	ND	5.4
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.3
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	7.9
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.8
	10061-01-5	cis-1,3-dichloropropene	ND	5.7
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.5
	79-00-5	1,1,2-trichloroethane	ND	5.7
	71-43-2	benzene	ND	5.0
	10061-02-6	trans-1,3-dichloropropene	ND	5.7
	110-75-8	2-chloroethylvinyl ether	ND	5.7
	75-25-2	bromoform	ND	5.4
	591-78-6	2-hexanone	ND	41

SAMPLE ID CAR8-03-059 FRACTION 03A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	52
	127-18-4	tetrachloroethene	ND	4.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.9
	108-88-3	toluene	ND	6.8
	108-90-7	chlorobenzene	ND	6.8
	100-41-4	ethylbenzene	ND	8.2
	100-42-5	styrene	ND	3.4
	95-47-6	total xylenes	ND	5.2

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
212	1,2-dichloroethane-d4	92 %
384	Toluene-d8	103 %
476	BFB	97 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 03/31/88

RADIAN CORPORATION

RAS Sacramento REPORT

Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-060

SAMPLE # 04 FRACTIONS: A,B

Date & Time Collected 03/30/88

Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAK8-03-060 FRACTION 04A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313304A

INSTRMT F4 INJECTD 04/05/88 UNITS ug/L

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.0
	74-83-9	bromomethane	ND	5.0
	75-01-4	vinyl chloride	ND	5.0
	75-00-3	chloroethane	ND	5.0
	75-09-2	methylene chloride	ND	2.8
	67-64-1	acetone	ND	7.5
	75-15-0	carbon disulfide	ND	1.7
	75-69-4	trichlorofluoromethane	ND	5.0
	75-35-4	1,1-dichloroethene	ND	4.7
	75-34-3	1,1-dichloroethane	ND	2.8
	156-60-5	trans-1,2-dichloroethene	ND	1.6
	67-66-3	chloroform	ND	1.6
	107-06-2	1,2-dichloroethane	ND	2.8
	78-93-3	2-butanone	ND	25
	71-55-6	1,1,1-trichloroethane	ND	3.8
	56-23-5	carbon tetrachloride	ND	2.8
	108-05-4	vinyl acetate	ND	6.9
	75-27-4	bromodichloromethane	ND	2.2
	78-87-5	1,2-dichloropropane	ND	6.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.0
	79-01-6	trichloroethene	ND	1.9
	124-48-1	dibromochloromethane	ND	3.1
	79-00-5	1,1,2-trichloroethane	ND	5.0
	71-43-2	benzene	ND	4.4
	10061-02-6	trans-1,3-dichloropropene	ND	5.0
	110-75-8	2-chloroethylvinyl ether	ND	5.0
	75-25-2	bromoform	ND	4.7
	591-78-6	2-hexanone	ND	36

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-060 FRACTION 04A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	46
	127-18-4	tetrachloroethene	ND	4.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	6.9
	108-88-3	toluene	ND	6.0
	108-90-7	chlorobenzene	ND	6.0
	100-41-4	ethylbenzene	ND	7.2
	100-42-5	styrene	ND	3.0
	95-47-6	total xylenes	ND	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
212	1,2-dichloroethane-d4	89 %
384	Toluene-d8	100 %
474	BFB	97 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-047 SAMPLE # 05 FRACTIONS: A, B

Date & Time Collected 03/29/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-047 FRACTION 05A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313305A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.6
	74-83-9	bromomethane	ND	5.6
	75-01-4	vinyl chloride	ND	5.6
	75-00-3	chloroethane	ND	5.6
	75-09-2	methylene chloride	ND	3.1
123	67-64-1	acetone	11	8.4
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.6
	75-35-4	1,1-dichloroethene	ND	5.3
	75-34-3	1,1-dichloroethane	ND	3.1
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.1
	78-93-3	2-butanone	ND	28
	71-55-6	1,1,1-trichloroethane	ND	4.3
	56-23-5	carbon tetrachloride	ND	3.1
	108-05-4	vinyl acetate	ND	7.7
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.7
	10061-01-5	cis-1,3-dichloropropene	ND	5.6
	79-01-6	trichloroethene	ND	2.1
	124-48-1	dibromochloromethane	ND	3.5
	79-00-5	1,1,2-trichloroethane	ND	5.6
	71-43-2	benzene	ND	4.9
	10061-02-6	trans-1,3-dichloropropene	ND	5.6
	110-75-8	2-chloroethylvinyl ether	ND	5.6
	75-25-2	bromoform	ND	5.3
	591-78-6	2-hexanone	ND	40

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Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-047 FRACTION 05A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	52
	127-18-4	tetrachloroethene	ND	4.6
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.7
388	108-88-3	toluene	12	6.7
	108-90-7	chlorobenzene	ND	6.7
	100-41-4	ethylbenzene	ND	8.1
	100-42-5	styrene	ND	3.4
	95-47-6	total xylenes	ND	5.2

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	90 %
385	Toluene-d8	103 %
476	BFB	94 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-048 SAMPLE # 06 FRACTIONS: A,B
Date & Time Collected 03/29/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAK8-03-048 FRACTION 06A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313306A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.8
	74-83-9	bromomethane	ND	5.8
	75-01-4	vinyl chloride	ND	5.8
	75-00-3	chloroethane	ND	5.8
	75-09-2	methylene chloride	ND	3.2
125	67-64-1	acetone	11	8.7
	75-15-0	carbon disulfide	ND	2.0
	75-69-4	trichlorofluoromethane	ND	5.8
	75-35-4	1,1-dichloroethene	ND	5.5
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.9
	67-66-3	chloroform	ND	1.9
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.4
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	8.0
	75-27-4	bromodichloromethane	ND	2.6
	78-87-5	1,2-dichloropropane	ND	7.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.8
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.6
	79-00-5	1,1,2-trichloroethane	ND	5.8
	71-43-2	benzene	ND	5.1
	10061-02-6	trans-1,3-dichloropropene	ND	5.8
	110-75-8	2-chloroethylvinyl ether	ND	5.8
	75-25-2	bromoform	ND	5.5
	591-78-6	2-hexanone	ND	42

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-048 FRACTION Q6A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	53
	127-18-4	tetrachloroethene	ND	4.8
	79-34-5	1,1,2,2-tetrachloroethane	ND	8.0
387	108-88-3	toluene	2.8 J	7.0
	108-90-7	chlorobenzene	ND	7.0
	100-41-4	ethylbenzene	ND	8.4
	100-42-5	styrene	ND	3.5
	95-47-6	total xylenes	ND	5.3

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
212	1,2-dichloroethane-d4	85 %
384	Toluene-d8	99 %
475	BFB	102 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-049 SAMPLE # 01 FRACTIONS: A,B

Date & Time Collected 03/29/88 Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-049 FRACTION 07A TEST CODE CLB240 NAME Purgeable Organics - Soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313307A
INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	6.3
	74-83-9	bromomethane	ND	6.3
	75-01-4	vinyl chloride	ND	6.3
	75-00-3	chloroethane	ND	6.3
	75-09-2	methylene chloride	ND	3.5
123	67-64-1	acetone	10	9.4
	75-15-0	carbon disulfide	ND	2.1
	75-69-4	trichlorofluoromethane	ND	6.3
	75-35-4	1,1-dichloroethene	ND	5.9
	75-34-3	1,1-dichloroethane	ND	3.5
	156-60-5	trans-1,2-dichloroethene	ND	2.0
	67-66-3	chloroform	ND	2.0
	107-06-2	1,2-dichloroethane	ND	3.5
	78-93-3	2-butanone	ND	31
	71-55-6	1,1,1-trichloroethane	ND	4.8
	56-23-5	carbon tetrachloride	ND	3.5
	108-05-4	vinyl acetate	ND	8.6
	75-27-4	bromodichloromethane	ND	2.8
	78-87-5	1,2-dichloropropane	ND	7.5
	10061-01-5	cis-1,3-dichloropropene	ND	6.3
	79-01-6	trichloroethene	ND	2.4
	124-48-1	dibromochloromethane	ND	3.9
	79-00-5	1,1,2-trichloroethane	ND	6.3
	71-43-2	benzene	ND	5.5
	10061-02-6	trans-1,3-dichloropropene	ND	6.3
	110-75-8	2-chloroethylvinyl ether	ND	6.3
	75-25-2	bromoform	ND	5.9
	591-78-6	2-hexanone	ND	45

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-049 FRACTION 07A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	58
	127-18-4	tetrachloroethene	ND	5.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	8.6
388	108-88-3	toluene	49	7.5
	108-90-7	chlorobenzene	ND	7.5
	100-41-4	ethylbenzene	ND	9.0
	100-42-5	styrene	ND	3.8
	95-47-6	total xylenes	ND	5.8

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	86 %
385	Toluene-d8	102 %
476	BFB	96 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-050 SAMPLE # 08 FRACTIONS: A,B
Date & Time Collected 03/29/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-050 FRACTION 08A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313308A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.7
	74-83-9	bromomethane	ND	5.7
	75-01-4	vinyl chloride	ND	5.7
	75-00-3	chloroethane	ND	5.7
	75-09-2	methylene chloride	ND	3.2
122	67-64-1	acetone	12	8.6
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.7
	75-35-4	1,1-dichloroethene	ND	5.4
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.3
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	7.9
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.8
	10061-01-5	cis-1,3-dichloropropene	ND	5.7
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.5
	79-00-5	1,1,2-trichloroethane	ND	5.7
	71-43-2	benzene	ND	5.0
	10061-02-6	trans-1,3-dichloropropene	ND	5.7
	110-75-8	2-chloroethylvinyl ether	ND	5.7
	75-25-2	bromoform	ND	5.4
	591-78-6	2-hexanone	ND	41

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-050 FRACTION 08A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	52
	127-18-4	tetrachloroethene	ND	4.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.9
387	108-88-3	toluene	9.8	6.8
	108-90-7	chlorobenzene	ND	6.8
	100-41-4	ethylbenzene	ND	8.2
	100-42-5	styrene	ND	3.4
	95-47-6	total xylenes	ND	5.2

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
212	1,2-dichloroethane-d4	87 %
384	Toluene-d8	100 %
476	BFB	97 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-051

SAMPLE # 09 FRACTIONS: A, B
Date & Time Collected 03/30/88

Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CARB-03-051 FRACTION 09A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0813309A
INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.7
	74-83-9	bromomethane	ND	5.7
	75-01-4	vinyl chloride	ND	5.7
	75-00-3	chloroethane	ND	5.7
	75-09-2	methylene chloride	ND	3.2
123	67-64-1	acetone	10	8.6
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.7
	75-35-4	1,1-dichloroethene	ND	5.4
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.3
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	7.9
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.8
	10061-01-5	cis-1,3-dichloropropene	ND	5.7
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.5
	79-00-5	1,1,2-trichloroethane	ND	5.7
	71-43-2	benzene	ND	5.0
	10061-02-6	trans-1,3-dichloropropene	ND	5.7
	110-75-8	2-chloroethylvinyl ether	ND	5.7
	75-25-2	bromoform	ND	5.4
	591-78-6	2-hexanone	ND	41

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-051 FRACTION 09A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	52
	127-18-4	tetrachloroethene	ND	4.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.9
	108-88-3	toluene	ND	6.8
	108-90-7	chlorobenzene	ND	6.8
	100-41-4	ethylbenzene	ND	8.2
	100-42-5	styrene	ND	3.4
	95-47-6	total xylenes	ND	5.2

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY	
212	1,2-dichloroethane-d4	89	%
384	Toluene-d8	98	%
476	BFB	100	%

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID CAR8-03-052

SAMPLE # 10 FRACTIONS: A, B

Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-052 FRACTION 10A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313310A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.8
	74-83-9	bromomethane	ND	5.8
	75-01-4	vinyl chloride	ND	5.8
	75-00-3	chloroethane	ND	5.8
	75-09-2	methylene chloride	ND	3.2
123	67-64-1	acetone	9.0	8.6
	75-15-0	carbon disulfide	ND	2.0
	75-69-4	trichlorofluoromethane	ND	5.8
	75-35-4	1,1-dichloroethene	ND	5.4
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.4
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	7.9
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.9
	10061-01-5	cis-1,3-dichloropropene	ND	5.8
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.6
	79-00-5	1,1,2-trichloroethane	ND	5.8
	71-43-2	benzene	ND	5.1
	10061-02-6	trans-1,3-dichloropropene	ND	5.8
	110-75-8	2-chloroethylvinyl ether	ND	5.8
	75-25-2	bromoform	ND	5.4
	591-78-6	2-hexanone	ND	41

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-052

FRACTION 10A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	53
	127-18-4	tetrachloroethene	ND	4.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.9
	108-88-3	toluene	ND	6.9
	108-90-7	chlorobenzene	ND	6.9
	100-41-4	ethylbenzene	ND	8.3
	100-42-5	styrene	ND	3.5
	95-47-6	total xylenes	ND	5.3

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	87 %
385	Toluene-d8	99 %
476	BFB	98 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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J = estimated value less than minimum detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-053 SAMPLE # 11 FRACTIONS: A,B

Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-053 FRACTION 11A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313311A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.6
	74-83-9	bromomethane	ND	5.6
	75-01-4	vinyl chloride	ND	5.6
	75-00-3	chloroethane	ND	5.6
	75-09-2	methylene chloride	ND	3.1
122	67-64-1	acetone	13	8.3
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.6
	75-35-4	1,1-dichloroethene	ND	5.2
	75-34-3	1,1-dichloroethane	ND	3.1
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.1
	78-93-3	2-butanone	ND	28
	71-55-6	1,1,1-trichloroethane	ND	4.2
	56-23-5	carbon tetrachloride	ND	3.1
	108-05-4	vinyl acetate	ND	7.7
	75-27-4	bromodichloromethane	ND	2.4
	78-87-5	1,2-dichloropropane	ND	6.7
	10061-01-5	cis-1,3-dichloropropene	ND	5.6
	79-01-6	trichloroethene	ND	2.1
	124-48-1	dibromochloromethane	ND	3.4
	79-00-5	1,1,2-trichloroethane	ND	5.6
	71-43-2	benzene	ND	4.9
	10061-02-6	trans-1,3-dichloropropene	ND	5.6
	110-75-8	2-chloroethylvinyl ether	ND	5.6
	75-25-2	bromoform	ND	5.2
	591-78-6	2-hexanone	ND	40

SAMPLE ID CAR8-03-053 FRACTION 11A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	51
	127-18-4	tetrachloroethene	ND	4.6
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.7
	108-88-3	toluene	ND	6.7
	108-90-7	chlorobenzene	ND	6.7
	100-41-4	ethylbenzene	ND	8.0
	100-42-5	styrene	ND	3.3
	95-47-6	total xylenes	ND	5.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY	
213	1,2-dichloroethane-d4	88	%
385	Toluene-d8	101	%
476	BFB	99	%

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-054 SAMPLE # 12 FRACTIONS: A, B
Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-133

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-054 FRACTION 12A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313312A

INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.7
	74-83-9	bromomethane	ND	5.7
	75-01-4	vinyl chloride	ND	5.7
	75-00-3	chloroethane	ND	5.7
	75-09-2	methylene chloride	ND	3.2
	67-64-1	acetone	ND	8.6
	75-15-0	carbon disulfide	ND	1.9
	75-69-4	trichlorofluoromethane	ND	5.7
	75-35-4	1,1-dichloroethene	ND	5.4
	75-34-3	1,1-dichloroethane	ND	3.2
	156-60-5	trans-1,2-dichloroethene	ND	1.8
	67-66-3	chloroform	ND	1.8
	107-06-2	1,2-dichloroethane	ND	3.2
	78-93-3	2-butanone	ND	29
	71-55-6	1,1,1-trichloroethane	ND	4.3
	56-23-5	carbon tetrachloride	ND	3.2
	108-05-4	vinyl acetate	ND	7.9
	75-27-4	bromodichloromethane	ND	2.5
	78-87-5	1,2-dichloropropane	ND	6.8
	10061-01-5	cis-1,3-dichloropropene	ND	5.7
	79-01-6	trichloroethene	ND	2.2
	124-48-1	dibromochloromethane	ND	3.5
	79-00-5	1,1,2-trichloroethane	ND	5.7
	71-43-2	benzene	ND	5.0
	10061-02-6	trans-1,3-dichloropropene	ND	5.7
	110-75-8	2-chloroethylvinyl ether	ND	5.7
	75-25-2	bromoform	ND	5.4
	591-78-6	2-hexanone	ND	41

SAMPLE ID CAR8-03-054 FRACTION 12A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	52
	127-18-4	tetrachloroethene	ND	4.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	7.9
	108-88-3	toluene	ND	6.8
	108-90-7	chlorobenzene	ND	6.8
	100-41-4	ethylbenzene	ND	8.2
	100-42-5	styrene	ND	3.4
	95-47-6	total xylenes	ND	5.2

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY	
213	1,2-dichloroethane-d4	85	%
385	Toluene-d8	100	%
476	BFB	98	%

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
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J = estimated value less than minimum detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-055 SAMPLE # 13 FRACTIONS: A,B

Date & Time Collected 03/30/88 Category

VOA S 03/31/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-055 FRACTION 13A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313313A
INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	6.0
	74-83-9	bromomethane	ND	6.0
	75-01-4	vinyl chloride	ND	6.0
	75-00-3	chloroethane	ND	6.0
	75-09-2	methylene chloride	ND	3.4
	67-64-1	acetone	ND	9.0
	75-15-0	carbon disulfide	ND	2.0
	75-69-4	trichlorofluoromethane	ND	6.0
	75-35-4	1,1-dichloroethene	ND	5.6
	75-34-3	1,1-dichloroethane	ND	3.4
	156-60-5	trans-1,2-dichloroethene	ND	1.9
	67-66-3	chloroform	ND	1.9
	107-06-2	1,2-dichloroethane	ND	3.4
	78-93-3	2-butanone	ND	30
	71-55-6	1,1,1-trichloroethane	ND	4.6
	56-23-5	carbon tetrachloride	ND	3.4
	108-05-4	vinyl acetate	ND	8.3
	75-27-4	bromodichloromethane	ND	2.6
	78-87-5	1,2-dichloropropane	ND	7.2
	10061-01-5	cis-1,3-dichloropropene	ND	6.0
	79-01-6	trichloroethene	ND	2.3
	124-48-1	dibromochloromethane	ND	3.7
	79-00-5	1,1,2-trichloroethane	ND	6.0
	71-43-2	benzene	ND	5.3
	10061-02-6	trans-1,3-dichloropropene	ND	6.0
	110-75-8	2-chloroethylvinyl ether	ND	6.0
	75-25-2	bromoform	ND	5.6
	591-78-6	2-hexanone	ND	43

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133
Continued From Above

SAMPLE ID CAR8-03-055 FRACTION 13A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	55
	127-18-4	tetrachloroethene	ND	4.9
	79-34-5	1,1,2,2-tetrachloroethane	ND	8.3
	108-88-3	toluene	ND	7.2
	108-90-7	chlorobenzene	ND	7.2
	100-41-4	ethylbenzene	ND	8.6
	100-42-5	styrene	ND	3.6
	95-47-6	total xylenes	ND	5.5

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	87 %
385	Toluene-d8	100 %
476	BFB	97 %

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = estimated value less than minimum detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-133

SAMPLE ID REAGENT BLANK FRACTION 14A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0313314A
INSTRMT F4 INJECTD 04/03/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.0
	74-83-9	bromomethane	ND	5.0
	75-01-4	vinyl chloride	ND	5.0
	75-00-3	chloroethane	ND	5.0
	75-09-2	methylene chloride	ND	2.8
	67-64-1	acetone	ND	7.5
	75-15-0	carbon disulfide	ND	1.7
	75-69-4	trichlorofluoromethane	ND	5.0
	75-35-4	1,1-dichloroethene	ND	4.7
	75-34-3	1,1-dichloroethane	ND	2.8
	156-60-5	trans-1,2-dichloroethene	ND	1.6
	67-66-3	chloroform	ND	1.6
	107-06-2	1,2-dichloroethane	ND	2.8
	78-93-3	2-butanone	ND	25
	71-55-6	1,1,1-trichloroethane	ND	3.8
	56-23-5	carbon tetrachloride	ND	2.8
	108-05-4	vinyl acetate	ND	6.9
	75-27-4	bromodichloromethane	ND	2.2
	78-87-5	1,2-dichloropropane	ND	6.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.0
	79-01-6	trichloroethene	ND	1.9
	124-48-1	dibromochloromethane	ND	3.1
	79-00-5	1,1,2-trichloroethane	ND	5.0
	71-43-2	benzene	ND	4.4
	10061-02-6	trans-1,3-dichloropropene	ND	5.0
	110-75-8	2-chloroethylvinyl ether	ND	5.0
	75-25-2	bromoform	ND	4.7
	591-78-6	2-hexanone	ND	36

SAMPLE ID REAGENT BLANK FRACTION 14A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	46
	127-18-4	tetrachloroethene	ND	4.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	6.9
	108-88-3	toluene	ND	6.0
	108-90-7	chlorobenzene	ND	6.0
	100-41-4	ethylbenzene	ND	7.2
	100-42-5	styrene	ND	3.0
	95-47-6	total xylenes	ND	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	92 %
385	Toluene-d8	99 %
476	BFB	103 %

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
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J = estimated value less than minimum detection limit.

Received: 03/31/88 Results by Sample

SAMPLE ID REAGENT BLANK FRACTION 14B TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0312817A
INSTRMT F4 INJECTD 04/05/88 UNITS ug/L

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.0
	74-83-9	bromomethane	ND	5.0
	75-01-4	vinyl chloride	ND	5.0
	75-00-3	chloroethane	ND	5.0
	75-09-2	methylene chloride	ND	2.8
125	67-64-1	acetone	8.5	7.5
	75-15-0	carbon disulfide	ND	1.7
	75-69-4	trichlorofluoromethane	ND	5.0
	75-35-4	1,1-dichloroethene	ND	4.7
	75-34-3	1,1-dichloroethane	ND	2.8
	156-60-5	trans-1,2-dichloroethene	ND	1.6
	67-66-3	chloroform	ND	1.6
	107-06-2	1,2-dichloroethane	ND	2.8
	78-93-3	2-butanone	ND	25
	71-55-6	1,1,1-trichloroethane	ND	3.8
	56-23-5	carbon tetrachloride	ND	2.8
	108-05-4	vinyl acetate	ND	6.9
	75-27-4	bromodichloromethane	ND	2.2
	78-87-5	1,2-dichloropropane	ND	6.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.0
	79-01-6	trichloroethene	ND	1.9
	124-48-1	dibromochloromethane	ND	3.1
	79-00-5	1,1,2-trichloroethane	ND	5.0
	71-43-2	benzene	ND	4.4
	10061-02-6	trans-1,3-dichloropropene	ND	5.0
	110-75-8	2-chloroethylvinyl ether	ND	5.0
	75-25-2	bromoform	ND	4.7
361	591-78-6	2-hexanone	2.7 J	36

SAMPLE ID REAGENT BLANK FRACTION 14B TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	46
	127-18-4	tetrachloroethene	ND	4.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	6.9
	108-88-3	toluene	ND	6.0
	108-90-7	chlorobenzene	ND	6.0
	100-41-4	ethylbenzene	ND	7.2
	100-42-5	styrene	ND	3.0
	95-47-6	total xylenes	ND	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
211	1,2-dichloroethane-d4	86 %
382	Toluene-d8	100 %
472	BFB	103 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-134

Received: 03/31/88 04/25/88 15:29:17

REPORT TO
Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN Larry French

CLIENT CARSWELL AFB SAMPLES 15
COMPANY Carswell AFB.
FACILITY Headquarters, SAC
Offutt, Nebraska 68113

WORK ID Stage 2, Weapons Storage Area
TAKEN 03/29-03/30/88
TRANS Federal 5910117986/5910117975
TYPE Soil-BNA Only
P.O. # 227-005-04-40
INVOICE under separate cover

PREPARED BY
Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN

PHONE 916-362-5332

Lucas A Petersen
CERTIFIED BY

CONTACT LARRY FRENCH

SAMPLE IDENTIFICATION

01	CAR8-03-047
02	CAR8-03-048
03	CAR8-03-049
04	CAR8-03-050
05	CAR8-03-051
06	CAR8-03-052
07	CAR8-03-053
08	CAR8-03-054
09	CAR8-03-055
10	CAR8-03-056
11	CAR8-03-057
12	CAR8-03-058
13	CAR8-03-059
14	CAR8-03-047 MATRIX SPIKE
14	CAR8-03-047 MS DUP
15	REAGENT BLANK

TEST CODES and NAMES used on this report

BNA S	Semivolatiles Screen
CL8270	Semivolatile Organics-Soil
DRY WT	Dry weight determination
EX BNA	Semivolatiles extraction
GPC	Gel Perm Clean-Up

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT

Results By Test

Work Order # S8-03-134

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
BNA_S date completed	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED
DRY_WT % moisture	11 % MOISTURE	15 % MOISTURE	21 % MOISTURE	12 % MOISTURE	12 % MOISTURE
EX_BNA date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
GPC date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED

TEST CODE default units	Sample 06 (entered units)	Sample 07 (entered units)	Sample 08 (entered units)	Sample 09 (entered units)	Sample 10 (entered units)
BNA_S date completed	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED
DRY_WT % moisture	14 % MOISTURE	11 % MOISTURE	10 % MOISTURE	18 % MOISTURE	18 % MOISTURE
EX_BNA date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
GPC date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED

TEST CODE default units	Sample 11 (entered units)	Sample 12 (entered units)	Sample 13 (entered units)	Sample 14 (entered units)	Sample 15 (entered units)
BNA_S date completed	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED	04/01/88 DATE COMPLETED		
DRY_WT % moisture	16 % MOISTURE	16 % MOISTURE	13 % MOISTURE		

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Results By Test

Work Order # 88-03-134
Continued From Above

TEST CODE default units	Sample 11 (entered units)	Sample 12 (entered units)	Sample 13 (entered units)	Sample 14 (entered units)	Sample 15 (entered units)
EX_BNA date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED 04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
GPC date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED		

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-134

Received: 03/31/88 Results By Test

SAMPLE Sample Id	Test: BNA S date completed	Test: DRY WT % moisture	Test: EX BNA date completed	Test: GPC date completed
01 CAR8-03-047	04/01/88 DATE COMPLETED	11 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
02 CAR8-03-048	04/01/88 DATE COMPLETED	15 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
03 CAR8-03-049	04/01/88 DATE COMPLETED	21 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
04 CAR8-03-050	04/01/88 DATE COMPLETED	12 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
05 CAR8-03-051	04/01/88 DATE COMPLETED	12 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
06 CAR8-03-052	04/01/88 DATE COMPLETED	14 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
07 CAR8-03-053	04/01/88 DATE COMPLETED	11 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
08 CAR8-03-054	04/01/88 DATE COMPLETED	10 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
09 CAR8-03-055	04/01/88 DATE COMPLETED	18 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
10 CAR8-03-056	04/01/88 DATE COMPLETED	18 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
11 CAR8-03-057	04/01/88 DATE COMPLETED	16 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
12 CAR8-03-058	04/01/88 DATE COMPLETED	16 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
13 CAR8-03-059	04/01/88 DATE COMPLETED	13 % MOISTURE	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED
14 CAR8-03-047 MAT			04/04/88 DATE COMPLETED	

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RAS Sacramento REPORT
Results By Test

Work Order # S8-03-134
Continued From Above

SAMPLE Sample Id	Test: BNA S date completed	Test: DRY WT % moisture	Test: EX BNA date completed	Test: GPC date completed
			04/04/88 DATE COMPLETED	
15 REAGENT BLANK			04/04/88 DATE COMPLETED	

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-047 SAMPLE # 01 FRACTIONS: A

Date & Time Collected 03/29/88 Category

BNA S 04/01/88 DRY WT 11 EX BNA 04/04/88 GPC 04/04/88

DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CARB-03-047 FRACTION 01A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/04/88 FILE # 0313401A VERIFIED LAK
INSTRMT F2 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	740
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	740
	111-44-4	bis(2-chloroethyl) ether	ND	420
	95-57-8	2-chlorophenol	ND	250
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	330
	100-51-6	benzyl alcohol	ND	3700
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	740
	108-60-1	bis(2-chloroisopropyl)ether	ND	420
	106-44-5	4-methylphenol	ND	740
	621-64-7	n-nitroso-di-n-propylamine	ND	890
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	160
	88-75-5	2-nitrophenol	ND	270
	105-67-9	2,4-dimethylphenol	ND	200
705	65-85-0	benzoic acid	260 J	3700
	111-91-1	bis(2-chloroethoxy)methane	ND	390
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	740
	87-68-3	hexachlorobutadiene	ND	67
	59-50-7	4-chloro-3-methylphenol	ND	220
	91-57-6	2-methylnaphthalene	ND	740

SAMPLE ID CAR8-03-047 FRACTION 01A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	450
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	740
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3700
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	260
	99-09-2	3-nitroaniline	ND	3700
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3100
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	740
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	420
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	310
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3700
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	270
	85-01-8	phenanthrene	ND	400
	120-12-7	anthracene	ND	140
1351	84-74-2	di-n-butylphthalate	320 B	190
	206-44-0	fluoranthene	ND	160
	92-87-5	benzidine	ND	3300
	129-00-0	pyrene	ND	140
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1200
	56-55-3	benzo(a)anthracene	ND	580
1684	117-81-7	bis(2-ethylhexyl)phthalate	140 JB	190

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Results by Sample

Work Order # S8-03-134
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SAMPLE ID CAR8-03-047 FRACTION 01A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	190
	117-84-0	di-n-octyl phthalate	ND	190
	205-99-2	benzo(b)fluoranthene	ND	360
	207-08-9	benzo(k)fluoranthene	ND	190
	50-32-8	benzo(a)pyrene	ND	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	280
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	310

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
376	2-fluorophenol	75 %
508	d5-phenol	72 %
638	d5-nitrobenzene	77 %
915	2-fluorobiphenyl	76 %
1142	2,4,6-tribromophenol	72 %
1504	d14-terphenyl	75 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-048 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 03/29/88 Category

BNA S 04/01/88 DRY WT 15 EX BNA 04/04/88 GPC 04/04/88
DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-048

FRACTION 02A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313402A VERIFIED LAK
INSTRMT F2 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	780
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	780
	111-44-4	bis(2-chloroethyl) ether	ND	450
	95-57-8	2-chlorophenol	ND	260
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	340
	100-51-6	benzyl alcohol	ND	3900
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	780
	108-60-1	bis(2-chloroisopropyl)ether	ND	450
	106-44-5	4-methylphenol	ND	780
	621-64-7	n-nitroso-di-n-propylamine	ND	940
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	280
	105-67-9	2,4-dimethylphenol	ND	210
707	65-85-0	benzoic acid	340 J	3900
	111-91-1	bis(2-chloroethoxy)methane	ND	420
	120-83-2	2,4-dichlorophenol	ND	210
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	780
	87-68-3	hexachlorobutadiene	ND	71
	59-50-7	4-chloro-3-methylphenol	ND	240
	91-57-6	2-methylnaphthalene	ND	780

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Results by Sample

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SAMPLE ID CAR8-03-048 FRACTION 02A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	470
	88-06-2	2,4,6-trichlorophenol	ND	210
	95-95-4	2,4,5-trichlorophenol	ND	780
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	3900
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	270
	99-09-2	3-nitroaniline	ND	3900
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3300
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	780
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	450
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	330
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	3900
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	280
	85-01-8	phenanthrene	ND	420
	120-12-7	anthracene	ND	150
1354	84-74-2	di-n-butylphthalate	680 B	200
	206-44-0	fluoranthene	ND	170
	92-87-5	benzidine	ND	3400
	129-00-0	pyrene	ND	150
	85-68-7	butylbenzylphthalate	ND	200
	91-94-1	3,3'-dichlorobenzidine	ND	1300
	56-55-3	benzo(a)anthracene	ND	610
1688	117-81-7	bis(2-ethylhexyl)phthalate	280 B	200

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Results by Sample

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SAMPLE ID CAR8-03-048

FRACTION 02A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	200
1802	117-84-0	di-n-octyl phthalate	330	200
	205-99-2	benzo(b)fluoranthene	ND	380
	207-08-9	benzo(k)fluoranthene	ND	200
	50-32-8	benzo(a)pyrene	ND	200
	193-39-5	indeno(1,2,3-cd)pyrene	ND	290
	53-70-3	dibenz(a,h)anthracene	ND	200
	191-24-2	benzo(ghi)perylene	ND	320

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
375	2-fluorophenol	65 %
508	d5-phenol	66 %
639	d5-nitrobenzene	72 %
918	2-fluorobiphenyl	73 %
1146	2,4,6-tribromophenol	64 %
1508	d14-terphenyl	64 %

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = estimated value less than detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-049 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 03/29/88 Category

BNA S 04/01/88 (DATE COMPLETED) DRY WT 21 (% MOISTURE) EX BNA 04/04/88 (DATE COMPLETED) GPC 04/04/88 (DATE COMPLETED)

SAMPLE ID CAR8-03-049 FRACTION 03A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313403A VERIFIED LAK
INSTRMT F2 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	830
	108-95-2	phenol	ND	130
	62-53-3	aniline	ND	830
	111-44-4	bis(2-chloroethyl) ether	ND	480
	95-57-8	2-chlorophenol	ND	280
	541-73-1	1,3-dichlorobenzene	ND	160
	106-46-7	1,4-dichlorobenzene	ND	370
	100-51-6	benzyl alcohol	ND	4200
	95-50-1	1,2-dichlorobenzene	ND	160
	95-48-7	2-methylphenol	ND	830
	108-60-1	bis(2-chloroisopropyl)ether	ND	480
	106-44-5	4-methylphenol	ND	830
	621-64-7	n-nitroso-di-n-propylamine	ND	1000
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	160
	78-59-1	isophorone	ND	180
	88-75-5	2-nitrophenol	ND	300
	105-67-9	2,4-dimethylphenol	ND	230
706	65-85-0	benzoic acid	180 J	4200
	111-91-1	bis(2-chloroethoxy)methane	ND	440
	120-83-2	2,4-dichlorophenol	ND	230
	120-82-1	1,2,4-trichlorobenzene	ND	160
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	830
	87-68-3	hexachlorobutadiene	ND	75
	59-50-7	4-chloro-3-methylphenol	ND	250
	91-57-6	2-methylnaphthalene	ND	830

SAMPLE ID CAR8-03-049 FRACTION 03A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	500
	88-06-2	2,4,6-trichlorophenol	ND	230
	95-95-4	2,4,5-trichlorophenol	ND	830
	91-58-7	2-chloronaphthalene	ND	160
	88-74-4	2-nitroaniline	ND	4200
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	290
	99-09-2	3-nitroaniline	ND	4200
	83-32-9	acenaphthene	ND	160
	51-28-5	2,4-dinitrophenol	ND	3500
	100-02-7	4-nitrophenol	ND	200
	132-64-9	dibenzofuran	ND	830
	606-20-2	2,6-dinitrotoluene	ND	160
	121-14-2	2,4-dinitrotoluene	ND	480
	84-66-2	diethylphthalate	ND	160
	7005-72-3	4-chlorophenyl-phenylether	ND	350
	86-73-7	fluorene	ND	160
	100-01-06	4-nitroaniline	ND	4200
	534-52-1	4,6-dinitro-2-methylphenol	ND	2000
	86-30-6	n-nitrosodiphenylamine	ND	160
	101-55-3	4-bromophenyl-phenylether	ND	160
	118-74-1	hexachlorobenzene	ND	160
	87-86-5	pentachlorophenol	ND	300
	85-01-8	phenanthrene	ND	450
	120-12-7	anthracene	ND	160
1350	84-74-2	di-n-butylphthalate	250 B	210
	206-44-0	fluoranthene	ND	180
	92-87-5	benzidine	ND	3700
	129-00-0	pyrene	ND	160
	85-68-7	butylbenzylphthalate	ND	210
	91-94-1	3,3'-dichlorobenzidine	ND	1400
	56-55-3	benzo(a)anthracene	ND	650
1683	117-81-7	bis(2-ethylhexyl)phthalate	230 B	210

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Results by Sample

Work Order # S8-03-134
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SAMPLE ID CAR8-03-049 FRACTION 03A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	210
1797	117-84-0	di-n-octyl phthalate	210 J	210
	205-99-2	benzo(b)fluoranthene	ND	400
	207-08-9	benzo(k)fluoranthene	ND	210
	50-32-8	benzo(a)pyrene	ND	210
	193-39-5	indeno(1,2,3-cd)pyrene	ND	310
	53-70-3	dibenz(a,h)anthracene	ND	210
	191-24-2	benzo(ghi)perylene	ND	340

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
376	2-fluorophenol	74 %
509	d5-phenol	73 %
637	d5-nitrobenzene	76 %
915	2-fluorobiphenyl	74 %
1142	2,4,6-tribromophenol	65 %
1504	d14-terphenyl	60 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-050 SAMPLE # 04 FRACTIONS: A

Date & Time Collected 03/29/88 Category

BNA S 04/01/88 (DATE COMPLETED) DRY WT 12 (% MOISTURE) EX BNA 04/04/88 (DATE COMPLETED) GPC 04/04/88 (DATE COMPLETED)

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-050 FRACTION 04A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313404A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	750
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	750
	111-44-4	bis(2-chloroethyl) ether	ND	430
	95-57-8	2-chlorophenol	ND	250
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	330
	100-51-6	benzyl alcohol	ND	3800
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	750
	108-60-1	bis(2-chloroisopropyl)ether	ND	430
	106-44-5	4-methylphenol	ND	750
	621-64-7	n-nitroso-di-n-propylamine	ND	900
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	270
	105-67-9	2,4-dimethylphenol	ND	200
753	65-85-0	benzoic acid	160 J	3800
	111-91-1	bis(2-chloroethoxy)methane	ND	400
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	750
	87-68-3	hexachlorobutadiene	ND	68
	59-50-7	4-chloro-3-methylphenol	ND	230
	91-57-6	2-methylnaphthalene	ND	750

SAMPLE ID CAR8-03-050 FRACTION 04A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	450
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	750
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3800
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	260
	99-09-2	3-nitroaniline	ND	3800
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3200
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	750
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	430
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	320
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3800
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	270
	85-01-8	phenanthrene	ND	410
	120-12-7	anthracene	ND	140
1410	84-74-2	di-n-butylphthalate	510 B	190
	206-44-0	fluoranthene	ND	170
	92-87-5	benzidine	ND	3300
	129-00-0	pyrene	ND	140
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1200
	56-55-3	benzo(a)anthracene	ND	590
1755	117-81-7	bis(2-ethylhexyl)phthalate	320 B	190

SAMPLE ID CAR8-03-050

FRACTION 04A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/29/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	190
1896	117-84-0	di-n-octyl phthalate	540	190
	205-99-2	benzo(b)fluoranthene	ND	360
	207-08-9	benzo(k)fluoranthene	ND	190
	50-32-8	benzo(a)pyrene	ND	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	280
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	310

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
436	2-fluorophenol	75 %
560	d5-phenol	71 %
691	d5-nitrobenzene	76 %
970	2-fluorobiphenyl	75 %
1202	2,4,6-tribromophenol	81 %
1569	d14-terphenyl	70 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-134

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-051 SAMPLE # 05 FRACTIONS: A

Date & Time Collected 03/30/88 Category

BNA S 04/01/88 DRY WT 12 EX BNA 04/04/88 GPC 04/04/88

DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CARB-03-051 FRACTION 05A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313405A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	750
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	750
	111-44-4	bis(2-chloroethyl) ether	ND	430
	95-57-8	2-chlorophenol	ND	250
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	330
	100-51-6	benzyl alcohol	ND	3700
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	750
	108-60-1	bis(2-chloroisopropyl)ether	ND	430
	106-44-5	4-methylphenol	ND	750
	621-64-7	n-nitroso-di-n-propylamine	ND	900
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	160
	88-75-5	2-nitrophenol	ND	270
	105-67-9	2,4-dimethylphenol	ND	200
	65-85-0	benzoic acid	ND	3700
	111-91-1	bis(2-chloroethoxy)methane	ND	400
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	750
	87-68-3	hexachlorobutadiene	ND	67
	59-50-7	4-chloro-3-methylphenol	ND	220
	91-57-6	2-methylnaphthalene	ND	750

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-051 FRACTION 05A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	450
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	750
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3700
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	260
	99-09-2	3-nitroaniline	ND	3700
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3100
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	750
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	430
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	310
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3700
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	270
	85-01-8	phenanthrene	ND	400
	120-12-7	anthracene	ND	140
1411	84-74-2	di-n-butylphthalate	400 B	190
	206-44-0	fluoranthene	ND	160
	92-87-5	benzidine	ND	3300
	129-00-0	pyrene	ND	140
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1200
	56-55-3	benzo(a)anthracene	ND	580
1756	117-81-7	bis(2-ethylhexyl)phthalate	170 JB	190

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-051 FRACTION 05A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	190
1896	117-84-0	di-n-octyl phthalate	230	190
	205-99-2	benzo(b)fluoranthene	ND	360
	207-08-9	benzo(k)fluoranthene	ND	190
	50-32-8	benzo(a)pyrene	ND	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	280
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	310

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
423	2-fluorophenol	55 %
554	d5-phenol	74 %
690	d5-nitrobenzene	75 %
971	2-fluorobiphenyl	78 %
1203	2,4,6-tribromophenol	70 %
1570	d14-terphenyl	72 %

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = estimated value less than detection limit.

FRAPHAM CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-052 SAMPLE # 06 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA S 04/01/88 DATE COMPLETED DRY WT 14 % MOISTURE EX BNA 04/04/88 DATE COMPLETED GPC 04/04/88 DATE COMPLETED

SAMPLE ID CAR8-03-052 FRACTION 06A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313406A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	770
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	770
	111-44-4	bis(2-chloroethyl) ether	ND	440
	95-57-8	2-chlorophenol	ND	260
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	340
	100-51-6	benzyl alcohol	ND	3900
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	770
	108-60-1	bis(2-chloroisopropyl)ether	ND	440
	106-44-5	4-methylphenol	ND	770
	621-64-7	n-nitroso-di-n-propylamine	ND	930
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	280
	105-67-9	2,4-dimethylphenol	ND	210
752	65-85-0	benzoic acid	380 J	3900
	111-91-1	bis(2-chloroethoxy)methane	ND	410
	120-83-2	2,4-dichlorophenol	ND	210
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	770
	87-68-3	hexachlorobutadiene	ND	70
	59-50-7	4-chloro-3-methylphenol	ND	230
	91-57-6	2-methylnaphthalene	ND	770

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-052 FRACTION 06A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	460
	88-06-2	2,4,6-trichlorophenol	ND	210
	95-95-4	2,4,5-trichlorophenol	ND	770
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	3900
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	270
	99-09-2	3-nitroaniline	ND	3900
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3300
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	770
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	440
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	330
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	3900
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	280
	85-01-8	phenanthrene	ND	420
	120-12-7	anthracene	ND	150
1411	84-74-2	di-n-butylphthalate	430 B	190
	206-44-0	fluoranthene	ND	170
	92-87-5	benzidine	ND	3400
	129-00-0	pyrene	ND	150
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1300
	56-55-3	benzo(a)anthracene	ND	600
1756	117-81-7	bis(2-ethylhexyl)phthalate	220 B	190

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # 88-03-134
Continued From Above

SAMPLE ID CAR8-03-052

FRACTION 06A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	190
1896	117-84-0	di-n-octyl phthalate	480	190
	205-99-2	benzo(b)fluoranthene	ND	370
	207-08-9	benzo(k)fluoranthene	ND	190
	50-32-8	benzo(a)pyrene	ND	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	290
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	320

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
423	2-fluorophenol	62 %
554	d5-phenol	72 %
689	d5-nitrobenzene	75 %
971	2-fluorobiphenyl	79 %
1203	2,4,6-tribromophenol	75 %
1569	d14-terphenyl	73 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-053 SAMPLE # 07 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA_S 04/01/88 DRY_WT 11 EX_BNA 04/04/88 GPC 04/04/88
DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAK8-03-053 FRACTION 07A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313407A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	750
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	750
	111-44-4	bis(2-chloroethyl) ether	ND	430
	95-57-8	2-chlorophenol	ND	250
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	330
	100-51-6	benzyl alcohol	ND	3800
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	750
	108-60-1	bis(2-chloroisopropyl)ether	ND	430
	106-44-5	4-methylphenol	ND	750
	621-64-7	n-nitroso-di-n-propylamine	ND	900
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	270
	105-67-9	2,4-dimethylphenol	ND	200
	65-85-0	benzoic acid	ND	3800
	111-91-1	bis(2-chloroethoxy)methane	ND	400
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	750
	87-68-3	hexachlorobutadiene	ND	68
	59-50-7	4-chloro-3-methylphenol	ND	230
	91-57-6	2-methylnaphthalene	ND	750

SAMPLE ID CAR8-03-053 FRACTION 07A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	450
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	750
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3800
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	260
	99-09-2	3-nitroaniline	ND	3800
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3200
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	750
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	430
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	320
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3800
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	270
	85-01-8	phenanthrene	ND	410
	120-12-7	anthracene	ND	140
1410	84-74-2	di-n-butylphthalate	350 B	190
	206-44-0	fluoranthene	ND	170
	92-87-5	benzidine	ND	3300
	129-00-0	pyrene	ND	140
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1200
	56-55-3	benzo(a)anthracene	ND	590
1755	117-81-7	bis(2-ethylhexyl)phthalate	220 B	190

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAK8-03-053

FRACTION 07A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	190
	117-84-0	di-n-octyl phthalate	ND	190
	205-99-2	benzo(b)fluoranthene	ND	360
	207-08-9	benzo(k)fluoranthene	ND	190
	50-32-8	benzo(a)pyrene	ND	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	280
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	310

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
421	2-fluorophenol	51 %
552	d5-phenol	69 %
688	d5-nitrobenzene	70 %
970	2-fluorobiphenyl	71 %
1202	2,4,6-tribromophenol	67 %
1569	d14-terphenyl	96 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
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J = estimated value less than detection limit.

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-054 SAMPLE # 08 FRACTIONS: A

Date & Time Collected 03/30/88 Category

BNA S 04/01/88 (DATE COMPLETED) DRY WT 10 (% MOISTURE) EX BNA 04/04/88 (DATE COMPLETED) GPC 04/04/88 (DATE COMPLETED)

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-134

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-054 FRACTION 08A TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313408A VERIFIED LAK

INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	730
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	730
	111-44-4	bis(2-chloroethyl) ether	ND	420
	95-57-8	2-chlorophenol	ND	240
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	320
	100-51-6	benzyl alcohol	ND	3700
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	730
	108-60-1	bis(2-chloroisopropyl)ether	ND	420
	106-44-5	4-methylphenol	ND	730
	621-64-7	n-nitroso-di-n-propylamine	ND	880
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	160
	88-75-5	2-nitrophenol	ND	260
	105-67-9	2,4-dimethylphenol	ND	200
	65-85-0	benzoic acid	ND	3700
	111-91-1	bis(2-chloroethoxy)methane	ND	390
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	730
	87-68-3	hexachlorobutadiene	ND	66
	59-50-7	4-chloro-3-methylphenol	ND	220
	91-57-6	2-methylnaphthalene	ND	730

SAMPLE ID CAR8-03-054 FRACTION 08A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	440
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	730
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3700
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	260
	99-09-2	3-nitroaniline	ND	3700
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3100
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	730
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	420
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	310
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3700
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	260
	85-01-8	phenanthrene	ND	400
	120-12-7	anthracene	ND	140
1412	84-74-2	di-n-butylphthalate	270 B	180
	206-44-0	fluoranthene	ND	160
	92-87-5	benzidine	ND	3200
	129-00-0	pyrene	ND	140
	85-68-7	butylbenzylphthalate	ND	180
	91-94-1	3,3'-dichlorobenzidine	ND	1200
	56-55-3	benzo(a)anthracene	ND	570
1758	117-81-7	bis(2-ethylhexyl)phthalate	180 JB	180

Received: 03/31/88

KAS Sacramento REPORT
Results by Sample

Work Order # 58-03-134
Continued From Above

SAMPLE ID CAR8-03-054

FRACTION 08A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	180
	117-84-0	di-n-octyl phthalate	ND	180
	205-99-2	benzo(b)fluoranthene	ND	350
	207-08-9	benzo(k)fluoranthene	ND	180
	50-32-8	benzo(a)pyrene	ND	180
	193-39-5	indeno(1,2,3-cd)pyrene	ND	270
	53-70-3	dibenz(a,h)anthracene	ND	180
	191-24-2	benzo(ghi)perylene	ND	300

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
427	2-fluorophenol	78 %
557	d5-phenol	75 %
691	d5-nitrobenzene	71 %
971	2-fluorobiphenyl	73 %
1204	2,4,6-tribromophenol	73 %
1571	d14-terphenyl	66 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-055 SAMPLE # 09 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA_S 04/01/88 (DATE COMPLETED) DRY_WT 18 (% MOISTURE) EX_BNA 04/04/88 (DATE COMPLETED) GPC 04/04/88 (DATE COMPLETED)

Received: 03/31/88 Results by Sample

SAMPLE ID CARB-03-055 FRACTION 09A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313409A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	810
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	810
	111-44-4	bis(2-chloroethyl) ether	ND	460
	95-57-8	2-chlorophenol	ND	270
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	350
	100-51-6	benzyl alcohol	ND	4000
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	810
	108-60-1	bis(2-chloroisopropyl)ether	ND	460
	106-44-5	4-methylphenol	ND	810
	621-64-7	n-nitroso-di-n-propylamine	ND	970
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	180
	88-75-5	2-nitrophenol	ND	290
	105-67-9	2,4-dimethylphenol	ND	220
753	65-85-0	benzoic acid	660 J	4000
	111-91-1	bis(2-chloroethoxy)methane	ND	430
	120-83-2	2,4-dichlorophenol	ND	220
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	810
	87-68-3	hexachlorobutadiene	ND	72
	59-50-7	4-chloro-3-methylphenol	ND	240
	91-57-6	2-methylnaphthalene	ND	810

SAMPLE ID CAR8-03-055 FRACTION 09A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	480
	88-06-2	2,4,6-trichlorophenol	ND	220
	95-95-4	2,4,5-trichlorophenol	ND	810
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	4000
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	280
	99-09-2	3-nitroaniline	ND	4000
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3400
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	810
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	460
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	340
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	4000
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	290
	85-01-8	phenanthrene	ND	430
	120-12-7	anthracene	ND	150
1411	84-74-2	di-n-butylphthalate	460 B	200
	206-44-0	fluoranthene	ND	180
	92-87-5	benzidine	ND	3500
	129-00-0	pyrene	ND	150
	85-68-7	butylbenzylphthalate	ND	200
	91-94-1	3,3'-dichlorobenzidine	ND	1300
1744	56-55-3	benzo(a)anthracene	97 J	630
1756	117-81-7	bis(2-ethylhexyl)phthalate	300 B	200

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-055

FRACTION 09A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1753	218-01-9	chrysene	89 J	200
1896	117-84-0	di-n-octyl phthalate	120 J	200
	205-99-2	benzo(b)fluoranthene	ND	390
	207-08-9	benzo(k)fluoranthene	ND	200
	50-32-8	benzo(a)pyrene	ND	200
	193-39-5	indeno(1,2,3-cd)pyrene	ND	300
	53-70-3	dibenz(a,h)anthracene	ND	200
	191-24-2	benzo(ghi)perylene	ND	330

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
424	2-fluorophenol	78 %
555	d5-phenol	73 %
690	d5-nitrobenzene	73 %
971	2-fluorobiphenyl	78 %
1203	2,4,6-tribromophenol	66 %
1569	d14-terphenyl	71 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-056 SAMPLE # 10 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA S 04/01/88 DRY WT 18 EX BNA 04/04/88 GPC 04/04/88
DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-056 FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313410A VERIFIED LAK
INSTRMT F2 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	810
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	810
	111-44-4	bis(2-chloroethyl) ether	ND	460
	95-57-8	2-chlorophenol	ND	270
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	360
	100-51-6	benzyl alcohol	ND	4100
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	810
	108-60-1	bis(2-chloroisopropyl)ether	ND	460
	106-44-5	4-methylphenol	ND	810
	621-64-7	n-nitroso-di-n-propylamine	ND	970
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	180
	88-75-5	2-nitrophenol	ND	290
	105-67-9	2,4-dimethylphenol	ND	220
	65-85-0	benzoic acid	ND	4100
	111-91-1	bis(2-chloroethoxy)methane	ND	430
	120-83-2	2,4-dichlorophenol	ND	220
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	810
	87-68-3	hexachlorobutadiene	ND	73
	59-50-7	4-chloro-3-methylphenol	ND	240
	91-57-6	2-methylnaphthalene	ND	810

SAMPLE ID CAR8-03-056 FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	490
	88-06-2	2,4,6-trichlorophenol	ND	220
	95-95-4	2,4,5-trichlorophenol	ND	810
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	4100
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	280
	99-09-2	3-nitroaniline	ND	4100
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3400
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	810
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	460
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	340
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	4100
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	290
1317	85-01-8	phenanthrene	170 J	440
	120-12-7	anthracene	ND	150
1412	84-74-2	di-n-butylphthalate	290 B	200
1510	206-44-0	fluoranthene	520	180
	92-87-5	benzidine	ND	3600
1546	129-00-0	pyrene	290	150
	85-68-7	butylbenzylphthalate	ND	200
	91-94-1	3,3'-dichlorobenzidine	ND	1300
1746	56-55-3	benzo(a)anthracene	200 J	630
1758	117-81-7	bis(2-ethylhexyl)phthalate	260 B	200

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RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-056

FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1754	218-01-9	chrysene	200 J	200
1899	117-84-0	di-n-octyl phthalate	360	200
2009	205-99-2	benzo(b)fluoranthene	200 J	390
2015	207-08-9	benzo(k)fluoranthene	210	200
2111	50-32-8	benzo(a)pyrene	200 J	200
	193-39-5	indeno(1,2,3-cd)pyrene	ND	300
	53-70-3	dibenz(a,h)anthracene	ND	200
	191-24-2	benzo(ghi)perylene	ND	330

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
428	2-fluorophenol	73 %
557	d5-phenol	70 %
692	d5-nitrobenzene	71 %
972	2-fluorobiphenyl	74 %
1204	2,4,6-tribromophenol	78 %
1571	d14-terphenyl	59 %

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

RADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-057 SAMPLE # 11 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA S 04/01/88 DRY WT 16 EX BNA 04/04/88 GPC 04/04/88
DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CARB-03-057 FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313411R VERIFIED LAK
INSTRMT F2 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	790
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	790
	111-44-4	bis(2-chloroethyl) ether	ND	450
	95-57-8	2-chlorophenol	ND	260
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	350
	100-51-6	benzyl alcohol	ND	3900
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	790
	108-60-1	bis(2-chloroisopropyl)ether	ND	450
	106-44-5	4-methylphenol	ND	790
	621-64-7	n-nitroso-di-n-propylamine	ND	940
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	280
	105-67-9	2,4-dimethylphenol	ND	210
752	65-85-0	benzoic acid	440 J	3900
	111-91-1	bis(2-chloroethoxy)methane	ND	420
	120-83-2	2,4-dichlorophenol	ND	210
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	790
	87-68-3	hexachlorobutadiene	ND	71
	59-50-7	4-chloro-3-methylphenol	ND	240
	91-57-6	2-methylnaphthalene	ND	790

RADIAN CORPORATION

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Received: 03/31/88 Results by Sample Continued From Above

SAMPLE ID CAR8-03-057 FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	470
	88-06-2	2,4,6-trichlorophenol	ND	210
	95-95-4	2,4,5-trichlorophenol	ND	790
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	3900
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	280
	99-09-2	3-nitroaniline	ND	3900
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3300
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	790
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	450
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	330
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	3900
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	280
	85-01-8	phenanthrene	ND	420
	120-12-7	anthracene	ND	150
1410	84-74-2	di-n-butylphthalate	650 B	200
1506	206-44-0	fluoranthene	96 J	170
	92-87-5	benzidine	ND	3500
	129-00-0	pyrene	ND	150
	85-68-7	butylbenzylphthalate	ND	200
	91-94-1	3,3'-dichlorobenzidine	ND	1300
	56-55-3	benzo(a)anthracene	ND	610
1753	117-81-7	bis(2-ethylhexyl)phthalate	200 JB	200

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-057

FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	200
1893	117-84-0	di-n-octyl phthalate	220	200
	205-99-2	benzo(b)fluoranthene	ND	380
	207-08-9	benzo(k)fluoranthene	ND	200
	50-32-8	benzo(a)pyrene	ND	200
	193-39-5	indeno(1,2,3-cd)pyrene	ND	290
	53-70-3	dibenz(a,h)anthracene	ND	200
	191-24-2	benzo(ghi)perylene	ND	320

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
421	2-fluorophenol	85 %
553	d5-phenol	82 %
688	d5-nitrobenzene	89 %
970	2-fluorobiphenyl	93 %
1202	2,4,6-tribromophenol	92 %
1568	d14-terphenyl	76 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-058 SAMPLE # 12 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA S 04/01/88 DRY WT 16 EX BNA 04/04/88 GPC 04/04/88
DATE COMPLETED % MOISTURE DATE COMPLETED DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-058 FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313412A VERIFIED LAK
INSTRMT F2 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	790
	108-95-2	phenol	ND	120
	62-53-3	aniline	ND	790
	111-44-4	bis(2-chloroethyl) ether	ND	450
	95-57-8	2-chlorophenol	ND	260
	541-73-1	1,3-dichlorobenzene	ND	150
	106-46-7	1,4-dichlorobenzene	ND	350
	100-51-6	benzyl alcohol	ND	3900
	95-50-1	1,2-dichlorobenzene	ND	150
	95-48-7	2-methylphenol	ND	790
	108-60-1	bis(2-chloroisopropyl)ether	ND	450
	106-44-5	4-methylphenol	ND	790
	621-64-7	n-nitroso-di-n-propylamine	ND	940
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	150
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	280
	105-67-9	2,4-dimethylphenol	ND	210
	65-85-0	benzoic acid	ND	3900
	111-91-1	bis(2-chloroethoxy)methane	ND	420
	120-83-2	2,4-dichlorophenol	ND	210
	120-82-1	1,2,4-trichlorobenzene	ND	150
	91-20-3	naphthalene	ND	130
	106-47-8	4-chloroaniline	ND	790
	87-68-3	hexachlorobutadiene	ND	71
	59-50-7	4-chloro-3-methylphenol	ND	240
	91-57-6	2-methylnaphthalene	ND	790

RADIAN CORPORATION

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RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CARB-03-058 FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	470
	88-06-2	2,4,6-trichlorophenol	ND	210
	95-95-4	2,4,5-trichlorophenol	ND	790
	91-58-7	2-chloronaphthalene	ND	150
	88-74-4	2-nitroaniline	ND	3900
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	270
	99-09-2	3-nitroaniline	ND	3900
	83-32-9	acenaphthene	ND	150
	51-28-5	2,4-dinitrophenol	ND	3300
	100-02-7	4-nitrophenol	ND	190
	132-64-9	dibenzofuran	ND	790
	606-20-2	2,6-dinitrotoluene	ND	150
	121-14-2	2,4-dinitrotoluene	ND	450
	84-66-2	diethylphthalate	ND	150
	7005-72-3	4-chlorophenyl-phenylether	ND	330
	86-73-7	fluorene	ND	150
	100-01-06	4-nitroaniline	ND	3900
	534-52-1	4,6-dinitro-2-methylphenol	ND	1900
	86-30-6	n-nitrosodiphenylamine	ND	150
	101-55-3	4-bromophenyl-phenylether	ND	150
	118-74-1	hexachlorobenzene	ND	150
	87-86-5	pentachlorophenol	ND	280
	85-01-8	phenanthrene	ND	420
	120-12-7	anthracene	ND	150
1414	84-74-2	di-n-butylphthalate	710 B	200
	206-44-0	fluoranthene	ND	170
	92-87-5	benzidine	ND	3500
	129-00-0	pyrene	ND	150
	85-68-7	butylbenzylphthalate	ND	200
	91-94-1	3,3'-dichlorobenzidine	ND	1300
	56-55-3	benzo(a)anthracene	ND	610
1759	117-81-7	bis(2-ethylhexyl)phthalate	220 B	200

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-058

FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	200
1900	117-84-0	di-n-octyl phthalate	89 J	200
	205-99-2	benzo(b)fluoranthene	ND	380
	207-08-9	benzo(k)fluoranthene	ND	200
	50-32-8	benzo(a)pyrene	ND	200
	193-39-5	indeno(1,2,3-cd)pyrene	ND	290
	53-70-3	dibenz(a,h)anthracene	ND	200
	191-24-2	benzo(ghi)perylene	ND	320

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
437	2-fluorophenol	79 %
562	d5-phenol	79 %
694	d5-nitrobenzene	84 %
974	2-fluorobiphenyl	84 %
1205	2,4,6-tribromophenol	82 %
1572	d14-terphenyl	69 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134

SAMPLE ID CAR8-03-059 SAMPLE # 13 FRACTIONS: A
Date & Time Collected 03/30/88 Category

BNA_S 04/01/88 (DATE COMPLETED) DRY_WT 13 (% MOISTURE) EX_BNA 04/04/88 (DATE COMPLETED) GPC 04/04/88 (DATE COMPLETED)

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-059 FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313413A VERIFIED LAK
INSTRMT F2 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	760
	108-95-2	phenol	ND	110
	62-53-3	aniline	ND	760
	111-44-4	bis(2-chloroethyl) ether	ND	430
	95-57-8	2-chlorophenol	ND	250
	541-73-1	1,3-dichlorobenzene	ND	140
	106-46-7	1,4-dichlorobenzene	ND	330
	100-51-6	benzyl alcohol	ND	3800
	95-50-1	1,2-dichlorobenzene	ND	140
	95-48-7	2-methylphenol	ND	760
	108-60-1	bis(2-chloroisopropyl)ether	ND	430
	106-44-5	4-methylphenol	ND	760
	621-64-7	n-nitroso-di-n-propylamine	ND	910
	67-72-1	hexachloroethane	ND	120
	98-95-3	nitrobenzene	ND	140
	78-59-1	isophorone	ND	170
	88-75-5	2-nitrophenol	ND	270
	105-67-9	2,4-dimethylphenol	ND	200
	65-85-0	benzoic acid	ND	3800
	111-91-1	bis(2-chloroethoxy)methane	ND	400
	120-83-2	2,4-dichlorophenol	ND	200
	120-82-1	1,2,4-trichlorobenzene	ND	140
	91-20-3	naphthalene	ND	120
	106-47-8	4-chloroaniline	ND	760
	87-68-3	hexachlorobutadiene	ND	68
	59-50-7	4-chloro-3-methylphenol	ND	230
	91-57-6	2-methylnaphthalene	ND	760

SAMPLE ID CARB-03-059 FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	450
	88-06-2	2,4,6-trichlorophenol	ND	200
	95-95-4	2,4,5-trichlorophenol	ND	760
	91-58-7	2-chloronaphthalene	ND	140
	88-74-4	2-nitroaniline	ND	3800
	131-11-3	dimethyl phthalate	ND	120
	208-96-8	acenaphthylene	ND	270
	99-09-2	3-nitroaniline	ND	3800
	83-32-9	acenaphthene	ND	140
	51-28-5	2,4-dinitrophenol	ND	3200
	100-02-7	4-nitrophenol	ND	180
	132-64-9	dibenzofuran	ND	760
	606-20-2	2,6-dinitrotoluene	ND	140
	121-14-2	2,4-dinitrotoluene	ND	430
	84-66-2	diethylphthalate	ND	140
	7005-72-3	4-chlorophenyl-phenylether	ND	320
	86-73-7	fluorene	ND	140
	100-01-06	4-nitroaniline	ND	3800
	534-52-1	4,6-dinitro-2-methylphenol	ND	1800
	86-30-6	n-nitrosodiphenylamine	ND	140
	101-55-3	4-bromophenyl-phenylether	ND	140
	118-74-1	hexachlorobenzene	ND	140
	87-86-5	pentachlorophenol	ND	270
1317	85-01-8	phenanthrene	200 J	410
	120-12-7	anthracene	ND	140
1412	84-74-2	di-n-butylphthalate	450 B	190
1509	206-44-0	fluoranthene	290	170
	92-87-5	benzidine	ND	3300
1545	129-00-0	pyrene	200	140
	85-68-7	butylbenzylphthalate	ND	190
	91-94-1	3,3'-dichlorobenzidine	ND	1300
1745	56-55-3	benzo(a)anthracene	130 J	590
1756	117-81-7	bis(2-ethylhexyl)phthalate	260 B	190

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-059

FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/30/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1753	218-01-9	chrysene	150 J	190
1896	117-84-0	di-n-octyl phthalate	280	190
2005	205-99-2	benzo(b)fluoranthene	130 J	360
2011	207-08-9	benzo(k)fluoranthene	120 J	190
2107	50-32-8	benzo(a)pyrene	190 J	190
	193-39-5	indeno(1,2,3-cd)pyrene	ND	280
	53-70-3	dibenz(a,h)anthracene	ND	190
	191-24-2	benzo(ghi)perylene	ND	310

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
420	2-fluorophenol	76 %
553	d5-phenol	77 %
690	d5-nitrobenzene	85 %
972	2-fluorobiphenyl	88 %
1204	2,4,6-tribromophenol	87 %
1570	d14-terphenyl	64 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-047 MATRIX SPIKE SAMPLE # 14 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/04/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-047 MATRIX SPIKE FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313414A VERIFIED LAK
INSTRMT F2 INJECTD 04/13/88 UNITS % RECOV.

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	NA	10
563	108-95-2	phenol	72	1.5
	62-53-3	aniline	NA	10
	111-44-4	bis(2-chloroethyl) ether	NA	5.7
583	95-57-8	2-chlorophenol	80	3.3
	541-73-1	1,3-dichlorobenzene	NA	1.9
612	106-46-7	1,4-dichlorobenzene	73	4.4
	100-51-6	benzyl alcohol	NA	50
	95-50-1	1,2-dichlorobenzene	NA	1.9
	95-48-7	2-methylphenol	NA	10
	108-60-1	bis(2-chloroisopropyl)ether	NA	5.7
	106-44-5	4-methylphenol	NA	10
674	621-64-7	n-nitroso-di-n-propylamine	72	12
	67-72-1	hexachloroethane	NA	1.6
	98-95-3	nitrobenzene	NA	1.9
	78-59-1	isophorone	NA	2.2
	88-75-5	2-nitrophenol	NA	3.6
	105-67-9	2,4-dimethylphenol	NA	2.7
	65-85-0	benzoic acid	NA	50
	111-91-1	bis(2-chloroethoxy)methane	NA	5.3
	120-83-2	2,4-dichlorophenol	NA	2.7
794	120-82-1	1,2,4-trichlorobenzene	82	1.9
	91-20-3	naphthalene	NA	1.6
	106-47-8	4-chloroaniline	NA	10
	87-68-3	hexachlorobutadiene	NA	0.90
887	59-50-7	4-chloro-3-methylphenol	79	3.0
	91-57-6	2-methylnaphthalene	NA	10

SAMPLE ID CAR8-03-047 MATRIX SPIKE FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	NA	6.0
	88-06-2	2,4,6-trichlorophenol	NA	2.7
	95-95-4	2,4,5-trichlorophenol	NA	10
	91-58-7	2-chloronaphthalene	NA	1.9
	88-74-4	2-nitroaniline	NA	50
	131-11-3	dimethyl phthalate	NA	1.6
	208-96-8	acenaphthylene	NA	3.5
	99-09-2	3-nitroaniline	NA	50
1083	83-32-9	acenaphthene	84	1.9
	51-28-5	2,4-dinitrophenol	NA	42
1093	100-02-7	4-nitrophenol	88	2.4
	132-64-9	dibenzofuran	NA	10
	606-20-2	2,6-dinitrotoluene	NA	1.9
1110	121-14-2	2,4-dinitrotoluene	74	5.7
	84-66-2	diethylphthalate	NA	1.9
	7005-72-3	4-chlorophenyl-phenylether	NA	4.2
	86-73-7	fluorene	NA	1.9
	100-01-06	4-nitroaniline	NA	50
	534-52-1	4,6-dinitro-2-methylphenol	NA	24
	86-30-6	n-nitrosodiphenylamine	NA	1.9
	101-55-3	4-bromophenyl-phenylether	NA	1.9
	118-74-1	hexachlorobenzene	NA	1.9
1291	87-86-5	pentachlorophenol	81	3.6
	85-01-8	phenanthrene	NA	5.4
	120-12-7	anthracene	NA	1.9
	84-74-2	di-n-butylphthalate	NA	2.5
	206-44-0	fluoranthene	NA	2.2
	92-87-5	benzidine	NA	44
1545	129-00-0	pyrene	38	1.9
	85-68-7	butylbenzylphthalate	NA	2.5
	91-94-1	3,3'-dichlorobenzidine	NA	17
	56-55-3	benzo(a)anthracene	NA	7.8
	117-81-7	bis(2-ethylhexyl)phthalate	NA	2.5

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID CAR8-03-047 MATRIX SPIKE FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	NA	2.5
	117-84-0	di-n-octyl phthalate	NA	2.5
	205-99-2	benzo(b)fluoranthene	NA	4.8
	207-08-9	benzo(k)fluoranthene	NA	2.5
	50-32-8	benzo(a)pyrene	NA	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	NA	3.7
	53-70-3	dibenz(a,h)anthracene	NA	2.5
	191-24-2	benzo(ghi)perylene	NA	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
436	2-fluorophenol	81 %
561	d5-phenol	79 %
692	d5-nitrobenzene	85 %
971	2-fluorobiphenyl	86 %
1203	2,4,6-tribromophenol	83 %
1569	d14-terphenyl	70 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-047 MS DUP SAMPLE # 14 FRACTIONS: B
Date & Time Collected not specified Category

EX BNA 04/04/88
DATE COMPLETED

SAMPLE ID CAR8-03-047 MS DUP FRACTION 14B TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313414B VERIFIED LAK
INSTRMT F2 INJECTD 04/07/88 UNITS % RECOV.

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	NA	10
517	108-95-2	phenol	64	1.5
	62-53-3	aniline	NA	10
	111-44-4	bis(2-chloroethyl) ether	NA	5.7
533	95-57-8	2-chlorophenol	78	3.3
	541-73-1	1,3-dichlorobenzene	NA	1.9
560	106-46-7	1,4-dichlorobenzene	73	4.4
	100-51-6	benzyl alcohol	NA	50
	95-50-1	1,2-dichlorobenzene	NA	1.9
	95-48-7	2-methylphenol	NA	10
	108-60-1	bis(2-chloroisopropyl)ether	NA	5.7
	106-44-5	4-methylphenol	NA	10
624	621-64-7	n-nitroso-di-n-propylamine	84	12
	67-72-1	hexachloroethane	NA	1.6
	98-95-3	nitrobenzene	NA	1.9
	78-59-1	isophorone	NA	2.2
	88-75-5	2-nitrophenol	NA	3.6
	105-67-9	2,4-dimethylphenol	NA	2.7
	65-85-0	benzoic acid	NA	50
	111-91-1	bis(2-chloroethoxy)methane	NA	5.3
	120-83-2	2,4-dichlorophenol	NA	2.7
740	120-82-1	1,2,4-trichlorobenzene	78	1.9
	91-20-3	naphthalene	NA	1.6
	106-47-8	4-chloroaniline	NA	10
	87-68-3	hexachlorobutadiene	NA	0.90
834	59-50-7	4-chloro-3-methylphenol	73	3.0
	91-57-6	2-methylnaphthalene	NA	10

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-134

Received: 03/31/88 Results by Sample Continued From Above

SAMPLE ID CAR8-03-047 MS DUP FRACTION 14B TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	NA	6.0
	88-06-2	2,4,6-trichlorophenol	NA	2.7
	95-95-4	2,4,5-trichlorophenol	NA	10
	91-58-7	2-chloronaphthalene	NA	1.9
	88-74-4	2-nitroaniline	NA	50
	131-11-3	dimethyl phthalate	NA	1.6
	208-96-8	acenaphthylene	NA	3.5
	99-09-2	3-nitroaniline	NA	50
1022	83-32-9	acenaphthene	78	1.9
	51-28-5	2,4-dinitrophenol	NA	42
1038	100-02-7	4-nitrophenol	75	2.4
	132-64-9	dibenzofuran	NA	10
	606-20-2	2,6-dinitrotoluene	NA	1.9
1051	121-14-2	2,4-dinitrotoluene	74	5.7
	84-66-2	diethylphthalate	NA	1.9
	7005-72-3	4-chlorophenyl-phenylether	NA	4.2
	86-73-7	fluorene	NA	1.9
	100-01-06	4-nitroaniline	NA	50
	534-52-1	4,6-dinitro-2-methylphenol	NA	24
	86-30-6	n-nitrosodiphenylamine	NA	1.9
	101-55-3	4-bromophenyl-phenylether	NA	1.9
	118-74-1	hexachlorobenzene	NA	1.9
1226	87-86-5	pentachlorophenol	90	3.6
	85-01-8	phenanthrene	NA	5.4
	120-12-7	anthracene	NA	1.9
	84-74-2	di-n-butylphthalate	NA	2.5
	206-44-0	fluoranthene	NA	2.2
	92-87-5	benzidine	NA	44
1474	129-00-0	pyrene	36	1.9
	85-68-7	butylbenzylphthalate	NA	2.5
	91-94-1	3,3'-dichlorobenzidine	NA	17
	56-55-3	benzo(a)anthracene	NA	7.8
	117-81-7	bis(2-ethylhexyl)phthalate	NA	2.5

SAMPLE ID CAR8-03-047 MS DUP

FRACTION 14B TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	NA	2.5
	117-84-0	di-n-octyl phthalate	NA	2.5
	205-99-2	benzo(b)fluoranthene	NA	4.8
	207-08-9	benzo(k)fluoranthene	NA	2.5
	50-32-8	benzo(a)pyrene	NA	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	NA	3.7
	53-70-3	dibenz(a,h)anthracene	NA	2.5
	191-24-2	benzo(ghi)perylene	NA	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
391	2-fluorophenol	72 %
515	d5-phenol	70 %
640	d5-nitrobenzene	74 %
914	2-fluorobiphenyl	73 %
1140	2,4,6-tribromophenol	70 %
1501	d14-terphenyl	66 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID REAGENT BLANK SAMPLE # 15 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/04/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST SAL EXTRCTD 04/04/88 FILE # 0313415A VERIFIED LAK
INSTRMT F2 INJECTD 04/07/88 UNITS UG/KG

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	670
511	108-95-2	phenol	76 J	100
	62-53-3	aniline	ND	670
	111-44-4	bis(2-chloroethyl) ether	ND	380
	95-57-8	2-chlorophenol	ND	220
	541-73-1	1,3-dichlorobenzene	ND	130
	106-46-7	1,4-dichlorobenzene	ND	290
	100-51-6	benzyl alcohol	ND	3300
	95-50-1	1,2-dichlorobenzene	ND	130
	95-48-7	2-methylphenol	ND	670
	108-60-1	bis(2-chloroisopropyl)ether	ND	380
	106-44-5	4-methylphenol	ND	670
	621-64-7	n-nitroso-di-n-propylamine	ND	800
	67-72-1	hexachloroethane	ND	110
	98-95-3	nitrobenzene	ND	130
	78-59-1	isophorone	ND	150
	88-75-5	2-nitrophenol	ND	240
	105-67-9	2,4-dimethylphenol	ND	180
	65-85-0	benzoic acid	ND	3300
	111-91-1	bis(2-chloroethoxy)methane	ND	350
	120-83-2	2,4-dichlorophenol	ND	180
	120-82-1	1,2,4-trichlorobenzene	ND	130
	91-20-3	naphthalene	ND	110
	106-47-8	4-chloroaniline	ND	670
	87-68-3	hexachlorobutadiene	ND	60
	59-50-7	4-chloro-3-methylphenol	ND	200
	91-57-6	2-methylnaphthalene	ND	670

SAMPLE ID REAGENT BLANK FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	400
	88-06-2	2,4,6-trichlorophenol	ND	180
	95-95-4	2,4,5-trichlorophenol	ND	670
	91-58-7	2-chloronaphthalene	ND	130
	88-74-4	2-nitroaniline	ND	3300
	131-11-3	dimethyl phthalate	ND	110
	208-96-8	acenaphthylene	ND	230
	99-09-2	3-nitroaniline	ND	3300
	83-32-9	acenaphthene	ND	130
	51-28-5	2,4-dinitrophenol	ND	2800
	100-02-7	4-nitrophenol	ND	160
	132-64-9	dibenzofuran	ND	670
	606-20-2	2,6-dinitrotoluene	ND	130
	121-14-2	2,4-dinitrotoluene	ND	380
	84-66-2	diethylphthalate	ND	130
	7005-72-3	4-chlorophenyl-phenylether	ND	280
	86-73-7	fluorene	ND	130
	100-01-06	4-nitroaniline	ND	3300
	534-52-1	4,6-dinitro-2-methylphenol	ND	1600
	86-30-6	n-nitrosodiphenylamine	ND	130
	101-55-3	4-bromophenyl-phenylether	ND	130
	118-74-1	hexachlorobenzene	ND	130
	87-86-5	pentachlorophenol	ND	240
	85-01-8	phenanthrene	ND	360
	120-12-7	anthracene	ND	130
1352	84-74-2	di-n-butylphthalate	270	170
	206-44-0	fluoranthene	ND	150
	92-87-5	benzidine	ND	2900
	129-00-0	pyrene	ND	130
	85-68-7	butylbenzylphthalate	ND	170
	91-94-1	3,3'-dichlorobenzidine	ND	1100
	56-55-3	benzo(a)anthracene	ND	520
1685	117-81-7	bis(2-ethylhexyl)phthalate	150 J	170

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-134
Continued From Above

SAMPLE ID REAGENT BLANK

FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	170
	117-84-0	di-n-octyl phthalate	ND	170
	205-99-2	benzo(b)fluoranthene	ND	320
	207-08-9	benzo(k)fluoranthene	ND	170
	50-32-8	benzo(a)pyrene	ND	170
	193-39-5	indeno(1,2,3-cd)pyrene	ND	250
	53-70-3	dibenz(a,h)anthracene	ND	170
	191-24-2	benzo(ghi)perylene	ND	270

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
378	2-fluorophenol	75 %
510	d5-phenol	68 %
639	d5-nitrobenzene	78 %
917	2-fluorobiphenyl	75 %
1144	2,4,6-tribromophenol	72 %
1506	d14-terphenyl	68 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

RADIAN CORPORATION

Page 1
Received: 03/31/88

RAS Sacramento REPORT
04/25/88 08:46:13

Work Order # S8-03-135

REPORT TO: Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN: Larry French

CLIENT: CARSWELL AFB SAMPLES 5
COMPANY: Carswell AFB.
FACILITY: Headquarters, SAC
Offutt, Nebraska 68113

WORK ID: Stage 2, Site 15
TAKEN: 03/29/88
TRANS: Federal 5910117975/5910117975
TYPE: Soil-Herbicide/Pesticide
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN:
PHONE: 916-362-5332

Lucas Letkovich
CERTIFIED BY

CONTACT: LARRY FRENCH

SAMPLES 2A, 3A, & 5A SHOW HIGH SURROGATE RECOVERIES DUE TO CONTAMINATION AND ARE FLAGGED AS QC.
QC= OUTSIDE CONTROL LIMITS.

SAMPLE IDENTIFICATION

01 CAR8-03-045
02 CAR8-03-046
03 REAGENT BLANK
04 REAGENT BLANK
05 METHOD SPIKE

TEST CODES and NAMES used on this report

8080	SW846-Pest/PCB's Soil
8150	Herbicides in soil
EXHERB	Extraction for Herbicides
EXPEST	Extraction for Pest/PCBs

RAS Sacramento REPORT

Work Order # S8-03-135

Received: 03/31/88

Results By Test

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
EXHERB Date completed	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED		04/05/88 DATE COMPLETED
EXPEST date completed	04/04/88 DATE COMPLETED	04/04/88 DATE COMPLETED		04/04/88 DATE COMPLETED	

KADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-135

Received: 03/31/88

Results By Test

SAMPLE Sample Id	Test: EXHERB Date completed	Test: EXPEST date completed
01 CAR8-03-045	04/05/88 DATE COMPLETED	04/04/88 DATE COMPLETED
02 CAR8-03-046	04/05/88 DATE COMPLETED	04/04/88 DATE COMPLETED
03 REAGENT BLANK	04/05/88 DATE COMPLETED	
04 REAGENT BLANK		04/04/88 DATE COMPLETED
05 METHOD SPIKE	04/05/88 DATE COMPLETED	

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-135

SAMPLE ID CAR8-03-045

SAMPLE # 01 FRACTIONS: A, B
Date & Time Collected 03/29/88 Category

EXHERB 04/05/88 EXPEST 04/04/88
DATE COMPLETED DATE COMPLETED

KADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-03-135

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-045 FRACTION 01B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/04/88 FILE # 118041146 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 1000 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	10	1000
58-89-9	gamma-BHC (lindane)	ND	10	1000
319-85-7	beta-BHC	ND	10	1000
76-44-8	Heptachlor	ND	10	1000
319-86-8	delta-BHC	ND	10	1000
309-00-02	Aldrin	ND	10	1000
1024-57-3	Heptachlor Epoxide	ND	10	1000
959-98-8	Endosulfan I	ND	10	1000
72-55-9	4,4'-DDE	29 C	10	1000
60-57-1	Dieldrin	ND	10	1000
72-20-8	Endrin	ND	10	1000
72-54-8	4,4'-DDD	140 C	10	1000
33213-65-9	Endosulfan II	ND	30	1000
50-29-3	4,4'-DDT	ND	20	1000
7421-93-4	Endrin Aldehyde	ND	20	1000
1031-07-8	Endosulfan Sulphate	ND	50	1000
53494-70-5	Endrin Ketone	ND	50	1000
72-43-5	Methoxychlor	ND	50	1000
57-74-9	Chlordane	ND	50	1000
8001-35-2	Toxaphene	ND	500	1000
12674-11-2	PCB-1016	ND	100	1000
11104-28-2	PCB-1221	ND	200	1000
11141-16-5	PCB-1232	ND	200	1000
53469-21-9	PCB-1242	ND	100	1000
12672-29-6	PCB-1248	ND	100	1000
11097-69-1	PCB-1254	ND	200	1000
11096-82-5	PCB-1260	ND	200	1000

SURROGATE 1770-80-5 Dibutylchlorendate 112 % Recovery

SAMPLE ID CAR8-03-045 FRACTION 01B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 03/31/88

Results by Sample

SAMPLE ID CAR8-03-045 FRACTION 01A TEST CODE 8150 NAME Herbicides in soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL EXTRCTD 04/05/88 FILE # 718041815 VERIFIED JD

INSTRMT 7 INJECTD 04/18/88 FACTOR 500 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	250	500
93-72-1	2,4,5-TP (Silvex)	ND	50	500
93-76-5	2,4,5-T	ND	50	500

SURROGATE

2,4-Dichlorophenyl Acetic Acid 87 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
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N\A = not available.
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D = Not reportable due to dilution

Received: 03/31/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-03-135

SAMPLE ID CAR8-03-046

SAMPLE # 02 FRACTIONS: A, B

Date & Time Collected 03/29/88

Category

EXHERB 04/05/88
DATE COMPLETED

EXPEST 04/04/88
DATE COMPLETED

Received: 03/31/88 Results by Sample

SAMPLE ID CAR8-03-046 FRACTION 02B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/04/88 FILE # 118041144 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 220 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	11	1100
58-89-9	gamma-BHC (lindane)	ND	11	1100
319-85-7	beta-BHC	ND	11	1100
76-44-8	Heptachlor	ND	11	1100
319-86-8	delta-BHC	ND	11	1100
309-00-02	Aldrin	ND	11	1100
1024-57-3	Heptachlor Epoxide	ND	11	1100
959-98-8	Endosulfan I	ND	2.2	220
72-55-9	4,4'-DDE	16 C	2.2	220
60-57-1	Dieldrin	ND	2.2	220
72-20-8	Endrin	ND	2.2	220
72-54-8	4,4'-DDD	17 C	2.2	220
33213-65-9	Endosulfan II	ND	6.6	220
50-29-3	4,4'-DDT	ND	4.4	220
7421-93-4	Endrin Aldehyde	ND	4.4	220
1031-07-8	Endosulfan Sulphate	ND	11	220
53494-70-5	Endrin Ketone	ND	11	220
72-43-5	Methoxychlor	ND	11	220
57-74-9	Chlordane	ND	55	1100
8001-35-2	Toxaphene	ND	110	220
12674-11-2	PCB-1016	ND	110	1100
11104-28-2	PCB-1221	ND	220	1100
11141-16-5	PCB-1232	ND	220	1100
53469-21-9	PCB-1242	ND	110	1100
12672-29-6	PCB-1248	ND	110	1100
11097-69-1	PCB-1254	ND	44	220
11096-82-5	PCB-1260	ND	44	220

SURROGATE 1770-80-5 Dibutylchlorendate 109 % Recovery

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-135
Continued From Above

SAMPLE ID CAR8-03-046 FRACTION 02B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
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NS = not spiked.
N\A = not available.
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J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

KADIAN CORPORATION

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-135

SAMPLE ID CAR8-03-046

FRACTION 02A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 03/29/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/05/88
INJECTD 04/18/88

FILE # 718041816 VERIFIED JD
FACTOR 510 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	260	510
93-72-1	2,4,5-TP (Silvex)	ND	51	510
93-76-5	2,4,5-T	ND	51	510

SURROGATE

2,4-Dichlorophenyl Acetic Acid 324 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 03/31/88

Results by Sample

SAMPLE ID REAGENT BLANK

SAMPLE # 03 FRACTIONS: A

Date & Time Collected not specified Category

EXHERB 04/05/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK FRACTION 03A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL EXTRCTD 04/05/88 FILE # 718041813 VERIFIED JD
INSTRMT 7 INJECTD 04/18/88 FACTOR 500 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	250	500
93-72-1	2,4,5-TP (Silvex)	ND	50	500
93-76-5	2,4,5-T	ND	50	500

SURROGATE

2,4-Dichlorophenyl Acetic Acid 159 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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NS = not spiked.
N\A = not available.
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J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-03-135

SAMPLE ID REAGENT BLANK

SAMPLE # 04 FRACTIONS: A
Date & Time Collected not specified Category

EXPEST 04/04/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK FRACTION 04A TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/04/88 FILE # 118041115 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 100 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	1.0	100
58-89-9	gamma-BHC (lindane)	ND	1.0	100
319-85-7	beta-BHC	ND	1.0	100
76-44-8	Heptachlor	ND	1.0	100
319-86-8	delta-BHC	ND	1.0	100
309-00-02	Aldrin	ND	1.0	100
1024-57-3	Heptachlor Epoxide	ND	1.0	100
959-98-8	Endosulfan I	ND	1.0	100
72-55-9	4,4'-DDE	ND	1.0	100
60-57-1	Dieldrin	ND	1.0	100
72-20-8	Endrin	ND	1.0	100
72-54-8	4,4'-DDD	ND	1.0	100
33213-65-9	Endosulfan II	ND	3.0	100
50-29-3	4,4'-DDT	ND	2.0	100
7421-93-4	Endrin Aldehyde	ND	2.0	100
1031-07-8	Endosulfan Sulphate	ND	5.0	100
53494-70-5	Endrin Ketone	ND	5.0	100
72-43-5	Methoxychlor	ND	5.0	100
57-74-9	Chlordane	ND	5.0	100
8001-35-2	Toxaphene	ND	50	100
12674-11-2	PCB-1016	ND	10	100
11104-28-2	PCB-1221	ND	20	100
11141-16-5	PCB-1232	ND	20	100
53469-21-9	PCB-1242	ND	10	100
12672-29-6	PCB-1248	ND	10	100
11097-69-1	PCB-1254	ND	20	100
11096-82-5	PCB-1260	ND	20	100

SURROGATE 1770-80-5 Dibutylchlorendate 106 % Recovery

SAMPLE ID REAGENT BLANK FRACTION 04A TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected not specified Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

SAMPLE ID METHOD SPIKE SAMPLE # 05 FRACTIONS: A
Date & Time Collected not specified Category

EXHERB 04/05/88
DATE COMPLETED

Received: 03/31/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-03-135

SAMPLE ID METHOD SPIKE

FRACTION 05A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/06/88
INJECTD 04/18/88

FILE # 718041818 VERIFIED JD
FACTOR 400 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	157	200	400
93-72-1	2,4,5-TP (Silvex)	197	40	400
93-76-5	2,4,5-T	85	40	400

SURROGATE

2,4-Dichlorophenyl Acetic Acid 148 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-173

Received: 03/31/88 07/20/88 09:23:55

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 13
COMPANY: Carswell AFB
FACILITY: IRP

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

WORK ID: soils Weapons Storage Area
TAKEN: GC, GM
TRANS: Fed Ex
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Car8-03-047
02 Car8-03-048
03 Car8-03-049
04 Car8-03-050
05 Car8-03-051
06 Car8-03-052
07 Car8-03-053
08 Car8-03-054
09 Car8-03-055
10 Car8-03-056
11 Car8-03-057
12 Car8-03-058
13 Car8-03-059

TEST CODES and NAMES used on this report

D3050P Digestion, method 3050, ICP
ICP200 ICPES, EPA 200.7 elements

Received: 03/31/88

Results By Test

SAMPLE Sample Id	Test: D3050P date complete
01 Car8-03-047	04/11/88
02 Car8-03-048	04/11/88
03 Car8-03-049	04/11/88
04 Car8-03-050	04/11/88
05 Car8-03-051	04/11/88
06 Car8-03-052	04/11/88
07 Car8-03-053	04/11/88
08 Car8-03-054	04/11/88
09 Car8-03-055	04/11/88
10 Car8-03-056	04/11/88
11 Car8-03-057	04/11/88
12 Car8-03-058	04/11/88
13 Car8-03-059	04/11/88

KADIAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-047 FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	3.9*	0.89	Mg	Magnesium	2500	9.9
Al	Aluminum	7400	20	Mn	Manganese	150	0.30
As	Arsenic	60*	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	80^	7.9
Ba	Barium	33	0.89	Ni	Nickel	7*	2.0
Be	Beryllium	0.24*	0.099	Pb	Lead	11*	5.0
Ca	Calcium	260000	59	Sb	Antimony	45	5.9
Cd	Cadmium	0.8*	0.30	Se	Selenium	40*	30
Co	Cobalt	2.3*	0.99	Si	Silicon	250	30
Cr	Chromium	18	0.89	Tl	Thallium	8*	8.9
Cu	Copper	3.7*	0.99	V	Vanadium	32	2.0
Fe	Iron	5800	3.0	Zn	Zinc	10	0.59
K	Potassium	600	30				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-047

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-048

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

VERIFIED RHH
UNITS ug/g

ANALYST DES

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	5.7	0.88	Mg	Magnesium	2100	9.8
Al	Aluminum	5600B	20	Mn	Manganese	130	0.29
As	Arsenic	50*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND,R	59	Na	Sodium	95	7.8
Ba	Barium	19	0.88	Ni	Nickel	7*	2.0
Be	Beryllium	0.21*	0.098	Pb	Lead	13*	4.9
Ca	Calcium	270000B	59	Sb	Antimony	56R	5.9
Cd	Cadmium	0.6*	0.29	Se	Selenium	40*	29
Co	Cobalt	2.8*	0.98	Si	Silicon	340	29
Cr	Chromium	17	0.88	Tl	Thallium	10*	8.8
Cu	Copper	3.3*	0.98	V	Vanadium	30	2.0
Fe	Iron	4700B	2.9	Zn	Zinc	8.1	0.59
K	Potassium	550	29				

CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-048

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KAUFMAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-049 FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/29/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	4*	0.89	Mg	Magnesium	3600	9.9
Al	Aluminum	26000	20	Mn	Manganese	240	0.30
As	Arsenic	ND	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	ND	7.9
Ba	Barium	110	0.89	Ni	Nickel	14	2.0
Be	Beryllium	0.56	0.099	Pb	Lead	16*	5.0
Ca	Calcium	86000	12	Sb	Antimony	ND	5.9
Cd	Cadmium	1.8	0.30	Se	Selenium	97*	30
Co	Cobalt	5.6	0.99	Si	Silicon	250	30
Cr	Chromium	31	0.89	Tl	Thallium	13*	8.9
Cu	Copper	7.0	0.99	V	Vanadium	51	2.0
Fe	Iron	14000	3.0	Zn	Zinc	27	0.59
K	Potassium	1900	30				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-049

FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 03/31/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-050

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/29/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	3.8*	0.88	Mg	Magnesium	2700	9.8
Al	Aluminum	8300	20	Mn	Manganese	180	0.29
As	Arsenic	70*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	96	7.8
Ba	Barium	32	0.88	Ni	Nickel	9*	2.0
Be	Beryllium	0.26*	0.098	Pb	Lead	12*	4.9
Ca	Calcium	240000	24	Sb	Antimony	40	5.9
Cd	Cadmium	0.5*	0.29	Se	Selenium	50*	29
Co	Cobalt	3.7*	0.98	Si	Silicon	250	29
Cr	Chromium	19	0.88	Tl	Thallium	ND	8.8
Cu	Copper	3.9*	0.98	V	Vanadium	35	2.0
Fe	Iron	6800	2.9	Zn	Zinc	14	0.59
K	Potassium	890	29				

SAMPLE ID Car8-03-050 FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/29/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-173

Received: 03/31/88 Results by Sample

SAMPLE ID Car8-03-051 FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	4.0*	0.88	Mg	Magnesium	2400	9.8
Al	Aluminum	4000	20	Mn	Manganese	110	0.29
As	Arsenic	50*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	120	7.8
Ba	Barium	11	0.88	Ni	Nickel	7*	2.0
Be	Beryllium	0.18*	0.098	Pb	Lead	11*	4.9
Ca	Calcium	270000	59	Sb	Antimony	50	5.9
Cd	Cadmium	1.2*	0.29	Se	Selenium	ND	29
Co	Cobalt	1.8*	0.98	Si	Silicon	160	29
Cr	Chromium	18	0.88	Tl	Thallium	18*	8.8
Cu	Copper	3.5*	0.98	V	Vanadium	25	2.0
Fe	Iron	4600	2.9	Zn	Zinc	12	0.59
K	Potassium	460	29				

SAMPLE ID Car8-03-051 FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KADVAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-173

Received: 03/31/88 Results by Sample

SAMPLE ID Car8-03-052 FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	4.0*	0.88	Mg	Magnesium	2300	9.8
Al	Aluminum	4700	20	Mn	Manganese	140	0.29
As	Arsenic	50*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	63	7.8
Ba	Barium	22	0.88	Ni	Nickel	5*	2.0
Be	Beryllium	0.22*	0.098	Pb	Lead	7*	4.9
Ca	Calcium	270000	59	Sb	Antimony	50	5.9
Cd	Cadmium	0.7*	0.29	Se	Selenium	30*	29
Co	Cobalt	2.1*	0.98	Si	Silicon	240	29
Cr	Chromium	17	0.88	Tl	Thallium	ND	8.8
Cu	Copper	2.5*	0.98	V	Vanadium	23	2.0
Fe	Iron	4400	2.9	Zn	Zinc	9.3	0.59
K	Potassium	660	29				

CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-052

FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KADIAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-053

FRACTION 07A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	4.9	0.87	Mg	Magnesium	2500	9.7
Al	Aluminum	3300	19	Mn	Manganese	160	0.29
As	Arsenic	70*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	58	Na	Sodium	130	7.8
Ba	Barium	8.6	0.87	Ni	Nickel	4*	1.9
Be	Beryllium	0.18*	0.097	Pb	Lead	11*	4.9
Ca	Calcium	280000	58	Sb	Antimony	62	5.8
Cd	Cadmium	0.5*	0.29	Se	Selenium	ND	29
Co	Cobalt	2.3*	0.97	Si	Silicon	140*	29
Cr	Chromium	20	0.87	Tl	Thallium	ND	8.7
Cu	Copper	3.8*	0.97	V	Vanadium	25	1.9
Fe	Iron	3800	2.9	Zn	Zinc	8.8	0.58
K	Potassium	430	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-053

FRACTION 07A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
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N\A = not available

KRAUSMAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-054

FRACTION 08A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

VERIFIED RHH
UNITS ug/g

ANALYST DES

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	4.0*	0.88	Mg	Magnesium	2500	9.8
Al	Aluminum	3300	20	Mn	Manganese	170	0.29
As	Arsenic	50*	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	160	7.8
Ba	Barium	9.9	0.88	Ni	Nickel	6*	2.0
Be	Beryllium	0.16*	0.098	Pb	Lead	15*	4.9
Ca	Calcium	270000	59	Sb	Antimony	46	5.9
Cd	Cadmium	0.8*	0.29	Se	Selenium	ND	29
Co	Cobalt	3.5*	0.98	Si	Silicon	140*	29
Cr	Chromium	21	0.88	Tl	Thallium	ND	8.8
Cu	Copper	3.8*	0.98	V	Vanadium	23	2.0
Fe	Iron	4500	2.9	Zn	Zinc	11	0.59
K	Potassium	450	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-054

FRACTION 08A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
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N\A = not available

KAUFMAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-055

FRACTION 09A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	2.6*	0.88	Mg	Magnesium	3000	9.8
Al	Aluminum	12000	20	Mn	Manganese	130	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	ND	7.8
Ba	Barium	40	0.88	Ni	Nickel	9*	2.0
Be	Beryllium	0.33*	0.098	Pb	Lead	18*	4.9
Ca	Calcium	170000	24	Sb	Antimony	32	5.9
Cd	Cadmium	1.9	0.29	Se	Selenium	72*	29
Co	Cobalt	2.8*	0.98	Si	Silicon	370	29
Cr	Chromium	24	0.88	Tl	Thallium	11*	8.8
Cu	Copper	9.8	0.98	V	Vanadium	28	2.0
Fe	Iron	11000	2.9	Zn	Zinc	62	0.59
K	Potassium	1600	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-055

FRACTION 09A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-03-173

Received: 03/31/88

Results by Sample

SAMPLE ID Car8-03-056 FRACTION 10A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.1*	0.89	Mg	Magnesium	3700	9.9
Al	Aluminum	17000	20	Mn	Manganese	140	0.30
As	Arsenic	ND	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	57	7.9
Ba	Barium	60	0.89	Ni	Nickel	12	2.0
Be	Beryllium	0.52	0.099	Pb	Lead	17*	5.0
Ca	Calcium	110000	12	Sb	Antimony	17*	5.9
Cd	Cadmium	1.3*	0.30	Se	Selenium	79*	30
Co	Cobalt	4.9*	0.99	Si	Silicon	280	30
Cr	Chromium	25	0.89	Tl	Thallium	ND	8.9
Cu	Copper	10	0.99	V	Vanadium	32	2.0
Fe	Iron	13000	3.0	Zn	Zinc	27	0.59
K	Potassium	1900	30				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-056

FRACTION 10A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-057

FRACTION 11A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.9*	0.88	Mg	Magnesium	2700	9.8
Al	Aluminum	4900	20	Mn	Manganese	160	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	37*	7.8
Ba	Barium	22	0.88	Ni	Nickel	7*	2.0
Be	Beryllium	0.25*	0.098	Pb	Lead	18*	4.9
Ca	Calcium	210000	24	Sb	Antimony	46	5.9
Cd	Cadmium	0.8*	0.29	Se	Selenium	ND	29
Co	Cobalt	2.8*	0.98	Si	Silicon	220	29
Cr	Chromium	17	0.88	Tl	Thallium	10*	8.8
Cu	Copper	9.0	0.98	V	Vanadium	18	2.0
Fe	Iron	7000	2.9	Zn	Zinc	17	0.59
K	Potassium	800	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-057 FRACTION 11A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
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N\A = not available

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-03-173

Received: 03/31/88 Results by Sample

SAMPLE ID Car8-03-058 FRACTION 12A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.5*	0.88	Mg	Magnesium	2700	9.8
Al	Aluminum	6500	20	Mn	Manganese	120	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	ND	7.8
Ba	Barium	12	0.88	Ni	Nickel	5*	2.0
Be	Beryllium	0.10*	0.098	Pb	Lead	14*	4.9
Ca	Calcium	180000	24	Sb	Antimony	35	5.9
Cd	Cadmium	ND	0.29	Se	Selenium	ND	29
Co	Cobalt	3.2*	0.98	Si	Silicon	260	29
Cr	Chromium	13	0.88	Tl	Thallium	ND	8.8
Cu	Copper	ND	0.98	V	Vanadium	18	2.0
Fe	Iron	10000	2.9	Zn	Zinc	9	0.59
K	Potassium	1200	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-058

FRACTION 12A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KADIAN CORPORATION

Received: 03/31/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-03-173

SAMPLE ID Car8-03-059

FRACTION 13A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/30/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	1.5*	0.88	Mg	Magnesium	2600	9.8
Al	Aluminum	6300	20	Mn	Manganese	170	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	40	7.8
Ba	Barium	28	0.88	Ni	Nickel	4*	2.0
Be	Beryllium	0.14*	0.098	Pb	Lead	16*	4.9
Ca	Calcium	180000	24	Sb	Antimony	48	5.9
Cd	Cadmium	ND	0.29	Se	Selenium	ND	29
Co	Cobalt	4.0*	0.98	Si	Silicon	280	29
Cr	Chromium	14	0.88	Tl	Thallium	ND	8.8
Cu	Copper	4.4*	0.98	V	Vanadium	20	2.0
Fe	Iron	8100	2.9	Zn	Zinc	19	0.59
K	Potassium	970	29				

Received: 03/31/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-03-173
Continued From Above

SAMPLE ID Car8-03-059

FRACTION 13A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/30/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-003

Received: 04/01/88 07/20/88 09:15:07

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 6
COMPANY: Carswell AFB
FACILITY: IRP

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

WORK ID: Site 13 soils
TAKEN: WGM/GJC
TRANS: WGM
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	CAR8-03-061
02	CAR8-03-062
03	CAR8-03-063
04	CAR8-03-064
05	CAR8-03-065
06	CAR8-03-066

TEST CODES and NAMES used on this report

D3050P	Digestion, method 3050, ICP
HC IR	Hydrocarbons, Total
HG C	Mercury, cold vapor
ICP200	ICPES, EPA 200.7 elements

RAS - Austin REPORT

Work Order # 88-04-003

Received: 04/01/88

Results By Test

SAMPLE Sample Id	Test: D3050P date complete	Test: HC IR mg/L
01 CAR8-03-061	04/15/88	410^ ug/g
02 CAR8-03-062	04/15/88	230 ug/g
03 CAR8-03-063	04/15/88	55 ug/g
04 CAR8-03-064	04/15/88	3500 ug/g
05 CAR8-03-065	04/15/88	230 ug/g
06 CAR8-03-066	04/15/88	99 ug/g

KADIAN CORPORATION

Received: 04/01/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-061 FRACTION 01A TEST CODE HG C NAME Mercury, cold vapor

Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP

INSTRMT 403

ANALYZED 04/09/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

Received: 04/01/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-003

SAMPLE ID CARB-03-061

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.89	Mg	Magnesium	1900	9.9
Al	Aluminum	11000	20	Mn	Manganese	130	0.30
As	Arsenic	ND	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	ND	7.9
Ba	Barium	260^	0.89	Ni	Nickel	6*	2.0
Be	Beryllium	0.25*	0.099	Pb	Lead	33^	5.0
Ca	Calcium	91000	12	Sb	Antimony	8*	5.9
Cd	Cadmium	1.0*	0.30	Se	Selenium	42*	30
Co	Cobalt	2.7*	0.99	Si	Silicon	130*^	30
Cr	Chromium	21^	0.89	Tl	Thallium	ND	8.9
Cu	Copper	4.9*	0.99	V	Vanadium	24	2.0
Fe	Iron	7700	3.0	Zn	Zinc	46^	0.59
K	Potassium	1400	30				

KADIAN CORPORATION

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003
Continued From Above

SAMPLE ID CAR8-03-061

FRACTION 01A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

CORPORATION

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-062

FRACTION 02A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

KAUFMAN CORPORATION

Received: 04/01/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-062

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED DS

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.87	Mg	Magnesium	1700	9.7
Al	Aluminum	9700B	19	Mn	Manganese	110	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND,R	58	Na	Sodium	ND	7.8
Ba	Barium	88R+	0.87	Ni	Nickel	3.6*	1.9
Be	Beryllium	0.20*	0.097	Pb	Lead	58R+	4.9
Ca	Calcium	85000B+	12	Sb	Antimony	8.5*R	5.8
Cd	Cadmium	0.92*	0.29	Se	Selenium	44 R+	29
Co	Cobalt	ND	0.97	Si	Silicon	280	29
Cr	Chromium	27+	0.87	Tl	Thallium	ND	8.7
Cu	Copper	4.1*	0.97	V	Vanadium	22	1.9
Fe	Iron	6900B	2.9	Zn	Zinc	31R	0.58
K	Potassium	1200	29				

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003
Continued From Above

SAMPLE ID CAR8-03-062

FRACTION 02A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

CORPORATION

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-063

FRACTION 03A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
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N\A = not available

RAS - Austin REPORT

Work Order # 88-04-003

Received: 04/01/88

Results by Sample

SAMPLE ID CAR8-03-063 FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.88	Mg	Magnesium	1700	9.8
Al	Aluminum	12000	20	Mn	Manganese	120	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.9
B	Boron	ND	59	Na	Sodium	ND	7.8
Ba	Barium	160	0.88	Ni	Nickel	6*	2.0
Be	Beryllium	0.21*	0.098	Pb	Lead	50	4.9
Ca	Calcium	63000	5.9	Sb	Antimony	ND	5.9
Cd	Cadmium	1.0*	0.29	Se	Selenium	37*	29
Co	Cobalt	1.7*	0.98	Si	Silicon	260	29
Cr	Chromium	22	0.88	Tl	Thallium	ND	8.8
Cu	Copper	8.7	0.98	V	Vanadium	25	2.0
Fe	Iron	8800	2.9	Zn	Zinc	35	0.59
K	Potassium	1500	29				

SAMPLE ID CAR8-03-063 FRACTION 03A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CARB-03-064

FRACTION 04A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

KAIDIAN CORPORATION

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-064 FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.90	Mg	Magnesium	2100	10
Al	Aluminum	14000	20	Mn	Manganese	160	0.30
As	Arsenic	ND	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	60	Na	Sodium	ND	8.0
Ba	Barium	55	0.90	Ni	Nickel	6*	2.0
Be	Beryllium	0.2*	0.10	Pb	Lead	19*	5.0
Ca	Calcium	87000	12	Sb	Antimony	ND	6.0
Cd	Cadmium	0.6*	0.30	Se	Selenium	44*	30
Co	Cobalt	2*	1.0	Si	Silicon	210	30
Cr	Chromium	16	0.90	Tl	Thallium	ND	9.0
Cu	Copper	6	1.0	V	Vanadium	27	2.0
Fe	Iron	8900	3.0	Zn	Zinc	26	0.60
K	Potassium	1700	30				

SAMPLE ID CAR8-03-064

FRACTION 04A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

KADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-003

Received: 04/01/88

Results by Sample

SAMPLE ID CAR8-03-065 FRACTION 05A TEST CODE HG C NAME Mercury, cold vapor

Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP

INSTRMT 403 ANALYZED 04/09/88 UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-065

FRACTION 05A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.89	Mg	Magnesium	1500	9.9
Al	Aluminum	9300	20	Mn	Manganese	110	0.30
As	Arsenic	ND	30	Mo	Molybdenum	ND	5.0
B	Boron	ND	59	Na	Sodium	23*	7.9
Ba	Barium	290	0.89	Ni	Nickel	6*	2.0
Be	Beryllium	0.15*	0.099	Pb	Lead	50	5.0
Ca	Calcium	66000	5.9	Sb	Antimony	ND	5.9
Cd	Cadmium	0.9*	0.30	Se	Selenium	ND	30
Co	Cobalt	1.5*	0.99	Si	Silicon	210	30
Cr	Chromium	20	0.89	Tl	Thallium	ND	8.9
Cu	Copper	11	0.99	V	Vanadium	21	2.0
Fe	Iron	6700	3.0	Zn	Zinc	37	0.59
K	Potassium	1100	30				

KADIAN CORPORATION

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003
Continued From Above

SAMPLE ID CAR8-03-065 FRACTION Q5A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
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N\A = not available

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003

SAMPLE ID CAR8-03-066

FRACTION 06A TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 03/31/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/g

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.030

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

KADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-003

Received: 04/01/88

Results by Sample

SAMPLE ID CAR8-03-066 FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 03/31/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/g

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.87	Mg	Magnesium	2200	9.6
Al	Aluminum	14000	19	Mn	Manganese	190	0.29
As	Arsenic	ND	29	Mo	Molybdenum	ND	4.8
B	Boron	ND	58	Na	Sodium	ND	7.7
Ba	Barium	66	0.87	Ni	Nickel	8*	1.9
Be	Beryllium	0.28*	0.096	Pb	Lead	39	4.8
Ca	Calcium	59000	5.8	Sb	Antimony	ND	5.8
Cd	Cadmium	1.7	0.29	Se	Selenium	44*	29
Co	Cobalt	3.0*	0.96	Si	Silicon	250	29
Cr	Chromium	24	0.87	Tl	Thallium	ND	8.7
Cu	Copper	17	0.96	V	Vanadium	28	1.9
Fe	Iron	11000	2.9	Zn	Zinc	42	0.58
K	Potassium	1800	29				

Received: 04/01/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-003
Continued From Above

SAMPLE ID CAR8-03-066

FRACTION 06A TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
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N\A = not available

CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 05/02/88 08:19:36

REPORT TO: Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN: Larry French

CLIENT: CARSWELL AFB SAMPLES: 17
COMPANY: Carswell AFB.
FACILITY: Headquarters, SAC
Offutt, Nebraska 68113

WORK ID: Stage 2, Site 13
TAKEN: 03/31/88
TRANS: Federal 7444437674
TYPE: SEDIMENT
P.O. #: 227-005-04-40
INV. #: 5002180

PREPARED BY: Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN:
PHONE: 916-362-5332

Lucas A Petkovsek
CERTIFIED BY

CONTACT: LARRY FRENCH

QC= OUTSIDE CONTROL LIMITS.

Previously Reported on 04/29/88.

SAMPLE IDENTIFICATION

01	CAR8-03-061 SEDIMENT
02	CAR8-03-062 SEDIMENT
03	CAR8-03-063 SEDIMENT
04	CAR8-03-064 SEDIMENT
05	CAR8-03-065 SEDIMENT
06	CAR8-03-066 SEDIMENT
07	TRIP BLANK
08	CAR8-03-063 MS
08	CAR8-03-063 MSD
09	REAGENT BLANK
10	CAR8-03-061 SEDIMENT
11	CAR8-03-062 SEDIMENT
12	CAR8-03-063 SEDIMENT
13	CAR8-03-064 SEDIMENT
14	CAR8-03-065 SEDIMENT
15	CAR8-03-066 SEDIMENT
16	REAGENT BLANK
17	REAGENT BLANK MED LEVEL

TEST CODES and NAMES used on this report

BNA S	Semivolatiles Screen
CL8240	Purgeable Organics - Soil
CL8270	Semivolatile Organics-Soil
DRY WT	Dry weight determination
EX BNA	Semivolatiles extraction
GPC	Gel Perm Clean-Up
VOA S	Volatiles Screen Analysis

Received: 04/04/88

RAS Sacramento REPORT Work Order # S8-04-009

Results By Test

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
VOA_S date completed	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED

TEST CODE default units	Sample 06 (entered units)	Sample 10 (entered units)	Sample 11 (entered units)	Sample 12 (entered units)	Sample 13 (entered units)
BNA_S date completed		04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
DRY_WT % moisture		34 % MOISTURE	24 % MOISTURE	26 % MOISTURE	25 % MOISTURE
EX_BNA date completed		04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
GPC date completed		04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
VOA_S date completed	04/06/88 DATE COMPLETED				

TEST CODE default units	Sample 14 (entered units)	Sample 15 (entered units)	Sample 16 (entered units)	Sample 17 (entered units)
BNA_S date completed	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED		
DRY_WT % moisture	29 % MOISTURE	20 % MOISTURE		
EX_BNA date completed	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
GPC date completed	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED		

KALIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results By Test

SAMPLE Sample Id	Test: BNA S date completed	Test: DRY WT % moisture	Test: EX BNA date completed	Test: GPC date completed	Test: VOA S date completed
01 CAR8-03-061 SED					04/06/88 DATE COMPLETED
02 CAR8-03-062 SED					04/06/88 DATE COMPLETED
03 CAR8-03-063 SED					04/06/88 DATE COMPLETED
04 CAR8-03-064 SED					04/06/88 DATE COMPLETED
05 CAR8-03-065 SED					04/06/88 DATE COMPLETED
06 CAR8-03-066 SED					04/06/88 DATE COMPLETED
10 CAR8-03-061 SED	04/06/88 DATE COMPLETED	34 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
11 CAR8-03-062 SED	04/06/88 DATE COMPLETED	24 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
12 CAR8-03-063 SED	04/06/88 DATE COMPLETED	26 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
13 CAR8-03-064 SED	04/06/88 DATE COMPLETED	25 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
14 CAR8-03-065 SED	04/06/88 DATE COMPLETED	29 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
15 CAR8-03-066 SED	04/06/88 DATE COMPLETED	20 % MOISTURE	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	
16 REAGENT BLANK			04/06/88 DATE COMPLETED		
17 REAGENT BLANK M			04/06/88 DATE COMPLETED		

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-061 SEDIMENT SAMPLE # 01 FRACTIONS: A,B

Date & Time Collected 03/31/88 Category

VOA S 04/06/88
DATE COMPLETED

RADIAN CORPORATION

RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-061 SEDIMENT FRACTION 01A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST JJ EXTRCTD FILE # 0400901A

INSTRMT F4 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	910
	74-83-9	bromomethane	ND	910
	75-01-4	vinyl chloride	ND	910
	75-00-3	chloroethane	ND	910
	75-09-2	methylene chloride	ND	510
130	67-64-1	acetone	2100 B	1400
	75-15-0	carbon disulfide	ND	310
	75-69-4	trichlorofluoromethane	ND	910
	75-35-4	1,1-dichloroethene	ND	850
	75-34-3	1,1-dichloroethane	ND	510
	156-60-5	trans-1,2-dichloroethene	ND	290
	67-66-3	chloroform	ND	290
	107-06-2	1,2-dichloroethane	ND	510
213	78-93-3	2-butanone	6300 B	4500
	71-55-6	1,1,1-trichloroethane	ND	690
	56-23-5	carbon tetrachloride	ND	510
	108-05-4	vinyl acetate	ND	1200
	75-27-4	bromodichloromethane	ND	400
	78-87-5	1,2-dichloropropane	ND	1100
	10061-01-5	cis-1,3-dichloropropene	ND	910
	79-01-6	trichloroethene	ND	340
	124-48-1	dibromochloromethane	ND	560
	79-00-5	1,1,2-trichloroethane	ND	910
	71-43-2	benzene	ND	800
	10061-02-6	trans-1,3-dichloropropene	ND	910
	110-75-8	2-chloroethylvinyl ether	ND	910
	75-25-2	bromoform	ND	850
	591-78-6	2-hexanone	ND	6500

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-061 SEDIMENT FRACTION 01A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	8300
	127-18-4	tetrachloroethene	ND	740
	79-34-5	1,1,2,2-tetrachloroethane	ND	1200
387	108-88-3	toluene	3000	1100
	108-90-7	chlorobenzene	ND	1100
	100-41-4	ethylbenzene	ND	1300
	100-42-5	styrene	ND	540
	95-47-6	total xylenes	ND	830

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	95 %
384	Toluene-d8	98 %
474	BFB	102 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

SAMPLE ID CARB-03-062 SEDIMENT SAMPLE # 02 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

VOA S 04/06/88
DATE COMPLETED

SAMPLE ID CAR8-03-062 SEDIMENT FRACTION 02A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST JJ EXTRCTD FILE # 0400902A
INSTRMT F4 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	860
	74-83-9	bromomethane	ND	860
	75-01-4	vinyl chloride	ND	860
	75-00-3	chloroethane	ND	860
	75-09-2	methylene chloride	ND	480
130	67-64-1	acetone	2200 B	1300
	75-15-0	carbon disulfide	ND	290
	75-69-4	trichlorofluoromethane	ND	860
	75-35-4	1,1-dichloroethene	ND	800
	75-34-3	1,1-dichloroethane	ND	480
	156-60-5	trans-1,2-dichloroethene	ND	270
	67-66-3	chloroform	ND	270
	107-06-2	1,2-dichloroethane	ND	480
213	78-93-3	2-butanone	5500 B	4300
	71-55-6	1,1,1-trichloroethane	ND	650
	56-23-5	carbon tetrachloride	ND	480
	108-05-4	vinyl acetate	ND	1200
	75-27-4	bromodichloromethane	ND	380
	78-87-5	1,2-dichloropropane	ND	1000
	10061-01-5	cis-1,3-dichloropropene	ND	860
	79-01-6	trichloroethene	ND	320
	124-48-1	dibromochloromethane	ND	530
	79-00-5	1,1,2-trichloroethane	ND	860
	71-43-2	benzene	ND	750
	10061-02-6	trans-1,3-dichloropropene	ND	860
	110-75-8	2-chloroethylvinyl ether	ND	860
	75-25-2	bromoform	ND	800
	591-78-6	2-hexanone	ND	6200

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-062 SEDIMENT FRACTION 02A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
341	108-10-1	4-methyl-2-pentanone	210 BJ	7900
	127-18-4	tetrachloroethene	ND	700
	79-34-5	1,1,2,2-tetrachloroethane	ND	1200
387	108-88-3	toluene	1900	1000
	108-90-7	chlorobenzene	ND	1000
	100-41-4	ethylbenzene	ND	1200
	100-42-5	styrene	ND	510
	95-47-6	total xylenes	ND	790

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	94 %
384	Toluene-d8	97 %
475	BFB	106 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 04/04/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-063 SEDIMENT

SAMPLE # 03 FRACTIONS: A, B

Date & Time Collected 03/31/88

Category

VOA S 04/06/88
DATE COMPLETED

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-063 SEDIMENT FRACTION 03A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0400903A

INSTRMT F4 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	7.3
	74-83-9	bromomethane	ND	7.3
	75-01-4	vinyl chloride	ND	7.3
	75-00-3	chloroethane	ND	7.3
114	75-09-2	methylene chloride	1.6 J	4.1
125	67-64-1	acetone	47 B	11
	75-15-0	carbon disulfide	ND	2.5
	75-69-4	trichlorofluoromethane	ND	7.3
	75-35-4	1,1-dichloroethene	ND	6.8
	75-34-3	1,1-dichloroethane	ND	4.1
	156-60-5	trans-1,2-dichloroethene	ND	2.3
	67-66-3	chloroform	ND	2.3
	107-06-2	1,2-dichloroethane	ND	4.1
212	78-93-3	2-butanone	24 J	36
	71-55-6	1,1,1-trichloroethane	ND	5.5
	56-23-5	carbon tetrachloride	ND	4.1
	108-05-4	vinyl acetate	ND	10
	75-27-4	bromodichloromethane	ND	3.2
	78-87-5	1,2-dichloropropane	ND	8.7
	10061-01-5	cis-1,3-dichloropropene	ND	7.3
	79-01-6	trichloroethene	ND	2.8
	124-48-1	dibromochloromethane	ND	4.5
	79-00-5	1,1,2-trichloroethane	ND	7.3
289	71-43-2	benzene	2.5 J	6.4
	10061-02-6	trans-1,3-dichloropropene	ND	7.3
	110-75-8	2-chloroethylvinyl ether	ND	7.3
	75-25-2	bromoform	ND	6.8
	591-78-6	2-hexanone	ND	52

SAMPLE ID CAR8-03-063 SEDIMENT FRACTION 03A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	67
	127-18-4	tetrachloroethene	ND	5.9
	79-34-5	1,1,2,2-tetrachloroethane	ND	10
387	108-88-3	toluene	110	8.7
	108-90-7	chlorobenzene	ND	8.7
434	100-41-4	ethylbenzene	4.4 J	10
	100-42-5	styrene	ND	4.4
500	95-47-6	total xylenes	21	6.7

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
212	1,2-dichloroethane-d4	99 %
384	Toluene-d8	98 %
474	BFB	107 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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N\A = not available.
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J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-064 SEDIMENT SAMPLE # 04 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

VOA S 04/06/88
DATE COMPLETED

RAS Sacramento REPORT

Work Order # S8-04-009

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-064 SEDIMENT FRACTION 04A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST REM EXTRCTD FILE # 0400904A

INSTRMT F4 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	7.2
	74-83-9	bromomethane	ND	7.2
	75-01-4	vinyl chloride	ND	7.2
	75-00-3	chloroethane	ND	7.2
119	75-09-2	methylene chloride	6.0 B	4.0
127	67-64-1	acetone	31 B	11
	75-15-0	carbon disulfide	ND	2.4
	75-69-4	trichlorofluoromethane	ND	7.2
	75-35-4	1,1-dichloroethene	ND	6.7
	75-34-3	1,1-dichloroethane	ND	4.0
	156-60-5	trans-1,2-dichloroethene	ND	2.3
	67-66-3	chloroform	ND	2.3
	107-06-2	1,2-dichloroethane	ND	4.0
	78-93-3	2-butanone	ND	36
	71-55-6	1,1,1-trichloroethane	ND	5.4
	56-23-5	carbon tetrachloride	ND	4.0
	108-05-4	vinyl acetate	ND	9.9
	75-27-4	bromodichloromethane	ND	3.1
	78-87-5	1,2-dichloropropane	ND	8.6
	10061-01-5	cis-1,3-dichloropropene	ND	7.2
	79-01-6	trichloroethene	ND	2.7
	124-48-1	dibromochloromethane	ND	4.4
	79-00-5	1,1,2-trichloroethane	ND	7.2
	71-43-2	benzene	ND	6.3
	10061-02-6	trans-1,3-dichloropropene	ND	7.2
	110-75-8	2-chloroethylvinyl ether	ND	7.2
	75-25-2	bromoform	ND	6.7
	591-78-6	2-hexanone	ND	51

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-04-009
Continued From Above

SAMPLE ID CAR8-03-064 SEDIMENT FRACTION 04A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	66
	127-18-4	tetrachloroethene	ND	5.9
	79-34-5	1,1,2,2-tetrachloroethane	ND	9.9
387	108-88-3	toluene	23	8.6
	108-90-7	chlorobenzene	ND	8.6
435	100-41-4	ethylbenzene	3.0 J	10
	100-42-5	styrene	ND	4.3
500	95-47-6	total xylenes	18	6.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	92 %
384	Toluene-d8	99 %
475	BFB	75 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 04/04/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-065 SEDIMENT

SAMPLE # 05 FRACTIONS: A,B

Date & Time Collected 03/31/88

Category

VOA S 04/06/88
DATE COMPLETED

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-065 SEDIMENT FRACTION 05A TEST CODE CL8240 NAME Purgeable Organics - Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST REM EXTRCTD FILE # 0400905A

INSTRMT F4 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	7.0
	74-83-9	bromomethane	ND	7.0
	75-01-4	vinyl chloride	ND	7.0
	75-00-3	chloroethane	ND	7.0
118	75-09-2	methylene chloride	13 B	3.9
126	67-64-1	acetone	56 B	10
	75-15-0	carbon disulfide	ND	2.4
	75-69-4	trichlorofluoromethane	ND	7.0
	75-35-4	1,1-dichloroethene	ND	6.5
	75-34-3	1,1-dichloroethane	ND	3.9
	156-60-5	trans-1,2-dichloroethene	ND	2.2
	67-66-3	chloroform	ND	2.2
	107-06-2	1,2-dichloroethane	ND	3.9
	78-93-3	2-butanone	ND	35
	71-55-6	1,1,1-trichloroethane	ND	5.3
	56-23-5	carbon tetrachloride	ND	3.9
	108-05-4	vinyl acetate	ND	9.6
	75-27-4	bromodichloromethane	ND	3.1
	78-87-5	1,2-dichloropropane	ND	8.3
	10061-01-5	cis-1,3-dichloropropene	ND	7.0
	79-01-6	trichloroethene	ND	2.6
	124-48-1	dibromochloromethane	ND	4.3
	79-00-5	1,1,2-trichloroethane	ND	7.0
289	71-43-2	benzene	1.5 J	6.1
	10061-02-6	trans-1,3-dichloropropene	ND	7.0
	110-75-8	2-chloroethylvinyl ether	ND	7.0
	75-25-2	bromoform	ND	6.5
	591-78-6	2-hexanone	ND	50

SAMPLE ID CAR8-03-065 SEDIMENT FRACTION 05A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	64
	127-18-4	tetrachloroethene	ND	5.7
	79-34-5	1,1,2,2-tetrachloroethane	ND	9.6
387	108-88-3	toluene	95	8.3
	108-90-7	chlorobenzene	ND	8.3
435	100-41-4	ethylbenzene	5.1 J	10
	100-42-5	styrene	ND	4.2
515	95-47-6	total xylenes	36	6.4

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY	
213	1,2-dichloroethane-d4	91	%
384	Toluene-d8	104	%
475	BFB	118	%

NOTES AND DEFINITIONS FOR THIS REPORT.
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N\A = not available.
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J = estimated value less than minimum detection limit.

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-066 SEDIMENT

SAMPLE # 06 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

VOA S 04/06/88
DATE COMPLETED

SAMPLE ID CAR8-03-066 SEDIMENT FRACTION 06A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST REM EXTRCTD FILE # 0400906A
INSTRMT F4 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	7.4
	74-83-9	bromomethane	ND	7.4
	75-01-4	vinyl chloride	ND	7.4
	75-00-3	chloroethane	ND	7.4
119	75-09-2	methylene chloride	4.4 B	4.1
127	67-64-1	acetone	44 B	11
	75-15-0	carbon disulfide	ND	2.5
	75-69-4	trichlorofluoromethane	ND	7.4
	75-35-4	1,1-dichloroethene	ND	6.9
	75-34-3	1,1-dichloroethane	ND	4.1
	156-60-5	trans-1,2-dichloroethene	ND	2.4
	67-66-3	chloroform	ND	2.4
	107-06-2	1,2-dichloroethane	ND	4.1
	78-93-3	2-butanone	ND	37
	71-55-6	1,1,1-trichloroethane	ND	5.6
	56-23-5	carbon tetrachloride	ND	4.1
	108-05-4	vinyl acetate	ND	10
	75-27-4	bromodichloromethane	ND	3.2
	78-87-5	1,2-dichloropropane	ND	8.8
	10061-01-5	cis-1,3-dichloropropene	ND	7.4
	79-01-6	trichloroethene	ND	2.8
	124-48-1	dibromochloromethane	ND	4.6
	79-00-5	1,1,2-trichloroethane	ND	7.4
	71-43-2	benzene	ND	6.5
	10061-02-6	trans-1,3-dichloropropene	ND	7.4
	110-75-8	2-chloroethylvinyl ether	ND	7.4
	75-25-2	bromoform	ND	6.9
	591-78-6	2-hexanone	ND	53

SAMPLE ID CAR8-03-066 SEDIMENT FRACTION 06A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	68
	127-18-4	tetrachloroethene	ND	6.0
	79-34-5	1,1,2,2-tetrachloroethane	ND	10
388	108-88-3	toluene	18	8.8
	108-90-7	chlorobenzene	ND	8.8
436	100-41-4	ethylbenzene	2.1 J	11
	100-42-5	styrene	ND	4.4
516	95-47-6	total xylenes	14	6.8

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
214	1,2-dichloroethane-d4	92 %
385	Toluene-d8	102 %
475	BFB	104 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
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N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

Received: 04/04/88 Results by Sample

SAMPLE ID TRIP BLANK FRACTION 07A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST REM EXTRCTD FILE # 0400907A
INSTRMT F4 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.0
	74-83-9	bromomethane	ND	5.0
	75-01-4	vinyl chloride	ND	5.0
	75-00-3	chloroethane	ND	5.0
118	75-09-2	methylene chloride	2.7 BJ	2.8
126	67-64-1	acetone	15 B	7.5
	75-15-0	carbon disulfide	ND	1.7
	75-69-4	trichlorofluoromethane	ND	5.0
	75-35-4	1,1-dichloroethene	ND	4.7
	75-34-3	1,1-dichloroethane	ND	2.8
	156-60-5	trans-1,2-dichloroethene	ND	1.6
	67-66-3	chloroform	ND	1.6
	107-06-2	1,2-dichloroethane	ND	2.8
	78-93-3	2-butanone	ND	25
	71-55-6	1,1,1-trichloroethane	ND	3.8
	56-23-5	carbon tetrachloride	ND	2.8
	108-05-4	vinyl acetate	ND	6.9
	75-27-4	bromodichloromethane	ND	2.2
	78-87-5	1,2-dichloropropane	ND	6.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.0
	79-01-6	trichloroethene	ND	1.9
	124-48-1	dibromochloromethane	ND	3.1
	79-00-5	1,1,2-trichloroethane	ND	5.0
	71-43-2	benzene	ND	4.4
	10061-02-6	trans-1,3-dichloropropene	ND	5.0
	110-75-8	2-chloroethylvinyl ether	ND	5.0
	75-25-2	bromoform	ND	4.7
	591-78-6	2-hexanone	ND	36

KAUFMAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID TRIP BLANK

FRACTION 07A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	46
	127-18-4	tetrachloroethene	ND	4.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	6.9
	108-88-3	toluene	ND	6.0
	108-90-7	chlorobenzene	ND	6.0
	100-41-4	ethylbenzene	ND	7.2
	100-42-5	styrene	ND	3.0
	95-47-6	total xylenes	ND	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	97 %
385	Toluene-d8	100 %
475	BFB	97 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-063 MS FRACTION 08A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0400908A
INSTRMT F4 INJECTD 04/12/88 UNITS %

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	NA	5.0
	74-83-9	bromomethane	NA	5.0
	75-01-4	vinyl chloride	NA	5.0
	75-00-3	chloroethane	NA	5.0
	75-09-2	methylene chloride	NA	2.8
	67-64-1	acetone	NA	7.5
	75-15-0	carbon disulfide	NA	1.7
	75-69-4	trichlorofluoromethane	NA	5.0
158	75-35-4	1,1-dichloroethene	94	4.7
	75-34-3	1,1-dichloroethane	NA	2.8
	156-60-5	trans-1,2-dichloroethene	NA	1.6
	67-66-3	chloroform	NA	1.6
	107-06-2	1,2-dichloroethane	NA	2.8
	78-93-3	2-butanone	NA	25
	71-55-6	1,1,1-trichloroethane	NA	3.8
	56-23-5	carbon tetrachloride	NA	2.8
	108-05-4	vinyl acetate	NA	6.9
	75-27-4	bromodichloromethane	NA	2.2
	78-87-5	1,2-dichloropropane	NA	6.0
	10061-01-5	cis-1,3-dichloropropene	NA	5.0
281	79-01-6	trichloroethene	89	1.9
	124-48-1	dibromochloromethane	NA	3.1
	79-00-5	1,1,2-trichloroethane	NA	5.0
288	71-43-2	benzene	93	4.4
	10061-02-6	trans-1,3-dichloropropene	NA	5.0
	110-75-8	2-chloroethylvinyl ether	NA	5.0
	75-25-2	bromoform	NA	4.7
	591-78-6	2-hexanone	NA	36

RADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-063 MS FRACTION 08A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	NA	46
	127-18-4	tetrachloroethene	NA	4.1
	79-34-5	1,1,2,2-tetrachloroethane	NA	6.9
387	108-88-3	toluene	92	6.0
405	108-90-7	chlorobenzene	110	6.0
	100-41-4	ethylbenzene	NA	7.2
	100-42-5	styrene	NA	3.0
	95-47-6	total xylenes	NA	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
211	1,2-dichloroethane-d4	97 %
384	Toluene-d8	100 %
475	BFB	107 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
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N\A = not available.
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J = estimated value less than minimum detection limit.

SAMPLE ID CAR8-03-063 MSD FRACTION 08B TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST RY EXTRCTD FILE # 0400908B
INSTRMT F4 INJECTD 04/12/88 UNITS %

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	NA	5.0
	74-83-9	bromomethane	NA	5.0
	75-01-4	vinyl chloride	NA	5.0
	75-00-3	chloroethane	NA	5.0
	75-09-2	methylene chloride	NA	2.8
	67-64-1	acetone	NA	7.5
	75-15-0	carbon disulfide	NA	1.7
	75-69-4	trichlorofluoromethane	NA	5.0
159	75-35-4	1,1-dichloroethene	91	4.7
	75-34-3	1,1-dichloroethane	NA	2.8
	156-60-5	trans-1,2-dichloroethene	NA	1.6
	67-66-3	chloroform	NA	1.6
	107-06-2	1,2-dichloroethane	NA	2.8
211	78-93-3	2-butanone	NA	25
	71-55-6	1,1,1-trichloroethane	NA	3.8
	56-23-5	carbon tetrachloride	NA	2.8
	108-05-4	vinyl acetate	NA	6.9
	75-27-4	bromodichloromethane	NA	2.2
	78-87-5	1,2-dichloropropane	NA	6.0
	10061-01-5	cis-1,3-dichloropropene	NA	5.0
281	79-01-6	trichloroethene	90	1.9
	124-48-1	dibromochloromethane	NA	3.1
	79-00-5	1,1,2-trichloroethane	NA	5.0
288	71-43-2	benzene	93	4.4
	10061-02-6	trans-1,3-dichloropropene	NA	5.0
	110-75-8	2-chloroethylvinyl ether	NA	5.0
	75-25-2	bromoform	NA	4.7
	591-78-6	2-hexanone	NA	36

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-063 MSD

FRACTION OBB TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	NA	46
	127-18-4	tetrachloroethene	NA	4.1
	79-34-5	1,1,2,2-tetrachloroethane	NA	6.9
387	108-88-3	toluene	108	6.0
405	108-90-7	chlorobenzene	120	6.0
	100-41-4	ethylbenzene	NA	7.2
	100-42-5	styrene	NA	3.0
	95-47-6	total xylenes	NA	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
211	1,2-dichloroethane-d4	92 %
384	Toluene-d8	102 %
474	BFB	108 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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N\A = not available.
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J = estimated value less than minimum detection limit.

SAMPLE ID REAGENT BLANK FRACTION 09A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PURGEABLES

VERIFIED LAK

ANALYST REM EXTRCTD FILE # 0402104A
INSTRMT F4 INJECTD 04/07/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	74-87-3	chloromethane	ND	5.0
	74-83-9	bromomethane	ND	5.0
	75-01-4	vinyl chloride	ND	5.0
	75-00-3	chloroethane	ND	5.0
120	75-09-2	methylene chloride	1.7 J	2.8
129	67-64-1	acetone	9.1	7.5
	75-15-0	carbon disulfide	ND	1.7
	75-69-4	trichlorofluoromethane	ND	5.0
	75-35-4	1,1-dichloroethene	ND	4.7
	75-34-3	1,1-dichloroethane	ND	2.8
	156-60-5	trans-1,2-dichloroethene	ND	1.6
	67-66-3	chloroform	ND	1.6
	107-06-2	1,2-dichloroethane	ND	2.8
	78-93-3	2-butanone	ND	25
	71-55-6	1,1,1-trichloroethane	ND	3.8
	56-23-5	carbon tetrachloride	ND	2.8
	108-05-4	vinyl acetate	ND	6.9
	75-27-4	bromodichloromethane	ND	2.2
	78-87-5	1,2-dichloropropane	ND	6.0
	10061-01-5	cis-1,3-dichloropropene	ND	5.0
	79-01-6	trichloroethene	ND	1.9
	124-48-1	dibromochloromethane	ND	3.1
	79-00-5	1,1,2-trichloroethane	ND	5.0
	71-43-2	benzene	ND	4.4
	10061-02-6	trans-1,3-dichloropropene	ND	5.0
	110-75-8	2-chloroethylvinyl ether	ND	5.0
	75-25-2	bromoform	ND	4.7
	591-78-6	2-hexanone	ND	36

SAMPLE ID REAGENT BLANK FRACTION 09A TEST CODE CL8240 NAME Purgeable Organics - Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	108-10-1	4-methyl-2-pentanone	ND	46
	127-18-4	tetrachloroethene	ND	4.1
	79-34-5	1,1,2,2-tetrachloroethane	ND	6.9
	108-88-3	toluene	ND	6.0
	108-90-7	chlorobenzene	ND	6.0
	100-41-4	ethylbenzene	ND	7.2
	100-42-5	styrene	ND	3.0
	95-47-6	total xylenes	ND	4.6

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
213	1,2-dichloroethane-d4	97 %
384	Toluene-d8	99 %
474	BFB	100 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit
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N\A = not available.
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Received: 04/04/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-061 SEDIMENT SAMPLE # 10 FRACTIONS: A

Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 (DATE COMPLETED) DRY_WT 34 (% MOISTURE) EX_BNA 04/06/88 (DATE COMPLETED) GPC 04/06/88 (DATE COMPLETED)

SAMPLE ID CAR8-03-061 SEDIMENT FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400910A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	1000
565	108-95-2	phenol	200	150
	62-53-3	aniline	ND	1000
	111-44-4	bis(2-chloroethyl) ether	ND	570
	95-57-8	2-chlorophenol	ND	330
	541-73-1	1,3-dichlorobenzene	ND	190
	106-46-7	1,4-dichlorobenzene	ND	440
	100-51-6	benzyl alcohol	ND	5000
	95-50-1	1,2-dichlorobenzene	ND	190
	95-48-7	2-methylphenol	ND	1000
	108-60-1	bis(2-chloroisopropyl)ether	ND	570
669	106-44-5	4-methylphenol	1500	1000
	621-64-7	n-nitroso-di-n-propylamine	ND	1200
	67-72-1	hexachloroethane	ND	160
	98-95-3	nitrobenzene	ND	190
	78-59-1	isophorone	ND	220
	88-75-5	2-nitrophenol	ND	360
	105-67-9	2,4-dimethylphenol	ND	270
756	65-85-0	benzoic acid	250 J	5000
	111-91-1	bis(2-chloroethoxy)methane	ND	530
	120-83-2	2,4-dichlorophenol	ND	270
	120-82-1	1,2,4-trichlorobenzene	ND	190
	91-20-3	naphthalene	ND	160
	106-47-8	4-chloroaniline	ND	1000
	87-68-3	hexachlorobutadiene	ND	90
	59-50-7	4-chloro-3-methylphenol	ND	300
906	91-57-6	2-methylnaphthalene	110 J	1000

SAMPLE ID CAR8-03-061 SEDIMENT FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	600
	88-06-2	2,4,6-trichlorophenol	ND	270
	95-95-4	2,4,5-trichlorophenol	ND	1000
	91-58-7	2-chloronaphthalene	ND	190
	88-74-4	2-nitroaniline	ND	5000
	131-11-3	dimethyl phthalate	ND	160
	208-96-8	acenaphthylene	ND	350
	99-09-2	3-nitroaniline	ND	5000
	83-32-9	acenaphthene	ND	190
	51-28-5	2,4-dinitrophenol	ND	4200
	100-02-7	4-nitrophenol	ND	240
	132-64-9	dibenzofuran	ND	1000
	606-20-2	2,6-dinitrotoluene	ND	190
	121-14-2	2,4-dinitrotoluene	ND	570
	84-66-2	diethylphthalate	ND	190
	7005-72-3	4-chlorophenyl-phenylether	ND	420
	86-73-7	fluorene	ND	190
	100-01-06	4-nitroaniline	ND	5000
	534-52-1	4,6-dinitro-2-methylphenol	ND	2400
	86-30-6	n-nitrosodiphenylamine	ND	190
	101-55-3	4-bromophenyl-phenylether	ND	190
	118-74-1	hexachlorobenzene	ND	190
	87-86-5	pentachlorophenol	ND	360
1297	85-01-8	phenanthrene	280 J	540
1304	120-12-7	anthracene	89 J	190
	84-74-2	di-n-butylphthalate	ND	250
1493	206-44-0	fluoranthene	1200	220
	92-87-5	benzidine	ND	4400
1517	129-00-0	pyrene	840	190
1618	85-68-7	butylbenzylphthalate	410	250
	91-94-1	3,3'-dichlorobenzidine	ND	1700
1705	56-55-3	benzo(a)anthracene	410 J	780
1712	117-81-7	bis(2-ethylhexyl)phthalate	1500 B	250

SAMPLE ID CAR8-03-061 SEDIMENT FRACTION 10A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1712	218-01-9	chrysene	570	250
	117-84-0	di-n-octyl phthalate	ND	250
1935	205-99-2	benzo(b)fluoranthene	570	480
1940	207-08-9	benzo(k)fluoranthene	550	250
2025	50-32-8	benzo(a)pyrene	660	250
2437	193-39-5	indeno(1,2,3-cd)pyrene	290 J	370
	53-70-3	dibenz(a,h)anthracene	ND	250
2558	191-24-2	benzo(ghi)perylene	320 J	410

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
441	2-fluorophenol	89 %
564	d5-phenol	78 %
693	d5-nitrobenzene	81 %
964	2-fluorobiphenyl	80 %
1189	2,4,6-tribromophenol	91 %
1541	d14-terphenyl	90 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-04-009

SAMPLE ID CAR8-03-062 SEDIMENT SAMPLE # 11 FRACTIONS: A
Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 (DATE COMPLETED) DRY_WT 24 (% MOISTURE) EX_BNA 04/06/88 (DATE COMPLETED) GPC 04/06/88 (DATE COMPLETED)

KADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-062 SEDIMENT FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400911A VERIFIED LAK

INSTRMT F1 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	880
569	108-95-2	phenol	110 J	130
	62-53-3	aniline	ND	880
	111-44-4	bis(2-chloroethyl) ether	ND	500
	95-57-8	2-chlorophenol	ND	290
	541-73-1	1,3-dichlorobenzene	ND	170
	106-46-7	1,4-dichlorobenzene	ND	390
	100-51-6	benzyl alcohol	ND	4400
	95-50-1	1,2-dichlorobenzene	ND	170
	95-48-7	2-methylphenol	ND	880
	108-60-1	bis(2-chloroisopropyl)ether	ND	500
672	106-44-5	4-methylphenol	860 J	880
	621-64-7	n-nitroso-di-n-propylamine	ND	1100
	67-72-1	hexachloroethane	ND	140
	98-95-3	nitrobenzene	ND	170
	78-59-1	isophorone	ND	190
	88-75-5	2-nitrophenol	ND	320
	105-67-9	2,4-dimethylphenol	ND	240
757	65-85-0	benzoic acid	180 J	4400
	111-91-1	bis(2-chloroethoxy)methane	ND	460
	120-83-2	2,4-dichlorophenol	ND	240
	120-82-1	1,2,4-trichlorobenzene	ND	170
	91-20-3	naphthalene	ND	140
	106-47-8	4-chloroaniline	ND	880
	87-68-3	hexachlorobutadiene	ND	79
	59-50-7	4-chloro-3-methylphenol	ND	260
903	91-57-6	2-methylnaphthalene	110 J	880

SAMPLE ID CAR8-03-062 SEDIMENT FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	530
	88-06-2	2,4,6-trichlorophenol	ND	240
	95-95-4	2,4,5-trichlorophenol	ND	880
	91-58-7	2-chloronaphthalene	ND	170
	88-74-4	2-nitroaniline	ND	4400
	131-11-3	dimethyl phthalate	ND	140
	208-96-8	acenaphthylene	ND	310
	99-09-2	3-nitroaniline	ND	4400
	83-32-9	acenaphthene	ND	170
	51-28-5	2,4-dinitrophenol	ND	3700
	100-02-7	4-nitrophenol	ND	210
	132-64-9	dibenzofuran	ND	880
	606-20-2	2,6-dinitrotoluene	ND	170
	121-14-2	2,4-dinitrotoluene	ND	500
	84-66-2	diethylphthalate	ND	170
	7005-72-3	4-chlorophenyl-phenylether	ND	370
	86-73-7	fluorene	ND	170
	100-01-06	4-nitroaniline	ND	4400
	534-52-1	4,6-dinitro-2-methylphenol	ND	2100
	86-30-6	n-nitrosodiphenylamine	ND	170
	101-55-3	4-bromophenyl-phenylether	ND	170
	118-74-1	hexachlorobenzene	ND	170
	87-86-5	pentachlorophenol	ND	320
1300	85-01-8	phenanthrene	370 J	470
1307	120-12-7	anthracene	110 J	170
	84-74-2	di-n-butylphthalate	ND	220
1485	206-44-0	fluoranthene	930	190
	92-87-5	benzidine	ND	3900
1520	129-00-0	pyrene	680	170
	85-68-7	butylbenzylphthalate	ND	220
	91-94-1	3,3'-dichlorobenzidine	ND	1400
1708	56-55-3	benzo(a)anthracene	330 J	680
1714	117-81-7	bis(2-ethylhexyl)phthalate	1400 B	220

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-062 SEDIMENT

FRACTION 11A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1715	218-01-9	chrysene	540	220
	117-84-0	di-n-octyl phthalate	ND	220
1945	205-99-2	benzo(b)fluoranthene	660	420
	207-08-9	benzo(k)fluoranthene	ND	220
2030	50-32-8	benzo(a)pyrene	740	220
2445	193-39-5	indeno(1,2,3-cd)pyrene	450	320
	53-70-3	dibenz(a,h)anthracene	ND	220
2567	191-24-2	benzo(ghi)perylene	480	360

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
445	2-fluorophenol	90 %
567	d5-phenol	82 %
695	d5-nitrobenzene	85 %
966	2-fluorobiphenyl	85 %
1192	2,4,6-tribromophenol	90 %
1544	d14-terphenyl	91 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-063 SEDIMENT SAMPLE # 12 FRACTIONS: A
Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 (DATE COMPLETED) DRY_WT 26 (% MOISTURE) EX_BNA 04/06/88 (DATE COMPLETED) GPC 04/06/88 (DATE COMPLETED)

Received: 04/04/88 Results by Sample.

SAMPLE ID CAR8-03-063 SEDIMENT FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400912A VERIFIED LAK

INSTRMT F1 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	880
570	108-95-2	phenol	88 J	130
	62-53-3	aniline	ND	880
	111-44-4	bis(2-chloroethyl) ether	ND	500
	95-57-8	2-chlorophenol	ND	290
	541-73-1	1,3-dichlorobenzene	ND	170
	106-46-7	1,4-dichlorobenzene	ND	390
	100-51-6	benzyl alcohol	ND	4400
	95-50-1	1,2-dichlorobenzene	ND	170
	95-48-7	2-methylphenol	ND	880
	108-60-1	bis(2-chloroisopropyl)ether	ND	500
672	106-44-5	4-methylphenol	210 J	880
	621-64-7	n-nitroso-di-n-propylamine	ND	1100
	67-72-1	hexachloroethane	ND	140
	98-95-3	nitrobenzene	ND	170
	78-59-1	isophorone	ND	190
	88-75-5	2-nitrophenol	ND	320
	105-67-9	2,4-dimethylphenol	ND	240
	65-85-0	benzoic acid	ND	4400
	111-91-1	bis(2-chloroethoxy)methane	ND	470
	120-83-2	2,4-dichlorophenol	ND	240
	120-82-1	1,2,4-trichlorobenzene	ND	170
804	91-20-3	naphthalene	130 J	140
	106-47-8	4-chloroaniline	ND	880
	87-68-3	hexachlorobutadiene	ND	79
	59-50-7	4-chloro-3-methylphenol	ND	260
907	91-57-6	2-methylnaphthalene	210 J	880

SAMPLE ID CAR8-03-063 SEDIMENT FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	530
	88-06-2	2,4,6-trichlorophenol	ND	240
	95-95-4	2,4,5-trichlorophenol	ND	880
	91-58-7	2-chloronaphthalene	ND	170
	88-74-4	2-nitroaniline	ND	4400
	131-11-3	dimethyl phthalate	ND	140
1046	208-96-8	acenaphthylene	110 J	310
	99-09-2	3-nitroaniline	ND	4400
1074	83-32-9	acenaphthene	290	170
	51-28-5	2,4-dinitrophenol	ND	3700
	100-02-7	4-nitrophenol	ND	210
1098	132-64-9	dibenzofuran	140 J	880
	606-20-2	2,6-dinitrotoluene	ND	170
	121-14-2	2,4-dinitrotoluene	ND	500
	84-66-2	diethylphthalate	ND	170
	7005-72-3	4-chlorophenyl-phenylether	ND	370
1152	86-73-7	fluorene	290	170
	100-01-06	4-nitroaniline	ND	4400
	534-52-1	4,6-dinitro-2-methylphenol	ND	2100
	86-30-6	n-nitrosodiphenylamine	ND	170
	101-55-3	4-bromophenyl-phenylether	ND	170
	118-74-1	hexachlorobenzene	ND	170
	87-86-5	pentachlorophenol	ND	320
1300	85-01-8	phenanthrene	5100	480
1307	120-12-7	anthracene	1500	170
	84-74-2	di-n-butylphthalate	ND	220
1487	206-44-0	fluoranthene	14000	190
	92-87-5	benzidine	ND	3900
1522	129-00-0	pyrene	10000	170
1620	85-68-7	butylbenzylphthalate	130 J	220
	91-94-1	3,3'-dichlorobenzidine	ND	1500
1709	56-55-3	benzo(a)anthracene	8200	690
1715	117-81-7	bis(2-ethylhexyl)phthalate	2400 B	220

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-063 SEDIMENT

FRACTION 12A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1717	218-01-9	chrysene	8100	220
	117-84-0	di-n-octyl phthalate	ND	220
1945	205-99-2	benzo(b)fluoranthene	8600	420
1950	207-08-9	benzo(k)fluoranthene	13000	220
2037	50-32-8	benzo(a)pyrene	12000	220
2457	193-39-5	indeno(1,2,3-cd)pyrene	4400	330
2463	53-70-3	dibenz(a,h)anthracene	1800	220
	191-24-2	benzo(ghi)perylene	ND	360

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
449	2-fluorophenol	80 %
568	d5-phenol	76 %
696	d5-nitrobenzene	88 %
966	2-fluorobiphenyl	91 %
1191	2,4,6-tribromophenol	91 %
1543	d14-terphenyl	78 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-064 SEDIMENT SAMPLE # 13 FRACTIONS: A
Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 (DATE COMPLETED) DRY_WT 25 (% MOISTURE) EX_BNA 04/06/88 (DATE COMPLETED) GPC 04/06/88 (DATE COMPLETED)

SAMPLE ID CAR8-03-064 SEDIMENT FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400913A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	44000
	108-95-2	phenol	ND	6600
	62-53-3	aniline	ND	44000
	111-44-4	bis(2-chloroethyl) ether	ND	25000
	95-57-8	2-chlorophenol	ND	15000
	541-73-1	1,3-dichlorobenzene	ND	8400
	106-46-7	1,4-dichlorobenzene	ND	19000
	100-51-6	benzyl alcohol	ND	220000
	95-50-1	1,2-dichlorobenzene	ND	8400
	95-48-7	2-methylphenol	ND	44000
	108-60-1	bis(2-chloroisopropyl)ether	ND	25000
	106-44-5	4-methylphenol	ND	44000
	621-64-7	n-nitroso-di-n-propylamine	ND	53000
	67-72-1	hexachloroethane	ND	7100
	98-95-3	nitrobenzene	ND	8400
	78-59-1	isophorone	ND	9700
	88-75-5	2-nitrophenol	ND	16000
	105-67-9	2,4-dimethylphenol	ND	12000
	65-85-0	benzoic acid	ND	220000
	111-91-1	bis(2-chloroethoxy)methane	ND	23000
	120-83-2	2,4-dichlorophenol	ND	12000
	120-82-1	1,2,4-trichlorobenzene	ND	8400
	91-20-3	naphthalene	ND	7100
	106-47-8	4-chloroaniline	ND	44000
	87-68-3	hexachlorobutadiene	ND	4000
	59-50-7	4-chloro-3-methylphenol	ND	13000
906	91-57-6	2-methylnaphthalene	5000 J	44000

SAMPLE ID CAR8-03-064 SEDIMENT FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	27000
	88-06-2	2,4,6-trichlorophenol	ND	12000
	95-95-4	2,4,5-trichlorophenol	ND	44000
	91-58-7	2-chloronaphthalene	ND	8400
	88-74-4	2-nitroaniline	ND	220000
	131-11-3	dimethyl phthalate	ND	7100
	208-96-8	acenaphthylene	ND	15000
	99-09-2	3-nitroaniline	ND	220000
	83-32-9	acenaphthene	ND	8400
	51-28-5	2,4-dinitrophenol	ND	190000
	100-02-7	4-nitrophenol	ND	11000
	132-64-9	dibenzofuran	ND	44000
	606-20-2	2,6-dinitrotoluene	ND	8400
	121-14-2	2,4-dinitrotoluene	ND	25000
	84-66-2	diethylphthalate	ND	8400
	7005-72-3	4-chlorophenyl-phenylether	ND	19000
	86-73-7	fluorene	ND	8400
	100-01-06	4-nitroaniline	ND	220000
	534-52-1	4,6-dinitro-2-methylphenol	ND	110000
	86-30-6	n-nitrosodiphenylamine	ND	8400
	101-55-3	4-bromophenyl-phenylether	ND	8400
	118-74-1	hexachlorobenzene	ND	8400
	87-86-5	pentachlorophenol	ND	16000
	85-01-8	phenanthrene	ND	24000
	120-12-7	anthracene	ND	8400
	84-74-2	di-n-butylphthalate	ND	11000
	206-44-0	fluoranthene	ND	9700
	92-87-5	benzidine	ND	190000
	129-00-0	pyrene	ND	8400
1618	85-68-7	butylbenzylphthalate	4300 BJ	11000
	91-94-1	3,3'-dichlorobenzidine	ND	73000
	56-55-3	benzo(a)anthracene	ND	35000
	117-81-7	bis(2-ethylhexyl)phthalate	ND	11000

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-064 SEDIMENT

FRACTION 13A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	11000
	117-84-0	di-n-octyl phthalate	ND	11000
	205-99-2	benzo(b)fluoranthene	ND	21000
	207-08-9	benzo(k)fluoranthene	ND	11000
	50-32-8	benzo(a)pyrene	ND	11000
	193-39-5	indeno(1,2,3-cd)pyrene	ND	16000
	53-70-3	dibenz(a,h)anthracene	ND	11000
	191-24-2	benzo(ghi)perylene	ND	18000

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
440	2-fluorophenol	84 %
564	d5-phenol	84 %
693	d5-nitrobenzene	94 %
964	2-fluorobiphenyl	84 %
1189	2,4,6-tribromophenol	82 %
1541	d14-terphenyl	86 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID CAR8-03-065 SEDIMENT SAMPLE # 14 FRACTIONS: A
Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 (DATE COMPLFIED) DRY_WT 29 (% MOISTURE) EX_BNA 04/06/88 (DATE COMPLETED) GPC 04/06/88 (DATE COMPLETED)

KADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-065 SEDIMENT FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400914A VERIFIED LAK

INSTRMT F1 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	920
	108-95-2	phenol	ND	140
	62-53-3	aniline	ND	920
	111-44-4	bis(2-chloroethyl) ether	ND	520
	95-57-8	2-chlorophenol	ND	300
	541-73-1	1,3-dichlorobenzene	ND	170
	106-46-7	1,4-dichlorobenzene	ND	400
	100-51-6	benzyl alcohol	ND	4600
	95-50-1	1,2-dichlorobenzene	ND	170
	95-48-7	2-methylphenol	ND	920
	108-60-1	bis(2-chloroisopropyl)ether	ND	520
	106-44-5	4-methylphenol	ND	920
	621-64-7	n-nitroso-di-n-propylamine	ND	1100
	67-72-1	hexachloroethane	ND	150
	98-95-3	nitrobenzene	ND	170
	78-59-1	isophorone	ND	200
	88-75-5	2-nitrophenol	ND	330
	105-67-9	2,4-dimethylphenol	ND	250
746	65-85-0	benzoic acid	270 J	4600
	111-91-1	bis(2-chloroethoxy)methane	ND	490
	120-83-2	2,4-dichlorophenol	ND	250
	120-82-1	1,2,4-trichlorobenzene	ND	170
792	91-20-3	naphthalene	380	150
	106-47-8	4-chloroaniline	ND	920
	87-68-3	hexachlorobutadiene	ND	83
	59-50-7	4-chloro-3-methylphenol	ND	280
896	91-57-6	2-methylnaphthalene	3100	920

SAMPLE ID CAR8-03-065 SEDIMENT FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	550
	88-06-2	2,4,6-trichlorophenol	ND	250
	95-95-4	2,4,5-trichlorophenol	ND	920
	91-58-7	2-chloronaphthalene	ND	170
	88-74-4	2-nitroaniline	ND	4600
	131-11-3	dimethyl phthalate	ND	150
	208-96-8	acenaphthylene	ND	320
	99-09-2	3-nitroaniline	ND	4600
1062	83-32-9	acenaphthene	250	170
	51-28-5	2,4-dinitrophenol	ND	3900
	100-02-7	4-nitrophenol	ND	220
1087	132-64-9	dibenzofuran	190 J	920
	606-20-2	2,6-dinitrotoluene	ND	170
	121-14-2	2,4-dinitrotoluene	ND	520
	84-66-2	diethylphthalate	ND	170
	7005-72-3	4-chlorophenyl-phenylether	ND	390
	86-73-7	fluorene	ND	170
	100-01-06	4-nitroaniline	ND	4600
	534-52-1	4,6-dinitro-2-methylphenol	ND	2200
	86-30-6	n-nitrosodiphenylamine	ND	170
	101-55-3	4-bromophenyl-phenylether	ND	170
	118-74-1	hexachlorobenzene	ND	170
	87-86-5	pentachlorophenol	ND	330
1228	85-01-8	phenanthrene	1900	500
1274	120-12-7	anthracene	430	170
	84-74-2	di-n-butylphthalate	ND	230
1472	206-44-0	fluoranthene	3600	200
	92-87-5	benzidine	ND	4000
1507	129-00-0	pyrene	3300	170
1608	85-68-7	butylbenzylphthalate	140 J	230
	91-94-1	3,3'-dichlorobenzidine	ND	1500
1693	56-55-3	benzo(a)anthracene	1300	720
1701	117-81-7	bis(2-ethylhexyl)phthalate	2200 B	230

KANDMAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-065 SEDIMENT

FRACTION 14A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1700	218-01-9	chrysene	1500	230
1819	117-84-0	di-n-octyl phthalate	140 J	230
1917	205-99-2	benzo(b)fluoranthene	2000	440
1921	207-08-9	benzo(k)fluoranthene	1600	230
2004	50-32-8	benzo(a)pyrene	2100	230
2404	193-39-5	indeno(1,2,3-cd)pyrene	780	340
2411	53-70-3	dibenz(a,h)anthracene	300	230
2517	191-24-2	benzo(ghi)perylene	890	380

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
436	2-fluorophenol	94 %
557	d5-phenol	77 %
684	d5-nitrobenzene	105 %
954	2-fluorobiphenyl	89 %
1179	2,4,6-tribromophenol	83 %
1531	d14-terphenyl	166 QC %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 04/04/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-04-009

SAMPLE ID CAR8-03-066 SEDIMENT SAMPLE # 15 FRACTIONS: A

Date & Time Collected 03/31/88 Category

BNA_S 04/06/88 DATE COMPLETED DRY_WT 20 % MOISTURE EX_BNA 04/06/88 DATE COMPLETED GPC 04/06/88 DATE COMPLETED

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-009

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-066 SEDIMENT FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400915A VERIFIED LAK

INSTRMT F1 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	830
560	108-95-2	phenol	110 J	120
	62-53-3	aniline	ND	830
	111-44-4	bis(2-chloroethyl) ether	ND	470
	95-57-8	2-chlorophenol	ND	270
	541-73-1	1,3-dichlorobenzene	ND	160
	106-46-7	1,4-dichlorobenzene	ND	360
	100-51-6	benzyl alcohol	ND	4100
	95-50-1	1,2-dichlorobenzene	ND	160
	95-48-7	2-methylphenol	ND	830
	108-60-1	bis(2-chloroisopropyl)ether	ND	470
669	106-44-5	4-methylphenol	220 J	830
	621-64-7	n-nitroso-di-n-propylamine	ND	990
	67-72-1	hexachloroethane	ND	130
	98-95-3	nitrobenzene	ND	160
	78-59-1	isophorone	ND	180
	88-75-5	2-nitrophenol	ND	300
	105-67-9	2,4-dimethylphenol	ND	220
	65-85-0	benzoic acid	ND	4100
	111-91-1	bis(2-chloroethoxy)methane	ND	440
	120-83-2	2,4-dichlorophenol	ND	220
	120-82-1	1,2,4-trichlorobenzene	ND	160
795	91-20-3	naphthalene	770	130
	106-47-8	4-chloroaniline	ND	830
	87-68-3	hexachlorobutadiene	ND	75
	59-50-7	4-chloro-3-methylphenol	ND	250
899	91-57-6	2-methylnaphthalene	510 J	830

SAMPLE ID CAR8-03-066 SEDIMENT FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	500
	88-06-2	2,4,6-trichlorophenol	ND	220
	95-95-4	2,4,5-trichlorophenol	ND	830
	91-58-7	2-chloronaphthalene	ND	160
	88-74-4	2-nitroaniline	ND	4100
	131-11-3	dimethyl phthalate	ND	130
	208-96-8	acenaphthylene	ND	290
	99-09-2	3-nitroaniline	ND	4100
1066	83-32-9	acenaphthene	780	160
	51-28-5	2,4-dinitrophenol	ND	3500
	100-02-7	4-nitrophenol	ND	200
1090	132-64-9	dibenzofuran	670 J	830
	606-20-2	2,6-dinitrotoluene	ND	160
	121-14-2	2,4-dinitrotoluene	ND	470
	84-66-2	diethylphthalate	ND	160
	7005-72-3	4-chlorophenyl-phenylether	ND	350
1143	86-73-7	fluorene	1200	160
	100-01-06	4-nitroaniline	ND	4100
	534-52-1	4,6-dinitro-2-methylphenol	ND	2000
	86-30-6	n-nitrosodiphenylamine	ND	160
	101-55-3	4-bromophenyl-phenylether	ND	160
	118-74-1	hexachlorobenzene	ND	160
	87-86-5	pentachlorophenol	ND	300
1291	85-01-8	phenanthrene	8400	450
1298	120-12-7	anthracene	2400	160
1382	84-74-2	di-n-butylphthalate	86 J	210
1477	206-44-0	fluoranthene	9900	180
	92-87-5	benzidine	ND	3600
1511	129-00-0	pyrene	12000	160
1611	85-68-7	butylbenzylphthalate	140 J	210
	91-94-1	3,3'-dichlorobenzidine	ND	1400
1698	56-55-3	benzo(a)anthracene	5400	650
1705	117-81-7	bis(2-ethylhexyl)phthalate	2100 B	210

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID CAR8-03-066 SEDIMENT FRACTION 15A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected 03/31/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
1795	218-01-9	chrysene	5400	210
	117-84-0	di-n-octyl phthalate	ND	210
1924	205-99-2	benzo(b)fluoranthene	5500	400
1929	207-08-9	benzo(k)fluoranthene	5100	210
2011	50-32-8	benzo(a)pyrene	7600	210
2414	193-39-5	indeno(1,2,3-cd)pyrene	3000	310
2420	53-70-3	dibenz(a,h)anthracene	580	210
2530	191-24-2	benzo(ghi)perylene	3000	340

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
435	2-fluorophenol	81 %
558	d5-phenol	86 %
687	d5-nitrobenzene	90 %
958	2-fluorobiphenyl	87 %
1182	2,4,6-tribromophenol	84 %
1534	d14-terphenyl	124 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID REAGENT BLANK SAMPLE # 16 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/06/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK FRACTION 16A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0400916A VERIFIED LAK
INSTRMT F1 INJECTD 04/13/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	670
	108-95-2	phenol	ND	100
	62-53-3	aniline	ND	670
	111-44-4	bis(2-chloroethyl) ether	ND	380
	95-57-8	2-chlorophenol	ND	220
	541-73-1	1,3-dichlorobenzene	ND	130
	106-46-7	1,4-dichlorobenzene	ND	290
	100-51-6	benzyl alcohol	ND	3300
	95-50-1	1,2-dichlorobenzene	ND	130
	95-48-7	2-methylphenol	ND	670
	108-60-1	bis(2-chloroisopropyl)ether	ND	380
	106-44-5	4-methylphenol	ND	670
	621-64-7	n-nitroso-di-n-propylamine	ND	800
	67-72-1	hexachloroethane	ND	110
	98-95-3	nitrobenzene	ND	130
	78-59-1	isophorone	ND	150
	88-75-5	2-nitrophenol	ND	240
	105-67-9	2,4-dimethylphenol	ND	180
	65-85-0	benzoic acid	ND	3300
	111-91-1	bis(2-chloroethoxy)methane	ND	350
	120-83-2	2,4-dichlorophenol	ND	180
	120-82-1	1,2,4-trichlorobenzene	ND	130
	91-20-3	naphthalene	ND	110
	106-47-8	4-chloroaniline	ND	670
	87-68-3	hexachlorobutadiene	ND	60
	59-50-7	4-chloro-3-methylphenol	ND	200
	91-57-6	2-methylnaphthalene	ND	670

SAMPLE ID REAGENT BLANK FRACTION 16A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	400
	88-06-2	2,4,6-trichlorophenol	ND	180
	95-95-4	2,4,5-trichlorophenol	ND	670
	91-58-7	2-chloronaphthalene	ND	130
	88-74-4	2-nitroaniline	ND	3300
	131-11-3	dimethyl phthalate	ND	110
	208-96-8	acenaphthylene	ND	230
	99-09-2	3-nitroaniline	ND	3300
	83-32-9	acenaphthene	ND	130
	51-28-5	2,4-dinitrophenol	ND	2800
	100-02-7	4-nitrophenol	ND	160
	132-64-9	dibenzofuran	ND	670
	606-20-2	2,6-dinitrotoluene	ND	130
	121-14-2	2,4-dinitrotoluene	ND	380
	84-66-2	diethylphthalate	ND	130
	7005-72-3	4-chlorophenyl-phenylether	ND	280
	86-73-7	fluorene	ND	130
	100-01-06	4-nitroaniline	ND	3300
	534-52-1	4,6-dinitro-2-methylphenol	ND	1600
	86-30-6	n-nitrosodiphenylamine	ND	130
	101-55-3	4-bromophenyl-phenylether	ND	130
	118-74-1	hexachlorobenzene	ND	130
	87-86-5	pentachlorophenol	ND	240
	85-01-8	phenanthrene	ND	360
	120-12-7	anthracene	ND	130
	84-74-2	di-n-butylphthalate	ND	170
	206-44-0	fluoranthene	ND	150
	92-87-5	benzidine	ND	2900
	129-00-0	pyrene	ND	130
	85-68-7	butylbenzylphthalate	ND	170
	91-94-1	3,3'-dichlorobenzidine	ND	1100
	56-55-3	benzo(a)anthracene	ND	520
1702	117-81-7	bis(2-ethylhexyl)phthalate	150 J	170

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009
Continued From Above

SAMPLE ID REAGENT BLANK

FRACTION 16A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	170
	117-84-0	di-n-octyl phthalate	ND	170
	205-99-2	benzo(b)fluoranthene	ND	320
	207-08-9	benzo(k)fluoranthene	ND	170
	50-32-8	benzo(a)pyrene	ND	170
	193-39-5	indeno(1,2,3-cd)pyrene	ND	250
	53-70-3	dibenz(a,h)anthracene	ND	170
	191-24-2	benzo(ghi)perylene	ND	270

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
433	2-fluorophenol	100 %
556	d5-phenol	97 %
685	d5-nitrobenzene	97 %
955	2-fluorobiphenyl	100 %
1180	2,4,6-tribromophenol	85 %
1531	d14-terphenyl	164 QC %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-009

SAMPLE ID REAGENT BLANK MED LEVEL

SAMPLE # 17 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/06/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK MED LEVEL FRACTION 17A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE COMPOUNDS

ANALYST KS EXTRCTD FILE # 0400917A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/Kg

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	40000
	108-95-2	phenol	ND	6000
	62-53-3	aniline	ND	40000
	111-44-4	bis(2-chloroethyl) ether	ND	23000
	95-57-8	2-chlorophenol	ND	13000
	541-73-1	1,3-dichlorobenzene	ND	7600
	106-46-7	1,4-dichlorobenzene	ND	18000
	100-51-6	benzyl alcohol	ND	200000
	95-50-1	1,2-dichlorobenzene	ND	7600
	95-48-7	2-methylphenol	ND	40000
	108-60-1	bis(2-chloroisopropyl)ether	ND	23000
	106-44-5	4-methylphenol	ND	40000
	621-64-7	n-nitroso-di-n-propylamine	ND	48000
	67-72-1	hexachloroethane	ND	6400
	98-95-3	nitrobenzene	ND	7600
	78-59-1	isophorone	ND	8800
	88-75-5	2-nitrophenol	ND	14000
	105-67-9	2,4-dimethylphenol	ND	11000
	65-85-0	benzoic acid	ND	200000
	111-91-1	bis(2-chloroethoxy)methane	ND	21000
	120-83-2	2,4-dichlorophenol	ND	11000
	120-82-1	1,2,4-trichlorobenzene	ND	7600
	91-20-3	naphthalene	ND	6400
	106-47-8	4-chloroaniline	ND	40000
	87-68-3	hexachlorobutadiene	ND	3600
	59-50-7	4-chloro-3-methylphenol	ND	12000
	91-57-6	2-methylnaphthalene	ND	40000

SAMPLE ID REAGENT BLANK MED LEVEL FRACTION 17A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	24000
	88-06-2	2,4,6-trichlorophenol	ND	11000
	95-95-4	2,4,5-trichlorophenol	ND	40000
	91-58-7	2-chloronaphthalene	ND	7600
	88-74-4	2-nitroaniline	ND	200000
	131-11-3	dimethyl phthalate	ND	6400
	208-96-8	acenaphthylene	ND	14000
	99-09-2	3-nitroaniline	ND	200000
	83-32-9	acenaphthene	ND	7600
	51-28-5	2,4-dinitrophenol	ND	170000
	100-02-7	4-nitrophenol	ND	9600
	132-64-9	dibenzofuran	ND	40000
	606-20-2	2,6-dinitrotoluene	ND	7600
	121-14-2	2,4-dinitrotoluene	ND	23000
	84-66-2	diethylphthalate	ND	7600
	7005-72-3	4-chlorophenyl-phenylether	ND	17000
	86-73-7	fluorene	ND	7600
	100-01-06	4-nitroaniline	ND	200000
	534-52-1	4,6-dinitro-2-methylphenol	ND	96000
	86-30-6	n-nitrosodiphenylamine	ND	7600
	101-55-3	4-bromophenyl-phenylether	ND	7600
	118-74-1	hexachlorobenzene	ND	7600
	87-86-5	pentachlorophenol	ND	14000
	85-01-8	phenanthrene	ND	22000
	120-12-7	anthracene	ND	7600
	84-74-2	di-n-butylphthalate	ND	10000
	206-44-0	fluoranthene	ND	8800
	92-87-5	benzidine	ND	180000
	129-00-0	pyrene	ND	7600
1621	85-68-7	butylbenzylphthalate	11000	10000
	91-94-1	3,3'-dichlorobenzidine	ND	66000
	56-55-3	benzo(a)anthracene	ND	31000
	117-81-7	bis(2-ethylhexyl)phthalate	ND	10000

SAMPLE ID REAGENT BLANK MED LEVEL FRACTION 17A TEST CODE CL8270 NAME Semivolatile Organics-Soil
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	10000
	117-84-0	di-n-octyl phthalate	ND	10000
	205-99-2	benzo(b)fluoranthene	ND	19000
	207-08-9	benzo(k)fluoranthene	ND	10000
	50-32-8	benzo(a)pyrene	ND	10000
	193-39-5	indeno(1,2,3-cd)pyrene	ND	15000
	53-70-3	dibenz(a,h)anthracene	ND	10000
	191-24-2	benzo(ghi)perylene	ND	16000

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
441	2-fluorophenol	88 %
564	d5-phenol	92 %
694	d5-nitrobenzene	92 %
965	2-fluorobiphenyl	86 %
1191	2,4,6-tribromophenol	94 %
1543	d14-terphenyl	82 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88 04/22/88 13:55:27

REPORT TO: Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN: Larry French

CLIENT: CARSWELL AFB SAMPLES: 10
COMPANY: Carswell AFB.
FACILITY: Headquarters, SAC
Offutt, Nebraska 68113

WORK ID: Stage 2, Site 13
TAKEN: 03/31/88
TRANS: Federal 7444437674
TYPE: SOIL
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN:
PHONE: 916-362-5332

CERTIFIED BY

CONTACT: LARRY FRENCH

MATRIX CONTAMINATION IN SAMPLES 7A & 7B REQUIRED SUCH A HIGH LEVEL OF DILUTION THAT THE 2,4-D SPIKE WAS NOT DETECTABLE. SAMPLE 1B REQUIRED SUCH A HIGH LEVEL OF DILUTION THAT THE DBC SURROGATE WAS NOT DETECTABLE. RESULTS ARE REPORTED AS NA.

SAMPLE IDENTIFICATION

01	CAR8-03-068 SOIL
02	CAR8-03-069 SEDIMENT
03	CAR8-03-070 SOIL
04	CAR8-03-071 SOIL
05	CAR8-03-072 SOIL
06	CAR8-03-073 SEDIMENT
07	CAR8-03-068 SOIL MS
07	CAR8-03-068 SOIL MSD
08	CAR8-03-070 MS
08	CAR8-03-070 MSD
09	REAGENT BLANK
10	REAGENT BLANK

TEST CODES and NAMES used on this report

8080	SW846-Pest/PCB's Soil
8150	Herbicides in soil
EXHERB	Extraction for Herbicides
EXPEST	Extraction for Pest/PCBs

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results By Test

Work Order # S8-04-010

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
EXHERB Date completed	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
EXPEST date completed	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED

TEST CODE default units	Sample 06 (entered units)	Sample 07 (entered units)	Sample 08 (entered units)	Sample 09 (entered units)	Sample 10 (entered units)
EXHERB Date completed	04/06/88 DATE COMPLETED	04/05/88 DATE COMPLETED			04/06/88 DATE COMPLETED
EXPEST date completed	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED 04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED	

RAS Sacramento REPORT

Work Order # S8-04-010

Received: 04/04/88

Results By Test

SAMPLE Sample Id	Test: EXHERB Date completed	Test: EXPEST date completed
01 CAR8-03-068 SOI	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED
02 CAR8-03-069 SED	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED
03 CAR8-03-070 SOI	04/05/88 DATE COMPLETED	04/05/88 DATE COMPLETED
04 CAR8-03-071 SOI	04/06/88 DATE COMPLETED	04/05/88 DATE COMPLETED
05 CAR8-03-072 SOI	04/06/88 DATE COMPLETED	04/05/88 DATE COMPLETED
06 CAR8-03-073 SED	04/06/88 DATE COMPLETED	04/05/88 DATE COMPLETED
07 CAR8-03-068 SOI	04/05/88 DATE COMPLETED	
	04/05/88 DATE COMPLETED	
08 CAR8-03-070 MS		04/05/88 DATE COMPLETED
		04/05/88 DATE COMPLETED
09 REAGENT BLANK		04/05/88 DATE COMPLETED
10 REAGENT BLANK	04/06/88 DATE COMPLETED	

RADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-068 SOIL

SAMPLE # 01 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

EXHERB 04/05/88 EXPEST 04/05/88
DATE COMPLETED DATE COMPLETED

CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-068 SOIL FRACTION 01B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041141 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 26000 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	260	26000
58-89-9	gamma-BHC (lindane)	ND	260	26000
319-85-7	beta-BHC	ND	260	26000
76-44-8	Heptachlor	980 C	260	26000
319-86-8	delta-BHC	ND	260	26000
309-00-02	Aldrin	ND	260	26000
1024-57-3	Heptachlor Epoxide	ND	260	26000
959-98-8	Endosulfan I	ND	260	26000
72-55-9	4,4'-DDE	ND	260	26000
60-57-1	Dieldrin	ND	260	26000
72-20-8	Endrin	ND	260	26000
72-54-8	4,4'-DDD	ND	260	26000
33213-65-9	Endosulfan II	ND	780	26000
50-29-3	4,4'-DDT	ND	520	26000
7421-93-4	Endrin Aldehyde	ND	520	26000
1031-07-8	Endosulfan Sulphate	ND	1300	26000
53494-70-5	Endrin Ketone	ND	1300	26000
72-43-5	Methoxychlor	ND	1300	26000
57-74-9	Chlordane	32000C	5500	110000
8001-35-2	Toxaphene	ND	13000	26000
12674-11-2	PCB-1016	ND	2600	26000
11104-28-2	PCB-1221	ND	5200	26000
11141-16-5	PCB-1232	ND	5200	26000
53469-21-9	PCB-1242	ND	2600	26000
12672-29-6	PCB-1248	ND	2600	26000
11097-69-1	PCB-1254	ND	5200	26000
11096-82-5	PCB-1260	ND	5200	26000

SURROGATE 1770-80-5 Dibutylchlorendate NA % Recovery

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010
Continued From Above

SAMPLE ID CAR8-03-068 SOIL FRACTION 01B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-068 SOIL

FRACTION 01A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/05/88
INJECTD 04/18/88

FILE # 718041826 VERIFIED JD
FACTOR 530 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	270	530
93-72-1	2,4,5-TP (Silvex)	ND	53	530
93-76-5	2,4,5-T	ND	53	530

SURROGATE

2,4-Dichlorophenyl Acetic Acid 130 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = Estimated value.
QC = Outside control limits.
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KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-069 SEDIMENT

SAMPLE # 02 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

EXHERB 04/05/88 EXPEST 04/05/88
DATE COMPLETED DATE COMPLETED

SAMPLE ID CAR8-03-069 SEDIMENT FRACTION 02B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041129 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 240 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	2.4	240
58-89-9	gamma-BHC (lindane)	ND	2.4	240
319-85-7	beta-BHC	ND	2.4	240
76-44-8	Heptachlor	ND	2.4	240
319-86-8	delta-BHC	ND	2.4	240
309-00-02	Aldrin	ND	2.4	240
1024-57-3	Heptachlor Epoxide	ND	2.4	240
959-98-8	Endosulfan I	ND	2.4	240
72-55-9	4,4'-DDE	ND	2.4	240
60-57-1	Dieldrin	ND	2.4	240
72-20-8	Endrin	ND	2.4	240
72-54-8	4,4'-DDD	ND	2.4	240
33213-65-9	Endosulfan II	ND	7.2	240
50-29-3	4,4'-DDT	ND	4.8	240
7421-93-4	Endrin Aldehyde	ND	4.8	240
1031-07-8	Endosulfan Sulphate	ND	12	240
53494-70-5	Endrin Ketone	ND	12	240
72-43-5	Methoxychlor	ND	12	240
57-74-9	Chlordane	21 C	12	240
8001-35-2	Toxaphene	ND	120	240
12674-11-2	PCB-1016	ND	24	240
11104-28-2	PCB-1221	ND	48	240
11141-16-5	PCB-1232	ND	48	240
53469-21-9	PCB-1242	ND	24	240
12672-29-6	PCB-1248	ND	24	240
11097-69-1	PCB-1254	ND	48	240
11096-82-5	PCB-1260	ND	48	240

SURROGATE 1770-80-5 Dibutylchlorendate 137 % Recovery

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88 Results by Sample Continued From Above

SAMPLE ID CAR8-03-069 SEDIMENT FRACTION 02B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
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QC = Outside control limits.
C = Confirmed NC = Not confirmed
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CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-069 SEDIMENT FRACTION 02A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/05/88
INJECTD 04/18/88

FILE # 718041827 VERIFIED JD
FACTOR 600 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	300	600
93-72-1	2,4,5-TP (Silvex)	ND	60	600
93-76-5	2,4,5-T	ND	60	600

SURROGATE

2,4-Dichlorophenyl Acetic Acid 148 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = Estimated value.
QC = Outside control limits.
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RADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-070 SOIL

SAMPLE # 03 FRACTIONS: A,B
Date & Time Collected 03/31/88 Category

EXHERB 04/05/88 EXPEST 04/05/88
DATE COMPLETED DATE COMPLETED

SAMPLE ID CAR8-03-070 SOIL FRACTION 03B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041131 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 240 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	2.4	240
58-89-9	gamma-BHC (lindane)	ND	2.4	240
319-85-7	beta-BHC	ND	2.4	240
76-44-8	Heptachlor	ND	2.4	240
319-86-8	delta-BHC	ND	2.4	240
309-00-02	Aldrin	ND	2.4	240
1024-57-3	Heptachlor Epoxide	ND	2.4	240
959-98-8	Endosulfan I	ND	2.4	240
72-55-9	4,4'-DDE	ND	2.4	240
60-57-1	Dieldrin	ND	2.4	240
72-20-8	Endrin	ND	2.4	240
72-54-8	4,4'-DDD	ND	2.4	240
33213-65-9	Endosulfan II	ND	7.2	240
50-29-3	4,4'-DDT	ND	4.8	240
7421-93-4	Endrin Aldehyde	ND	4.8	240
1031-07-8	Endosulfan Sulphate	ND	12	240
53494-70-5	Endrin Ketone	ND	12	240
72-43-5	Methoxychlor	ND	12	240
57-74-9	Chlordane	42 C	12	240
8001-35-2	Toxaphene	ND	120	240
12674-11-2	PCB-1016	ND	24	240
11104-28-2	PCB-1221	ND	48	240
11141-16-5	PCB-1232	ND	48	240
53469-21-9	PCB-1242	ND	24	240
12672-29-6	PCB-1248	ND	24	240
11097-69-1	PCB-1254	ND	48	240
11096-82-5	PCB-1260	ND	48	240

SURROGATE 1770-80-5 Dibutylchlorendate 140 % Recovery

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010
Continued From Above

SAMPLE ID CAR8-03-070 SOIL FRACTION 03B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 03/31/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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N\A = not available.
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C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-070 SOIL FRACTION 03A TEST CODE 8150 NAME Herbicides
Date & Time Collected 03/31/88 Categ

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL EXTRCTD 04/05/88 FILE # 718041829 VERIFIED JD
INSTRMT 7 INJECTD 04/18/88 FACTOR 610 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	310	610
93-72-1	2,4,5-TP (Silvex)	ND	61	610
93-76-5	2,4,5-T	ND	61	610

SURROGATE

2,4-Dichlorophenyl Acetic Acid 148 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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SAMPLE ID CAR8-03-071 SOIL SAMPLE # 04 FRACTIONS: A,B
Date & Time Collected 04/01/88 Category

EXHERB 04/06/88 EXPEST 04/05/88
DATE COMPLETED DATE COMPLETED

RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-071 SOIL FRACTION 04B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041139 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 2100 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	21	2100
58-89-9	gamma-BHC (lindane)	ND	21	2100
319-85-7	beta-BHC	ND	21	2100
76-44-8	Heptachlor	ND	21	2100
319-86-8	delta-BHC	ND	21	2100
309-00-02	Aldrin	ND	21	2100
1024-57-3	Heptachlor Epoxide	ND	21	2100
959-98-8	Endosulfan I	ND	21	2100
72-55-9	4,4'-DDE	ND	21	2100
60-57-1	Dieldrin	ND	21	2100
72-20-8	Endrin	ND	21	2100
72-54-8	4,4'-DDD	ND	21	2100
33213-65-9	Endosulfan II	ND	63	2100
50-29-3	4,4'-DDT	ND	42	2100
7421-93-4	Endrin Aldehyde	ND	42	2100
1031-07-8	Endosulfan Sulphate	ND	110	2100
53494-70-5	Endrin Ketone	ND	110	2100
72-43-5	Methoxychlor	ND	110	2100
57-74-9	Chlordane	420 C	110	2100
8001-35-2	Toxaphene	ND	1100	2100
12674-11-2	PCB-1016	ND	210	2100
11104-28-2	PCB-1221	ND	420	2100
11141-16-5	PCB-1232	ND	420	2100
53469-21-9	PCB-1242	ND	210	2100
12672-29-6	PCB-1248	ND	210	2100
11097-69-1	PCB-1254	ND	420	2100
11096-82-5	PCB-1260	ND	420	2100

SURROGATE 1770-80-5 Dibutylchlorendate 119 % Recovery

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010
Continued From Above

SAMPLE ID CAR8-03-071 SOIL

FRACTION 04B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-0

SAMPLE ID CAR8-03-071 SOIL

FRACTION 04A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/06/88
INJECTD 04/18/88

FILE # 718041830 VERIFIED JD
FACTOR 540 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	270	540
93-72-1	2,4,5-TP (Silvex)	ND	54	540
93-76-5	2,4,5-T	ND	54	540

SURROGATE

2,4-Dichlorophenyl Acetic Acid 130 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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N\A = not available.
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QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

SAMPLE ID CAR8-03-072 SOIL SAMPLE # 05 FRACTIONS: A,B
Date & Time Collected 04/01/88 Category

EXHERB 04/06/88 EXPEST 04/05/88
DATE COMPLETED DATE COMPLETED

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-072 SOIL FRACTION 05B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041133 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 210 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	2.1	210
58-89-9	gamma-BHC (lindane)	ND	2.1	210
319-85-7	beta-BHC	ND	2.1	210
76-44-8	Heptachlor	ND	2.1	210
319-86-8	delta-BHC	ND	2.1	210
309-00-02	Aldrin	ND	2.1	210
1024-57-3	Heptachlor Epoxide	ND	2.1	210
959-98-8	Endosulfan I	ND	2.1	210
72-55-9	4,4'-DDE	ND	2.1	210
60-57-1	Dieldrin	ND	2.1	210
72-20-8	Endrin	ND	2.1	210
72-54-8	4,4'-DDD	ND	2.1	210
33213-65-9	Endosulfan II	ND	6.3	210
50-29-3	4,4'-DDT	ND	4.2	210
7421-93-4	Endrin Aldehyde	ND	4.2	210
1031-07-8	Endosulfan Sulphate	ND	11	210
53494-70-5	Endrin Ketone	ND	11	210
72-43-5	Methoxychlor	ND	11	210
57-74-9	Chlordane	ND	11	210
8001-35-2	Toxaphene	ND	110	210
12674-11-2	PCB-1016	ND	21	210
11104-28-2	PCB-1221	ND	42	210
11141-16-5	PCB-1232	ND	42	210
53469-21-9	PCB-1242	ND	21	210
12672-29-6	PCB-1248	ND	21	210
11097-69-1	PCB-1254	ND	42	210
11096-82-5	PCB-1260	ND	42	210

SURROGATE 1770-80-5 Dibutylchlorendate 137 % Recovery

SAMPLE ID CAR8-03-072 SOIL

FRACTION 05B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
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Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-072 SOIL

FRACTION 05A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/06/88
INJECTD 04/18/88

FILE # 718041825 VERIFIED JD
FACTOR 440 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	220	440
93-72-1	2,4,5-TP (Silvex)	ND	44	440
93-76-5	2,4,5-T	ND	44	440

SURROGATE

2,4-Dichlorophenyl Acetic Acid 172 QC % Recovery

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N\A = not available.
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J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
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KADIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-0[illegible]

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-073 SEDIMENT SAMPLE # 06 FRACTIONS: A,B

Date & Time Collected 04/01/88 Category

EXHERB 04/06/88 EXPEST 04/05/88

DATE COMPLETED DATE COMPLETED

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-073 SEDIMENT FRACTION 06B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041135 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 220 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	2.2	220
58-89-9	gamma-BHC (lindane)	ND	2.2	220
319-85-7	beta-BHC	ND	2.2	220
76-44-8	Heptachlor	ND	2.2	220
319-86-8	delta-BHC	ND	2.2	220
309-00-02	Aldrin	ND	2.2	220
1024-57-3	Heptachlor Epoxide	ND	2.2	220
959-98-8	Endosulfan I	ND	2.2	220
72-55-9	4,4'-DDE	ND	2.2	220
60-57-1	Dieldrin	ND	2.2	220
72-20-8	Endrin	ND	2.2	220
72-54-8	4,4'-DDD	ND	2.2	220
33213-65-9	Endosulfan II	ND	6.6	220
50-29-3	4,4'-DDT	ND	4.4	220
7421-93-4	Endrin Aldehyde	ND	4.4	220
1031-07-8	Endosulfan Sulphate	ND	11	220
53494-70-5	Endrin Ketone	ND	11	220
72-43-5	Methoxychlor	ND	11	220
57-74-9	Chlordane	ND	11	220
8001-35-2	Toxaphene	ND	110	220
12674-11-2	PCB-1016	ND	22	220
11104-28-2	PCB-1221	ND	44	220
11141-16-5	PCB-1232	ND	44	220
53469-21-9	PCB-1242	ND	22	220
12672-29-6	PCB-1248	ND	22	220
11097-69-1	PCB-1254	ND	44	220
11096-82-5	PCB-1260	ND	44	220

SURROGATE 1770-80-5 Dibutylchlorendate 140 % Recovery

SAMPLE ID CAR8-03-073 SEDIMENT FRACTION 06B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
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NA = not analyzed.
NS = not spiked.
N\A = not available.
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QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

SAMPLE ID CAR8-03-073 SEDIMENT FRACTION 06A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL EXTRCTD 04/06/88 FILE # 718041831 VERIFIED JD
INSTRMT 7 INJECTD 04/18/88 FACTOR 550 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	280	550
93-72-1	2,4,5-TP (Silvex)	ND	55	550
93-76-5	2,4,5-T	ND	55	550

SURROGATE

2,4-Dichlorophenyl Acetic Acid 139 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-068 SOIL MS

SAMPLE # 07 FRACTIONS: A

Date & Time Collected 03/31/88

Category

EXHERB 04/05/88
DATE COMPLETED

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-04-010

SAMPLE ID CARB-03-068 SOIL MS

FRACTION 07A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/05/88
INJECTD 04/18/88

FILE # 718041819 VERIFIED JD
FACTOR 530 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	NA	270	530
93-72-1	2,4,5-TP (Silvex)	60	53	530
93-76-5	2,4,5-T	43 QC	53	530

SURROGATE

2,4-Dichlorophenyl Acetic Acid 167 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
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J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-04-010

SAMPLE ID CAR8-03-068 SOIL MSD

SAMPLE # 07 FRACTIONS: B

Date & Time Collected 03/31/88

Category

EXHERB 04/05/88
DATE COMPLETED

SAMPLE ID CAR8-03-068 SOIL MSD FRACTION 07B TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected 03/31/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL EXTRCTD 04/05/88 FILE # 718041820 VERIFIED JD
INSTRMT 7 INJECTD 04/18/88 FACTOR 530 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	NA	270	530
93-72-1	2,4,5-TP (Silvex)	61	53	530
93-76-5	2,4,5-T	93	53	530

SURROGATE

2,4-Dichlorophenyl Acetic Acid 241 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
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J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

RADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

SAMPLE ID CAR8-03-070 MS

SAMPLE # 08 FRACTIONS: A
Date & Time Collected 04/01/88

Category

EXPEST 04/05/88
DATE COMPLETED

RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88

Results by Sample

SAMPLE ID CAR8-03-070 MS FRACTION 08A TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041119 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 240 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	NS	2.2	220
58-89-9	gamma-BHC (lindane)	95	2.2	220
319-85-7	beta-BHC	NS	2.2	220
76-44-8	Heptachlor	88	2.2	220
319-86-8	delta-BHC	NS	2.2	220
309-00-02	Aldrin	83	2.2	220
1024-57-3	Heptachlor Epoxide	NS	2.2	220
959-98-8	Endosulfan I	NS	2.2	220
72-55-9	4,4'-DDE	NS	2.2	220
60-57-1	Dieldrin	109	2.2	220
72-20-8	Endrin	116	2.2	220
72-54-8	4,4'-DDD	NS	2.2	220
33213-65-9	Endosulfan II	NS	6.6	220
50-29-3	4,4'-DDT	134	4.4	220
7421-93-4	Endrin Aldehyde	NS	4.4	220
1031-07-8	Endosulfan Sulphate	NS	11	220
53494-70-5	Endrin Ketone	NS	11	220
72-43-5	Methoxychlor	NS	11	220
57-74-9	Chlordane	NS	11	220
8001-35-2	Toxaphene	NS	110	220
12674-11-2	PCB-1016	NS	22	220
11104-28-2	PCB-1221	NS	44	220
11141-16-5	PCB-1232	NS	44	220
53469-21-9	PCB-1242	NS	22	220
12672-29-6	PCB-1248	NS	22	220
11097-69-1	PCB-1254	NS	44	220
11096-82-5	PCB-1260	NS	44	220

SURROGATE 1770-80-5 Dibutylchlorendate 115 % Recovery

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # 58-04-010

Received: 04/04/88 Results by Sample Continued From Above

SAMPLE ID CAR8-03-070 MS FRACTION 08A TEST CODE 8080 NAME SW846-Pest/PCB's

Date & Time Collected 04/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
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QC = Outside control limits.
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D = Not reportable due to dilution

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-010

SAMPLE ID CAR8-03-070 MSD

SAMPLE # 08 FRACTIONS: B
Date & Time Collected 04/01/88

EXPEST 04/05/88
DATE COMPLETED

KAUFFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-010

Received: 04/04/88 Results by Sample

SAMPLE ID CAR8-03-070 MSD FRACTION 08B TEST CODE 8080 NAME SW846-Pest/PCB's Soil

Date & Time Collected 04/01/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041120 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 240 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	NS	2.4	240
58-89-9	gamma-BHC (lindane)	101	2.4	240
319-85-7	beta-BHC	NS	2.4	240
76-44-8	Heptachlor	88	2.4	240
319-86-8	delta-BHC	NS	2.4	240
309-00-02	Aldrin	93	2.4	240
1024-57-3	Heptachlor Epoxide	NS	2.4	240
959-98-8	Endosulfan I	NS	2.4	240
72-55-9	4,4'-DDE	NS	2.4	240
60-57-1	Dieldrin	118	2.4	240
72-20-8	Endrin	115	2.4	240
72-54-8	4,4'-DDD	NS	2.4	240
33213-65-9	Endosulfan II	NS	7.2	240
50-29-3	4,4'-DDT	133	4.8	240
7421-93-4	Endrin Aldehyde	NS	4.8	240
1031-07-8	Endosulfan Sulphate	NS	12	240
53494-70-5	Endrin Ketone	NS	12	240
72-43-5	Methoxychlor	NS	12	240
57-74-9	Chlordane	NS	12	240
8001-35-2	Toxaphene	NS	120	240
12674-11-2	PCB-1016	NS	24	240
11104-28-2	PCB-1221	NS	48	240
11141-16-5	PCB-1232	NS	48	240
53469-21-9	PCB-1242	NS	24	240
12672-29-6	PCB-1248	NS	24	240
11097-69-1	PCB-1254	NS	48	240
11096-82-5	PCB-1260	NS	48	240

SURROGATE 1770-80-5 Dibutylchlorendate 114 % Recovery

SAMPLE ID CAR8-03-070 MSD FRACTION 08B TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected 04/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
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NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT

Results by Sample

Work Order # S8-04-010

SAMPLE ID REAGENT BLANK

SAMPLE # 09 FRACTIONS: A

Date & Time Collected not specified Category

EXPEST 04/05/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK FRACTION 09A TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/05/88 FILE # 118041114 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 100 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	1.0	100
58-89-9	gamma-BHC (lindane)	ND	1.0	100
319-85-7	beta-BHC	ND	1.0	100
76-44-8	Heptachlor	ND	1.0	100
319-86-8	delta-BHC	ND	1.0	100
309-00-02	Aldrin	ND	1.0	100
1024-57-3	Heptachlor Epoxide	ND	1.0	100
959-98-8	Endosulfan I	ND	1.0	100
72-55-9	4,4'-DDE	ND	1.0	100
60-57-1	Dieldrin	ND	1.0	100
72-20-8	Endrin	ND	1.0	100
72-54-8	4,4'-DDD	ND	1.0	100
33213-65-9	Endosulfan II	ND	3.0	100
50-29-3	4,4'-DDT	ND	2.0	100
7421-93-4	Endrin Aldehyde	ND	2.0	100
1031-07-8	Endosulfan Sulphate	ND	5.0	100
53494-70-5	Endrin Ketone	ND	5.0	100
72-43-5	Methoxychlor	ND	5.0	100
57-74-9	Chlordane	ND	5.0	100
8001-35-2	Toxaphene	ND	50	100
12674-11-2	PCB-1016	ND	10	100
11104-28-2	PCB-1221	ND	20	100
11141-16-5	PCB-1232	ND	20	100
53469-21-9	PCB-1242	ND	10	100
12672-29-6	PCB-1248	ND	10	100
11097-69-1	PCB-1254	ND	20	100
11096-82-5	PCB-1260	ND	20	100

SURROGATE 1770-80-5 Dibutylchlorendate 112 % Recovery

SAMPLE ID REAGENT BLANK FRACTION 09A TEST CODE 8080 NAME SW846-Pest/PCB's Soil
Date & Time Collected not specified Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

Received: 04/04/88

RAS Sacramento REPORT Work Order

Results by Sample

SAMPLE ID REAGENT BLANK SAMPLE # 10 FRACTIONS: A

Date & Time Collected not specified Category

EXHERB 04/06/88
DATE COMPLETED

KADIAN CORPORATION

Received: 04/04/88

RAS Sacramento REPORT
Results by Sample

Work Order # SB-04-010

SAMPLE ID REAGENT BLANK

FRACTION 10A TEST CODE 8150 NAME Herbicides in soil
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST AL
INSTRMT 7

EXTRCTD 04/06/88
INJECTD 04/18/88

FILE # 718041814 VERIFIED JD
FACTOR 400 UNITS UG/KG

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	200	400
93-72-1	2,4,5-TP (Silvex)	ND	40	400
93-76-5	2,4,5-T	ND	40	400

SURROGATE

2,4-Dichlorophenyl Acetic Acid 133 QC % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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J = Estimated value.
QC = Outside control limits.
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D = Not reportable due to dilution

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-014

Received: 04/06/88 07/01/88 11:58:13

REPORT TO: Radian
BI.4
Austin

ATTEN: Larry French

CLIENT: CARSWELL DO4 SAMPLES: 7
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: Site 11 and 03
TAKEN: MP,RP
TRANS: FED EX
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

2nd col. conf. for EPA601 on -01, -03; for EPA602 on -01, -02, -03.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	04-01
02	04-02
03	04-03
04	reagent blank
05	2nd col. conf. 04-01
06	2nd col. conf. 04-02
07	2nd col. conf. 04-03

TEST CODES and NAMES used on this report

AS G	Arsenic, graphite AA
CL T	Chloride
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA601	EPA method 601
EPA602	EPA method 602
F SIE	Fluoride, SIE
HC IR	Hydrocarbons
HG C	Mercury, cold vapor
ICP200	ICPES, EPA 200.7 elements
NO3	Nitrate, colorimetric
ONG IR	Oil and grease, infrared
OPO4	Orthophosphate
PB G	Lead, graphite AA
SE G	Selenium, graphite AA
SO4 N	Sulfate, nephelometry
TDS	Total dissolved solids
XYLENE	Xylenes, EPA 602

KALMAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT

Results By Test

Work Order # 88-04-014

SAMPLE Sample Id	Test: AS G ug/ml	Test: CL T mg/L	Test: DG3020 date complete	Test: DG6010 date complete	Test: F SIE mg/L
01 04-01	0.046	32	04/14/88	04/08/88	0.36
02 04-02	0.006*^	8.9	04/14/88	04/08/88	0.24
03 04-03	0.068	16	04/14/88	04/08/88	0.20

SAMPLE Sample Id	Test: HC IR mg/L	Test: NO3 mg/L as N	Test: ONG IR mg/L	Test: PB G ug/ml	Test: SE G ug/ml
01 04-01		0.28 mg/L as NO2NO3	NA	0.042	<0.003
02 04-02	<0.2	0.59 mg/L as NO2NO3			<0.003
03 04-03	<0.2	<0.2 mg/L as NO2NO3			<0.003

SAMPLE Sample Id	Test: SO4 N mg/L
01 04-01	330
02 04-02	46
03 04-03	120

CORPORATION

RAS - Austin REPORT

Work Order # 88-04-014

Received: 04/06/88

Results by Sample

SAMPLE ID 04-01

FRACTION 01A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/05/88 Category

ANALYST CL

INSTRMT G

INJECTD 04/06/88

FILE #

VERIFIED CL

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.7*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	98	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01

FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

460-00-4 1-Bromo-4-fluorobenzene 105 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KARDIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-01

FRACTION 01C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/05/88

Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 04/06/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	1.5	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01

FRACTION 01C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-01

FRACTION 01G TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 04/18/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-01

FRACTION 01G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/05/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	30	0.10
Al	Aluminum	77	0.20	Mn	Manganese	1.6	0.0030
As	Arsenic	ND	0.30	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	26	0.080
Ba	Barium	0.46	0.0090	Ni	Nickel	0.05*	0.020
Be	Beryllium	0.009	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	1300	0.12	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	120	0.30
Cr	Chromium	0.13	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	0.01*	0.010	V	Vanadium	0.19	0.020
Fe	Iron	67	0.030	Zn	Zinc	0.11	0.0060
K	Potassium	13	0.30				

RADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01

FRACTION 01G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-01 FRACTION 01F TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 04/07/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.03*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-01 FRACTION 01F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 04/08/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	780	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01 FRACTION 01F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-01 FRACTION 01C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTD 04/06/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND,Q	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-01

FRACTION 01C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

95% confidence interval.
Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-02

FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

ANALYST CL
INSTRMT G

INJECTD 04/06/88

FILE #

VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 04-02 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	108	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-02

FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

460-00-4 1-Bromo-4-fluorobenzene 104 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-02

FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTED 04/07/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	13	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-02

FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-02 FRACTION 02G TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 04/18/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-014

Received: 04/06/88 Results by Sample

SAMPLE ID 04-02 FRACTION 02G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 04/05/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	0.009*	0.0090	Mg	Magnesium	13	0.10
Al	Aluminum	13	0.20	Mn	Manganese	0.29	0.0030
As	Arsenic	ND	0.30	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	14	0.080
Ba	Barium	0.19	0.0090	Ni	Nickel	ND	0.020
Be	Beryllium	0.002*	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	220	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	30	0.30
Cr	Chromium	0.024*	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	ND	0.010	V	Vanadium	0.03*	0.020
Fe	Iron	13	0.030	Zn	Zinc	0.055	0.0060
K	Potassium	7.4	0.30				

SAMPLE ID 04-02

FRACTION 02G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 04-02 FRACTION 02F TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 04/07/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.04*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-02 FRACTION 02F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 04/08/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	570	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-02

FRACTION 02F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-02

FRACTION 02C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.
Q = daily EPA standard recovery outside

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-02

FRACTION 02C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

95% confidence interval.
Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-014

Received: 04/06/88

Results by Sample

SAMPLE ID 04-03 FRACTION 03A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/05/88 Category

ANALYST CL VERIFIED CL

INSTRMT G INJECTD 04/06/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-03 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	117	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-03 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

460-00-4 1-Bromo-4-fluorobenzene 101 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-03

FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTED 04/07/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	19	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-03

FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KRADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 04-03

FRACTION 03G TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/05/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403

ANALYZED 04/18/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

 RAS - Austin REPORT Work Order # 88-04-014

Received: 04/06/88 Results by Sample

SAMPLE ID 04-03 FRACTION 03G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 04/05/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	11	0.10
Al	Aluminum	20	0.20	Mn	Manganese	1.3	0.0030
As	Arsenic	ND	0.30	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	36	0.080
Ba	Barium	0.20	0.0090	Ni	Nickel	0.03*	0.020
Be	Beryllium	0.006	0.0010	Pb	Lead	0.06*	0.050
Ca	Calcium	320	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	41	0.30
Cr	Chromium	0.044*	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	0.03*	0.010	V	Vanadium	0.08*	0.020
Fe	Iron	46	0.030	Zn	Zinc	0.070	0.0060
K	Potassium	3.8	0.30				

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-03

FRACTION 03G TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 04-03 FRACTION 03F TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 04/07/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	ND	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-03 FRACTION 03F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 04/08/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	732	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

RADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 04-03 FRACTION 03F TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/05/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-03 FRACTION 03C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 04/07/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.
Q = daily EPA standard recovery outside

SAMPLE ID 04-03 FRACTION 03C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

95% confidence interval.
Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-014

Received: 04/06/88

Results by Sample

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected not specified Category

ANALYST CL VERIFIED CL

INSTRMT G INJECTD 04/06/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N/A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

460-00-4 1-Bromo-4-fluorobenzene N/A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID reagent blank FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 04/07/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Page 42 RAS - Austin REPORT Work Order # 88-04-014
Received: 04/06/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

ANALYST CL VERIFIED CL
INSTRMT B INJECTD 04/12/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.8*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N/A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/05/88 Category

460-00-4 1-Bromo-4-fluorobenzene N/A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-014

Received: 04/06/88

Results by Sample

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

FILE #

INJECTED 04/13/88

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	3.8	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014
Continued From Above

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 2nd col. conf. 04-01 FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTD 04/13/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-014

Received: 04/06/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-02 FRACTION 06A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 04/13/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	6.2	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-02 FRACTION 06A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 2nd col. conf. 04-02 FRACTION 06A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTD 04/13/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
G = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-014

Received: 04/06/88

Results by Sample

SAMPLE ID 2nd col. conf. 04-03 FRACTION 07A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTED 04/13/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	5.4	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-03 FRACTION 07A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/05/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 04/06/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-014

SAMPLE ID 2nd col. conf. 04-03 FRACTION 07A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/05/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D
INJECTD 04/13/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	:	SPR601	01D	:	SPR602
02B	:	SPR601	02D	:	SPR602
03B	:	SPR601	03D	:	SPR602

CORPORATION

 RAS - Austin REPORT Work Order # 88-04-016

Received: 04/07/88 06/21/88 06:46:42

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 7
COMPANY: Carswell AFB
FACILITY: IRP

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

WORK ID: 04
TAKEN: RP,MP
TRANS: Fed Ex
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	04-01
02	04-04
03	04-05
04	04-06
05	04-09
06	04-10
07	04-11

TEST CODES and NAMES used on this report

AS G	Arsenic, graphite AA
CL T	Chloride
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
F SIE	Fluoride, SIE
HC IR	Hydrocarbons
HG C	Mercury, cold vapor
ICP200	ICPES, EPA 200.7 elements
NO3	Nitrate, colorimetric
OPO4	Orthophosphate
SE G	Selenium, graphite AA
SO4 N	Sulfate, nephelometry
TDS	Total dissolved solids

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-016

Received: 04/07/88

Results By Test

SAMPLE Sample Id	Test: AS G ug/ml	Test: CL T mg/L	Test: DG3020 date complete	Test: DG6010 date complete	Test: F SIE mg/L
02 04-04	0.039	4.4*	04/14/88	04/20/88	0.33
03 04-05	<0.002	18	04/14/88	04/20/88	0.17
04 04-06	0.056	18	04/14/88	04/20/88	0.48
05 04-09	0.008	9.9	04/14/88	04/20/88	0.35
06 04-10	<0.002	4.4	04/14/88	04/20/88	0.01*
07 04-11	<0.002	21	04/14/88	04/20/88	0.13

SAMPLE Sample Id	Test: HC IR mg/L	Test: NO3 mg/L as N	Test: SE G ug/ml	Test: SO4 N mg/L
01 04-01	<0.2			
02 04-04	<0.2	0.46@ mg/L as NO2NO3	<0.003	30
03 04-05		0.06* mg/L as NO2NO3	<0.003	52
04 04-06		0.29 mg/L as NO2NO3	<0.003R	110
05 04-09		0.65 mg/L as NO2NO3	<0.003	75
06 04-10		<0.02 mg/L as NO2NO3	<0.003	5

CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results By Test

Work Order # 88-04-016
Continued From Above

SAMPLE Sample Id	Test: HC IR mg/L	Test: NO3 mg/L as N	Test: SE G ug/ml	Test: SO4 N mg/L
07 04-11		<0.02 mg/L as NO2NO3	<0.003	49

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-04

FRACTION 02D TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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NA = not analyzed
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N\A = not available

CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-04

FRACTION 02D TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	17	0.10
Al	Aluminum	63	0.20	Mn	Manganese	0.59	0.0030
As	Arsenic	1.0	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	14	0.080
Ba	Barium	0.29	0.0090	Ni	Nickel	0.06*	0.020
Be	Beryllium	0.003*	0.0010	Pb	Lead	0.06*	0.050
Ca	Calcium	620	0.060	Sb	Antimony	0.15*	0.060
Cd	Cadmium	0.004*	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	78^	0.30
Cr	Chromium	0.10	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	0.01*	0.010	V	Vanadium	0.17	0.020
Fe	Iron	58	0.030	Zn	Zinc	0.11	0.0060
K	Potassium	13	0.30				

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-04

FRACTION 02D TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
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NA = not analyzed
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N\A = not available

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-04 FRACTION 02B TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21

ANALYZED 04/07/88

UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.15	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-04 FRACTION 02B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 04/08/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	430	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-04 FRACTION 02B TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-05 FRACTION 03C TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403

ANALYZED 04/09/88

UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

 RAS - Austin REPORT Work Order # 88-04-016

Received: 04/07/88 Results by Sample

SAMPLE ID 04-05 FRACTION 03C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 04/06/88 Category

ANALYST DES VERIFIED RHH

UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	4.8	0.10
Al	Aluminum	ND	0.20	Mn	Manganese	0.007*	0.0030
As	Arsenic	ND	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	110	0.080
Ba	Barium	0.029*	0.0090	Ni	Nickel	ND	0.020
Be	Beryllium	ND	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	12	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	0.005*	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	5.2	0.30
Cr	Chromium	ND	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	ND	0.010	V	Vanadium	ND	0.020
Fe	Iron	0.11*	0.030	Zn	Zinc	ND	0.0060
K	Potassium	3.1	0.30				

SAMPLE ID 04-05 FRACTION 03C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-05 FRACTION 03A TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21

ANALYZED 04/07/88

UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.02*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-05 FRACTION 03A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 04/08/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	370	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

SAMPLE ID 04-05 FRACTION 03A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-06 FRACTION 04C TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 04/09/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-06

FRACTION 04C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 04/06/88 Category

VERIFIED RHH

UNITS ug/ml

ANALYST DES

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	37	0.10
Al	Aluminum	120	0.20	Mn	Manganese	2.6	0.0030
As	Arsenic	2.0	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	25	0.080
Ba	Barium	0.46	0.0090	Ni	Nickel	0.14	0.020
Be	Beryllium	0.004*	0.0010	Pb	Lead	0.16*	0.050
Ca	Calcium	1800	0.60	Sb	Antimony	0.25*	0.060
Cd	Cadmium	0.004*	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	0.04*	0.010	Si	Silicon	82	0.30
Cr	Chromium	0.21	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	0.09	0.010	V	Vanadium	0.35	0.020
Fe	Iron	140	0.030	Zn	Zinc	0.21	0.0060
K	Potassium	19	0.30				

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-06

FRACTION 04C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-06 FRACTION 04A TEST CODE OPO4 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21

ANALYZED 04/07/88

UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.09*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-06 FRACTION 04A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 04/08/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	480	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-06 FRACTION 04A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-09 FRACTION 05C TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403
ANALYZED 04/09/88
UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RAS - Austin REPORT

Work Order # 88-04-016

Received: 04/07/88

Results by Sample

SAMPLE ID 04-09

FRACTION 05C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements

Date & Time Collected 04/06/88 Category

ANALYST DES

VERIFIED RHH

UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	8.5	0.10
Al	Aluminum	14	0.20	Mn	Manganese	0.79	0.0030
As	Arsenic	ND	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	28	0.080
Ba	Barium	0.16	0.0090	Ni	Nickel	ND	0.020
Be	Beryllium	ND	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	400	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	29	0.30
Cr	Chromium	0.038*	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	ND	0.010	V	Vanadium	0.04*	0.020
Fe	Iron	13	0.030	Zn	Zinc	ND	0.0060
K	Potassium	3.4	0.30				

SAMPLE ID 04-09 FRACTION 05C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

SAMPLE ID 04-09 FRACTION 05A TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 04/07/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.13	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-09 FRACTION 05A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 04/08/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	430	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-09 FRACTION 05A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-10 FRACTION 06C TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403
ANALYZED 04/09/88
UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-10 FRACTION 06C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

ANALYST DES

VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	ND	0.10
Al	Aluminum	ND	0.20	Mn	Manganese	ND	0.0030
As	Arsenic	ND	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	ND	0.080
Ba	Barium	ND	0.0090	Ni	Nickel	ND	0.020
Be	Beryllium	ND	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	ND	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	ND	0.30
Cr	Chromium	ND	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	ND	0.010	V	Vanadium	ND	0.020
Fe	Iron	ND	0.030	Zn	Zinc	ND	0.0060
K	Potassium	ND	0.30				

SAMPLE ID 04-10 FRACTION 06C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-10 FRACTION 06A TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21 ANALYZED 04/07/88 UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	ND	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-10 FRACTION 06A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT ANALYZED 04/08/88 UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	1*	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

SAMPLE ID 04-10 FRACTION 06A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-11 FRACTION 07C TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 04/06/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 04/09/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-11 FRACTION 07C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

ANALYST DES VERIFIED RHH
UNITS ug/ml

CODE	METAL	RESULT	DET LIMIT	CODE	METAL	RESULT	DET LIMIT
Ag	Silver	ND	0.0090	Mg	Magnesium	4.0	0.10
Al	Aluminum	ND	0.20	Mn	Manganese	0.008*	0.0030
As	Arsenic	ND	0.015	Mo	Molybdenum	ND	0.050
B	Boron	ND	0.60	Na	Sodium	110	0.080
Ba	Barium	0.028*	0.0090	Ni	Nickel	ND	0.020
Be	Beryllium	ND	0.0010	Pb	Lead	ND	0.050
Ca	Calcium	13	0.060	Sb	Antimony	ND	0.060
Cd	Cadmium	ND	0.0030	Se	Selenium	ND	0.30
Co	Cobalt	ND	0.010	Si	Silicon	5.4	0.30
Cr	Chromium	ND	0.0090	Tl	Thallium	ND	0.090
Cu	Copper	ND	0.010	V	Vanadium	ND	0.020
Fe	Iron	ND	0.030	Zn	Zinc	0.026*	0.0060
K	Potassium	3.6	0.30				

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-11

FRACTION 07C TEST CODE ICP200 NAME ICPES, EPA 200.7 elements
Date & Time Collected 04/06/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit.
N\A = not available

CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016

SAMPLE ID 04-11

FRACTION 07A TEST CODE OP04 NAME Orthophosphate
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT 21

ANALYZED 04/07/88

UNITS mg/L as P

ANALYTE	RESULT	DET LIMIT
Orthophosphate	0.02*	0.020

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID 04-11

FRACTION 07A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

VERIFIED LM

ANALYST MJS
INSTRMT

ANALYZED 04/08/88

UNITS mg/L

ANALYTE	RESULT	DET LIMIT
Filterable Residue (TDS)	350	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-016
Continued From Above

SAMPLE ID 04-11

FRACTION 07A TEST CODE TDS NAME Total dissolved solids
Date & Time Collected 04/06/88 Category

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

CORPORATION

 RAS Sacramento REPORT Work Order # 58-04-017

Received: 04/06/88 05/13/88 15:13:37

REPORT TO: Radian Corporation
8501 MoPac Blvd.
Austin, Tx 78766

ATTEN: Larry French

CLIENT: CARSWELL AFB SAMPLES: 10
COMPANY: Carswell AFB.
FACILITY: Headquarters, SAC
Offutt, Nebraska 68113

WORK ID: Site 11 & 13
TAKEN: 04/05/88
TRANS: Federal 5471898342
TYPE: H20
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
10395 Old Placerville Road
Sacramento,
California 95827

ATTEN:
PHONE: 916-362-5332

CERTIFIED BY: Lucasa Petersen

CONTACT: LARRY FRENCH

"QC"= OUTSIDE CONTROL LIMITS.

SAMPLE IDENTIFICATION

01	04-01 H20
02	04-02 H20
03	04-01 MATRIX SPIKE
03	04-01 MATRIX SPIKE DUP
04	REAGENT BLANK H20
05	04-01 MATRIX SPIKE
05	04-01 MATRIX SPIKE DUP
06	REAGENT BLANK H20
07	04-01 MATRIX SPIKE
07	04-01 MATRIX SPIKE DUP
08	REAGENT BLANK H20
09	04-01 MATRIX SPIKE
09	04-01 MATRIX SPIKE DUP
10	REAGENT BLANK H20

TEST CODES and NAMES used on this report

509B	Herbicides in water
604	Phenols in water.
608	EPA-Pest/PCB's Water
CL 625	Semivolatile Organics H20
EXHERB	Extraction for Herbicides
EXPEST	Extraction for Pest/PCBs
EXPHEN	Extraction for Phenols
EX BNA	Semivolatiles extraction

KARDIAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-017

Received: 04/06/88

Results By Test

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
EXHERB Date completed	04/08/88 DATE COMPLETED				
EXPEST date completed	04/06/88 DATE COMPLETED				
EXPHEN date completed	04/06/88 DATE COMPLETED				04/06/88 DATE COMPLETED 04/06/88 DATE COMPLETED
EX_BNA date completed	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED 04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	

TEST CODE default units	Sample 06 (entered units)	Sample 07 (entered units)	Sample 08 (entered units)	Sample 09 (entered units)	Sample 10 (entered units)
EXHERB Date completed				04/08/88 DATE COMPLETED 04/08/88 DATE COMPLETED	04/08/88 DATE COMPLETED
EXPEST date completed		04/06/88 DATE COMPLETED 04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED		
EXPHEN date completed	04/06/88 DATE COMPLETED				

RAS Sacramento REPORT

Work Order # S8-04-017

Received: 04/06/88

Results By Test

SAMPLE Sample Id	Test: EXHERB Date completed	Test: EXPEST date completed	Test: EXPHEN date completed	Test: EX BNA date completed
01 04-01 H2O	04/08/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED	04/06/88 DATE COMPLETED
02 04-02 H2O				04/06/88 DATE COMPLETED
03 04-01 MATRIX SP				04/06/88 DATE COMPLETED
				04/06/88 DATE COMPLETED
04 REAGENT BLANK H				04/06/88 DATE COMPLETED
05 04-01 MATRIX SP			04/06/88 DATE COMPLETED	
			04/06/88 DATE COMPLETED	
06 REAGENT BLANK H			04/06/88 DATE COMPLETED	
07 04-01 MATRIX SP		04/06/88 DATE COMPLETED		
		04/06/88 DATE COMPLETED		
08 REAGENT BLANK H		04/06/88 DATE COMPLETED		
09 04-01 MATRIX SP	04/08/88 DATE COMPLETED			
	04/08/88 DATE COMPLETED			
10 REAGENT BLANK H	04/08/88 DATE COMPLETED			

KADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 H20

SAMPLE # 01 FRACTIONS: A, B, C, D, E, F, G, H
Date & Time Collected 04/05/88 Category

EXHERB 04/08/88 DATE COMPLETED
EXPEST 04/06/88 DATE COMPLETED
EXPHEN 04/06/88 DATE COMPLETED
EX_BNA 04/06/88 DATE COMPLETED

CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 H20

FRACTION 01G TEST CODE 509B NAME Herbicides in water
Date & Time Collected 04/05/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

VERIFIED JD

ANALYST AL
INSTRMT 7

EXTRCTD 04/08/88
INJECTD 04/18/88

FILE # 71804186
FACTOR 1.0

UNITS UG/L

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	0.50	1.0
93-72-1	2,4,5-TP (Silvex)	ND	0.10	1.0
93-76-5	2,4,5-T	ND	0.10	1.0

SURROGATE

2,4-Dichlorophenyl Acetic Acid 114 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed

RADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 H20

FRACTION 01G TEST CODE 509B NAME Herbicides in water
Date & Time Collected 04/05/88 Category

D = Not reportable due to dilution

Received: 04/06/88

Results by Sample

SAMPLE ID 04-01 H20 FRACTION 01C TEST CODE 604 NAME Phenols in water.

Date & Time Collected 04/05/88 Category

ORGANICS ANALYSIS DATA SHEET
PHENOLS

VERIFIED JD

ANALYST AL EXTRCTD 04/06/88 FILE # C38041814

INSTRMT C INJECTD 04/18/88 FACTOR 1.0 UNITS UG/L

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
108-95-2	Phenol	0.58 C	0.20	1.0
95-57-8	2-Chlorophenol	0.25 C	0.20	1.0
88-75-5	2-Nitrophenol	ND	2.0	1.0
105-67-9	2,4-Dimethylphenol	ND	0.30	1.0
120-83-2	2,4-Dichlorophenol	ND	0.50	1.0
59-50-7	4-Chloro-3-Methylphenol	ND	0.40	1.0
88-06-2	2,4,6-Trichlorophenol	ND	0.60	1.0
51-28-5	2,4-Dinitrophenol	ND	13	1.0
100-02-7	4-Nitrophenol	ND	2.5	1.0
534-52-1	2-Methyl-4,6-Dinitrophenol	ND	16	1.0
87-86-5	Pentachlorophenol	ND	7.5	1.0

SURROGATE

1770-80-5 2-Fluorophenol 63 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
Confirmation: C = confirmed; NC = not confirmed;
NR = not required; NP = not performed
PC = Previously confirmed
J = Estimated value.
QC = Outside control limits.

KEARDHAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 H20

FRACTION 01C TEST CODE 604 NAME Phenols in water.
Date & Time Collected 04/05/88 Category

D = Not reportable due to dilution

CORPORATION

RAS Sacramento REPORT

Work Order # S8-04-017

Received: 04/06/88

Results by Sample

SAMPLE ID 04-01 H20 FRACTION 01E TEST CODE 608 NAME EPA-Pest/PCB's Water

Date & Time Collected 04/05/88 Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/06/88 FILE # 118041148 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 5.4 UNITS UG/L

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	0.27	27
58-89-9	gamma-BHC (lindane)	ND	0.27	27
319-85-7	beta-BHC	ND	0.27	27
76-44-8	Heptachlor	ND	0.27	27
319-86-8	delta-BHC	ND	0.27	27
309-00-02	Aldrin	ND	0.27	27
1024-57-3	Heptachlor Epoxide	ND	0.27	27
959-98-8	Endosulfan I	ND	0.054	5.4
72-55-9	4,4'-DDE	ND	0.054	5.4
60-57-1	Dieldrin	ND	0.054	5.4
72-20-8	Endrin	ND	0.054	5.4
72-54-8	4,4'-DDD	ND	0.054	5.4
33213-65-9	Endosulfan II	ND	0.16	5.4
50-29-3	4,4'-DDT	ND	0.11	5.4
7421-93-4	Endrin Aldehyde	ND	0.11	5.4
1031-07-8	Endosulfan Sulphate	ND	0.27	5.4
53494-70-5	Endrin Ketone	ND	0.27	5.4
72-43-5	Methoxychlor	ND	0.27	5.4
57-74-9	Chlordane	ND	1.4	27
8001-35-2	Toxaphene	ND	2.7	5.4
12674-11-2	PCB-1016	ND	2.7	27
11104-28-2	PCB-1221	ND	5.4	27
11141-16-5	PCB-1232	ND	5.4	27
53469-21-9	PCB-1242	ND	2.7	27
12672-29-6	PCB-1248	ND	0.54	5.4
11097-69-1	PCB-1254	ND	1.1	5.4
11096-82-5	PCB-1260	ND	1.1	5.4

SURROGATE 1770-80-5 Dibutylchlorendate 51 % Recovery

KAUFMAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 H20 FRACTION 01E TEST CODE 608 NAME EPA-Pest/PCB's Water
Date & Time Collected 04/05/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

SAMPLE ID 04-01 H20 FRACTION 01A TEST CODE CL 625 NAME Semivolatile Organics H20
Date & Time Collected 04/05/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE HSL COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0401701A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/L

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	10
	108-95-2	phenol	ND	1.5
	62-53-3	aniline	ND	10
	111-44-4	bis(2-chloroethyl) ether	ND	5.7
	95-57-8	2-chlorophenol	ND	3.3
	541-73-1	1,3-dichlorobenzene	ND	1.9
	106-46-7	1,4-dichlorobenzene	ND	4.4
	100-51-6	benzyl alcohol	ND	50
	95-50-1	1,2-dichlorobenzene	ND	1.9
	95-48-7	2-methylphenol	ND	10
	108-60-1	bis(2-chloroisopropyl)ether	ND	5.7
	106-44-5	4-methylphenol	ND	10
	621-64-7	n-nitroso-di-n-propylamine	ND	12
	67-72-1	hexachloroethane	ND	1.6
	98-95-3	nitrobenzene	ND	1.9
	78-59-1	isophorone	ND	2.2
	88-75-5	2-nitrophenol	ND	3.6
	105-67-9	2,4-dimethylphenol	ND	2.7
	65-85-0	benzoic acid	ND	50
	111-91-1	bis(2-chloroethoxy)methane	ND	5.3
	120-83-2	2,4-dichlorophenol	ND	2.7
	120-82-1	1,2,4-trichlorobenzene	ND	1.9
	91-20-3	naphthalene	ND	1.6
	106-47-8	4-chloroaniline	ND	10
	87-68-3	hexachlorobutadiene	ND	0.90
	59-50-7	4-chloro-3-methylphenol	ND	3.0
	91-57-6	2-methylnaphthalene	ND	10

KAUFMAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 H20

FRACTION 01A TEST CODE CL 625 NAME Semivolatile Organics H20
Date & Time Collected 04/05/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	6.0
	88-06-2	2,4,6-trichlorophenol	ND	2.7
	95-95-4	2,4,5-trichlorophenol	ND	10
	91-58-7	2-chloronaphthalene	ND	1.9
	88-74-4	2-nitroaniline	ND	50
	131-11-3	dimethyl phthalate	ND	1.6
	208-96-8	acenaphthylene	ND	3.5
	99-09-2	3-nitroaniline	ND	50
	83-32-9	acenaphthene	ND	1.9
	51-28-5	2,4-dinitrophenol	ND	42
	100-02-7	4-nitrophenol	ND	2.4
	132-64-9	dibenzofuran	ND	10
	606-20-2	2,6-dinitrotoluene	ND	1.9
	121-14-2	2,4-dinitrotoluene	ND	5.7
	84-66-2	diethylphthalate	ND	1.9
	7005-72-3	4-chlorophenyl-phenylether	ND	4.2
	86-73-7	fluorene	ND	1.9
	100-01-06	4-nitroaniline	ND	50
	534-52-1	4,6-dinitro-2-methylphenol	ND	24
	86-30-6	n-nitrosodiphenylamine	ND	1.9
	101-55-3	4-bromophenyl-phenylether	ND	1.9
	118-74-1	hexachlorobenzene	ND	1.9
	87-86-5	pentachlorophenol	ND	3.6
	85-01-8	phenanthrene	ND	5.4
	120-12-7	anthracene	ND	1.9
	84-74-2	di-n-butylphthalate	ND	2.5
	206-44-0	fluoranthene	ND	2.2
	92-87-5	benzidine	ND	44
	129-00-0	pyrene	ND	1.9
1618	85-68-7	butylbenzylphthalate	2.9	2.5
	91-94-1	3,3'-dichlorobenzidine	ND	17
	56-55-3	benzo(a)anthracene	ND	7.8
1713	117-81-7	bis(2-ethylhexyl)phthalate	190	2.5

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 H20

FRACTION 01A TEST CODE CL 625 NAME Semivolatile Organics H20
Date & Time Collected 04/05/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	2.5
	117-84-0	di-n-octyl phthalate	ND	2.5
	205-99-2	benzo(b)fluoranthene	ND	4.8
	207-08-9	benzo(k)fluoranthene	ND	2.5
	50-32-8	benzo(a)pyrene	ND	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	ND	3.7
	53-70-3	dibenz(a,h)anthracene	ND	2.5
	191-24-2	benzo(ghi)perylene	ND	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
442	2-fluorophenol	81 %
564	d5-phenol	82 %
693	d5-nitrobenzene	90 %
964	2-fluorobiphenyl	90 %
1189	2,4,6-tribromophenol	93 %
1541	d14-terphenyl	80 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

KADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-02 H20

SAMPLE # 02 FRACTIONS: A,B
Date & Time Collected 04/05/88 Category

EX BNA 04/06/88
DATE COMPLETED

SAMPLE ID 04-02 H2O FRACTION 02A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected 04/05/88 Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE HSL COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0401702A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/L

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	11
	108-95-2	phenol	ND	1.6
	62-53-3	aniline	ND	11
	111-44-4	bis(2-chloroethyl) ether	ND	6.2
	95-57-8	2-chlorophenol	ND	3.6
	541-73-1	1,3-dichlorobenzene	ND	2.1
	106-46-7	1,4-dichlorobenzene	ND	4.8
	100-51-6	benzyl alcohol	ND	55
	95-50-1	1,2-dichlorobenzene	ND	2.1
	95-48-7	2-methylphenol	ND	11
	108-60-1	bis(2-chloroisopropyl)ether	ND	6.2
	106-44-5	4-methylphenol	ND	11
	621-64-7	n-nitroso-di-n-propylamine	ND	13
	67-72-1	hexachloroethane	ND	1.7
	98-95-3	nitrobenzene	ND	2.1
	78-59-1	isophorone	ND	2.4
	88-75-5	2-nitrophenol	ND	3.9
	105-67-9	2,4-dimethylphenol	ND	2.9
	65-85-0	benzoic acid	ND	55
	111-91-1	bis(2-chloroethoxy)methane	ND	5.8
	120-83-2	2,4-dichlorophenol	ND	2.9
	120-82-1	1,2,4-trichlorobenzene	ND	2.1
	91-20-3	naphthalene	ND	1.7
	106-47-8	4-chloroaniline	ND	11
	87-68-3	hexachlorobutadiene	ND	0.98
	59-50-7	4-chloro-3-methylphenol	ND	3.3
	91-57-6	2-methylnaphthalene	ND	11

KADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-02 H20

FRACTION 02A TEST CODE CL 625 NAME Semivolatile Organics H20
Date & Time Collected 04/05/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	6.5
	88-06-2	2,4,6-trichlorophenol	ND	2.9
	95-95-4	2,4,5-trichlorophenol	ND	11
	91-58-7	2-chloronaphthalene	ND	2.1
	88-74-4	2-nitroaniline	ND	55
	131-11-3	dimethyl phthalate	ND	1.7
	208-96-8	acenaphthylene	ND	3.8
	99-09-2	3-nitroaniline	ND	55
	83-32-9	acenaphthene	ND	2.1
	51-28-5	2,4-dinitrophenol	ND	46
	100-02-7	4-nitrophenol	ND	2.6
	132-64-9	dibenzofuran	ND	11
	606-20-2	2,6-dinitrotoluene	ND	2.1
	121-14-2	2,4-dinitrotoluene	ND	6.2
	84-66-2	diethylphthalate	ND	2.1
	7005-72-3	4-chlorophenyl-phenylether	ND	4.6
	86-73-7	fluorene	ND	2.1
	100-01-06	4-nitroaniline	ND	55
	534-52-1	4,6-dinitro-2-methylphenol	ND	26
	86-30-6	n-nitrosodiphenylamine	ND	2.1
	101-55-3	4-bromophenyl-phenylether	ND	2.1
	118-74-1	hexachlorobenzene	ND	2.1
	87-86-5	pentachlorophenol	ND	3.9
	85-01-8	phenanthrene	ND	5.9
	120-12-7	anthracene	ND	2.1
	84-74-2	di-n-butylphthalate	ND	2.7
	206-44-0	fluoranthene	ND	2.4
	92-87-5	benzidine	ND	48
	129-00-0	pyrene	ND	2.1
1617	85-68-7	butylbenzylphthalate	1.8 J	2.7
	91-94-1	3,3'-dichlorobenzidine	ND	18
	56-55-3	benzo(a)anthracene	ND	8.5
	117-81-7	bis(2-ethylhexyl)phthalate	ND	2.7

SAMPLE ID 04-02 H20 FRACTION 02A TEST CODE CL 625 NAME Semivolatile Organics H20
Date & Time Collected 04/05/88 Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	2.7
1831	117-84-0	di-n-octyl phthalate	2.0 J	2.7
	205-99-2	benzo(b)fluoranthene	ND	5.2
	207-08-9	benzo(k)fluoranthene	ND	2.7
	50-32-8	benzo(a)pyrene	ND	2.7
	193-39-5	indeno(1,2,3-cd)pyrene	ND	4.0
	53-70-3	dibenz(a,h)anthracene	ND	2.7
	191-24-2	benzo(ghi)perylene	ND	4.5

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
440	2-fluorophenol	70 %
563	d5-phenol	68 %
692	d5-nitrobenzene	53 %
962	2-fluorobiphenyl	67 %
1188	2,4,6-tribromophenol	81 %
1540	d14-terphenyl	84 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID 04-01 MATRIX SPIKE SAMPLE # 03 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/06/88
DATE COMPLETED

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 03A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE HSL COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0401703A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS % RECOV.

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	NA	10
567	108-95-2	phenol	78	1.5
	62-53-3	aniline	NA	10
	111-44-4	bis(2-chloroethyl) ether	NA	5.7
586	95-57-8	2-chlorophenol	84	3.3
	541-73-1	1,3-dichlorobenzene	NA	1.9
614	106-46-7	1,4-dichlorobenzene	75	4.4
	100-51-6	benzyl alcohol	NA	50
	95-50-1	1,2-dichlorobenzene	NA	1.9
	95-48-7	2-methylphenol	NA	10
	108-60-1	bis(2-chloroisopropyl)ether	NA	5.7
	106-44-5	4-methylphenol	NA	10
676	621-64-7	n-nitroso-di-n-propylamine	91	12
	67-72-1	hexachloroethane	NA	1.6
	98-95-3	nitrobenzene	NA	1.9
	78-59-1	isophorone	NA	2.2
	88-75-5	2-nitrophenol	NA	3.6
	105-67-9	2,4-dimethylphenol	NA	2.7
	65-85-0	benzoic acid	NA	50
	111-91-1	bis(2-chloroethoxy)methane	NA	5.3
	120-83-2	2,4-dichlorophenol	NA	2.7
793	120-82-1	1,2,4-trichlorobenzene	83	1.9
	91-20-3	naphthalene	NA	1.6
	106-47-8	4-chloroaniline	NA	10
	87-68-3	hexachlorobutadiene	NA	0.90
884	59-50-7	4-chloro-3-methylphenol	96	3.0
	91-57-6	2-methylnaphthalene	NA	10

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 03A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	NA	6.0
	88-06-2	2,4,6-trichlorophenol	NA	2.7
	95-95-4	2,4,5-trichlorophenol	NA	10
	91-58-7	2-chloronaphthalene	NA	1.9
	88-74-4	2-nitroaniline	NA	50
	131-11-3	dimethyl phthalate	NA	1.6
	208-96-8	acenaphthylene	NA	3.5
	99-09-2	3-nitroaniline	NA	50
1075	83-32-9	acenaphthene	93	1.9
	51-28-5	2,4-dinitrophenol	NA	42
1086	100-02-7	4-nitrophenol	88 QC	2.4
	132-64-9	dibenzofuran	NA	10
	606-20-2	2,6-dinitrotoluene	NA	1.9
1102	121-14-2	2,4-dinitrotoluene	88	5.7
	84-66-2	diethylphthalate	NA	1.9
	7005-72-3	4-chlorophenyl-phenylether	NA	4.2
	86-73-7	fluorene	NA	1.9
	100-01-06	4-nitroaniline	NA	50
	534-52-1	4,6-dinitro-2-methylphenol	NA	24
	86-30-6	n-nitrosodiphenylamine	NA	1.9
	101-55-3	4-bromophenyl-phenylether	NA	1.9
	118-74-1	hexachlorobenzene	NA	1.9
1276	87-86-5	pentachlorophenol	100	3.6
	85-01-8	phenanthrene	NA	5.4
	120-12-7	anthracene	NA	1.9
	84-74-2	di-n-butylphthalate	NA	2.5
	206-44-0	fluoranthene	NA	2.2
	92-87-5	benzidine	NA	44
1520	129-00-0	pyrene	71	1.9
	85-68-7	butylbenzylphthalate	NA	2.5
	91-94-1	3,3'-dichlorobenzidine	NA	17
	56-55-3	benzo(a)anthracene	NA	7.8
	117-81-7	bis(2-ethylhexyl)phthalate	NA	2.5

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 03A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	NA	2.5
	117-84-0	di-n-octyl phthalate	NA	2.5
	205-99-2	benzo(b)fluoranthene	NA	4.8
	207-08-9	benzo(k)fluoranthene	NA	2.5
	50-32-8	benzo(a)pyrene	NA	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	NA	3.7
	53-70-3	dibenz(a,h)anthracene	NA	2.5
	191-24-2	benzo(ghi)perylene	NA	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
440	2-fluorophenol	77 %
565	d5-phenol	89 %
694	d5-nitrobenzene	87 %
965	2-fluorobiphenyl	85 %
1191	2,4,6-tribromophenol	97 %
1543	d14-terphenyl	79 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID 04-01 MATRIX SPIKE DUP SAMPLE # 03 FRACTIONS: B
Date & Time Collected not specified Category

EX BNA 04/06/88
DATE COMPLETED

Received: 04/06/88 Results by Sample

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 03B TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE HSL COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0401703B VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS % RECOV.

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	NA	10
568	108-95-2	phenol	76	1.5
	62-53-3	aniline	NA	10
	111-44-4	bis(2-chloroethyl) ether	NA	5.7
587	95-57-8	2-chlorophenol	74	3.3
	541-73-1	1,3-dichlorobenzene	NA	1.9
615	106-46-7	1,4-dichlorobenzene	80	4.4
	100-51-6	benzyl alcohol	NA	50
	95-50-1	1,2-dichlorobenzene	NA	1.9
	95-48-7	2-methylphenol	NA	10
	108-60-1	bis(2-chloroisopropyl)ether	NA	5.7
	106-44-5	4-methylphenol	NA	10
676	621-64-7	n-nitroso-di-n-propylamine	91	12
	67-72-1	hexachloroethane	NA	1.6
	98-95-3	nitrobenzene	NA	1.9
	78-59-1	isophorone	NA	2.2
	88-75-5	2-nitrophenol	NA	3.6
	105-67-9	2,4-dimethylphenol	NA	2.7
	65-85-0	benzoic acid	NA	50
	111-91-1	bis(2-chloroethoxy)methane	NA	5.3
	120-83-2	2,4-dichlorophenol	NA	2.7
793	120-82-1	1,2,4-trichlorobenzene	85	1.9
	91-20-3	naphthalene	NA	1.6
	106-47-8	4-chloroaniline	NA	10
	87-68-3	hexachlorobutadiene	NA	0.90
884	59-50-7	4-chloro-3-methylphenol	91	3.0
	91-57-6	2-methylnaphthalene	NA	10

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 03B TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	NA	6.0
	88-06-2	2,4,6-trichlorophenol	NA	2.7
	95-95-4	2,4,5-trichlorophenol	NA	10
	91-58-7	2-chloronaphthalene	NA	1.9
	88-74-4	2-nitroaniline	NA	50
	131-11-3	dimethyl phthalate	NA	1.6
	208-96-8	acenaphthylene	NA	3.5
	99-09-2	3-nitroaniline	NA	50
1074	83-32-9	acenaphthene	97	1.9
	51-28-5	2,4-dinitrophenol	NA	42
1086	100-02-7	4-nitrophenol	86 QC	2.4
	132-64-9	dibenzofuran	NA	10
	606-20-2	2,6-dinitrotoluene	NA	1.9
1101	121-14-2	2,4-dinitrotoluene	83	5.7
	84-66-2	diethylphthalate	NA	1.9
	7005-72-3	4-chlorophenyl-phenylether	NA	4.2
	86-73-7	fluorene	NA	1.9
	100-01-06	4-nitroaniline	NA	50
	534-52-1	4,6-dinitro-2-methylphenol	NA	24
	86-30-6	n-nitrosodiphenylamine	NA	1.9
	101-55-3	4-bromophenyl-phenylether	NA	1.9
	118-74-1	hexachlorobenzene	NA	1.9
1275	87-86-5	pentachlorophenol	84	3.6
	85-01-8	phenanthrene	NA	5.4
	120-12-7	anthracene	NA	1.9
	84-74-2	di-n-butylphthalate	NA	2.5
	206-44-0	fluoranthene	NA	2.2
	92-87-5	benzidine	NA	44
1520	129-00-0	pyrene	74	1.9
	85-68-7	butylbenzylphthalate	NA	2.5
	91-94-1	3,3'-dichlorobenzidine	NA	17
	56-55-3	benzo(a)anthracene	NA	7.8
	117-81-7	bis(2-ethylhexyl)phthalate	NA	2.5

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 03B TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	NA	2.5
	117-84-0	di-n-octyl phthalate	NA	2.5
	205-99-2	benzo(b)fluoranthene	NA	4.8
	207-08-9	benzo(k)fluoranthene	NA	2.5
	50-32-8	benzo(a)pyrene	NA	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	NA	3.7
	53-70-3	dibenz(a,h)anthracene	NA	2.5
	191-24-2	benzo(ghi)perylene	NA	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
443	2-fluorophenol	75 %
566	d5-phenol	77 %
694	d5-nitrobenzene	90 %
965	2-fluorobiphenyl	80 %
1191	2,4,6-tribromophenol	84 %
1542	d14-terphenyl	79 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

RADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID REAGENT BLANK H2O

SAMPLE # 04 FRACTIONS: A
Date & Time Collected not specified Category

EX BNA 04/06/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK H2O FRACTION 04A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
SEMIVOLATILE HSL COMPOUNDS

ANALYST KS EXTRCTD 04/06/88 FILE # 0401704A VERIFIED LAK
INSTRMT F1 INJECTD 04/12/88 UNITS ug/L

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	62-75-9	n-nitrosodimethylamine	ND	10
	108-95-2	phenol	ND	1.5
	62-53-3	aniline	ND	10
	111-44-4	bis(2-chloroethyl) ether	ND	5.7
	95-57-8	2-chlorophenol	ND	3.3
	541-73-1	1,3-dichlorobenzene	ND	1.9
	106-46-7	1,4-dichlorobenzene	ND	4.4
	100-51-6	benzyl alcohol	ND	50
	95-50-1	1,2-dichlorobenzene	ND	1.9
	95-48-7	2-methylphenol	ND	10
	108-60-1	bis(2-chloroisopropyl)ether	ND	5.7
	106-44-5	4-methylphenol	ND	10
	621-64-7	n-nitroso-di-n-propylamine	ND	12
	67-72-1	hexachloroethane	ND	1.6
	98-95-3	nitrobenzene	ND	1.9
	78-59-1	isophorone	ND	2.2
	88-75-5	2-nitrophenol	ND	3.6
	105-67-9	2,4-dimethylphenol	ND	2.7
	65-85-0	benzoic acid	ND	50
	111-91-1	bis(2-chloroethoxy)methane	ND	5.3
	120-83-2	2,4-dichlorophenol	ND	2.7
	120-82-1	1,2,4-trichlorobenzene	ND	1.9
	91-20-3	naphthalene	ND	1.6
	106-47-8	4-chloroaniline	ND	10
	87-68-3	hexachlorobutadiene	ND	0.90
	59-50-7	4-chloro-3-methylphenol	ND	3.0
	91-57-6	2-methylnaphthalene	ND	10

KADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID REAGENT BLANK H2O FRACTION 04A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	77-47-4	hexachlorocyclopentadiene	ND	6.0
	88-06-2	2,4,6-trichlorophenol	ND	2.7
	95-95-4	2,4,5-trichlorophenol	ND	10
	91-58-7	2-chloronaphthalene	ND	1.9
	88-74-4	2-nitroaniline	ND	50
	131-11-3	dimethyl phthalate	ND	1.6
	208-96-8	acenaphthylene	ND	3.5
	99-09-2	3-nitroaniline	ND	50
	83-32-9	acenaphthene	ND	1.9
	51-28-5	2,4-dinitrophenol	ND	42
	100-02-7	4-nitrophenol	ND	2.4
	132-64-9	dibenzofuran	ND	10
	606-20-2	2,6-dinitrotoluene	ND	1.9
	121-14-2	2,4-dinitrotoluene	ND	5.7
	84-66-2	diethylphthalate	ND	1.9
	7005-72-3	4-chlorophenyl-phenylether	ND	4.2
	86-73-7	fluorene	ND	1.9
	100-01-06	4-nitroaniline	ND	50
	534-52-1	4,6-dinitro-2-methylphenol	ND	24
	86-30-6	n-nitrosodiphenylamine	ND	1.9
	101-55-3	4-bromophenyl-phenylether	ND	1.9
	118-74-1	hexachlorobenzene	ND	1.9
	87-86-5	pentachlorophenol	ND	3.6
	85-01-8	phenanthrene	ND	5.4
	120-12-7	anthracene	ND	1.9
	84-74-2	di-n-butylphthalate	ND	2.5
	206-44-0	fluoranthene	ND	2.2
	92-87-5	benzidine	ND	44
	129-00-0	pyrene	ND	1.9
	85-68-7	butylbenzylphthalate	ND	2.5
	91-94-1	3,3'-dichlorobenzidine	ND	17
	56-55-3	benzo(a)anthracene	ND	7.8
	117-81-7	bis(2-ethylhexyl)phthalate	ND	2.5

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID REAGENT BLANK H2O

FRACTION 04A TEST CODE CL 625 NAME Semivolatile Organics H2O
Date & Time Collected not specified Category

SCAN	CAS #	COMPOUND	RESULT	DET LIMIT
	218-01-9	chrysene	ND	2.5
	117-84-0	di-n-octyl phthalate	ND	2.5
	205-99-2	benzo(b)fluoranthene	ND	4.8
	207-08-9	benzo(k)fluoranthene	ND	2.5
	50-32-8	benzo(a)pyrene	ND	2.5
	193-39-5	indeno(1,2,3-cd)pyrene	ND	3.7
	53-70-3	dibenz(a,h)anthracene	ND	2.5
	191-24-2	benzo(ghi)perylene	ND	4.1

SURROGATE RECOVERIES

SCAN	COMPOUND	RECOVERY
447	2-fluorophenol	81 %
568	d5-phenol	76 %
696	d5-nitrobenzene	86 %
965	2-fluorobiphenyl	78 %
1190	2,4,6-tribromophenol	80 %
1542	d14-terphenyl	91 %

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
N\A = not available.
B = detected in Reagent Blank; background subtraction not performed.
J = estimated value less than detection limit.

SAMPLE ID 04-01 MATRIX SPIKE SAMPLE # 05 FRACTIONS: A
Date & Time Collected not specified Category

EXPHEN 04/06/88
DATE COMPLETED

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 05A TEST CODE 604 NAME Phenols in water.
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PHENOLS

VERIFIED JD

ANALYST AL EXTRCTD 04/06/88 FILE # C38041815
INSTRMT C INJECTD 04/18/88 FACTOR 2.0 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
108-95-2	Phenol	NS	0.40	2.0
95-57-8	2-Chlorophenol	59	0.40	2.0
88-75-5	2-Nitrophenol	NS	4.0	2.0
105-67-9	2,4-Dimethylphenol	62	0.60	2.0
120-83-2	2,4-Dichlorophenol	67	1.0	2.0
59-50-7	4-Chloro-3-Methylphenol	NS	0.80	2.0
88-06-2	2,4,6-Trichlorophenol	116	1.2	2.0
51-28-5	2,4-Dinitrophenol	NS	26	2.0
100-02-7	4-Nitrophenol	98	5.0	2.0
534-52-1	2-Methyl-4,6-Dinitrophenol	92	32	2.0
87-86-5	Pentachlorophenol	NS	15	2.0

SURROGATE

1770-80-5 2-Fluorophenol 57 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
Confirmation: C = confirmed; NC = not confirmed;
NR = not required; NP = not performed
PC = Previously confirmed
J = Estimated value.
QC = Outside control limits.

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 05A TEST CODE 604 NAME Phenols in water.
Date & Time Collected not specified Category

D = Not reportable due to dilution

SAMPLE ID 04-01 MATRIX SPIKE DUP

SAMPLE # 05 FRACTIONS: B

Date & Time Collected not specified Category

EXPHEN 04/06/88
DATE COMPLETED

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-017

Received: 04/06/88 Results by Sample

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 05B TEST CODE 604 NAME Phenols in water.

Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PHENOLS

VERIFIED JD

ANALYST AL EXTRCTD 04/06/88 FILE # C38041816

INSTRMT C INJECTD 04/18/88 FACTOR 2.1 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
108-95-2	Phenol	NS	0.42	2.1
95-57-8	2-Chlorophenol	64	0.42	2.1
88-75-5	2-Nitrophenol	NS	4.2	2.1
105-67-9	2,4-Dimethylphenol	66	0.63	2.1
120-83-2	2,4-Dichlorophenol	74	1.1	2.1
59-50-7	4-Chloro-3-Methylphenol	NS	0.84	2.1
88-06-2	2,4,6-Trichlorophenol	123 GC	1.3	2.1
51-28-5	2,4-Dinitrophenol	NS	27	2.1
100-02-7	4-Nitrophenol	100	5.3	2.1
534-52-1	2-Methyl-4,6-Dinitrophenol	94	34	2.1
87-86-5	Pentachlorophenol	NS	16	2.1

SURROGATE

1770-80-5 2-Fluorophenol 61 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
Confirmation: C = confirmed; NC = not confirmed;
NR = not required; NP = not performed
PC = Previously confirmed
J = Estimated value.
GC = Outside control limits.

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 05B TEST CODE 604 NAME Phenols in water.
Date & Time Collected not specified Category

D = Not reportable due to dilution

KAUFMANN CORPORATION

RAS Sacramento REPORT

Work Order # S8-04-017

Results by Sample

eceived: 04/06/88

SAMPLE ID REAGENT BLANK H20

SAMPLE # 06 FRACTIONS: A

Date & Time Collected not specified

Category

EXPHEN 04/06/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK H2O FRACTION 06A TEST CODE 604 NAME Phenols in water.
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PHENOLS

VERIFIED JD

ANALYST AL EXTRCTD 04/06/88 FILE # C3804187
INSTRMT C INJECTD 04/18/88 FACTOR 1 UNITS UG/L

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
108-95-2	Phenol	ND	0.20	1
95-57-8	2-Chlorophenol	ND	0.20	1
88-75-5	2-Nitrophenol	ND	2.0	1
105-67-9	2,4-Dimethylphenol	ND	0.30	1
120-83-2	2,4-Dichlorophenol	ND	0.50	1
59-50-7	4-Chloro-3-Methylphenol	ND	0.40	1
88-06-2	2,4,6-Trichlorophenol	ND	0.60	1
51-28-5	2,4-Dinitrophenol	ND	13	1
100-02-7	4-Nitrophenol	ND	2.5	1
534-52-1	2-Methyl-4,6-Dinitrophenol	ND	16	1
87-86-5	Pentachlorophenol	ND	7.5	1

SURROGATE

1770-80-5 2-Fluorophenol 96 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
Confirmation: C = confirmed; NC = not confirmed;
NR = not required; NP = not performed
PC = Previously confirmed
J = Estimated value.
QC = Outside control limits.

SAMPLE ID REAGENT BLANK H2O FRACTION 06A TEST CODE 604 NAME Phenols in water.
Date & Time Collected not specified Category

D = Not reportable due to dilution

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 MATRIX SPIKE

SAMPLE # 07 FRACTIONS: A
Date & Time Collected not specified Category

EXPEST 04/06/88
DATE COMPLETED

KAUFMAN CORPORATION

 RAS Sacramento REPORT Work Order # S8-04-017

Received: 04/06/88 Results by Sample

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 07A TEST CODE 608 NAME EPA-Pest/PCB's Water

Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/06/88 FILE # 118041156 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 41 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	NS	0.41	41
58-89-9	gamma-BHC (lindane)	105	0.41	41
319-85-7	beta-BHC	NS	0.41	41
76-44-8	Heptachlor	145 QC	0.41	41
319-86-8	delta-BHC	NS	0.41	41
309-00-02	Aldrin	43	0.41	41
1024-57-3	Heptachlor Epoxide	NS	0.41	41
959-98-8	Endosulfan I	NS	0.41	41
72-55-9	4,4'-DDE	NS	0.41	41
60-57-1	Dieldrin	98	0.41	41
72-20-8	Endrin	112	0.41	41
72-54-8	4,4'-DDD	NS	0.41	41
33213-65-9	Endosulfan II	NS	1.2	41
50-29-3	4,4'-DDT	48	0.82	41
7421-93-4	Endrin Aldehyde	NS	0.82	41
1031-07-8	Endosulfan Sulphate	NS	2.1	41
53494-70-5	Endrin Ketone	NS	2.1	41
72-43-5	Methoxychlor	NS	2.1	41
57-74-9	Chlordane	NS	2.1	41
8001-35-2	Toxaphene	NS	21	41
12674-11-2	PCB-1016	NS	4.1	41
11104-28-2	PCB-1221	NS	8.2	41
11141-16-5	PCB-1232	NS	8.2	41
53469-21-9	PCB-1242	NS	4.1	41
12672-29-6	PCB-1248	NS	4.1	41
11097-69-1	PCB-1254	NS	8.2	41
11096-82-5	PCB-1260	NS	8.2	41

SURROGATE 1770-80-5 Dibutylchlorendate 55 % Recovery

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 07A TEST CODE 608 NAME EPA-Pest/PCB's Water
Date & Time Collected not specified Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

KAUFMAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 MATRIX SPIKE DUP

SAMPLE # 07 FRACTIONS: B

Date & Time Collected not specified Category

EXPEST 04/06/88
DATE COMPLETED

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 07B TEST CODE 608 NAME EPA-Pest/PCB's Water
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/06/88 FILE # 118041157 VERIFIED JD
INSTRMT 1 INJECTD 04/11/88 FACTOR 41 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	NS	0.41	41
58-89-9	gamma-BHC (lindane)	125	0.41	41
319-85-7	beta-BHC	NS	0.41	41
76-44-8	Heptachlor	107	0.41	41
319-86-8	delta-BHC	NS	0.41	41
309-00-02	Aldrin	91	0.41	41
1024-57-3	Heptachlor Epoxide	NS	0.41	41
959-98-8	Endosulfan I	NS	0.41	41
72-55-9	4,4'-DDE	NS	0.41	41
60-57-1	Dieldrin	115	0.41	41
72-20-8	Endrin	106	0.41	41
72-54-8	4,4'-DDD	NS	0.41	41
33213-65-9	Endosulfan II	NS	1.2	41
50-29-3	4,4'-DDT	62	0.82	41
7421-93-4	Endrin Aldehyde	NS	0.82	41
1031-07-8	Endosulfan Sulphate	NS	2.1	41
53494-70-5	Endrin Ketone	NS	2.1	41
72-43-5	Methoxychlor	NS	2.1	41
57-74-9	Chlordane	NS	2.1	41
8001-35-2	Toxaphene	NS	21	41
12674-11-2	PCB-1016	NS	4.1	41
11104-28-2	PCB-1221	NS	8.2	41
11141-16-5	PCB-1232	NS	8.2	41
53469-21-9	PCB-1242	NS	4.1	41
12672-29-6	PCB-1248	NS	4.1	41
11097-69-1	PCB-1254	NS	8.2	41
11096-82-5	PCB-1260	NS	8.2	41

SURROGATE 1770-80-5 Dibutylchlorendate 60 % Recovery

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 07B TEST CODE 608 NAME EPA-Pest/PCB's Water
Date & Time Collected not specified Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

SAMPLE ID REAGENT BLANK H20 SAMPLE # 08 FRACTIONS: A

Date & Time Collected not specified Category

EXPEST 04/06/88
DATE COMPLETED

RADIAN CORPORATION

 RAS Sacramento REPORT Work Order # SB-04-017

Received: 04/06/88 Results by Sample

SAMPLE ID REAGENT BLANK H20 FRACTION OBA TEST CODE 608 NAME EPA-Pest/PCB's Water

Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET - PESTICIDES

ANALYST PD EXTRCTD 04/06/88 FILE # 118041116 VERIFIED JD

INSTRMT 1 INJECTD 04/11/88 FACTOR 1 UNITS UG/L

CAS #	COMPOUND	RESULT	DET LIMIT	FACTOR
319-84-6	alpha-BHC	ND	0.010	1
58-89-9	gamma-BHC (lindane)	ND	0.010	1
319-85-7	beta-BHC	ND	0.010	1
76-44-8	Heptachlor	ND	0.010	1
319-86-8	delta-BHC	ND	0.010	1
309-00-02	Aldrin	ND	0.010	1
1024-57-3	Heptachlor Epoxide	ND	0.010	1
959-98-8	Endosulfan I	ND	0.010	1
72-55-9	4,4'-DDE	ND	0.010	1
60-57-1	Dieldrin	ND	0.010	1
72-20-8	Endrin	ND	0.010	1
72-54-8	4,4'-DDD	ND	0.010	1
33213-65-9	Endosulfan II	ND	0.030	1
50-29-3	4,4'-DDT	ND	0.020	1
7421-93-4	Endrin Aldehyde	ND	0.020	1
1031-07-8	Endosulfan Sulphate	ND	0.050	1
53494-70-5	Endrin Ketone	ND	0.050	1
72-43-5	Methoxychlor	ND	0.050	1
57-74-9	Chlordane	ND	0.050	1
8001-35-2	Toxaphene	ND	0.50	1
12674-11-2	PCB-1016	ND	0.10	1
11104-28-2	PCB-1221	ND	0.20	1
11141-16-5	PCB-1232	ND	0.20	1
53469-21-9	PCB-1242	ND	0.10	1
12672-29-6	PCB-1248	ND	0.10	1
11097-69-1	PCB-1254	ND	0.20	1
11096-82-5	PCB-1260	ND	0.20	1

SURROGATE 1770-80-5 Dibutylchlorendate 113 % Recovery

SAMPLE ID REAGENT BLANK H2O FRACTION 08A TEST CODE 608 NAME EPA-Pest/PCB's Water
Date & Time Collected not specified Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed
D = Not reportable due to dilution

KADIAN CORPORATION

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 MATRIX SPIKE

SAMPLE # 09 FRACTIONS: A
Date & Time Collected not specified Category

EXHERB 04/08/88
DATE COMPLETED

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 09A TEST CODE 509B NAME Herbicides in water
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

VERIFIED JD

ANALYST AL EXTRCTD 04/08/88 FILE # 71804187
INSTRMT 7 INJECTD 04/18/88 FACTOR 2.0 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	45	1.0	2.0
93-72-1	2,4,5-TP (Silvex)	50	0.20	2.0
93-76-5	2,4,5-T	46	0.20	2.0

SURROGATE

2,4-Dichlorophenyl Acetic Acid 73 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID 04-01 MATRIX SPIKE FRACTION 09A TEST CODE 509B NAME Herbicides in water
Date & Time Collected not specified Category

D = Not reportable due to dilution

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017

SAMPLE ID 04-01 MATRIX SPIKE DUP

SAMPLE # 09 FRACTIONS: B

Date & Time Collected not specified Category

EXHERB 04/08/88
DATE COMPLETED

Received: 04/06/88

Results by Sample

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 09B TEST CODE 509B NAME Herbicides in water

Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

VERIFIED JD

ANALYST AL EXTRCTD 04/08/88 FILE # 71804187

INSTRMT 7 INJECTD 04/18/88 FACTOR 2.1 UNITS % RECOV.

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	38	1.1	2.1
93-72-1	2,4,5-TP (Silvex)	47	0.21	2.1
93-76-5	2,4,5-T	38	0.21	2.1

SURROGATE

2,4-Dichlorophenyl Acetic Acid 73 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed

SAMPLE ID 04-01 MATRIX SPIKE DUP FRACTION 09B TEST CODE 509B NAME Herbicides in water
Date & Time Collected not specified Category

D = Not reportable due to dilution

SAMPLE ID REAGENT BLANK H2O SAMPLE # 10 FRACTIONS: A

Date & Time Collected not specified Category

EXHERB 04/08/88
DATE COMPLETED

SAMPLE ID REAGENT BLANK H20 FRACTION 10A TEST CODE 509B NAME Herbicides in water
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

VERIFIED JD

ANALYST AL EXTRCTD 04/08/88 FILE # 71804184
INSTRMT 7 INJECTD 04/18/88 FACTOR 1 UNITS UG/L

CAS #	COMPOUND	RESULT	DET. LIMIT	FACTOR
94-75-7	2,4-D	ND	0.50	1
93-72-1	2,4,5-TP (Silvex)	ND	0.10	1
93-76-5	2,4,5-T	ND	0.10	1

SURROGATE

2,4-Dichlorophenyl Acetic Acid 75 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NA = not analyzed.
NS = not spiked.
N\A = not available.
* = less than 5 times the detection limit.
J = Estimated value.
QC = Outside control limits.
C = Confirmed NC = Not confirmed

Received: 04/06/88

RAS Sacramento REPORT
Results by Sample

Work Order # S8-04-017
Continued From Above

SAMPLE ID REAGENT BLANK H20

FRACTION 10A TEST CODE 509B NAME Herbicides in water
Date & Time Collected not specified Category

D = Not reportable due to dilution

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	:	DUPBNA	01D	:	DUPGC	01F	:	DUPGC	01H	:	DUPGC
02B	:	DUPBNA									

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 04/25/88 10:33:52

REPORT TO: Radian
Bl. 4
Austin

ATTEN: Larry French

CLIENT: CARSWELL D04 SAMPLES: 16
COMPANY: Carswell AFB
FACILITY: IRP

WORK ID: 04
TAKEN: RP, MP
TRANS: Fed Ex
TYPE:
P.O. #: 227-005-04-40
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: SMITH

2nd col. conf. on EPA601 for -01,-03,-08; on EPA602 for -01,-02,-04,-05,-07,-08. On EPA601 -01: 1,1-dichloroethene and 1,1-dichloroethane confirmed but not quantitated because of coelution.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01	04-04
02	04-05
03	04-06
04	04-07
05	04-08
06	04-09
07	04-10
08	04-11
09	reagent blank
10	2nd col. conf. 04-04
11	2nd col. conf. 04-05
12	2nd col. conf. 04-06
13	2nd col. conf. 04-07
14	2nd col. conf. 04-08
15	2nd col. conf. 04-10
16	2nd col. conf. 04-11

TEST CODES and NAMES used on this report

EPA601	EPA method 601
EPA602	EPA method 602
XYLENE	Xylenes, EPA 602

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-04

FRACTION 01A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST CL

INSTRMT G

INJECTD 04/07/88

FILE #

VERIFIED CL

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	0.2*	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KAUFMAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-04 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.2*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	0.03*	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40
	SURROGATES		
74-97-5	Bromochloromethane	118	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-04 FRACTION 01A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 98 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-04 FRACTION 01C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	1.2	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	98% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-04 FRACTION 01C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-04

FRACTION 01C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTD 04/13/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	98% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 04-05 FRACTION 02A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST CL VERIFIED CL

INSTRMT 0 INJECTD 04/07/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-05 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40
	SURROGATES		
74-97-5	Bromochloromethane	96 % Recovery	
3017-95-6	2-Bromo-1-chloropropane	% Recovery	
110-56-5	1-4-Dichlorobutane	% Recovery	

SAMPLE ID 04-05 FRACTION 02A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 93 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-05

FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

FILE #

INJECTED 04/07/88

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	5.7	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 04-05 FRACTION 02C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KAUFFMAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-05

FRACTION 02C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-06

FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

ANALYST CL
INSTRMT G

INJECTD 04/07/88

FILE #

VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	0.4*	0.10
75-34-3	1,1-Dichloroethane	1.1	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	0.3	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KAUFMAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-06 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.4	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	110	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-06 FRACTION 03A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 86 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-06

FRACTION 03C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTED 04/07/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	5.8	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 04-06 FRACTION 03C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-06 FRACTION 03C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 04/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 95% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID 04-07 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

ANALYST RW VERIFIED CL
INSTRMT G INJECTD 04/07/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-07 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	96	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-07 FRACTION 04A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 81 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KAUFMAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-07 FRACTION 04C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	3.6	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	90% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 04-07

FRACTION 04C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KAUFMAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-07 FRACTION 04C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTD 04/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 90% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 04-08

FRACTION 05A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST RW

INSTRMT G

INJECTD 04/07/88

FILE #

VERIFIED CL

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 04-08 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	99	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-08 FRACTION 05A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 87 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-08

FRACTION 05C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTED 04/07/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	6.7	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 04-08

FRACTION 05C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-08

FRACTION 05C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID 04-09 FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #
INSTRMT G INJECTD 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample Continued From Above

SAMPLE ID 04-09 FRACTION 06A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	89	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-09 FRACTION 06A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 84 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-09 FRACTION 06C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	11	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	92% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-09

FRACTION 06C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-09

FRACTION 06C TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 92% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 04-10

FRACTION 07A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST RW

INSTRMT G

INJECTD 04/07/88

FILE #

VERIFIED CL

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-10 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	94	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-10 FRACTION 07A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 91 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 04-10 FRACTION 07C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	15	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	96% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-10

FRACTION 07C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 04-10 FRACTION 07C TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	96% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-11 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

ANALYST RW
INSTRMT Q
INJECTD 04/07/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-11 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	98	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 04-11 FRACTION 08A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene 85 % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 04/07/88

Results by Sample

SAMPLE ID 04-11 FRACTION 08C TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	2.0	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	94% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 04-11

FRACTION 08C TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT

Results by Sample

Work Order # 88-04-017

SAMPLE ID 04-11

FRACTION OBC TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW

INSTRMT D

INJECTD 04/07/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	94% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected not specified Category

ANALYST CL VERIFIED CL

INSTRMT G INJECTD 04/07/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample Continued From Above

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected not specified Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	ND	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N/A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected not specified Category

460-00-4 1-Bromo-4-fluorobenzene N/A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

KAUFMAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 04/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank

FRACTION 09A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KAUFMAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID reagent blank FRACTION 09A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected not specified Category

VERIFIED CL

ANALYST CLL FILE #

INSTRMT D INJECTD 04/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

ANALYST CL
INSTRMT B
INJECTD 04/12/88
FILE #
VERIFIED CL
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	0.2*	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST CL VERIFIED CL

INSTRMT B INJECTD 04/12/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	0.2*	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene N/A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 04/13/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	22	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-04 FRACTION 10A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 04/13/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-05 FRACTION 11A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTED 04/13/88
FILE #
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	7.0	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

KAUFMAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017
Continued From Above

SAMPLE ID 2nd col. conf. 04-05 FRACTION 11A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 2nd col. conf. 04-05 FRACTION 11A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL

INSTRMT D

INJECTD 04/13/88

FILE #

UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT

Work Order # 88-04-017

Received: 04/07/88

Results by Sample

SAMPLE ID 2nd col. conf. 04-06 FRACTION 12A TEST CODE EPA601 NAME EPA method 601

Date & Time Collected 04/06/88 Category

ANALYST CL VERIFIED CL

INSTRMT B INJECTD 04/12/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
74-87-3	Chloromethane	ND	0.30
74-83-9	Bromomethane	ND	1.2
75-01-4	Vinyl chloride	ND	0.20
75-00-3	Chloroethane	ND	0.50
75-09-2	Methylene chloride	ND	0.30
75-69-4	Trichlorofluoromethane	ND	0.10
75-35-4	1,1-Dichloroethene	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.090
156-60-5	trans-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	0.3	0.050
107-06-2	1,2-Dichloroethane	ND	0.030
71-55-6	1,1,1-Trichloroethane	ND	0.090
56-23-5	Carbon tetrachloride	ND	0.10
75-27-4	Bromodichloromethane	ND	0.10

SAMPLE ID 2nd col. conf. 04-06 FRACTION 12A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

CAS#	COMPOUND	RESULT	DET LIMIT
78-87-5	1,2-Dichloropropane-A	ND	0.10
10061-02-6	trans-1,3-Dichloropropene-A	ND	0.30
79-01-6	Trichloroethene	0.6*	0.20
124-48-1	Dibromochloromethane-B	ND	0.20
79-00-5	1,1,2-Trichloroethane-B	ND	0.070
10061-01-5	cis-1,3-Dichloropropene-B	ND	N\A
110-75-8	2-Chloroethylvinyl ether	ND	0.20
75-25-2	Bromoform	ND	0.30
79-34-5	1,1,2,2-Tetrachloroethane-C	ND	0.12
127-18-4	Tetrachloroethene-C	ND	0.030
108-90-7	Chlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.30
95-50-1	1,2-Dichlorobenzene	ND	0.50
106-46-7	1,4-Dichlorobenzene	ND	0.40

SURROGATES

74-97-5	Bromochloromethane	N/A	% Recovery
3017-95-6	2-Bromo-1-chloropropane		% Recovery
110-56-5	1-4-Dichlorobutane		% Recovery

SAMPLE ID 2nd col. conf. 04-06 FRACTION 12A TEST CODE EPA601 NAME EPA method 601
Date & Time Collected 04/06/88 Category

460-00-4 1-Bromo-4-fluorobenzene N/A % Recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A= not available
Second column confirmation NOT performed unless otherwise noted.
A-1,2-dichloropropane and trans-1,3-dichloropropene co-elute. Quantitated as 1,2-dichloropropane unless otherwise noted.
B-Dibromochloromethane, 1,1,2-trichloroethane and cis-1,3-dichloropropene co-elute. Quantitated as dibromochloromethane unless otherwise noted.
C-1,1,2,2-tetrachloroethane and tetrachloroethene co-elute. Quantitated as tetrachloroethene unless otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-07 FRACTION 13A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTED 04/13/88
FILE #
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	4.1	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-07 FRACTION 13A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-07 FRACTION 13A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D
INJECTD 04/13/88
FILE #
UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-08 FRACTION 14A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTED 04/13/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	6.2	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-08 FRACTION 14A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

KADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-08 FRACTION 14A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 04/13/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-10 FRACTION 15A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D INJECTED 04/13/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	6.3	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-10 FRACTION 15A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-10 FRACTION 15A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D

INJECTD 04/13/88 FILE # UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

KADIMAN CORPORATION

Received: 04/07/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-04-017

SAMPLE ID 2nd col. conf. 04-11

FRACTION 16A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST RW
INSTRMT D

INJECTED 04/13/88

FILE #

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	1.1	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID 2nd col. conf. 04-11 FRACTION 16A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 04/06/88 Category

A-Chlorobenzene and m-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-04-017

Received: 04/07/88 Results by Sample

SAMPLE ID 2nd col. conf. 04-11 FRACTION 16A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 04/06/88 Category

VERIFIED CL

ANALYST CL FILE #

INSTRMT D INJECTD 04/13/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	:	SPR601	01D	:	SPR602
02B	:	SPR601	02D	:	SPR602
03B	:	SPR601	03D	:	SPR602
04B	:	SPR601	04D	:	SPR602
05B	:	SPR601	05D	:	SPR602
06B	:	SPR601	06D	:	SPR602
07B	:	SPR601	07D	:	SPR602
08B	:	SPR601	08D	:	SPR602

FINAL PAGE

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