

Table V-2
Water Chemistry of the HJ Horizon

Well	Sample Date	Gross Alpha (pCi/L)	Avg. Gross Alpha (pCi/L)	Ra-226 + 228 (pCi/L)	Avg. Ra-226 + 228 (pCi/L)	U (mg/L)	Avg. U (mg/L)	TDS mg/L	Avg. TDS mg/L	As mg/L	Avg. As mg/L	Se mg/L	Avg. Se mg/L
LC16M	9/12/06	299	263	170.3	111.2	0.164	0.138	330	326	0.002	0.001	0.000	0.000
	11/10/06	274		80.4		0.133		304		0.000		0.000	
	3/1/07	290		68.9		0.134		333		0.000		0.000	
	5/4/07	188		125.2		0.122		335		0.000		0.000	
LC19M	9/20/06	985	1,135	370.8	416.3	0.336	0.498	319	298	0.014	0.008	0.000	0.000
	11/3/06	863		551.1		0.051		328		0.002		0.000	
	3/5/07	1,220		319.4		0.844		278		0.008		0.000	
	5/4/07	1,470		424.0		0.762		266		0.007		0.000	
LC22M	9/21/06	810	517	264.2	207.6	0.342	0.188	366	332	0.005	0.002	0.000	0.000
	11/16/06	597		248.9		0.185		328		0.000		0.000	
	3/1/07	87		5.3		0.129		319		0.002		0.000	
	5/3/07	576		311.8		0.097		316		0.002		0.000	
LC26M	9/21/06	306	172	92.3	47.3	0.107	0.065	554	513	0.003	0.001	0.000	0.000
	11/17/06	300		81.0		0.072		528		0.000		0.000	
	3/1/07	31		3.6		0.045		519		0.000		0.000	
	5/3/07	50		12.4		0.037		449		0.000		0.000	
MB-3	8/27/09	255.0	227	5.0	111.8	0.179	0.183	231	236	0.001	0.000	0.016	0.015
	12/14/09	215.0		3.0		0.186		220		0.000		0.017	
	3/30/10	204.0		204.0		0.174		246		0.000		0.012	
	7/6/10	235.0		235.0		0.194		247		0.000		0.015	
MB-6	8/27/09	10.2	21	7.2	17.3	0.000	0.005	256	256	0.003	0.001	0.000	0.000
	12/14/09	21.0		9.7		0.007		242		0.000		0.000	
	3/31/10	27.9		27.9		0.006		265		0.000		0.000	
	7/7/10	24.3		24.3		0.006		259		0.000		0.000	
MB-9	8/27/09	204.0	62	5.6	11.1	0.152	0.041	333	265	0.000	0.003	0.000	0.000
	12/15/09	12.5		7.3		0.004		240		0.006		0.000	
	3/30/10	19.2		19.2		0.004		231		0.004		0.000	
	7/6/10	12.4		12.4		0.004		254		0.003		0.000	
MP-101	4/23/09	671	568	256.4	268.4	0.092	0.074	391	405	0.005	0.005	0.000	0.000
	5/7/09	552		245.7		0.074		410		0.005		0.000	
	5/21/09	482		277.2		0.069		425		0.005		0.000	
	6/4/09	565		294.3		0.062		394		0.005		0.000	
MP-102	4/23/09	789	619	296.8	294.7	0.074	0.072	314	332	0.001	0.001	0.001	0.001
	5/7/09	521		322.5		0.070		325		0.001		0.001	
	5/21/09	574		307.3		0.075		340		0.001		0.001	
	6/4/09	591		252.1		0.070		347		0.000		0.001	
MP-103	4/23/09	237	394	93.1	136.2	0.064	0.157	375	367	0.000	0.004	0.002	0.003
	5/7/09	240		102.7		0.063		376		0.000		0.002	
	5/21/09	803		229.2		0.438		312		0.017		0.005	
	6/4/09	296		119.7		0.064		404		0.000		0.003	
	4/22/09	860		387.5		0.176		398		0.006		0.000	

Table V-2
Water Chemistry of the HJ Horizon

Well	Sample Date	Gross Alpha (pCi/L)	Avg. Gross Alpha (pCi/L)	Ra-226 + 228 (pCi/L)	Avg. Ra-226 + 228 (pCi/L)	U (mg/L)	Avg. U (mg/L)	TDS mg/L	Avg. TDS mg/L	As mg/L	Avg. As mg/L	Se mg/L	Avg. Se mg/L
MP-104	5/6/09	918	844	452.9	392.4	0.201	0.190	419	414	0.009	0.007	0.000	0.000
	5/20/09	763		399.3		0.184		425		0.006		0.000	
	6/3/09	836		330.0		0.200		414		0.006		0.000	
MP-105	4/23/09	823	698	229.6	270.3	0.444	0.349	309	336	0.019	0.014	0.009	0.006
	5/7/09	914		245.0		0.453		306		0.019		0.007	
	5/21/09	305		99.6		0.069		385		0.000		0.002	
	6/4/09	751		506.9		0.430		343		0.016		0.005	
MP-106	4/22/09	36	27	11.7	11.8	0.007	0.007	304	300	0.001	0.001	0.000	0.000
	5/6/09	26		11.5		0.008		305		0.001		0.000	
	5/20/09	24		11.6		0.007		317		0.000		0.000	
	6/3/09	25		12.5		0.007		275		0.001		0.000	
MP-107	4/22/09	160	291	6.5	7.9	0.121	0.108	361	369	0.004	0.006	0.015	0.013
	5/6/09	165		3.2		0.105		372		0.010		0.012	
	5/20/09	678		17.9		0.108		388		0.005		0.013	
	6/3/09	162		3.8		0.099		355		0.004		0.013	
MP-108	4/22/09	265	298	67.5	73.9	0.155	0.154	347	350	0.008	0.007	0.005	0.005
	5/6/09	355		81.0		0.159		352		0.007		0.005	
	5/20/09	248		67.5		0.151		356		0.007		0.005	
	6/3/09	325		79.6		0.151		343		0.007		0.006	
MP-109	4/21/09	2,040	1,723	737.6	705.8	0.241	0.256	313	283	0.002	0.002	0.000	0.000
	5/5/09	1,700		699.8		0.254		294		0.002		0.000	
	5/19/09	1,690		680.9		0.254		290		0.001		0.000	
	6/2/09	1,460		705.0		0.275		236		0.001		0.000	
MP-110	4/21/09	300	970	7.8	322.6	0.320	0.296	328	328	0.009	0.007	0.000	0.000
	5/7/09	1,190		416.0		0.297		314		0.007		0.000	
	5/21/09	1,380		415.2		0.295		328		0.005		0.000	
	6/4/09	1,010		451.2		0.273		341		0.005		0.000	
MP-111	4/21/09	554	709	156.9	132.9	0.263	0.344	259	322	0.001	0.005	0.000	0.000
	5/5/09	635		123.0		0.301		340		0.008		0.000	
	5/19/09	885		129.4		0.408		348		0.006		0.000	
	6/2/09	760		122.2		0.405		340		0.005		0.000	
MP-112	4/22/09	554	709	156.9	132.9	0.263	0.344	279	259	0.022	0.026	0.000	0.000
	5/6/09	635		123.0		0.301		261		0.026		0.000	
	5/20/09	885		129.4		0.408		257		0.027		0.000	
	6/3/09	760		122.2		0.405		240		0.027		0.000	
MP-113	4/22/09	1,270	1,066	519.6	557.6	0.184	0.152	375	371	0.006	0.005	0.000	0.000
	5/6/09	682		601.8		0.144		366		0.004		0.000	
	5/20/09	1,260		535.0		0.138		370		0.004		0.000	
	6/3/09	1,050		573.8		0.142		371		0.004		0.000	
M-101	4/20/09	428	394	137.1	166.1	0.039	0.052	405	452	0.004	0.004	0.000	0.000
	5/4/09	434		177.7		0.065		471		0.004		0.000	

Table V-2
Water Chemistry of the HJ Horizon

Well	Sample Date	Gross Alpha (pCi/L)	Avg. Gross Alpha (pCi/L)	Ra-226 + 228 (pCi/L)	Avg. Ra-226 + 228 (pCi/L)	U (mg/L)	Avg. U (mg/L)	TDS mg/L	Avg. TDS mg/L	As mg/L	Avg. As mg/L	Se mg/L	Avg. Se mg/L
M-102	5/18/09	325	63	161.4	5.3	0.048	0.039	439	536	0.004	0.004	0.000	0.000
	6/1/09	388		188.1		0.057		491		0.004		0.000	
	4/20/09	66		4.6		0.037		520		0.003		0.000	
	5/4/09	72		5.1		0.041		553		0.003		0.000	
	5/18/09	55		6.8		0.039		522		0.005		0.000	
6/1/09	60	4.7	0.041	548	0.003	0.000							
M-103	4/20/09	461	480	3.6	4.3	0.559	0.567	609	618	0.002	0.002	0.029	0.031
	5/4/09	518		3.5		0.607		629		0.002		0.032	
	5/18/09	502		5.7		0.554		608		0.001		0.032	
	6/1/09	438		4.2		0.548		627		0.001		0.032	
M-104	4/20/09	587	587	5.3	5.0	0.571	0.594	578	582	0.001	0.001	0.033	0.037
	5/4/09	633		4.6		0.612		602		0.001		0.037	
	5/18/09	524		4.1		0.585		544		0.001		0.037	
	6/1/09	603		6.1		0.609		603		0.000		0.039	
M-105	4/20/09	537	525	235.0	238.4	0.081	0.084	507	500	0.000	0.000	0.000	0.000
	5/4/09	523		254.0		0.085		527		0.000		0.000	
	5/18/09	377		189.8		0.083		472		0.000		0.001	
	6/1/09	661		274.6		0.086		495		0.000		0.000	
M-106	4/20/09	71	87	15.3	17.3	0.050	0.053	709	706	0.000	0.000	0.000	0.000
	5/4/09	94		14.8		0.059		726		0.001		0.000	
	5/18/09	76		18.3		0.055		693		0.000		0.000	
	6/1/09	107		20.7		0.050		695		0.000		0.000	
M-107	4/20/09	69	77	6.7	8.8	0.039	0.049	424	454	0.004	0.004	0.000	0.000
	5/4/09	69		8.7		0.052		481		0.004		0.000	
	5/18/09	87		8.9		0.050		437		0.004		0.000	
	6/1/09	83		11.0		0.053		475		0.004		0.000	
M-108	4/20/09	50	44	14.8	14.8	0.016	0.015	423	420	0.000	0.000	0.000	0.000
	5/4/09	41		14.6		0.016		439		0.000		0.000	
	5/18/09	41		13.5		0.015		394		0.000		0.000	
	6/1/09	45		16.4		0.015		425		0.000		0.000	
M-109	4/20/09	47	50	15.6	15.3	0.018	0.020	322	321	0.002	0.002	0.000	0.000
	5/4/09	57		14.9		0.020		335		0.002		0.000	
	5/18/09	54		13.7		0.020		292		0.002		0.000	
	6/1/09	43		17.0		0.021		334		0.001		0.000	
M-110	4/20/09	220	205	45.8	43.5	0.168	0.153	356	353	0.000	0.000	0.000	0.000
	5/4/09	228		45.0		0.166		368		0.001		0.000	
	5/18/09	184		37.7		0.142		317		0.000		0.000	
	6/1/09	187		45.5		0.136		371		0.000		0.000	
M-111	4/20/09	48	45	9.8	9.7	0.027	0.026	371	362	0.000	0.000	0.000	0.000
	5/4/09	50		9.5		0.027		377		0.001		0.000	
	5/18/09	45		9.3		0.024		320		0.000		0.000	

Table V-2
Water Chemistry of the HJ Horizon

Well	Sample Date	Gross Alpha (pCi/L)	Avg. Gross Alpha (pCi/L)	Ra-226 + 228 (pCi/L)	Avg. Ra-226 + 228 (pCi/L)	U (mg/L)	Avg. U (mg/L)	TDS mg/L	Avg. TDS mg/L	As mg/L	Avg. As mg/L	Se mg/L	Avg. Se mg/L
M-112	6/1/09	35	40	10.2	10.1	0.025	0.024	378	357	0.000	0.000	0.000	0.000
	4/20/09	41		10.1		0.024		356		0.000		0.000	
	5/4/09	50		10.1		0.025		376		0.000		0.000	
	5/18/09	32		9.9		0.023		322		0.000		0.000	
	6/1/09	35		10.2		0.023		373		0.000		0.000	
M-113	4/20/09	55	52	18.6	14.2	0.021	0.018	306	311	0.000	0.000	0.000	0.000
	5/4/09	76		14.8		0.018		321		0.000		0.000	
	5/18/09	42		9.6		0.017		300		0.000		0.000	
	6/1/09	36		13.9		0.015		315		0.000		0.000	
M-114	4/20/09	594	475	191.5	201.4	0.053	0.054	334	338	0.001	0.001	0.000	0.000
	5/4/09	370		203.2		0.058		354		0.001		0.000	
	5/18/09	466		187.6		0.055		325		0.000		0.000	
	6/1/09	471		223.3		0.052		340		0.000		0.000	
M-115	4/20/09	140	136	4.9	4.5	0.109	0.114	326	316	0.006	0.005	0.001	0.001
	5/4/09	145		4.4		0.116		319		0.006		0.000	
	5/18/09	121		3.2		0.111		298		0.005		0.001	
	6/1/09	138		5.3		0.118		322		0.004		0.000	
M-116	4/20/09	190	198	1.6	2.2	0.169	0.183	293	305	0.006	0.004	0.008	0.010
	5/4/09	202		1.5		0.197		310		0.005		0.010	
	5/18/09	226		2.6		0.180		312		0.003		0.010	
	6/1/09	174		2.9		0.187		304		0.003		0.010	
M-117	4/20/09	166	191	2.4	2.3	0.178	0.181	300	308	0.003	0.003	0.011	0.011
	5/4/09	198		2.2		0.191		316		0.003		0.011	
	5/18/09	207		1.9		0.175		307		0.002		0.011	
	6/1/09	192		2.8		0.178		309		0.002		0.012	
M-118	4/20/09	272	269	30.2	28.4	0.181	0.190	340	348	0.002	0.002	0.003	0.002
	5/4/09	245		29.9		0.201		347		0.002		0.002	
	5/18/09	301		20.4		0.185		350		0.001		0.002	
	6/1/09	257		33.0		0.192		353		0.001		0.002	
M-119	4/21/09	95	102	2.5	2.9	0.075	0.080	329	331	0.004	0.004	0.001	0.001
	5/5/09	106		3.5		0.086		325		0.005		0.001	
	5/19/09	122		2.8		0.077		331		0.004		0.001	
	6/2/09	84		2.6		0.084		338		0.004		0.001	
M-120	4/20/09	72	54	1.5	1.5	0.049	0.047	294	290	0.000	0.000	0.003	0.003
	5/4/09	47		1.1		0.045		304		0.000		0.003	
	5/18/09	45		1.6		0.044		295		0.000		0.003	
	6/1/09	53		1.8		0.048		266		0.000		0.003	
M-121	4/20/09	55	60	2.1	2.3	0.041	0.041	326	333	0.004	0.004	0.000	0.000
	5/4/09	59		2.2		0.043		335		0.004		0.000	
	5/18/09	72		2.0		0.039		325		0.003		0.000	
	6/1/09	54		3.0		0.042		346		0.003		0.000	

Table V-2
Water Chemistry of the HJ Horizon

Well	Sample Date	Gross Alpha (pCi/L)	Avg. Gross Alpha (pCi/L)	Ra-226 + 228 (pCi/L)	Avg. Ra-226 + 228 (pCi/L)	U (mg/L)	Avg. U (mg/L)	TDS mg/L	Avg. TDS mg/L	As mg/L	Avg. As mg/L	Se mg/L	Avg. Se mg/L
M-122	4/21/09	68	74	9.0	10.1	0.045	0.048	336	338	0.002	0.002	0.000	0.000
	5/5/09	80		11.1		0.048		335		0.002		0.000	
	5/19/09	79		9.5		0.047		334		0.002		0.000	
	6/2/09	70		10.8		0.050		345		0.002		0.000	
M-123	4/21/09	29	33	3.7	5.0	0.012	0.014	313	323	0.005	0.004	0.000	0.000
	5/5/09	32		7.3		0.014		324		0.004		0.000	
	5/19/09	36		4.7		0.014		326		0.004		0.000	
	6/2/09	33		4.1		0.015		330		0.003		0.000	
M-124	4/21/09	63	64	2.2	3.5	0.050	0.053	300	309	0.003	0.002	0.000	0.000
	5/5/09	61		5.7		0.056		314		0.002		0.000	
	5/19/09	62		2.7		0.052		311		0.002		0.000	
	6/2/09	71		3.2		0.054		312		0.002		0.000	
M-125	4/21/09	255	333	3.6	4.5	0.274	0.291	362	366	0.001	0.001	0.011	0.012
	5/5/09	368		5.7		0.296		379		0.001		0.013	
	5/19/09	400		4.6		0.297		362		0.000		0.012	
	6/2/09	308		4.1		0.297		360		0.000		0.013	
M-126	4/21/09	358	414	3.1	3.0	0.307	0.337	324	331	0.006	0.006	0.005	0.005
	5/5/09	417		2.6		0.344		344		0.006		0.005	
	5/19/09	454		2.8		0.343		329		0.006		0.004	
	6/2/09	426		3.3		0.354		328		0.007		0.006	
M-127	4/21/09	116	151	2.3	3.0	0.124	0.135	332	343	0.003	0.003	0.005	0.006
	5/5/09	136		3.2		0.140		356		0.003		0.006	
	5/19/09	167		3.2		0.135		345		0.002		0.005	
	6/2/09	186		3.2		0.139		340		0.002		0.006	
M-128	4/21/09	82	96	2.7	2.8	0.077	0.083	349	364	0.007	0.006	0.000	0.000
	5/5/09	94		2.8		0.084		377		0.006		0.000	
	5/19/09	114		2.8		0.084		363		0.005		0.000	
	6/2/09	93		2.8		0.085		368		0.005		0.000	
Average			346		105.4		0.149		366		0.003		0.003

Exceeds EPA Gross Alpha MCL of 15.0 pCi/L.

Exceeds EPA Radium 226 + 228 MCL of 5.0 pCi/L

Exceeds EPA Uranium MCL of 0.03 mg/L

Exceeds EPA Arsenic MCL of 0.01 mg/l

Value is an outlier and was not used in calculations

Parameter	Low	High	Avg.	EPA MCL
Gross Alpha (pCi/L)	20.9	1,723	346	15.0
Ra226 + 228 (pCi/L)	1.5	706	105	5.0
U (mg/L)	0.005	0.594	0.149	0.03
TDS mg/L	236	706	366	---
As mg/L	0.000	0.026	0.003	0.010
Se mg/L	0.000	0.037	0.003	0.050