



GEOFON PROJECT # 04-4304-480
 JET PROPULSION LAB.
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	SVW37-VPJ-070	SVW31-VPA-071	SVW31-VPA-072	SVW31-VPB-073	SVW31-VPC-074	SVW31-VPD-075	SVW31-VPE-076
	DUP						
DATE	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01
ANALYSIS TIME	08:57	09:23	09:48	10:14	11:07	11:31	11:56
SAMPLING DEPTH (feet)	185	20	20	35	45	55	65
VOLUME WITHDRAWN (cc)	800	140	260	200	240	280	320
VOLUME INJECTED	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd						
CHLOROETHANE	nd						
CHLOROFORM	nd						
1,1-DICHLORO ETHANE	nd						
1,2-DICHLORO ETHANE	nd						
1,1-DICHLORO ETHENE	nd						
CIS-1,2-DICHLORO ETHENE	nd						
TRANS-1,2-DICHLORO ETHENE	nd						
DICHLOROMETHANE	nd						
TETRACHLORO ETHENE	nd						
1,1,1,2-TETRACHLORO ETHANE	nd						
1,1,2,2-TETRACHLORO ETHANE	nd						
1,1,1-TRICHLORO ETHANE	nd						
1,1,2-TRICHLORO ETHANE	nd						
TRICHLORO ETHENE	1.6	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd						
TRICHLOROFLUOROMETHANE (FR11)	nd						
DICHLORODIFLUOROMETHANE (FR12)	nd						
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd						
BENZENE	nd						
CHLOROBENZENE	nd						
ETHYLBENZENE	nd						
TOLUENE	nd						
m&p-XYLENES	nd						
o-XYLENE	nd						
SURROGATES							
1,4 DIFLUORO BENZENE	98%	98%	96%	98%	99%	98%	99%
4 BROMOFLUORO BENZENE	89%	90%	87%	90%	90%	90%	91%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)
 ANALYSES PERFORMED BY: MARK BURKE
 DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
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 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	BLANK		BLANK SVW37-VPA-		SVW37-VPA-		SVW37-VPD-		SVW37-VPD-		SVW37-VPE-	
	064	064	065	065	066 DUP	066 DUP	067	067				
DATE	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01
ANALYSIS TIME	5:53	5:53	6:20	6:20	6:46	6:46	7:13	7:13	7:39	7:39	7:39	7:39
SAMPLING DEPTH (feet)	--	--	25	25	80	80	80	80	100	100	100	100
VOLUME WITHDRAWN (cc)	--	--	160	160	380	380	480	480	460	460	460	460
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	10.6	2.9	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES												
1,4 DIFLUORO BENZENE	10.0	26.5	9.9	29.0	9.9	27.8	9.9	26.7	9.9	27.6	9.9	27.6
4 BROMOFLUORO BENZENE	21.1	69.0	21.2	72.9	21.1	70.9	21.2	67.4	21.1	69.8	21.1	69.8

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



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 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW37-VPH-	SVW37-VPH-	SVW37-VPI-	SVW37-VPI-	SVW37-VPJ-	SVW37-VPJ-	SVW31-VPA-	SVW31-VPA-	SVW31-VPA-	SVW31-VPA-
	068	068	069	069	070	070	071	071	072 DUP	072 DUP
DATE	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01
ANALYSIS TIME	8:06	8:06	8:30	8:30	8:57	8:57	9:23	9:23	9:48	9:48
SAMPLING DEPTH (feet)	155	155	170	170	185	185	20	20	20	20
VOLUME WITHDRAWN (cc)	680	680	740	740	800	800	140	140	260	260
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA								
CARBON TETRACHLORIDE	nd									
CHLOROETHANE	nd									
CHLOROFORM	nd									
1,1-DICHLORO ETHANE	nd									
1,2-DICHLORO ETHANE	nd									
1,1-DICHLORO ETHENE	nd									
CIS-1,2-DICHLORO ETHENE	nd									
TRANS-1,2-DICHLORO ETHENE	nd									
DICHLOROMETHANE	nd									
TETRACHLORO ETHENE	nd									
1,1,1,2-TETRACHLORO ETHANE	nd									
1,1,2,2-TETRACHLORO ETHANE	nd									
1,1,1-TRICHLORO ETHANE	nd									
1,1,2-TRICHLORO ETHANE	nd									
TRICHLORO ETHENE	nd	nd	nd	nd	10.6	3.4	nd	nd	nd	nd
VINYL CHLORIDE	nd									
TRICHLOROFLUOROMETHANE (FR11)	nd									
DICHLORODIFLUOROMETHANE (FR12)	nd									
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd									
BENZENE	nd									
CHLOROBENZENE	nd									
ETHYLBENZENE	nd									
TOLUENE	nd									
m&p-XYLENES	nd									
o-XYLENE	nd									
SURROGATES										
1,4 DIFLUORO BENZENE	9.9	30.0	9.9	28.8	9.9	27.5	9.9	27.5	9.9	27.0
4 BROMOFLUORO BENZENE	21.1	76.1	21.1	70.9	21.1	69.6	21.1	69.9	21.2	68.2

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)
 ANALYSES PERFORMED BY: MARK BURKE
 DATA REVIEWED BY: JAMES E. PICKER

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 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW31-VPB-073		SVW31-VPB-073		SVW31-VPC-074		SVW31-VPC-074		SVW31-VPD-075		SVW31-VPD-075		SVW31-VPE-076		SVW31-VPE-076	
DATE	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01	07/18/01
ANALYSIS TIME	10:14	10:14	11:07	11:07	11:31	11:31	11:56	11:56	11:56	11:56	11:56	11:56	11:56	11:56	11:56	11:56
SAMPLING DEPTH (feet)	35	35	45	45	55	55	65	65	65	65	65	65	65	65	65	65
VOLUME WITHDRAWN (cc)	200	200	240	240	280	280	320	320	320	320	320	320	320	320	320	320
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	RT	AREA														
CARBON TETRACHLORIDE	nd	nd														
CHLOROETHANE	nd	nd														
CHLOROFORM	nd	nd														
1,1-DICHLORO ETHANE	nd	nd														
1,2-DICHLORO ETHANE	nd	nd														
1,1-DICHLORO ETHENE	nd	nd														
CIS-1,2-DICHLORO ETHENE	nd	nd														
TRANS-1,2-DICHLORO ETHENE	nd	nd														
DICHLOROMETHANE	nd	nd														
TETRACHLORO ETHENE	nd	nd														
1,1,1,2-TETRACHLORO ETHANE	nd	nd														
1,1,2,2-TETRACHLORO ETHANE	nd	nd														
1,1,1-TRICHLORO ETHANE	nd	nd														
1,1,2-TRICHLORO ETHANE	nd	nd														
TRICHLORO ETHENE	nd	nd														
VINYL CHLORIDE	nd	nd														
TRICHLOROFLUOROMETHANE (FR11)	nd	nd														
DICHLORODIFLUOROMETHANE (FR12)	nd	nd														
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd														
BENZENE	nd	nd														
CHLOROBENZENE	nd	nd														
ETHYLBENZENE	nd	nd														
TOLUENE	nd	nd														
m&p-XYLENES	nd	nd														
o-XYLENE	nd	nd														
SURROGATES																
1,4 DIFLUORO BENZENE	9.9	27.6	9.9	27.8	9.9	27.7	9.9	27.4	9.9	27.7	9.9	27.4	9.9	27.4	9.9	27.8
4 BROMOFLUORO BENZENE	21.1	70.1	21.1	70.1	21.1	70.4	21.1	70.4	21.1	70.4	21.1	70.4	21.1	70.4	21.1	71.1

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

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GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	BLANK	SVW30-VPA-077	SVW30-VPA-078	SVW30-VPB-079	SVW30-VPC-080	SVE30-VPD-081	SVW30-VPE-082	SVW12-VPC-083
	DUP							
DATE	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01
ANALYSIS TIME	06:17	06:42	07:09	07:35	08:01	08:25	08:51	09:45
SAMPLING DEPTH (feet)	--	17	17	30	40	50	65	60
VOLUME WITHDRAWN (cc)	--	130	250	180	220	260	320	300
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES								
1,4 DIFLUORO BENZENE	96%	102%	104%	99%	102%	99%	100%	100%
4 BROMOFLUORO BENZENE	88%	89%	94%	89%	93%	90%	91%	89%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



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VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	SVW12-VPC-084	SVW12-VPD-085	SVW7-VPA-086	SVW7-VPB-087	SVW1-VPB-088	SVW1-VPC-089	SVW1-VPC-090
	DUP						DUP
DATE	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01
ANALYSIS TIME	10:10	10:36	11:02	11:55	12:20	12:45	13:10
SAMPLING DEPTH (feet)	60	76	20	35	21	33	33
VOLUME WITHDRAWN (cc)	420	360	140	200	145	200	320
VOLUME INJECTED	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd
SURROGATES							
1,4 DIFLUORO BENZENE	100%	102%	101%	98%	99%	98%	101%
4 BROMOFLUORO BENZENE	89%	92%	91%	89%	90%	87%	92%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



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 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	BLANK	BLANK	SVW30-VPA-	SVW30-VPA-	SVW30-VPA-	SVW30-VPA-	SVW30-VPB-	SVW30-VPB-	SVW30-VPC-	SVW30-VPC-
			077	077	078 DUP	078 DUP	079	079	080	080
DATE	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01
ANALYSIS TIME	6:17	6:17	6:42	6:42	7:09	7:09	7:35	7:35	8:01	8:01
SAMPLING DEPTH (feet)	--	--	17	17	17	17	30	30	40	40
VOLUME WITHDRAWN (cc)	--	--	130	130	250	250	180	180	220	220
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES										
1,4 DIFLUORO BENZENE	9.9	27.0	10.0	28.9	10.0	29.3	10.0	27.8	9.9	28.9
4 BROMOFLUORO BENZENE	21.2	68.3	21.2	69.8	21.2	73.3	21.2	69.4	21.2	72.9

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVE30-VPD-	SVE30-VPD-	SVW30-VPE-	SVW30-VPE-	SVW12-VPC-	SVW12-VPC-	SVW12-VPC-	SVW12-VPC-	SVW12-VPD-	SVW12-VPD-
	081	081	082	082	083	083	084 DUP	084 DUP	085	085
DATE	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01
ANALYSIS TIME	8:25	8:25	8:51	8:51	9:45	9:45	10:10	10:10	10:36	10:36
SAMPLING DEPTH (feet)	50	50	65	65	60	60	60	60	76	76
VOLUME WITHDRAWN (cc)	260	260	320	320	300	300	420	420	360	360
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA								
CARBON TETRACHLORIDE	nd									
CHLOROETHANE	nd									
CHLOROFORM	nd									
1,1-DICHLORO ETHANE	nd									
1,2-DICHLORO ETHANE	nd									
1,1-DICHLORO ETHENE	nd									
CIS-1,2-DICHLORO ETHENE	nd									
TRANS-1,2-DICHLORO ETHENE	nd									
DICHLOROMETHANE	nd									
TETRACHLORO ETHENE	nd									
1,1,1,2-TETRACHLORO ETHANE	nd									
1,1,2,2-TETRACHLORO ETHANE	nd									
1,1,1-TRICHLORO ETHANE	nd									
1,1,2-TRICHLORO ETHANE	nd									
TRICHLORO ETHENE	nd									
VINYL CHLORIDE	nd									
TRICHLOROFLUOROMETHANE (FR11)	nd									
DICHLORODIFLUOROMETHANE (FR12)	nd									
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd									
BENZENE	nd									
CHLOROBENZENE	nd									
ETHYLBENZENE	nd									
TOLUENE	nd									
m&p-XYLENES	nd									
o-XYLENE	nd									
SURROGATES										
1,4 DIFLUORO BENZENE	9.9	27.8	9.9	28.3	9.9	28.2	10.0	28.2	10.0	28.7
4 BROMOFLUORO BENZENE	21.2	70.1	21.2	71.0	21.2	69.7	21.2	69.2	21.2	71.4

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB.
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW7-VPA-	SVW7-VPA-	SVW7-VPB-	SVW7-VPB-	SVW1-VPB-	SVW1-VPB-	SVW1-VPC-	SVW1-VPC-	SVW1-VPC-	SVW1-VPC-
	086	086	087	087	088	088	089	089	090 DUP	090 DUP
DATE	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01	07/19/01
ANALYSIS TIME	11:02	11:02	11:55	11:55	12:20	12:20	12:45	12:45	13:10	13:10
SAMPLING DEPTH (feet)	20	20	35	35	21	21	33	33	33	33
VOLUME WITHDRAWN (cc)	140	140	200	200	145	145	200	200	320	320
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA								
CARBON TETRACHLORIDE	nd									
CHLOROETHANE	nd									
CHLOROFORM	nd									
1,1-DICHLORO ETHANE	nd									
1,2-DICHLORO ETHANE	nd									
1,1-DICHLORO ETHENE	nd									
CIS-1,2-DICHLORO ETHENE	nd									
TRANS-1,2-DICHLORO ETHENE	nd									
DICHLOROMETHANE	nd									
TETRACHLORO ETHENE	nd									
1,1,1,2-TETRACHLORO ETHANE	nd									
1,1,2,2-TETRACHLORO ETHANE	nd									
1,1,1-TRICHLORO ETHANE	nd									
1,1,2-TRICHLORO ETHANE	nd									
TRICHLORO ETHENE	nd									
VINYL CHLORIDE	nd									
TRICHLOROFLUOROMETHANE (FR11)	nd									
DICHLORODIFLUOROMETHANE (FR12)	nd									
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd									
BENZENE	nd									
CHLOROBENZENE	nd									
ETHYLBENZENE	nd									
TOLUENE	nd									
m&p-XYLENES	nd									
o-XYLENE	nd									
SURROGATES										
1,4 DIFLUORO BENZENE	10.0	28.5	9.9	27.7	9.9	28.0	10.0	27.5	9.9	28.5
4 BROMOFLUORO BENZENE	21.2	71.2	21.2	69.8	21.2	70.2	21.2	67.9	21.2	71.5

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT # 04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1

GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	BLANK	SWW5-VPB-091	SWW3-VPC-092	SWW3-VPD-093	SWW4-VPB-094	SWW4-VPD-095	SWW4-VPD-096 DUP	SWW2-VPA-097	SWW2-VPC-098	SWW14-VPB-099	SWW17-VPC-100
DATE	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01
ANALYSIS TIME	06:30	06:56	07:21	07:46	08:12	08:38	09:04	09:30	09:56	10:22	10:47
SAMPLING DEPTH (feet)	--	9	40	47	20	56	57	10	37	10	36
VOLUME WITHDRAWN (cc)	--	100	220	250	140	285	405	100	210	100	205
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	1.1	nd	nd	nd	nd	nd	nd	nd	2.6
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.1
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	20	1.5	1.7	1.3	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	62
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	2.3
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.2
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.3
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.5
SURROGATES											
1,4 DIFLUORO BENZENE	101%	101%	100%	98%	101%	99%	97%	98%	100%	97%	95%
4 BROMOFLUORO BENZENE	95%	93%	92%	90%	93%	90%	87%	90%	91%	88%	94%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	BLANK	BLANK	SWW5-VPB-091	SWW5-VPB-091	SWW3-VPC-092	SWW3-VPC-092	SWW3-VPD-093	SWW3-VPD-093
DATE	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01
ANALYSIS TIME	6:30	6:30	6:56	6:56	7:21	7:21	7:46	7:46
SAMPLING DEPTH (feet)	--	--	9	9	40	40	47	47
VOLUME WITHDRAWN (cc)	--	--	100	100	220	220	250	250
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	9.3	175.0	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES								
1,4 DIFLUORO BENZENE	10.0	28.6	10.0	28.4	10.0	28.1	9.9	27.6
4 BROMOFLUORO BENZENE	21.2	74.0	21.2	72.6	21.2	72.1	21.2	70.4

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW4-VPB-094	SVW4-VPB-094	SVW4-VPD-095	SVW4-VPD-095	SVW4-VPD-096	SVW4-VPD-096	SVW2-VPA-097	SVW2-VPA-097
					DUP	DUP		
DATE	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01
ANALYSIS TIME	8:12	8:12	8:38	8:38	9:04	9:04	9:30	9:30
SAMPLING DEPTH (feet)	20	20	56	56	57	57	10	10
VOLUME WITHDRAWN (cc)	140	140	285	285	405	405	100	100
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd							
CHLOROETHANE	nd							
CHLOROFORM	nd							
1,1-DICHLORO ETHANE	nd							
1,2-DICHLORO ETHANE	nd							
1,1-DICHLORO ETHENE	nd							
CIS-1,2-DICHLORO ETHENE	nd							
TRANS-1,2-DICHLORO ETHENE	nd							
DICHLOROMETHANE	nd							
TETRACHLORO ETHENE	nd							
1,1,1,2-TETRACHLORO ETHANE	nd							
1,1,2,2-TETRACHLORO ETHANE	nd							
1,1,1-TRICHLORO ETHANE	nd							
1,1,2-TRICHLORO ETHANE	nd							
TRICHLORO ETHENE	10.7	40.5	10.7	3.1	10.7	3.5	10.7	2.7
VINYL CHLORIDE	nd							
TRICHLOROFLUOROMETHANE (FR11)	nd							
DICHLORODIFLUOROMETHANE (FR12)	nd							
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd							
BENZENE	nd							
CHLOROBENZENE	nd							
ETHYLBENZENE	nd							
TOLUENE	nd							
m&p-XYLENES	nd							
o-XYLENE	nd							
SURROGATES								
1,4 DIFLUORO BENZENE	9.9	28.4	10.0	27.9	10.0	27.3	10.0	27.7
4 BROMOFLUORO BENZENE	21.2	72.8	21.2	70.0	12.2	67.6	21.2	70.1

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)
 ANALYSES PERFORMED BY: MARK BURKE
 DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT #04-4304-480
JET PROPULSION LAB
4800 OAK GROVE DRIVE
LA CANADA, CA

HP Labs Project #GF071101W1
SHIMADZU GC-14A FRONT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
AREA COUNTS

SAMPLE NAME	SVW2-VPC-098	SVW2-VPC-098	SVW14-VPB-099	SVW14-VPB-099	SVW17-VPC-100	SVW17-VPC-100
DATE	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01	07/20/01
ANALYSIS TIME	9:56	9:56	10:22	10:22	10:47	10:47
SAMPLING DEPTH (feet)	37	37	10	10	36	36
VOLUME WITHDRAWN (cc)	210	210	100	100	205	205
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	9.5	425.0
CHLOROETHANE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	15.4	12.1
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	9.5	226.0
CHLOROBENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	17.6	8.3
TOLUENE	nd	nd	nd	nd	13.4	15.2
m&p-XYLENES	nd	nd	nd	nd	17.9	5.8
o-XYLENE	nd	nd	nd	nd	19.0	5.4
SURROGATES						
1,4 DIFLUORO BENZENE	9.9	28.2	9.9	27.3	9.9	26.8
4 BROMOFLUORO BENZENE	21.2	71.3	21.2	68.9	21.2	73.6

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT # 04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 GC SHIMADZU 14A RIGHT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	BLANK	SVW10-VPB-101	SVW10-VPB-102	SVW10-VPD-103	SVW9-VPA-104	SVW9-VPB-105	SVW9-VPC-106
	DUP						
DATE	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01
ANALYSIS TIME	06:16	06:42	07:08	07:35	08:01	08:27	08:52
SAMPLING DEPTH (feet)	--	35	35	69	20	35	50
VOLUME WITHDRAWN (cc)	--	200	290	340	140	200	260
VOLUME INJECTED	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	1.6	1.6	nd	9.3	8.1	7.8
BENZENE	nd	nd	nd	nd	nd	nd	nd
CHLOROENZENE	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd
SURROGATES							
1,4 DIFLUORO BENZENE	96%	104%	99%	99%	97%	99%	102%
4 BROMOFLUORO BENZENE	90%	95%	89%	89%	88%	89%	94%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)
 ANALYSES PERFORMED BY: MARK BURKE
 DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT # 04-4304-480

JET PROPULSION LAB
4800 OAK GROVE DRIVE
LA CANADA, CA

HP Labs Project #GF071101W1

GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	SVW9-VPD-107	SVW9-VPD-108	SVW9-VPE-109	SVW8-VPC-110	SVW8-VPD-111	SVW8-VPE-112
	DUP					
DATE	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01
ANALYSIS TIME	09:18	09:44	10:09	10:35	11:34	12:03
SAMPLING DEPTH (feet)	70	70	87	50	70	90
VOLUME WITHDRAWN (cc)	340	430	410	260	340	420
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	7.6	8.1	7.5	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd
SURROGATES						
1,4 DIFLUORO BENZENE	96%	96%	102%	97%	98%	105%
4 BROMOFLUORO BENZENE	87%	88%	92%	88%	89%	96%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	BLANK	BLANK	SVW10-VPB-	SVW10-VPB-	SVW10-VPB-	SVW10-VPB-	SVW10-VPD-	SVW10-VPD-	SVW9-VPA-	SVW9-VPA-
			101	101	102 DUP	102 DUP	103	103	104	104
DATE	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01
ANALYSIS TIME	6:16	6:16	6:42	6:42	7:08	7:08	7:35	7:35	8:01	8:01
SAMPLING DEPTH (feet)	--	--	35	35	35	35	69	69	20	20
VOLUME WITHDRAWN (cc)	--	--	200	200	290	290	340	340	140	140
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	4.9	125.0	4.9	124.0	nd	nd	4.9	711.0
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES										
1,4 DIFLUORO BENZENE	10.0	27.2	10.0	29.4	10.0	27.8	10.0	27.9	9.9	27.3
4 BROMOFLUORO BENZENE	21.2	69.9	21.2	74.3	21.2	69.4	21.2	69.3	21.2	68.6

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW9-VPB-105	SVW9-VPB-105	SVW9-VPC-106	SVW9-VPC-106	SVW9-VPD-107	SVW9-VPD-107	SVW9-VPD-108	SVW9-VPD-108
							DUP	DUP
DATE	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01
ANALYSIS TIME	8:27	8:27	8:52	8:52	9:18	9:18	9:44	9:44
SAMPLING DEPTH (feet)	35	35	50	50	70	70	70	70
VOLUME WITHDRAWN (cc)	200	200	260	260	340	340	430	430
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd							
CHLOROETHANE	nd							
CHLOROFORM	nd							
1,1-DICHLORO ETHANE	nd							
1,2-DICHLORO ETHANE	nd							
1,1-DICHLORO ETHENE	nd							
CIS-1,2-DICHLORO ETHENE	nd							
TRANS-1,2-DICHLORO ETHENE	nd							
DICHLOROMETHANE	nd							
TETRACHLORO ETHENE	nd							
1,1,1,2-TETRACHLORO ETHANE	nd							
1,1,2,2-TETRACHLORO ETHANE	nd							
1,1,1-TRICHLORO ETHANE	nd							
1,1,2-TRICHLORO ETHANE	nd							
TRICHLORO ETHENE	nd							
VINYL CHLORIDE	nd							
TRICHLOROFLUOROMETHANE (FR11)	nd							
DICHLORODIFLUOROMETHANE (FR12)	nd							
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	4.9	622.0	4.9	600.0	4.9	582.0	4.9	623.0
BENZENE	nd							
CHLOROBENZENE	nd							
ETHYLBENZENE	nd							
TOLUENE	nd							
m&p-XYLENES	nd							
o-XYLENE	nd							
SURROGATES								
1,4 DIFLUORO BENZENE	10.0	27.8	10.0	28.9	10.0	27.2	10.0	27.2
4 BROMOFLUORO BENZENE	21.2	69.1	21.2	73.6	21.2	67.9	21.2	68.7

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW9-VPE-109	SVW9-VPE-109	SVW8-VPC-110	SVW8-VPC-110	SVW8-VPD-111	SVW8-VPD-111	SVW8-VPE-112	SVW8-VPE-112
DATE	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01	07/23/01
ANALYSIS TIME	10:09	10:09	10:35	10:35	11:34	11:34	12:03	12:03
SAMPLING DEPTH (feet)	87	87	50	50	70	70	90	90
VOLUME WITHDRAWN (cc)	410	410	260	260	340	340	420	420
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd							
CHLOROETHANE	nd							
CHLOROFORM	nd							
1,1-DICHLORO ETHANE	nd							
1,2-DICHLORO ETHANE	nd							
1,1-DICHLORO ETHENE	nd							
CIS-1,2-DICHLORO ETHENE	nd							
TRANS-1,2-DICHLORO ETHENE	nd							
DICHLOROMETHANE	nd							
TETRACHLORO ETHENE	nd							
1,1,1,2-TETRACHLORO ETHANE	nd							
1,1,2,2-TETRACHLORO ETHANE	nd							
1,1,1-TRICHLORO ETHANE	nd							
1,1,2-TRICHLORO ETHANE	nd							
TRICHLORO ETHENE	nd							
VINYL CHLORIDE	nd							
TRICHLOROFUOROMETHANE (FR11)	nd							
DICHLORODIFLUOROMETHANE (FR12)	nd							
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	4.9	578.0	nd	nd	nd	nd	nd	nd
BENZENE	nd							
CHLOROBENZENE	nd							
ETHYLBENZENE	nd							
TOLUENE	nd							
m&p-XYLENES	nd							
o-XYLENE	nd							
SURROGATES								
1,4 DIFLUORO BENZENE	10.0	28.8	10.0	27.3	10.0	27.7	10.0	29.7
4 BROMOFLUORO BENZENE	21.2	71.8	21.2	68.5	21.2	69.2	21.2	74.8

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT # 04-4304-480
JET PROPULSION LAB
4800 OAK GROVE DRIVE
LA CANADA, CA

HP Labs Project #GF071101W1

GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	BLANK	SVW15-VPB-113	SVW15-VPB-114 DUP	SVW15-VPC-115	SVW15-VPD-116	SVW15-VPE-117	SVW6-VPB-118
DATE	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01
ANALYSIS TIME	05:49	06:14	06:39	07:03	07:29	07:54	08:20
SAMPLING DEPTH (feet)	--	40	40	60	75	90	40
VOLUME WITHDRAWN (cc)	--	220	310	300	360	420	220
VOLUME INJECTED	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd
SURROGATES							
1,4 DIFLUORO BENZENE	100%	101%	99%	99%	99%	99%	98%
4 BROMOFLUORO BENZENE	91%	93%	90%	91%	91%	90%	89%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT # 04-4304-480
JET PROPULSION LAB
4800 OAK GROVE DRIVE
LA CANADA, CA

HP Labs Project #GF071101W1

GC SHIMADZU 14A RIGHT

VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR

	SVW6-VPC-119	SVW6-VPC-120 DUP	SVW6-VPD-121	SVW6-VPE-122	SVW11-VPA-123	SVW11-VPE-124
DATE	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01
ANALYSIS TIME	08:46	09:11	09:36	10:01	11:15	11:41
SAMPLING DEPTH (feet)	60	60	77	96	20	96
VOLUME WITHDRAWN (cc)	420	510	370	445	140	445
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd
SURROGATES						
1,4 DIFLUORO BENZENE	96%	97%	95%	97%	99%	94%
4 BROMOFLURO BENZENE	88%	88%	87%	89%	89%	85%

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	BLANK		SVW15-VPB- 113		SVW15-VPB- 114 DUP		SVW15-VPC- 115		SVW15-VPD- 116	
	DATE	ANALYSIS TIME	DATE	ANALYSIS TIME	DATE	ANALYSIS TIME	DATE	ANALYSIS TIME	DATE	ANALYSIS TIME
DATE	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01
ANALYSIS TIME	5:49	5:49	6:14	6:14	6:39	6:39	7:03	7:03	7:29	7:29
SAMPLING DEPTH (feet)	--	--	40	40	40	40	60	60	75	75
VOLUME WITHDRAWN (cc)	--	--	220	220	310	310	300	300	360	360
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES										
1,4 DIFLUORO BENZENE	9.9	28.3	9.9	28.5	9.9	27.8	9.9	28.0	9.9	27.8
4 BROMOFLUORO BENZENE	21.2	71.3	21.1	72.3	21.2	70.0	21.2	71.3	21.2	70.6

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER



GEOFON PROJECT #04-4304-480
JET PROPULSION LAB
4800 OAK GROVE DRIVE
LA CANADA, CA

HP Labs Project #GF071101W1
SHIMADZU GC-14A FRONT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
AREA COUNTS

SAMPLE NAME	SVW15-VPE-117		SVW6-VPB-118		SVW6-VPC-119		SVW6-VPC-120	
	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	DUP	DUP
DATE	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01
ANALYSIS TIME	7:54	7:54	8:20	8:20	8:46	8:46	9:11	9:11
SAMPLING DEPTH (feet)	90	90	40	40	60	60	60	60
VOLUME WITHDRAWN (cc)	420	420	220	220	420	420	510	510
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES								
1,4 DIFLUORO BENZENE	9.9	27.8	9.9	27.6	9.9	27.2	10.0	27.4
4 BROMOFLUORO BENZENE	21.2	70.4	21.2	69.3	21.2	68.9	21.2	68.6

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER

GEOFON PROJECT #04-4304-480
 JET PROPULSION LAB
 4800 OAK GROVE DRIVE
 LA CANADA, CA

HP Labs Project #GF071101W1
 SHIMADZU GC-14A FRONT
 VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8021) ANALYSES OF SOIL VAPOR
 AREA COUNTS

SAMPLE NAME	SVW6-VPD-121	SVW6-VPD-121	SVW6-VPE-122	SVW6-VPE-122	SVW11-VPA-123	SVW11-VPA-123	SVW11-VPE-124	SVW11-VPE-124
DATE	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01	07/24/01
ANALYSIS TIME	9:36	9:36	10:01	10:01	11:15	11:15	11:41	11:41
SAMPLING DEPTH (feet)	77	77	96	96	20	20	96	96
VOLUME WITHDRAWN (cc)	370	370	445	445	140	140	445	445
VOLUME INJECTED	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROETHANE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd
VINYL CHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLOROFLUOROMETHANE (FR11)	nd	nd	nd	nd	nd	nd	nd	nd
DICHLORODIFLUOROMETHANE (FR12)	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLOROTRIFLUOROETHANE (FR113)	nd	nd	nd	nd	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd
SURROGATES								
1,4 DIFLUORO BENZENE	9.9	26.9	10.0	27.4	9.9	27.8	9.9	26.4
4 BROMOFLUORO BENZENE	21.2	68.0	21.2	69.6	21.1	69.3	21.1	66.6

ND INDICATES NOT DETECTED AT A DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND

ANALYSES PERFORMED ON-SITE IN CA DOHS MOBILE LABORATORY (CERT #1745)

ANALYSES PERFORMED BY: MARK BURKE

DATA REVIEWED BY: JAMES E. PICKER