TABLES

TABLE 1: SYSTEM MONITORING (VACUUM, FLOWRATE AND FID READING) DATA
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	TIME	WELL SCREEN	VACUUM				FLOWRATE						FID READINGS				
				VE-04-A	VE-04-B	VE-04-C	Total Influent	A	B	C	ABC	Influent	Effluent	Influent (A)	Influent (B)	Influent (C)	Influent (ABC)	Effluent (Total)
		hours		*in. H2O*	*in. H2O*	*in.H2O*	*in. H2O*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
1	5/29/2003	645	ABC	28	28	28	45	179	75	15	259	259	NA					
	5/29/2003	1000	ABC	28	28	28	45	231	99	16	259	259	NA	5.5	6	7	4.5	3
	5/30/2003	640	ABC	28	28	28	45	187	85	14	259	259	NA					
	5/30/2003	950	ABC	29	29	30	45	195	118	18	259	259	NA	7.3	8.5	6.1	5.5	2.5
2	6/2/2003	650	ABC	29	29	30	45	184	77	13	259	259	NA					
	6/2/2003	1035	ABC	29	29	30	45	206	95	16	259	259	NA	85	6.5	20	65.3	48
	6/3/2003	635	ABC	29	29	30	45	180	77	16	259	259	NA					
	6/3/2003	900	ABC	29	29	30	45	184	79	17	259	259	NA	70.5	5.5	12.5	50	47
	6/4/2003	635	ABC	29	29	30	45	172	73	13	259	259	NA					
	6/4/2003	1005	ABC	29	29	30	45	171	72	19	259	259	NA	43	5.5	9.5	40	32
	6/5/2003	800	ABC	29	29	30	45	172	71	12	259	259	NA					
	6/5/2003	1100	ABC	29	29	30	45	184	77	14	259	259	NA	28	8	8.5	25	20
3	6/9/2003	815	ABC	29	29	30	45	172	76	11	259	259	NA					
	6/9/2003	1000	ABC	29	29	30	45	174	74	12	259	259	NA	15.5	6.5	6	13	11
	6/10/2003	710	ABC	29	29	30	45	165	70	12	259	259	NA					
	6/10/2003	1030	ABC	29	29	30	45	168	73	13	259	259	NA	15	5.8	6.5	14.5	10
	6/11/2003	630	ABC	29	29	30	45	166	71	11	272	272	NA					
	6/11/2003	1000	ABC	29	29	30	45	176	77	12	272	272	NA	13	5.5	7	12	8
	6/12/2003	630	ABC	28	28	29	45	166	69	10	272	272	NA					
	6/12/2003	1000	ABC	28	28	29	45	179	82	11	272	272	NA	14.5	6	5.5	11	9
4	6/16/2003	910	ABC	28	28	29	45	164	71	11	272	272	NA					
	6/16/2003	1100	ABC	28	28	29	45	173	79	11	272	272	NA	14	6.5	5	13.5	8.5
	6/17/2003	700	ABC	28	26	29	45	174	91	12	272	272	NA					
	6/17/2003	1000	ABC	28	27	27	48	195	102	13	272	272	NA	12	5.5	7.5	9.5	8
	6/18/2003	700	ABC	28	26	27	45	178	94	13	272	272	NA					
	6/18/2003	950	ABC	28	26	27	45	180	93	13	272	272	NA	13	4.8	8	9.5	8.5
	6/19/2003	800	ABC	28	26	28	45	166	87	11	265	265	NA					
	6/19/2003	1000	ABC	27	26	26	45	177	93	10	265	265	NA	10	4.5	5.5	8.5	8
5	6/23/2003	650	ABC	26	26	26	45	173	92	11	272	272	NA					
	6/23/2003	935	ABC	27	26	28	45	173	94	11	272	272	NA	10.5	5.5	12	10	9
	6/24/2003	710	ABC	27	26	26	45	181	94	11	281	281	NA					
	6/24/2003	940	ABC	28	26	26	45	184	99	11	276	276	NA	12.5	6.5	17	10.5	10
	6/25/2003	705	ABC	27	26	26	44	171	93	12	270	270	NA					
	6/25/2003	1030	ABC	28	26	27	45	198	112	12	270	270	NA	13	7.5	20	10.5	9.5
	6/26/2003	740	ABC	27	26	26	45	185	98	12	265	265	NA					
	6/26/2003	1000	ABC	29	27	26	45	204	114	12	265	265	NA	15	9.5	25	13	11
6	6/30/2003	730	ABC	27	26	27	45	186	97	13	259	259	NA					
	6/30/2003	1000	ABC	28	27	27	45	213	119	13	272	272	NA	35.5	20	64	42	30
	7/1/2003	645	ABC	27	26	27	45	188	96	12	259	259	NA					
	7/1/2003	1005	ABC	27	27	27	45	232	132	14	272	272	NA	32	22	75	30.5	25
	7/2/2003	645	ABC	27	26	27	45	191	98	12	259	259	NA					
	7/2/2003	1015	ABC	28	27	27	45	233	133	15	272	272	NA	35	25.5	90	32	27
	7/3/2003	800	ABC	27	26	27	45	202	116	12	259	259	NA					
	7/3/2003	1030	ABC	27	27	27	45	236	138	15	272	272	NA	30	21.5	75	35	25

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OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	TIME	WELL SCREEN	VACUUM				FLOWRATE						FID READINGS				
				VE-04-A	VE-04-B	VE-04-C	Total Influent	A	B	C	ABC	Influent	Effluent	Influent (A)	Influent (B)	Influent (C)	Influent (ABC)	Effluent (Total)
		hours		*in. H2O*	*in. H2O*	*in.H2O*	*in. H2O*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
7	7/7/2003	635	ABC	27	26	27	45	199	104	13	259	259	NA					
	7/7/2003	1015	ABC	27	26	27	45	207	112	15	272	272	NA	55	40	115	47.5	43
	7/8/2003	630	ABC	27	26	27	45	184	93	14	259	259	NA					
	7/8/2003	1000	ABC	27	27	27	45	200	109	14	272	272	NA	56	45.5	120	55	45
	7/9/2003	645	ABC	27	26	27	45	185	95	13	259	259	NA					
	7/9/2003	1015	ABC	27	27	27	45	227	123	16	272	272	NA	58	49	122.5	56.5	43
	7/10/2003	610	ABC	26	26	26	45	185	103	13	262	262	NA					
	7/10/2003	1015	ABC	28	27	27	45	232	136	15	262	262	NA	62	48	123	55	45
8	7/14/2003	620	ABC	27	26	27	45	207	109	14	272	272	NA					
	7/14/2003	1010	ABC	27	27	27	45	237	120	14	272	272	NA	73	50.5	125	77	43
	7/15/2003	630	ABC	27	26	27	45	211	112	14	272	272	NA					
	7/15/2003	1000	ABC	27	27	27	45	235	124	14	272	272	NA	75	65	132	70	44
	7/16/2002	610	ABC	27	26	27	45	207	110	14	272	272	NA					
	7/16/2003	1015	ABC	27	27	27	45	236	121	14	272	272	NA	72.5	60	130	65	45
9	7/22/2003	800	ABC	26	25	25	45	203	112	13	272	272	NA					
	7/22/2003	1050	ABC	26	25	25	45	220	123	14	272	272	NA	80	75	120	82	46
	7/23/2003	700	ABC	26	25	25	45	189	104	14	272	272	NA					
	7/23/2003	1000	ABC	26	25	25	45	205	114	15	272	272	NA	80	69	130	77	44
	7/24/2003	700	ABC	26	25	25	45	189	102	13	272	272	NA					
	7/24/2003	1045	ABC	26	25	25	45	237	127	15	272	272	NA	85	70	135	90	42
	7/25/2003	620	ABC	26	25	25	45	189	97	14	272	272	NA					
	7/25/2003	1000	ABC	26	25	25	45	196	108	14	272	272	NA	80	75	130	95	45
10	728/03	730	ABC	28	25	25	45	187	94	12	272	272	NA					
	7/28/2003	1030	ABC	27	25	25	45	199	108	14	272	272	NA	85	70.5	125	90	39
	7/29/2003	630	ABC	27	25	25	45	200	104	15	272	272	NA					
	7/29/2003	1000	ABC	27	25	25	45	200	114	14	272	272	NA	94	87	138	86	42
	7/30/2003	630	ABC	29	28	30	45	206	112	14	285	285	NA					
	7/30/2003	1000	ABC	29	28	30	45	208	112	14	285	285	NA	92.5	90	135.5	95	41
	7/31/2003	600	ABC	35	34	35	55	225	121	16	311	311	NA					
	7/31/2003	1230	ABC	35	34	34	55	264	134	16	311	311	NA	93	87	130	90	46
11	8/4/2003	700	ABC	35	34	36	55	215	112	18	311	311	NA					
	8/4/2003	1035	ABC	35	34	36	55	233	141	18	311	311	NA	80	85	140	95	45
	8/5/2003	700	ABC	35	34	36	55	187	95	19	311	311	NA					
	8/5/2003	1000	ABC	35	35	36	55	246	146	18	311	311	NA	83	93	135	98	41
	8/6/2003	700	ABC	35	34	36	55	202	104	18	311	311	NA					
	8/6/2003	1005	ABC	35	35	36	55	239	136	20	311	311	NA	85	95	145	95	48
	8/7/2003	630	ABC	35	35	36	55	206	110	20	311	311	NA					
	8/7/2003	1210	ABC	35	35	36	55	257	166	22	311	311	NA	98	87	132	97	43
12	8/11/2003	700	ABC	35	34	36	55	223	128	17	311	311	NA					
	8/11/2003	1100	ABC	35	34	36	55	260	168	17	311	311	NA	85	88	123	85	47
	8/12/2003	700	ABC	35	34	36	55	227	143	19	303	303	NA					
	8/12/2003	1000	ABC	35	35	36	55	257	148	19	303	303	NA	102	86	130	98	46
	8/13/2003	800	ABC	35	35	36	55	235	132	18	311	311	NA					
	8/13/2003	1135	ABC	35	35	36	55	273	170	18	303	311	NA	75	83	137	76	41
	8/14/2003	715	ABC	35	35	36	55	235	132	18	311	311	NA					
	8/14/2003	1025	ABC	35	35	36	55	278	172	21	311	311	NA	76	89	129	91	40

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OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	TIME	WELL SCREEN	VACUUM				FLOWRATE						FID READINGS				
				VE-04-A	VE-04-B	VE-04-C	Total Influent	A	B	C	ABC	Influent	Effluent	Influent (A)	Influent (B)	Influent (C)	Influent (ABC)	Effluent (Total)
		hours		*in. H2O*	*in. H2O*	*in.H2O*	*in. H2O*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
15	9/2/2003	800	ABC	35	34	36	55	234	128	21	303	303	NA					
	9/2/2003	1030	ABC	35	35	36	55	252	157	20	311	311	NA	90	65	130	85	38
	9/3/2003	630	ABC	35	35	36	55	228	125	19	311	311	NA					
	9/3/2003	1040	ABC	35	35	36	55	249	155	20	311	311	NA	92	73	128	91	43
	9/4/2003	630	ABC	35	35	36	55	230	132	19	311	311	NA					
	9/4/2003	1105	ABC	35	35	36	55	279	178	21	311	311	NA	95	78	120	92	47
16	9/8/2003	700	ABC	35	35	36	55	223	122	15	311	311	NA					
	9/8/2003	930	ABC	35	35	36	55	231	133	16	311	311	NA	55	60	130	65	46
	9/9/2003	650	ABC	35	35	36	55	221	124	19	311	311	NA					
	9/9/2003	1030	ABC	35	35	36	55	226	125	20	311	311	NA	58	69	130	68	46
	9/10/2003	715	ABC	35	35	36	55	208	111	19	311	311	NA					
	9/10/2003	1020	ABC	35	35	36	55	217	114	20	311	311	NA	50	60	128	60	45
	9/11/2003	655	ABC	35	35	36	55	195	106	20	311	311	NA					
	9/11/2003	1000	ABC	35	35	36	55	237	135	21	311	311	NA	48	60	125	85	44
17	9/15/2003	650	ABC	35	34	35	55	197	103	16	311	311	NA					
	9/15/2003	1000	ABC	35	34	36	55	230	129	18	311	311	NA	48	55	95	65	42
	9/16/2003	645	ABC	35	34	35	55	199	107	16	311	311	NA					
	9/16/2003	950	ABC	35	34	36	55	227	127	19	311	311	NA	45	48	120	55	40
	8/17/2003	715	ABC	35	34	35	55	195	107	15	311	311	NA					
	9/17/2003	955	ABC	35	34	35	55	199	108	16	311	311	NA	55	47	110	68	42
	9/18/2003	705	ABC	34	33	35	55	195	107	15	311	311	NA					
	9/18/2003	950	ABC	34	33	35	55	216	127	16	311	311	NA	73	65	115	82	46
18	9/22/2003	830	ABC	33	32	33	55	219	121	27	311	311	NA					
	9/22/2003	1030	ABC	33	32	33	55	270	158	39	311	311	NA	28	43	55	35	22
	9/23/2003	720	ABC	33	32	33	55	209	109	27	311	311	NA					
	9/23/2003	1035	ABC	33	32	33	55	281	165	54	311	311	NA	25	32	37	28	25
	9/24/2003	700	ABC	33	32	33	55	204	103	27	311	311	NA					
	9/24/2003	1000	ABC	33	32	33	55	202	102	29	311	311	NA	23	28	25	25	20
	9/25/2003	655	ABC	32	31	32	55	186	100	29	311	311	NA					
	9/25/2003	930	ABC	32	31	32	55	215	116	38	311	311	NA	26	35	38	30	22
19	9/29/2003	815	ABC	32	31	32	50	207	110	36	324	324	NA					
	9/29/2003	1100	ABC	32	31	32	50	232	142	55	324	324	NA	29	32	45	34	22
	9/30/2003	715	ABC	31	30	31	50	198	100	40	324	324	NA					
	9/30/2003	945	ABC	31	30	31	50	206	112	48	324	324	NA	20	32	15	20	15
	10/1/2003	720	ABC	31	30	31	50	201	106	45	324	324	NA					
	10/1/2003	1000	ABC	31	30	31	50	214	132	50	324	324	NA	22	35	18	30	16
	10/2/2003	727	ABC	30	29	30	50	183	93	37	324	324	NA					
	10/2/2003	942	ABC	30	29	30	50	186	92	38	324	324	NA	55	30	60	42	25
20	10/7/2003	955	ABC	30	29	30	50	191	107	64	324	324	NA					
	10/7/2003	1200	ABC	30	29	30	50	226	119	67	324	324	NA	45	28	55	40	22
	10/8/2003	655	ABC	30	29	30	50	174	95	49	324	324	NA					
	10/8/2003	1130	ABC	30	29	30	50	226	129	77	324	324	NA	16	18	15	15	10
	10/9/2003	632	ABC	30	29	30	50	199	106	53	324	324	NA					
	10/9/2003	1133	ABC	30	29	30	50	214	125	73	324	324	NA	17	21	18	20	16
	10/10/2003	723	ABC	30	29	30	50	186	99	52	324	324	NA					
	10/10/2003	915	ABC	30	29	30	50	180	97	47	324	324	NA	12	15	35	31	24

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WEEK	DATE	TIME	WELL SCREEN	VACUUM				FLOWRATE						FID READINGS				
				VE-04-A	VE-04-B	VE-04-C	Total Influent	A	B	C	ABC	Influent	Effluent	Influent (A)	Influent (B)	Influent (C)	Influent (ABC)	Effluent (Total)
		hours		*in. H2O*	*in. H2O*	*in.H2O*	*in. H2O*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
21	10/13/2003	920	ABC	30	29	30	50	209	110	62	324	324	NA					
	10/13/2003	1100	ABC	30	29	30	50	239	156	64	324	324	NA	21	18	30	25	18
	10/14/2003	722	ABC	30	29	30	50	178	96	47	324	324	NA					
	10/14/2003	1134	ABC	30	29	30	50	252	138	87	324	324	NA	20	18	15	15	17
	10/15/2003	700	ABC	30	29	30	50	177	88	46	324	324	NA					
	10/15/2003	1036	ABC	30	29	30	50	201	106	57	324	324	NA	21	17	30	23	12
	10/16/2003	745	ABC	30	29	30	50	170	83	43	324	324	NA					
	10/16/2003	1100	ABC	30	29	30	50	247	160	53	324	324	NA	31	22	28	25	16
22	10/20/2003	728	ABC	29	28	29	50	179	105	50	324	324	NA					
	10/20/2003	1030	ABC	29	28	29	50	226	133	55	324	324	NA	19	22	12	18	12
	10/21/2003	617	ABC	28	27	28	50	197	107	70	324	324	NA					
	10/21/2003	1240	ABC	28	26	27	50	262	160	117	324	324	NA	22	24	5.5	20	15
	10/22/2003	626	ABC	28	27	28	50	191	103	70	324	324	NA					
	10/22/2003	1215	ABC	28	27	27	50	229	133	99	324	324	NA	19.5	23	6	18.5	13
	10/23/2003	614	ABC	28	27	28	50	184	100	67	324	324	NA					
	10/23/2003	1155	ABC	28	27	28	50	252	145	113	324	324	NA	18	20	12	15	10
23	10/27/2003	615	ABC	28	27	28	50	183	95	71	324	324	NA					
	10/27/2003	1055	ABC	28	27	28	50	271	170	136	324	324	NA	20	22	18	20	12
	10/28/2003	620	ABC	27	26	27	50	166	93	66	324	324	NA					
	10/28/2003	1200	ABC	27	26	27	50	247	136	108	324	324	NA	16	14	12	14	9
	10/29/2003	555	ABC	27	26	27	45	167	86	60	324	324	NA					
	10/29/2003	1330	ABC	27	26	27	45	252	155	70	324	324	NA	18	15	14	12	8
	10/30/2003	630	ABC	27	26	27	45	158	79	57	324	324	NA					
	10/30/2003	1040	ABC	27	26	27	45	179	97	73	324	324	NA	21	18	15	16	10
24	11/3/2003	625	ABC	28	27	28	45	153	68	43	324	324	NA					
	11/3/2003	930	ABC	28	27	28	45	180	71	46	324	324	NA	20	21.5	5.1	17.5	12
	11/4/2003	556	ABC	27	26	27	45	152	68	46	324	324	NA					
	11/4/2003	1213	ABC	27	26	27	45	170	92	70	324	324	NA	17	18.5	4	16	10.5
	11/5/2003	630	ABC	27	26	27	45	152	71	46	324	324	NA					
	11/5/2003	1015	ABC	27	26	27	45	162	82	64	324	324	NA	18.5	19	3.5	15	9.5
	11/6/2003	620	ABC	27	26	27	45	161	75	58	324	324	NA					
	11/6/2003	1054	ABC	27	26	27	45	174	97	71	324	324	NA	19	21	4.5	17	11.5
25	11/10/2003	620	ABC	27	26	27	45	159	85	77	324	324	NA					
	11/10/2003	1020	ABC	27	26	27	45	180	94	82	324	324	NA	20	16.5	10.5	15	8
	11/11/2003	600	ABC	27	26	27	45	176	100	79	324	324	NA					
	11/11/2003	1300	ABC	27	26	27	45	195	104	79	324	324	NA	17	17.5	4	13.5	8.5
	11/12/2003	630	ABC	27	26	27	45	159	95	53	324	324	NA					
	11/12/2003	1200	ABC	27	26	27	45	176	95	69	324	324	NA	19	15	10.5	14	7
	11/13/2003	620	ABC	27	26	27	45	152	74	51	324	324	NA					
	11/13/2003	1000	ABC	27	26	27	45	180	94	71	324	324	NA	14	16	3	12.5	7.5
26	11/17/2003	700	ABC	27	26	27	45	155	76	45	337	337	NA					
	11/17/2003	1100	ABC	27	26	27	45	186	106	77	337	337	NA	14	18.5	10.5	14	8.5
	11/18/2003	730	ABC	28	27	27	45	164	82	58	337	337	NA					
	11/18/2003	1120	ABC	28	27	27	45	195	110	87	324	324	NA	15	16	7.5	12	8
	11/19/2003	630	ABC	27	26	26	45	155	78	49	335	335	NA					
	11/19/2003	1005	ABC	28	27	27	45	192	97	84	335	335	NA	11	16	10.5	12	8
	11/20/2003	630	ABC	27	26	26	45	157	77	51	337	337	NA					
	11/20/2003	1105	ABC	27	26	26	45	191	107	85	324	324	NA	12	18.5	8	13	7.5

TABLE 1: SYSTEM MONITORING (VACUUM, FLOWRATE AND FID READING) DATA
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	TIME	WELL SCREEN	VACUUM				FLOWRATE						FID READINGS				
				VE-04-A	VE-04-B	VE-04-C	Total Influent	A	B	C	ABC	Influent	Effluent	Influent (A)	Influent (B)	Influent (C)	Influent (ABC)	Effluent (Total)
		hours		*in. H2O*	*in. H2O*	*in.H2O*	*in. H2O*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*cfm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
27	11/24/2003	655	ABC	27	26	26	45	148	70	44	337	337	NA					
	11/24/2003	1105	ABC	27	26	26	45	164	91	68	324	324	NA	20	16.5	10	14.5	5
	11/25/2003	645	ABC	27	26	26	45	141	75	47	324	324	NA					
	11/25/2003	1015	ABC	27	26	26	45	165	86	66	324	324	NA	16	15	10	12.5	7
	11/26/2003	640	ABC	27	26	26	45	146	69	43	324	324	NA					
	11/26/2003	1030	ABC	27	26	26	45	160	89	64	324	324	NA	11	14.5	4.5	9.5	7
28	12/1/2003	644	ABC	27	26	26	45	153	71	47	324	324	NA					
	12/1/2003	1025	ABC	28	27	27	45	170	90	71	324	324	NA	11	11	2.5	10.5	7
	12/2/2003	704	ABC	28	27	27	45	160	75	52	324	324	NA					
	12/2/2003	1223	ABC	28	27	27	45	179	98	77	324	324	NA	10.5	10.5	3	9.5	6
	12/3/2003	700	ABC	27	26	26	45	156	73	53	324	324	NA					
	12/3/2003	1100	ABC	27	26	26	45	176	94	74	324	324	NA	12	10	6	9	5
	12/4/2003	700	ABC	27	26	26	45	158	75	51	324	324	NA					
	12/4/2003	1130	ABC	27	26	26	45	202	112	91	324	324	NA	13	12	7.5	10	6

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25	SVW-26	SVW-27	SVW-28	SVW-32	SVW-33	SVW-34	SVW-35	SVW-36	SVW-37	SVW-38	SVW-39
			in. H ,O	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*
2	6/4/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0	0	0	0	P	P	0	P	P	0
		E	P	P	1.5	0	0.0	0	0.6	0	0	0	0.1	0
		F	P	0	0	P	P	0	0	P	NA	P	0.1	2.7
		G	P	0.2	0.0	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	0	P	P	P	NA	0	P	P
		I	0.0	P	0.0	NA	0.0	P	NA	0	NA	0.0	P	0
		J	0.0	P	0.1	NA	0.0	0	NA	P	NA	0	1.80	NA
3	6/12/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0	0	0	0	P	P	0	P	P	0
		E	P	P	1.3	0	0.0	0	0.4	0	0	0	0.2	0
		F	P	0	0	P	P	0	0	P	NA	P	0.1	2.2
		G	P	0.4	0.0	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	0	P	P	P	NA	0	P	P
		I	0.0	P	0.0	NA	0.0	P	NA	0	NA	0.0	P	0
		J	0.0	P	0.2	NA	0.0	0	NA	P	NA	0	1.50	NA
4	6/19/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	0.3	0	0	0	0.1	0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	3.5
		G	P	0.5	1.2	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	0	P	P	P	NA	0	P	P
		I	0.0	P	0.0	NA	0.0	P	NA	0	NA	0.0	P	0
		J	0.0	P	0.1	NA	0.0	0	NA	P	NA	0	1.70	NA
5	6/26/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	0.4	0	0	0	0.0	0
		F	P	0	1	P	P	0	0	P	NA	P	0.0	3.2
		G	P	0.5	0.0	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	0	P	P	P	NA	0	P	P
		I	0.0	P	0.0	NA	0.0	P	NA	0	NA	0.0	P	0
		J	0.0	P	0.0	NA	0.0	0	NA	P	NA	0	1.50	NA

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25 *in. H ,O*	SVW-26 *in. H ,O*	SVW-27 *in. H ,O*	SVW-28 *in. H ,O*	SVW-32 *in. H ,O*	SVW-33 *in. H ,O*	SVW-34 *in. H ,O*	SVW-35 *in. H ,O*	SVW-36 *in. H ,O*	SVW-37 *in. H ,O*	SVW-38 *in. H ,O*	SVW-39 *in. H ,O*
6	7/3/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	0.4	0	0	0	0.3	0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	3.1
		G	P	0.3	1.5	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	0	P	P	P	NA	0	P	P
		I	0.0	P	0.0	NA	0.0	P	NA	0	NA	0.0	P	0
		J	0.0	P	0.2	NA	0.0	0	NA	P	NA	0	1.20	NA
7	7/10/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0.1	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	2.1	0	0	0	0.0	1.5
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.6
		G	P	0.6	1.1	P	P	0	P	P	NA	P	P	P
		H	P	0.1	P	P	0.1	P	P	P	NA	0	P	P
		I	1.2	P	1.5	NA	0.3	P	NA	0	NA	0.0	P	0
		J	0.8	P	0.2	NA	0.0	0	NA	P	NA	0	0.40	NA
9	7/25/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0.2	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	2.0	0	0	0	0.0	1.2
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.5
		G	P	0.5	1.3	P	P	0	P	P	NA	P	P	P
		H	P	0.1	P	P	0.1	P	P	P	NA	0	P	P
		I	1.3	P	1.2	NA	0.2	P	NA	0	NA	0.0	P	0
		J	0.6	P	0.3	NA	0.0	0	NA	P	NA	0	0.60	NA
11	8/6/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0.3	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	1.6	0	0	0	0.0	1.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.6
		G	P	0.6	1.1	P	P	0	P	P	NA	P	P	P
		H	P	0.1	P	P	0.2	P	P	P	NA	0	P	P
		I	1.2	P	1.3	NA	0.1	P	NA	0	NA	0.0	P	0
		J	0.4	P	0.2	NA	0.0	0	NA	P	NA	0	0.80	NA

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25	SVW-26	SVW-27	SVW-28	SVW-32	SVW-33	SVW-34	SVW-35	SVW-36	SVW-37	SVW-38	SVW-39
			in. H ,O	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*
12	8/14/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	0	P	P	P	0	P	P	0
		D	P	P	0.2	0	0	0	P	P	0	P	P	0
		E	P	P	0.0	0	0.0	0	1.4	0	0	0	0.0	1.3
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.5
		G	P	0.4	1.4	P	P	0	P	P	NA	P	P	P
		H	P	0.3	P	P	0.4	P	P	P	NA	0	P	P
		I	1.4	P	1.1	NA	0.2	P	NA	0	NA	0.0	P	0
		J	0.6	P	0.1	NA	0.0	0	NA	P	NA	0	0.60	NA
15	9/4/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	P	P	P	0	P	P	P
		C	P	P	0	P	P	P	P	P	0	P	P	P
		D	P	P	0.1	0	0	0	P	P	0	P	0	P
		E	P	P	0.0	0	0.0	0	1.2	0	0	0	P	1.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	0.8
		G	P	0.1	1.2	P	P	0	P	P	NA	P	P	P
		H	P	0.3	P	P	P	P	P	P	NA	0	P	P
		I	1.1	P	1.3	NA	0.3	P	NA	0	NA	0.0	P	0
		J	0.3	P	P	NA	0.0	0	NA	P	NA	0	0.50	NA
16	9/9/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.1	P	P	0	P	P	P
		C	P	P	0	P	P	P	P	P	0	P	P	P
		D	P	P	0.0	0	0	0	P	P	0	P	0	P
		E	P	P	0.0	0	0.2	0	0.0	0	0	0	P	0.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.5
		G	P	0.0	1.0	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0	P	P
		I	1.8	P	0.2	NA	0.3	P	NA	0	NA	0.0	P	0
		J	1.3	P	P	NA	4.5	0.1	NA	P	NA	0	0.50	NA
17	9/18/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.1	P	P	0	P	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0	0	0	P	P	0	P	0	P
		E	P	P	0.0	0	0.4	0	0.0	0	0	0	P	0.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.8
		G	P	0.0	1.3	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0	P	P
		I	1.5	P	0.5	NA	0.2	P	NA	0.6	NA	0.0	P	0
		J	1.0	P	P	NA	3.9	0.2	NA	P	NA	0	0.50	NA

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25	SVW-26	SVW-27	SVW-28	SVW-32	SVW-33	SVW-34	SVW-35	SVW-36	SVW-37	SVW-38	SVW-39
			in. H ,O	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*
18	9/25/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.1	P	P	0	P	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0	0	0	P	P	0	P	0	P
		E	P	P	0.0	0	0.5	0	0.0	0	0	0	P	0.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.6
		G	P	0.0	1.0	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0	P	P
		I	1.3	P	0.6	NA	0.3	P	NA	0.5	NA	0.0	P	0
		J	1.2	P	P	NA	3.5	0.3	NA	P	NA	0	0.50	NA
19	10/2/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.2	P	P	0	P	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0	0	0	P	P	0	P	0	P
		E	P	P	0.0	0	0.4	0	0.0	0	0	0	P	0.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.5
		G	P	0.0	1.2	P	P	0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0	P	P
		I	1.1	P	0.8	NA	0.2	P	NA	0.6	NA	0.0	P	0
		J	1.3	P	P	NA	3.0	0.5	NA	P	NA	0	0.50	NA
20	10/9/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.4	0.1	0	P	P	0	P	0.1	P
		E	P	P	0.0	0	0.0	0	0.0	0	0	0	P	0.1
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.3
		G	P	0.0	1.2	P	P	0.1	P	P	NA	P	P	P
		H	P	0.1	P	P	P	P	P	P	NA	0.1	P	P
		I	2.5	P	0.8	NA	0.0	P	NA	0.0	NA	0.0	P	0
		J	2.1	P	P	NA	0.9	0.1	NA	P	NA	0	0.40	NA
21	10/16/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.5	0.1	0	P	P	0	P	0.1	P
		E	P	P	0.0	0	0.0	0	0.0	0	0	0	P	0.1
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.2
		G	P	0.0	1.1	P	P	0.2	P	P	NA	P	P	P
		H	P	0.1	P	P	P	P	P	P	NA	0.1	P	P
		I	2.0	P	0.4	NA	0.0	P	NA	0.0	NA	0.0	P	0
		J	2.3	P	P	NA	0.8	0.8	NA	P	NA	0	0.50	NA

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25	SVW-26	SVW-27	SVW-28	SVW-32	SVW-33	SVW-34	SVW-35	SVW-36	SVW-37	SVW-38	SVW-39
			in. H ,O	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*	*in. H ,O*
24	11/6/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.4	0.2	0	P	P	0	P	0.0	P
		E	P	P	0.0	0	0.0	0	0.0	0	0	0	P	0.1
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.0
		G	P	0.0	1.2	P	P	0.4	P	P	NA	P	P	P
		H	P	0.1	P	P	P	P	P	P	NA	0.1	P	P
		I	1.3	P	0.2	NA	0.0	P	NA	0.0	NA	0.0	P	0
		J	2.1	P	P	NA	0.8	1.0	NA	P	NA	0	0.70	NA
25	11/13/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.5	0.3	0	P	P	0	P	0.0	P
		E	P	P	0.0	0	0.2	0	0.0	0	0	0	P	0.1
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.0
		G	P	2.1	1.5	P	P	0.0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0.1	P	P
		I	1.5	P	0.5	NA	0.1	P	NA	0.0	NA	0.0	P	0
		J	4.5	P	P	NA	1.0	0.0	NA	P	NA	0	0.70	NA
26	11/20/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.7	0.3	0	P	P	0	P	0.0	P
		E	P	P	0.0	0	0.4	0	0.0	0	0	0	P	0.4
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.4
		G	P	1.8	1.8	P	P	0.0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0.1	P	P
		I	1.2	P	0.4	NA	0.4	P	NA	0.0	NA	0.0	P	0
		J	4.0	P	P	NA	0.8	0.0	NA	P	NA	0	0.40	NA
27	11/26/2003	A	0	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.4	0.4	0	P	P	0	P	0.0	P
		E	P	P	0.0	0	0.5	0	0.0	0	0	0	P	0.3
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.6
		G	P	1.5	1.6	P	P	0.0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0.1	P	P
		I	1.0	P	0.7	NA	0.7	P	NA	0.0	NA	0.0	P	0
		J	4.3	P	P	NA	0.5	0.0	NA	P	NA	0	0.80	NA

TABLE 2: VACUUM RESPONSES IN SOIL VAPOR MONITORING WELLS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

WEEK	DATE	SAMPLE PROBE I/D	VACUUM RESPONSES *(Magnahelic Gauges)*											
			SVW-25 *in. H ,O*	SVW-26 *in. H ,O*	SVW-27 *in. H ,O*	SVW-28 *in. H ,O*	SVW-32 *in. H ,O*	SVW-33 *in. H ,O*	SVW-34 *in. H ,O*	SVW-35 *in. H ,O*	SVW-36 *in. H ,O*	SVW-37 *in. H ,O*	SVW-38 *in. H ,O*	SVW-39 *in. H ,O*
28	12/2/2003	A	0.1	P	0	0	P	0	P	P	P	P	P	0
		B	0	P	0	P	0	0.0	P	P	0	0	P	P
		C	P	P	0	P	P	0.00	P	P	0	P	P	P
		D	P	P	0.0	0.0	0.0	0	P	P	0	P	0.0	P
		E	P	P	0.0	0	0.0	0	0.0	0	0	0	P	0.0
		F	P	0	0	P	P	0	0	P	NA	P	0.0	1.7
		G	P	0.2	0.1	P	P	0.0	P	P	NA	P	P	P
		H	P	0.0	P	P	P	P	P	P	NA	0.2	P	P
		I	0.4	P	0.2	NA	0.3	P	NA	0.0	NA	0.0	P	0
		J	2.0	P	P	NA	0.2	0.1	NA	P	NA	0	0.50	NA

TABLE 3: SUMMARY OF LABORATORY ANALYTICAL RESULTS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

Week	Sample ID	Sample Location	Sample Matrix	Date Sampled	VOCs USING TO - 14 (ppbv)												
					Dichlorodi-fluoromethane	Chloroethane	Freon 11	1,1-DCE	Freon 113	Chloroform	1,1,1-TCA	CCl_4	TCE	Toluene	PCE	p&m-Xylene	Total VOCs
1	VE04-A-001-001	Screen A	Air	5/28/2003	120	8.8	ND	ND	35	14	ND	20	210	ND	11	ND	4,987.80
	VE04-B-001-002	Screen B	Air	5/28/2003	12	12	ND	18	120	64	ND	110	1,400	ND	46	ND	9,542.00
	VE04-C-001-003	Screen C	Air	5/28/2003	81	14	ND	6.8	55	27	ND	46	490	ND	19	ND	6,107.80
	VE04-INN-001-004	Influent	Air	5/28/2003	150	ND	5.5	11	86	43	6	70	870	5.9	39	ND	**3,243.40**
	VE04-EFF-001-005	Effluent	Air	5/28/2003	39	16	73	0.73	34	1	ND	1.4	ND	1.6	ND	0.63	**444.50**
	VE04-A-001-006	Screen A	Air	5/29/2003	270	4.2	2.7	ND	26	13	4	12	86	3.9	6.9	ND	2,360.50
	VE04-B-001-007	Screen B	Air	5/29/2003	38	6.3	10	29	210	78	12	110	970	4.2	32	ND	6,273.20
	VE04-C-001-008	Screen C	Air	5/29/2003	120	15	ND	ND	42	24	ND	27	300	ND	11	ND	5,410.00
	VE04-INN-001-009	Influent	Air	5/29/2003	230	ND	5.8	12	93	41	7.6	54	470	ND	24	ND	**1,727.40**
	VE04-EFF-001-010	Effluent	Air	5/29/2003	230	8	30	ND	13	ND	ND	ND	ND	1.1	ND	ND	**450.10**
	VE04-A-001-011	Screen A	Air	5/30/2003	250	ND	ND	ND	19	13	ND	9.6	55	ND	4.9	ND	3,176.50
	VE04-B-001-012	Screen B	Air	5/30/2003	38	ND	ND	27	210	75	13	120	860	ND	28	ND	5,294.00
	VE04-C-001-013	Screen C	Air	5/30/2003	130	15	ND	ND	40	25	ND	30	260	ND	11	ND	4,408.00
	VE04-INN-001-014	Influent	Air	5/30/2003	190	ND	ND	11	82	35	6.8	46	380	ND	19	ND	**1,640.80**
	VE04-EFF-001-015	Effluent	Air	5/30/2003	160	ND	32	ND	12	ND	ND	ND	ND	1.8	ND	ND	**336.70**
2	VE04-A-002-016	Screen A	Air	6/2/2003	84	ND	5.4	1.4	13	9.1	2.5	4.5	38	4.2	4.5	2.3	767.70
	VE04-B-002-017	Screen B	Air	6/2/2003	32	ND	15	27	230	78	12	110	670	3.3	32	ND	2,071.30
	VE04-C-002-018	Screen C	Air	6/2/2003	34	ND	12	4.8	35	20	3.7	23	200	4.5	14	2.8	1,253.80
	VE04-INN-002-019	Influent	Air	6/2/2003	68	ND	8.2	9.4	79	31	5.4	38	250	3.6	16	1.4	**802.00**
	VE04-EFF-002-020	Effluent	Air	6/2/2003	110	4	21	ND	10	ND	ND	ND	ND	3.3	ND	2.1	**233.81**
3	VE04-INN-003-001	Influent	Air	6/9/2003	27	ND	11	7.4	67	28	3.8	32	210	3.7	14	1.8	**550.80**
	VE04-EFF-003-002	Effluent	Air	6/9/2003	28	4.5	18	ND	15	ND	ND	ND	ND	3.2	ND	1.2	**185.42**
5	VE04-INN-005-001	Influent	Air	6/23/2003	17	ND	16	6.9	52	29	3	37	220	1.4	16	ND	**563.20**
	VE04-EFF-005-002	Effluent	Air	6/23/2003	17	5.3	16	ND	32	ND	ND	ND	ND	1.6	ND	0.72	**252.32**
7	VE04-INN-007-001	Influent	Air	7/7/2003	15	ND	18	6.8	41	32	3.1	36	200	3.5	16	0.66	**684.42**
	VE04-EFF-007-002	Effluent	Air	7/7/2003	13	4.2	3.7	ND	1	ND	ND	ND	ND	2.5	ND	ND	**132.42**
9	VE04-INN-009-001	Influent	Air	7/22/2003	14	ND	15	5.2	29	29	2.6	27	150	3.4	14	0.6	**551.59**
	VE04-EFF-009-002	Effluent	Air	7/22/2003	12	4.1	4.1	ND	1.5	ND	ND	ND	ND	12	ND	3.2	**240.63**
11	VE04-INN-011-001	Influent	Air	8/4/2003	13	ND	19	5	33	32	2.6	28	180	3.6	14	0.8	**653.90**
	VE04-EFF-011-002	Effluent	Air	8/4/2003	16	4.2	12	ND	7.3	ND	ND	ND	ND	2.6	ND	ND	**146.83**

TABLE 3: SUMMARY OF LABORATORY ANALYTICAL RESULTS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

Week	Sample ID	Sample Location	Sample Matrix	Date Sampled	VOCs USING TO - 14 (ppbv)												
					Dichlorodi-fluoromethane	Chloroethane	Freon 11	1,1-DCE	Freon 113	Chloroform	1,1,1-TCA	CCl_4	TCE	Toluene	PCE	p&m-Xylene	Total VOCs
15	VE04-INN-015-001	Influent	Air	9/2/2003	19	ND	20	4.5	32	31	2.2	25	170	4.3	13	ND	**739.70**
	VE04-EFF-015-002	Effluent	Air	9/2/2003	28	4.9	16	ND	9	ND	ND	ND	ND	3.7	ND	0.52	**167.62**
17	VE04-INN-017-001	Influent	Air	9/16/2003	12	ND	22	4	29	27	1.8	25	160	3.3	12	ND	**488.10**
	VE04-EFF-017-002	Effluent	Air	9/16/2003	13	2.1	20	ND	21	ND	ND	ND	ND	3.1	ND	ND	**134.19**
19	VE04-INN-019-001	Influent	Air	9/29/2003	12	ND	30	4.8	30	35	2	28	230	2.9	15	ND	**667.97**
	VE04-EFF-019-002	Effluent	Air	9/29/2003	9.7	5.2	18	ND	34	ND	ND	ND	ND	3.8	ND	0.74	**197.84**
21	VE04-INN-021-001	Influent	Air	10/13/2003	12	ND	33	4.4	27	35	1.9	27	220	2.7	14	ND	**851.20**
	VE04-EFF-021-002	Effluent	Air	10/13/2003	11	5.9	38	1.1	80	ND	ND	ND	ND	2.1	ND	ND	**309.86**
23	VE04-INN-023-001	Influent	Air	10/27/2003	7.8	ND	23	2.7	17	24	1.4	18	150	4.9	10	1.1	**485.81**
	VE04-EFF-023-002	Effluent	Air	10/27/2003	21	9.8	37	1.4	44	0.57	ND	ND	ND	3.8	ND	0.63	**223.34**
25	VE04-INN-025-001	Influent	Air	11/11/2003	14	ND	46	5.7	25	40	2.4	30	220	1.9	15	ND	**539.00**
	VE04-EFF-025-002	Effluent	Air	11/11/2003	16	27	100	5.4	110	3	ND	0.87	ND	1.7	ND	ND	**544.19**
27	VE04-INN-027-001	Influent	Air	11/24/2003	14	ND	44	5.9	25	41	2.5	34	220	1.8	15	ND	**622.10**
	VE04-EFF-027-002	Effluent	Air	11/24/2003	12	23	40	4.4	33	5.3	ND	2.8	ND	1.4	ND	ND	**610.80**
28	VE04-INN-028-001	Influent	Air	12/4/2003	11	ND	38	4.7	21	37	2.2	28	190	2.4	14	0.65	**545.45**
	VE04-EFF-028-002	Effluent	Air	12/4/2003	13	14	53	7.4	35	19	1.6	14	ND	2.4	ND	0.56	**427.36**

Explanation:
VOCs: Volatile Organic Compounds
Freon 113: 1,1,2-Trichlorotrifluoroethane (FR113)
Freon 11: Trichlorofluoromethane (FR11)
CCl_4: Carbon Tetrachloride
1,1-DCE: 1,1-Dichloroethene
1,1,1-TCA: 1,1,1-Trichloroethane
TCE: Trichloroethene
PCE: Tetrachloroethene
ND: Not Detected above the laboratory Method Detection Limit (MDL)

TABLE 4: INFLUENT AND EFFLUENT EMISSION RATES CALCULATIONS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

INFLUENT				
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**
5/28/03 (Week 1)				
Freon 113	0.086	260	187	0.0159
CCl_4	0.070	260	154	0.0106
TCE	0.870	260	131.5	0.1130
PCE	0.039	260	166	0.0064
Total VOCs	3.243	260	86	0.2755
5/29/03 (Week 1)				
Freon 113	0.093	260	187	0.0172
CCl_4	0.054	260	154	0.0082
TCE	0.470	260	131.5	0.0611
PCE	0.024	260	166	0.0039
Total VOCs	1.727	260	86	0.1467
5/30/03 (Week 1)				
Freon 113	0.082	260	187	0.0151
CCl_4	0.046	260	154	0.0070
TCE	0.380	260	131.5	0.0494
PCE	0.019	260	166	0.0031
Total VOCs	1.641	260	86	0.1394
6/2/03 (Week 2)				
Freon 113	0.079	260	187	0.0146
CCl_4	0.038	260	154	0.0058
TCE	0.250	260	131.5	0.0325
PCE	0.016	260	166	0.0026
Total VOCs	0.802	260	86	0.0681
6/9/03 (Week 3)				
Freon 113	0.067	266	187	0.0127
CCl_4	0.032	266	154	0.0050
TCE	0.210	266	131.5	0.0279
PCE	0.014	266	166	0.0023
Total VOCs	0.551	266	86	0.0479

EFFLUENT					
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**	**Destruction Efficiency (%)**
5/28/03 (Week 1)					
Freon 113	0.034	260	187	0.0063	60.47
CCl_4	0.0014	260	154	0.0002	98.00
TCE	0	260	131.5	0.0000	100.00
PCE	0	260	166	0.0000	100.00
Total VOCs	0.4445	260	86	0.0378	86.29
5/29/03 (Week 1)					
Freon 113	0.013	260	187	0.0024	86.02
CCl_4	0	260	154	0.0000	100.00
TCE	0	260	131.5	0.0000	100.00
PCE	0	260	166	0.0000	100.00
Total VOCs	0.4501	260	86	0.0382	73.94
5/30/03 (Week 1)					
Freon 113	0.012	260	187	0.0022	85.37
CCl_4	0	260	154	0.0000	100.00
TCE	0	260	131.5	0.0000	100.00
PCE	0	260	166	0.0000	100.00
Total VOCs	0.3367	260	86	0.0286	79.48
6/2/03 (Week 2)					
Freon 113	0.01	260	187	0.0018	87.34
CCl_4	0	260	154	0.0000	100.00
TCE	0	260	131.5	0.0000	100.00
PCE	0	260	166	0.0000	100.00
Total VOCs	0.2338	260	86	0.0199	70.85
6/9/03 (Week 3)					
Freon 113	0.015	266	187	0.0028	77.61
CCl_4	0	266	154	0.0000	100.00
TCE	0	266	131.5	0.0000	100.00
PCE	0	266	166	0.0000	100.00
Total VOCs	0.1854	266	86	0.0161	66.35

TABLE 4: INFLUENT AND EFFLUENT EMISSION RATES CALCULATIONS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

INFLUENT				
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**
6/23/03 (Week 5)				
Freon 113	0.052	270	187	0.0100
CCl_4	0.037	270	154	0.0058
TCE	0.220	270	131.5	0.0297
PCE	0.016	270	166	0.0027
Total VOCs	0.563	270	86	0.0497
7/7/03 (Week 7)				
Freon 113	0.041	270	187	0.0079
CCl_4	0.036	270	154	0.0057
TCE	0.200	270	131.5	0.0270
PCE	0.016	270	166	0.0027
Total VOCs	0.684	270	86	0.0603
7/22/03 (Week 9)				
Freon 113	0.029	275	187	0.0057
CCl_4	0.027	275	154	0.0043
TCE	0.150	275	131.5	0.0206
PCE	0.014	275	166	0.0024
Total VOCs	0.552	275	86	0.0496
8/4/03 (Week 11)				
Freon 113	0.033	311	187	0.0073
CCl_4	0.028	311	154	0.0051
TCE	0.180	311	131.5	0.0280
PCE	0.014	311	166	0.0027
Total VOCs	0.654	311	86	0.0665
9/2/03 (Week 15)				
Freon 113	0.032	311	187	0.0071
CCl_4	0.025	311	154	0.0045
TCE	0.170	311	131.5	0.0264
PCE	0.013	311	166	0.0025
Total VOCs	0.740	311	86	0.0752

EFFLUENT					
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**	**Destruction Efficiency (%)**
6/23/03 (Week 5)					
Freon 113	0.032	270	187	0.0061	38.46
CCl_4	0	270	154	0.0000	100.00
TCE	0	270	131.5	0.0000	100.00
PCE	0	270	166	0.0000	100.00
Total VOCs	0.2523	270	86	0.0223	55.19
7/7/03 (Week 7)					
Freon 113	0.001	270	187	0.0002	97.56
CCl_4	0	270	154	0.0000	100.00
TCE	0	270	131.5	0.0000	100.00
PCE	0	270	166	0.0000	100.00
Total VOCs	0.132	270	86	0.0116	80.70
7/22/03 (Week 9)					
Freon 113	0.0015	275	187	0.0003	94.83
CCl_4	0	275	154	0.0000	100.00
TCE	0	275	131.5	0.0000	100.00
PCE	0	275	166	0.0000	100.00
Total VOCs	0.241	275	86	0.0217	56.34
8/4/03 (Week 11)					
Freon 113	0.0073	311	187	0.0016	77.88
CCl_4	0	311	154	0.0000	100.00
TCE	0	311	131.5	0.0000	100.00
PCE	0	311	166	0.0000	100.00
Total VOCs	0.147	311	86	0.0149	77.52
9/2/03 (Week 15)					
Freon 113	0.009	311	187	0.0020	71.88
CCl_4	0	311	154	0.0000	100.00
TCE	0	311	131.5	0.0000	100.00
PCE	0	311	166	0.0000	100.00
Total VOCs	0.168	311	86	0.0171	77.30

TABLE 4: INFLUENT AND EFFLUENT EMISSION RATES CALCULATIONS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

INFLUENT				
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**
9/16/03 (Week 17)				
Freon 113	0.029	311	187	0.0064
CCl_4	0.025	311	154	0.0045
TCE	0.160	311	131.5	0.0249
PCE	0.012	311	166	0.0024
Total VOCs	0.488	311	86	0.0496
9/29/03 (Week 19)				
Freon 113	0.030	324	187	0.0069
CCl_4	0.028	324	154	0.0053
TCE	0.230	324	131.5	0.0372
PCE	0.015	324	166	0.0031
Total VOCs	0.668	324	86	0.0707
10/13/03 (Week 21)				
Freon 113	0.027	324	187	0.0062
CCl_4	0.027	324	154	0.0051
TCE	0.220	324	131.5	0.0356
PCE	0.014	324	166	0.0029
Total VOCs	0.851	324	86	0.0901
10/27/03 (Week 23)				
Freon 113	0.017	324	187	0.0039
CCl_4	0.018	324	154	0.0034
TCE	0.150	324	131.5	0.0243
PCE	0.010	324	166	0.0020
Total VOCs	0.486	324	86	0.0515
11/11/03 (Week 25)				
Freon 113	0.025	324	187	0.0058
CCl_4	0.030	324	154	0.0057
TCE	0.220	324	131.5	0.0356
PCE	0.015	324	166	0.0031
Total VOCs	0.539	324	86	0.0571

EFFLUENT					
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**	**Destruction Efficiency (%)**
9/16/03 (Week 17)					
Freon 113	0.021	311	187	0.0046	27.59
CCl_4	0	311	154	0.0000	100.00
TCE	0	311	131.5	0.0000	100.00
PCE	0	311	166	0.0000	100.00
Total VOCs	0.134	311	86	0.0136	72.54
9/29/03 (Week 19)					
Freon 113	0.034	311	187	0.0075	13.33
CCl_4	0	311	154	0.0000	100.00
TCE	0	311	131.5	0.0000	100.00
PCE	0	311	166	0.0000	100.00
Total VOCs	0.198	311	86	0.0201	70.36
10/13/03 (Week 21)					
Freon 113	0.08	324	187	0.0184	196.30
CCl_4	0	324	154	0.0000	100.00
TCE	0	324	131.5	0.0000	100.00
PCE	0	324	166	0.0000	100.00
Total VOCs	0.31	324	86	0.0328	63.57
10/27/03 (Week 23)					
Freon 113	0.044	324	187	0.0101	158.82
CCl_4	0	324	154	0.0000	100.00
TCE	0	324	131.5	0.0000	100.00
PCE	0	324	166	0.0000	100.00
Total VOCs	0.223	324	86	0.0236	54.12
11/11/03 (Week 25)					
Freon 113	0.11	324	187	0.0253	340.00
CCl_4	0.001	324	154	0.0002	96.67
TCE	0	324	131.5	0.0000	100.00
PCE	0	324	166	0.0000	100.00
Total VOCs	0.544	324	86	0.0576	0.93

TABLE 4: INFLUENT AND EFFLUENT EMISSION RATES CALCULATIONS
SOIL VAPOR EXTRACTION PILOT TEST AT THE EXTRACTION WELL VE-04
OPERABLE UNIT 2, NASA JET PROPULSION LABORATORY, PASADENA, CALIFORNIA

INFLUENT				
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**
11/24/03 (Week 27)				
Freon 113	0.025	325	187	0.0058
CCl_4	0.034	325	154	0.0065
TCE	0.220	325	131.5	0.0357
PCE	0.015	325	166	0.0031
Total VOCs	0.622	325	86	0.0661
12/4/03 (Week 28)				
Freon 113	0.021	325	187	0.0048
CCl_4	0.028	325	154	0.0053
TCE	0.190	325	131.5	0.0309
PCE	0.014	325	166	0.0029
Total VOCs	0.545	325	86	0.0579

EFFLUENT					
Compound	**Laboratory Results (ppmv)**	**Flow Rate (scfm)**	**Molecular Weight**	**Removal Rate (lbs/day)**	**Destruction Efficiency (%)**
11/24/03 (Week 27)					
Freon 113	0.033	325	187	0.0076	32.00
CCl_4	0.003	325	154	0.0006	91.18
TCE	0	325	131.5	0.0000	100.00
PCE	0	325	166	0.0000	100.00
Total VOCs	0.611	325	86	0.0649	1.77
12/4/03 (Week 28)					
Freon 113	0.035	325	187	0.0081	66.67
CCl_4	0.014	325	154	0.0027	50.00
TCE	0	325	131.5	0.0000	100.00
PCE	0	325	166	0.0000	100.00
Total VOCs	0.427	325	86	0.0453	21.65

Explanation:

VOCs: Volatile Organic Compounds

Freon 113: 1,1,2-Trichlorotrifluoroethane (FR113)

CCl_4 = Carbon Tetrachloride

TCE = Trichloroethene

PCE = Tetrachloroethene

ppmv = parts per million by volume