SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons						
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																		
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
GROUNDWATER BORE LOCATIONS			SOIL ANALYTICAL RESULTS (mg/kg, unless otherwise noted)																																		
ATA-4	0.25	17664	C,A	-	-	20	-	2.6	36	-	-	590	13000	-	0.35	23	-	3500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	0.5	17665	ND	-	-	<5	-	0.1	33	-	-	84	3100	-	0.08	8	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	1.0	17666	-	-	-	<5	-	<0.1	19	-	-	29	33	-	0.08	6	-	78	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-4	1.5	17667	-	-	-	<5	-	<0.1	31	-	-	31	170	-	0.04	7	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	2.0	17668	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	3.0	17670	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	100	510	120	20	100	411	116	-	-	-	-	-	-
ATA-4	4.0	17672	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	4.8	17673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-4	8.0	17674	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-6	0.0	17690	-	-	<2	<5	1	0.1	14	-	2	14	16	-	<0.02	19	7	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-6	0.5	17691	ND	5.3	5	<5	130	3.5	370	11	9	130	210	-	0.11	430	18	140	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-6	1.0	17692	-	-	<2	<5	5	<0.1	26	-	4	19	33	-	<0.02	36	<2	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-6	1.5	17693	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-6	2.0	17694	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-7	0.0	17699	-	-	3	8	26	3.3	160	<1	12	330	500	-	0.13	230	18	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-7	0.5	17700	ND	<0.5	20	13	150	1.5	25	-	8	570	1400	-	0.16	80	52	650	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-7	1.0	17701	-	-	-	<5	-	<0.1	20	-	-	6	22	-	<0.02	7	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-7	1.5	17702	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-8	0.0	17998	-	-	-	11	-	1	43	-	-	510	930	-	1.6	20	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-8	0.5	17999	-	-	-	5	-	<0.1	7	-	-	44	36	-	0.06	10	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-8	1.0	18000	-	-	-	<5	-	<0.1	38	-	-	3	20	-	0.03	8	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-8	3.0	18004	-	-	-	<5	-	<0.1	13	-	-	8	13	-	<0.02	1	-	5	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-9	0.0	18008	-	-	-	15	-	0.1	54	<1	-	120	310	-	0.63	8	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-9	0.5	18009	-	-	-	<5	-	0.1	3	-	-	<1	4	-	<0.02	<1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-9	1.0	18010	-	-	-	5	-	<0.1	22	-	-	5	25	-	0.03	10	-	2	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-9	3.0	18014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-10	0.25	18015	-	-	-	<5	-	0.2	5	-	-	15	18	-	<0.02	3	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-10	0.5	18016	-	-	-	25	-	0.2	8	-	-	1	<1	-	<0.02	<1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-10	3.0	18021	-	-	-	<5	-	<0.1	13	-	-	10	7	-	<0.02	3	-	3	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-11	0.5	18023	-	-	-	5	-	0.1	14	<1	-	100	110	-	0.43	11	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-11	1.5	18025	-	-	-	<5	-	<0.1	15	<1	-	4	15	-	0.04	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-11	3.0	18028	-	-	-	<5	-	<0.1	9	<1	-	6	5	-	0.04	2	-	2	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-12	1.0	18035	-	-	-	8	-	<0.1	14	<1	-	40	77	-	0.17	22	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	2.0	18037	-	-	-	5	-	<0.1	32	<1	-	36	81	-	0.14	12	-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	3.0	18039	-	-	-	<5	-	<0.1	17	<1	-	35	56	-	0.33	8	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	4.0	18041	-	-	-	4	-	<0.1	31	<1	-	19	110	-	2.9	9	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	5.0	18043	-	-	-	<5	-	<0.1	24	<1	-	5	23	-	0.08	10	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	6.0	18045	-	-	-	<5	-	<0.1	23	<1	-	26	130	-	0.13	7	-	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	7.0	18047	-	-	-	14	-	1	32	<1	-	2400	920	-	0.22	70	-	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	8.0	18049	-	-	-	<5	-	<0.1	29	<1	-	150	32	-	0.03	8	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	8.5	18050	-	-	-	<5	-	<0.1	17	-	-	3	19	-	<0.02	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-13	0.5	18052	-	-	-	7	-	<0.1	13	-	-	29	15	-	0.04	3	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-13	1.0	18053	-	-	-	5	-	<0.1	19	-	-	5	20	-	0.03	7	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-13	2.0	18055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-13	3.0	18057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-14	0.5	18292	-	-	-	<5	-	0.1	96	-	-	7	20	-	<0.02	4	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-14	1.0	18293	-	-	-	<5	-	<0.1	46	-	-	3	25	-	<0.02	5	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATA-14	1.5	18294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	180	720	330	ND	-	-	-	-	-	-	-	-	-	-
ATA-14	2.5	18296	-	-	-	<5	-	0.1	5	-	-	3	4	-	<0.02	1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	240	-	-	-	-	-	-	-	-	-	-
ATA-14	3.5	18298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons					
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATA-15	10.0	19899	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATA-15	11.0	19900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATA-15	12.0	19901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATA-16	10.0	19894	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATA-16	11.0	19895	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
SOIL BORE LOCATIONS					SOIL ANALYTICAL RESULTS (mg/kg, unless otherwise noted)																																	
ATAS-1	0.0	18669	ND	-	-	12	-	0.6	180	-	-	320	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	1000	1800	220	34	1000	614	1460	34	68	3.1	<0.2	<0.2	107
ATAS-1	1.0	18671	-	-	-	<5	-	<0.1	19	-	-	3	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-1	3.0	18675	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-1	3.5	18676	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-2	0.0	18315	C,Cr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-2	0.5	18316	**A**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-2	1.0	18317	-	-	-	10	-	0.9	130	-	-	620	830	-	1.4	14	-	310	<0.1	<0.1	<0.1	<0.3	<0.2	83	1400	130	92	83	663	878	-	-	-	-	-	-
ATAS-2	2.0	18319	-	-	-	17	-	0.4	49	-	-	650	1100	-	2.4	12	-	370	<0.1	<0.1	<0.1	<0.3	<0.2	8.5	44	<0.4	ND	8.7	18.4	<0.8	-	-	-	-	-	-
ATAS-2	2.5	18320	-	-	-	<5	-	0.1	75	-	-	33	41	-	0.12	6	-	20	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-2	3.0	18321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-3	0.0	18346	ND	-	-	8	-	0.4	48	-	-	230	340	-	1.0	57	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-3	0.5	18347	C, Cr	-	-	<5	-	1.1	170	-	-	600	1200	-	4.1	22	-	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-3	1.0	18348	-	-	-	<5	-	<0.1	4	-	-	6	9	-	0.06	1	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-3	2.0	18350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-4	0.0	18308	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-4	0.5	18309	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-4	1.5	18311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-4	6.5	18563	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-4	7.0	18564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-4	7.5	18565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-4	2.5	18313	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-5	0.0	18656	C	-	-	<5	-	0.2	8	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-5	1.0	18658	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-5	1.5	18659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	450	<0.4	<0.4	ND	450	<0.8	<0.8	0.2	0.2	<0.1	<0.2	<0.2	2.7
ATAS-5	3.0	18662	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-5	3.5	18663	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-5	5.0	18665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-5	6.5	18667	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-5	7.0	18668	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-6	0.0	18322	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-6	0.5	18323	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-6	1.0	18324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	4.8	28	33	310	210	40	ND	343	131	117	-	-	-	-	-	-
ATAS-6	1.5	18325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-6	2.0	18326	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-6	3.0	18328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-7	0.0	18330	ND	-	-	<5	-	<0.1	5	-	-	9	24	-	<0.02	4	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-7	0.5	18331	ND	-	-	5	-	0.1	3	-	-	9	35	-	<0.02	2	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-7	1.0	18332	-	-	-	<5	-	<0.1	25	-	-	4	32	-	<0.02	6	-	12	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-7	2.0	18334	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-7	3.0	18336	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
ATAS-8	0.0	18338	ND	-	-	<5	-	0.1	6	-	-	12	25	-	<0.02	6	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-8	0.5	18339	ND	-	-	<5	-	0.1	4	-	-	<1	1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-8	2.5	18343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-9	0.5	18543	ND	-	-	25	-	0.2	29	-	-	350	730	-	4.7	17	-	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-9	1.5	18545	ND	-	-	5	-	<0.1	22	-	-	28	180	-	1.0	8	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons						
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																		
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATAS-9	2.0	18546	-	-	-	8	-	<0.1	16	-	-	5	20	-	0.06	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-9	2.5	18547	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-10	0.0	18556	-	-	-	14	-	0.2	17	-	-	130	240	-	0.51	12	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-10	0.5	18557	C	-	-	19	-	0.9	37	-	-	300	550	-	1.5	14	-	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-10	1.0	18558	-	-	-	6	-	<0.1	9	-	-	4	18	-	0.03	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	0.0	18549	-	-	-	14	-	1.8	42	-	-	270	300	-	1.3	41	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	0.5	18550	ND	-	-	<5	-	<0.1	5	-	-	58	63	-	0.22	3	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	1.0	18551	-	-	-	<5	-	<0.1	15	-	-	7	23	-	0.04	8	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-12	0.0	18353	ND	-	-	<5	-	<0.1	10	-	-	22	10	-	0.02	7	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-12	0.5	18354	ND	-	-	<5	-	<0.1	4	-	-	12	5	-	0.04	3	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-12	1.0	18355	-	-	-	8	-	<0.1	30	-	-	5	28	-	0.05	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-12	2.5	18358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-13	0.0	18360	-	-	-	24	-	0.6	28	-	-	3000	630	-	0.14	14	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-13	0.5	18361	ND	-	-	40	-	0.1	23	-	-	4900	680	-	0.16	23	-	1100	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-13	1.0	18362	ND	-	-	<5	-	<0.1	2	-	-	160	34	-	0.04	1	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-13	1.5	18363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-13	2.0	18364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	280	1100	85	25	280	613	532	-	-	-	-	-	-	-
ATAS-13	3.0	18366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-14	0.5	18268	ND	-	-	30	-	0.1	24	-	-	3900	200	-	0.1	24	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-14	1.0	18269	-	-	-	<5	-	<0.1	20	-	-	5	26	-	0.05	4	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-14	1.5	18270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-14	2.0	18271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	93	360	16	1.8	93	86.5	292	-	-	-	-	-	-	-
ATAS-14	3.0	18273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	120	370	58	11	120	146	282	-	-	-	-	-	-	-
ATAS-15	0.5	18275	ND	-	-	40	-	<0.1	21	-	-	230	930	-	0.47	10	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-15	1.5	18277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-15	2.0	18278	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-15	3.0	18280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-16	0.0	18374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-16	0.5	18369	ND	-	-	9	-	<0.1	16	-	-	380	100	-	0.08	5	-	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-16	1.0	18370	-	-	-	<5	-	<0.1	18	-	-	5	21	-	0.03	4	-	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-17	0.0	18284	ND	-	-	15	-	<0.1	9	-	-	13	20	-	0.04	2	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-17	0.5	18285	ND	-	-	27	-	0.9	17	-	-	330	580	-	1.6	14	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-17	1.0	18286	-	-	-	33	-	<0.1	9	-	-	30	55	-	0.11	3	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-17	2.5	18289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-18	0.0	18244	ND	-	-	<5	-	<0.1	11	-	-	22	34	-	0.06	4	-	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-18	0.5	18245	C	-	-	87	-	0.8	36	-	-	5100	1900	-	0.84	22	-	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-18	1.0	18246	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-18	1.0	18246	-	-	-	<5	-	<0.1	14	-	-	6	19	-	0.04	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-18	2.5	18249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-19	0.0	18251	-	-	-	12	-	0.3	94	-	-	240	610	-	0.34	67	-	3700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-19	0.5	18252	ND	-	-	18	-	0.4	15	-	-	700	1900	-	0.18	13	-	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-19	1.0	18253	-	-	-	10	-	<0.1	16	-	-	6	25	-	0.03	5	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-19	2.0	18255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-19	2.5	18256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-19	3.0	18257	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-	-
ATAS-20	0.5	18259	ND	-	-	36	-	0.5	29	-	-	1800	340	-	1.4	31	-	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-20	1.0	18260	-	-	-	10	-	<0.1	35	-	-	5	38	-	0.02	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-20	3.0	18264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-	-
ATAS-21	0.0	18502	C	-	-	18	-	1.6	130	5	-	240	170	-	0.31	660	-	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-21	0.5	18503	C	-	-	20	-	0.6	11	<1	-	430	530	-	0.5	36	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-21	1.0	18504	-	<1	-	6	-	<0.1	10	-	-	37	100	-	0.17	6	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals													BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons					
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATAS-22	0.0	18509	ND	-	-	12	-	2	67	4	-	330	160	-	0.1	220	-	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-22	0.5	18510	-	-	-	-	-	-	-	2	-	-	120	-	0.12	81	-	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-22	1.0	18511	ND	<1	-	<5	-	<0.1	5	-	-	18	17	-	0.04	5	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-22	1.5	18505	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-23	0.0	18517	-	-	-	10	-	0.6	200	3	-	140	190	-	0.12	16	-	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-23	0.5	18518	C, Cr	<1	-	9	-	0.4	130	14	-	170	160	-	0.09	26	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-23	1.0	18519	-	-	-	10	-	<0.1	310	-	-	14	26	-	0.05	15	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-24	0.0	18600	-	-	20	10	74	4.9	450	-	9	1300	1000	-	0.51	33	88	490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-24	0.5	18601	ND	<1	<2	<5	2	<0.1	170	13	1	6	8	-	0.02	3	3	6	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-24	1.5	18603	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-24	3.0	18606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-25	0.0	18586	-	-	93	16	120	3.1	190	-	8	2600	2500	-	3.7	24	460	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-25	0.5	18587	C	-	22	8	41	1.5	340	-	6	390	380	-	0.71	31	49	680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-25	1.0	18588	-	<1	<2	<5	7	<0.1	11	-	3	5	17	-	0.05	7	4	9	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-25	2.0	18590	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-25	3.0	18592	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-26	0.0	18579	C, A	-	13	9	37	0.5	17	<1	7	2000	330	-	0.32	14	140	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-26	0.5	18580	-	<1	<2	<5	52	<0.1	14	-	4	18	12	-	0.05	4	7	5	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-26	1.5	18582	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-26	3.0	18585	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-27	0.5	18525	ND	-	-	<5	-	<0.1	21	3	-	59	120	-	0.47	8	-	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-27	1.5	18527	-	-	-	23	-	0.4	19	2	-	9400	950	-	0.03	61	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-27	2.5	18529	ND	-	-	18	-	9.6	21	<1	-	16000	290	-	0.08	33	-	6200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-27	3.5	18531	-	-	-	<5	-	<0.1	15	3	-	230	19	-	0.09	35	-	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	0.0	18534	-	-	-	11	-	3.4	300	3	-	150	160	-	0.17	81	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	1.0	18536	-	<1	-	9	-	<0.1	41	<1	-	66	20	-	0.03	25	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	1.5	18537	-	-	-	9	-	0.6	18	2	-	1400	130	-	0.03	23	-	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	2.0	18538	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-29	0.0	18593	ND	-	<2	7	25	0.1	100	-	9	45	33	-	0.04	23	7	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-29	0.5	18594	C	-	20	11	96	4.3	390	-	15	490	570	-	1.2	41	110	1400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-29	1.0	18595	-	-	4	11	40	0.9	125	-	21	160	180	-	0.24	37	18	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-29	2.5	18598	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-30	0.0	18237	ND	-	<2	<5	4	2.4	73	-	8	81	91	-	0.04	6	14	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-30	0.5	18238	ND	-	<2	<5	17	0.1	20	-	4	100	44	-	0.06	10	23	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-30	1.0	18239	-	-	10	<5	18	1.7	160	-	360	360	360	-	0.64	27	36	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	0.0	18229	-	-	<2	<5	4	0.5	8	-	1	3	17	-	<0.02	1	12	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	0.5	18230	-	30	<2	<5	2	3	41	-	<1	54	23	-	0.05	6	14	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	1.0	18231	-	-	<2	<5	3	<0.1	11	-	2	81	12	-	<0.02	2	14	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	1.5	18232	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	2.5	18234	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.0	18266	ND	<1	<2	<5	5	<0.1	3	-	<1	1	17	-	0.04	1	8	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.5	18223	ND	-	<2	<5	14	0.6	27	-	3	67	40	-	0.08	5	24	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	1.0	18224	-	<1	<2	<5	6	<0.1	28	-	4	38	44	-	0.06	5	26	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	2.0	18226	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-33	0.0	18608	-	-	71	21	26	1.7	140	13	10	1500	910	-	0.31	110	340	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-33	1.0	18610	C	-	<2	9	23	0.1	48	3	8	120	110	-	0.09	22	15	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-33	2.5	18613	ND	<1	7	-	50	-	-	4	5	-	530	-	1.1	14	24	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-33	4.0	18616	-	<1	<2	<5	10	1.0	21	3	2	13	17	-	0.03	8	8	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-34	0.0	19933	-	-	-	<5	15	3.4	14	-	-	260	160	-	0.06	11	9	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-35	0.0	18618	ND	-	3	9	3	3.0	120	-	1	500	79	-	0.07	18	35	144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-35	0.5	18619	-	-	19	16	38	0.3	33	-	5	1500	660	-	1.6	30	180	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons					
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATAS-35	1.0	18620	-	-	2	9	27	0.7	14	-	6	1900	150	-	0.2	46	19	213	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-35	1.5	18621	-	<1	<2	<5	34	0.1	10	-	3	31	13	-	0.04	5	2	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-36	0.0	18625	ND	-	4	11	30	3.8	130	-	5	2200	150	-	0.1	48	120	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-36	0.5	18626	-	-	-	10	-	0.3	23	-	-	300	150	-	0.28	21	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-36	1.0	18627	-	<1	2	<5	22	<0.1	21	-	4	69	130	-	0.45	9	16	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-36	2.0	18629	-	<1	<2	11	31	0.1	32	-	2	160	84	-	0.23	14	15	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-36	3.5	18632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-36	4.0	18633	-	-	5	11	0.1	21	-	-	5	290	190	-	0.72	20	190	120	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-36	5.0	18634	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	55	130	2	ND	55	42.8	92.2	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-36	7.0	18637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	1500	3300	28	ND	1500	860	2618	3.2	37	0.6	<0.2	<0.2	43
ATAS-36	9.0	18639	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	61	250	1.6	ND	61	190.5	63.1	<0.1	<0.1	0.2	<0.2	<0.2	2.6
ATAS-36	9.5	18640	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-37	0.0	18641	-	-	<2	<5	6	<0.1	6	-	2	13	27	-	0.02	3	6	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	0.5	18642	ND	<1	<2	<5	<2	<0.1	9	-	<1	1	5	-	0.02	1	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	1.0	18643	-	-	<2	<5	9	0.6	19	-	5	88	64	-	0.1	8	7	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	1.5	18644	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	3.0	18647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-38	0.0	18649	ND	-	<2	<5	8	0.1	10	-	4	18	20	-	0.03	5	6	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-38	0.5	18650	-	-	<2	<5	2	<0.1	9	-	1	6	25	-	0.02	2	5	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-38	1.0	18651	-	<1	<2	<5	3	<0.1	12	-	1	2	17	-	0.02	2	5	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-39	0.5	18772	-	-	-	<5	-	1.1	14	-	-	460	160	-	0.45	10	-	100	<0.1	<0.1	<0.1	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-39	1.0	18773	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	1700	7000	1000	110	1700	2070	5960	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-39	1.5	18774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-39	2.0	18775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-39	3.0	18777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-40	0.5	18779	-	-	-	<5	-	<0.1	53	-	-	51	44	-	0.09	12	-	69	<0.1	<0.1	<0.1	<0.3	<0.2	93	980	38	ND	93	131.3	887	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-40	1.5	18781	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	380	1300	51	ND	380	526	825	<0.1	1.3	0.7	<0.2	<0.2	4.4
ATAS-40	3.0	18784	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	49	190	11	ND	49	57.2	146.6	<0.1	0.3	0.1	<0.2	<0.2	2.7
ATAS-40	5.0	18786	-	-	-	6	-	<0.1	4	-	-	7	5	-	0.02	1	-	1	<0.1	<0.1	<0.1	<0.3	<0.2	600	2200	54	ND	600	776	1428	<0.1	2.2	1.2	<0.2	<0.2	5.7
ATAS-40	7.0	18788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	1400	5200	250	ND	1400	2330	3120	2.3	14	3.9	<0.2	<0.2	22.5
ATAS-40	9.0	18790	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-41	1.0	19259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-41	3.0	19263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-42	1.0	18796	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-42	1.5	18797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	2.3	210	45	9.4	2.5	130	125	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-42	4.0	18801	-	-	-	<5	-	<0.1	1	-	-	4	1	-	<0.02	1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-42	6.0	18803	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	330	1200	60	ND	330	215	1045	<0.1	0.5	1.1	<0.2	<0.2	3.5
ATAS-42	8.0	18805	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-42	9.0	18806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-43	2.0	19249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	0.2	0.2	0.2	3.2
ATAS-43	2.7	19253	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-43	4.0	19252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-44	0.5	18808	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	340	950	42	ND	340	341	651	<0.1	0.3	0.3	<0.2	<0.2	3
ATAS-44	2.0	18811	-	-	-	<5	-	<0.1	11	-	-	7	9	-	0.03	3	-	1	<0.1	<0.1	<0.1	<0.3	<0.2	970	2800	130	ND	970	1685	1242	<0.1	0.6	1.6	<0.2	<0.2	4.2
ATAS-44	4.0	18814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-44	7.0	18817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	1100	3500	160	ND	1100	1788	1870	2.6	19	3.8	<0.2	<0.2	29.6
ATAS-44	8.0	18818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-44	9.0	18819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-44	12.0	18822	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-44	15.0	18825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	<0.1	<0.1	0.1	<0.2	<0.2	<2.5
ATAS-45	0.0	19278	ND	-	4	<5	4	0.2	11	-	-	90	96	33	0.19	5	20	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals													BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons					
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATAS-45	0.5	19279	-	-	<2	<5	3	<0.1	6	-	-	41	28	31	0.09	3	2	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-45	1.0	19280	-	-	<2	<5	4	0.1	7	-	-	16	8	24	0.04	1	<2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-45	1.5	19281	-	-	<2	<5	4	<0.1	15	-	-	2	12	10	0.06	3	<2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-45	2.0	19282	-	-	<2	<5	3	<0.1	10	-	-	2	11	6	0.02	1	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-46	0.0	19271	-	-	160	<5	26	0.1	54	-	-	440	8700	120	0.68	12	390	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-46	0.5	19272	ND	-	13	<5	17	<0.1	39	-	-	300	4300	180	0.32	9	58	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-46	1.0	19273	-	-	<2	<5	5	<0.1	26	-	-	5	21	19	0.06	5	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-46	1.5	19274	-	-	<2	<5	3	<0.1	14	-	-	2	12	7	0.07	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47	0.0	19286	-	-	44	<5	160	0.5	23	-	-	1600	3000	230	1.2	22	150	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47	0.5	19287	ND	-	2	<5	9	<0.1	9	-	-	39	66	70	0.08	6	13	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47	1.0	19288	-	-	<2	<5	3	<0.1	19	-	-	4	17	8	0.1	3	<2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47	2.5	19291	-	-	2	<5	7	<0.1	6	-	-	5	17	6	0.03	1	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-48	0.0	19134	-	-	<2	5	2	<0.1	71	-	-	9	29	11	0.06	2	<2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-48	0.5	19135	ND	-	<2	5	1	<0.1	72	-	-	4	25	13	0.03	3	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-48	1.0	19136	-	-	<2	<5	5	<0.1	20	-	-	4	15	33	0.03	4	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-49	0.0	19142	ND	-	<2	<5	10	<0.1	13	-	-	12	65	91	0.03	4	4	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-49	0.5	19143	-	-	<2	<5	8	<0.1	47	-	-	5	51	480	0.02	5	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-49	1.0	19144	-	-	<2	<5	4	<0.1	38	-	-	5	22	33	0.04	3	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-50	0.0	19303	-	-	61	11	88	1.4	15	-	-	2300	3600	120	4.1	38	220	760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-50	0.5	19304	-	-	160	8	22	0.1	13	-	-	1900	1500	95	2.5	27	800	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-50	1.5	19306	-	-	3	<5	14	<0.1	16	-	-	12	17	39	0.03	3	10	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-50	2.0	19307	-	-	<2	<5	21	<0.1	5	-	-	3	5	5	0.02	1	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-51	0.0	19295	ND	-	5	7	3	0.1	13	-	-	630	110	71	0.16	7	49	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-51	2.0	19298	-	-	6	7	92	0.2	32	-	-	420	210	92	0.09	8	65	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-51	3.0	19300	ND	-	7	8	12	0.2	17	-	-	2900	510	81	0.14	26	265	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-51	4.5	19302	-	-	<2	<5	10	<0.1	7	-	-	10	6	6	0.05	1	<2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-52	0.5	18486	-	-	-	17	-	<0.1	11	-	-	64	36	-	0.03	10	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-52	1.0	18487	-	-	-	9	-	<0.1	21	-	-	9	26	-	0.05	9	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-52	3.0	18491	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-53	0.5	18493	-	-	-	63	-	0.9	29	-	-	640	320	-	0.24	15	-	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-53	2.0	18496	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-53	3.0	18498	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-53	4.0	18500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS-54	1.5	19267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-54	3.0	19270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS-55	0.0	19156	-	-	6	<5	5	<0.1	32	-	-	70	86	71	0.19	7	15	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-55	0.5	19157	ND	-	3	<5	10	<0.1	10	-	-	240	22	60	0.06	7	6	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-55	1.0	19158	-	-	<2	<5	6	<0.1	12	-	-	9	20	8	0.05	2	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-56	0.0	19163	-	-	2	<5	11	<0.1	48	-	-	35	34	76	0.12	7	5	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-56	0.5	19164	-	-	6	<5	26	0.1	17	-	-	92	80	150	0.11	12	24	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-56	1.5	19166	ND	-	4	7	72	0.2	13	-	-	240	280	120	0.15	24	25	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-56	2.5	19168	ND	-	<2	<5	90	<0.1	11	-	-	89	9	74	0.06	22	2	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-56	3.0	19169	-	-	<2	<5	3	0.3	4	-	-	3	8	32	0.8	4	<2	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-57	0.0	19149	-	-	<2	<5	6	0.1	8	-	-	19	50	120	0.04	4	5	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-57	0.5	19150	ND	-	1300	<5	5	0.1	9	-	-	160	3600	43	0.22	6	640	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-57	1.5	19152	-	-	7	16	12	<0.1	13	-	-	280	160	180	1.6	9	31	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-57	2.0	19153	-	-	<2	<5	2	<0.1	4	-	-	1	10	28	<0.02	1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-58	0.5	19231	-	-	<2	<5	7	0.1	16	-	-	12	38	29	0.05	4	8	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-58	1.5	19233	-	-	2	<5	13	0.1	7	-	-	25	130	86	0.08	7	18	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-58	2.5	19235	ND	-	4	<5	15	0.2	8	-	-	100	79	79	0.1	14	4	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-58	3.0	19236	-	-	<2	<5	4	<0.1	5	-	-	6	32	40	0.03	2	2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons					
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	C_{-36}	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
ATAS-59	0.5	19239	ND	-	<2	<5	9	0.1	23	-	-	27	100	86	0.07	6	5	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-59	1.5	19241	-	-	4	8	75	0.1	18	-	-	220	290	140	0.34	19	20	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-59	2.0	19242	-	-	<2	<5	10	<0.1	5	-	-	11	17	54	0.03	2	<2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-60	1.0	19904	-	-	-	6	9	<0.1	12	-	-	5	15	-	<0.02	3	<2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-60	1.5	19905	-	-	-	<5	-	<0.1	17	-	-	4	19	-	0.03	4	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-61	0.0	19223	-	-	<2	<5	10	<0.1	11	-	-	6	13	13	0.03	3	<2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-61	0.5	19224	ND	-	15	35	120	0.1	22	-	-	410	310	220	0.28	31	96	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-61	1.0	19225	-	-	<2	<5	7	<0.1	13	-	-	6	20	21	0.03	6	<2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-62	1.0	19911	-	-	-	18	52	0.1	19	-	-	170	150	-	0.09	18	21	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-63	0.5	19920	-	-	-	71	56	0.4	12	-	-	190	490	-	0.41	13	16	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-63	1.0	19921	-	-	-	5	9	<0.1	9	-	-	3	18	-	<0.02	2	<2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-64	0.5	19201	ND	-	8	5	45	0.1	15	-	-	160	120	120	0.07	17	50	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-64	1.0	19202	-	-	<2	<5	6	<0.1	25	-	-	5	27	22	0.02	4	13	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-64	1.5	19203	-	-	<2	<5	5	<0.1	20	-	-	4	20	10	0.03	5	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-65	0.5	19208	ND	-	7	5	11	0.3	60	-	-	32	94	56	0.04	21	13	490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-65	1.0	19209	-	-	<2	<5	5	<0.1	9	-	-	3	13	100	<0.02	3	10	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-65	1.5	19210	-	-	<2	<5	4	<0.1	14	-	-	3	12	8	0.02	3	14	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-66	0.0	19215	-	-	10	<5	11	0.1	52	-	-	110	100	100	0.04	18	75	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-66	0.5	19216	-	-	61	11	71	0.2	35	-	-	560	200	390	0.09	48	490	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-66	1.0	19217	-	-	<2	<5	8	<0.1	35	-	-	8	43	50	0.06	5	<2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-67	0.5	19193	ND	-	3	<5	9	0.9	35	-	-	39	95	40	0.03	16	17	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-67	1.5	19195	-	-	<2	<5	83	0.1	22	-	-	190	64	280	0.05	20	23	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-67	2.0	19196	-	-	<2	<5	5	<0.1	15	-	-	3	16	10	0.04	3	9	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-68	0.5	19927	-	-	-	<5	9	0.1	12	-	-	38	53	-	<0.02	4	2	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-68	1.0	19928	-	-	-	<5	5	0.1	14	-	-	15	35	-	0.02	4	<2	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-68	1.5	19929	-	-	-	<5	8	<0.1	20	-	-	4	21	-	0.02	6	<2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-69	0.5	19181	-	-	14	9	93	0.6	29	-	-	200	190	170	0.24	27	62	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-69	2.0	19184	ND	-	9	5	78	0.9	13	-	-	1900	440	566	0.1	31	51	2600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-69	3.0	19186	-	-	3	<5	87	<0.1	15	-	-	200	37	150	0.78	37	15	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-69	5.0	19188	ND	-	6	6	100	0.1	10	-	-	130	230	63	<0.02	41	33	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-69	6.0	19189	-	-	<2	<5	4	<0.1	8	-	-	2	7	10	0.02	1	10	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-70	0.5	19173	ND	-	<2	<5	39	0.1	15	-	-	54	160	85	0.07	17	8	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-70	1.5	19175	-	-	<2	<5	4	<0.1	24	-	-	40	26	160	0.03	18	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-70	2.0	19176	-	-	<2	<5	4	<0.1	20	-	-	2	21	37	0.03	7	<2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-70	3.0	19178	-	-	2	<5	4	<0.1	15	-	-	2	16	17	0.02	3	9	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QUALITY CONTROL SAMPLES					QC SAMPLE ANALYTICAL RESULTS (mg/kg, unless otherwise noted)																															
Helena East Dup 13		18236	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 18		18516	-	-	-	29	-	1.1	49	<1	-	3300	370	-	0.23	140	-	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 19		18541	-	-	-	<5	-	0.5	18	-	-	4000	110	-	0.02	67	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 20		18770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 23		19256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
Helena East DUP 24		19285	-	-	<2	<5	3	<0.1	10	-	-	2	8	5	0.03	1	<2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 25		19293	-	-	2	<5	13	<0.1	11	-	-	18	20	40	0.04	2	<2	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 26		19141	-	-	6	<5	16	0.2	24	-	-	140	2000	150	0.32	13	13	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 28		19199	-	-	<2	<5	74	<0.1	10	-	-	74	14	110	0.03	16	12	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 29		19214	-	-	<2	<5	4	<0.1	29	-	-	3	27	140	0.02	2	10	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 30		19222	-	-	<2	<5	9	<0.1	15	-	-	8	28	210	0.02	3	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 31		19896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East Dup 32		19918	-	-	-	<5	<1	<0.1	<1	-	-	<1	<1	-	<0.02	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup10		18367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	1100	5600	3800	2100	-	-	-	-	-	-	-	-	-
Helena East DUP11		18281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	99	370	63	12	99	172	281	-	-	-	-	-	-

SOIL ANALYTICAL RESULTS: METALS, BTEX, TPH, PAHs
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

		Other		Heavy Metals														BTEX				Total Petroleum Hydrocarbons								Polycyclic Aromatic Hydrocarbons						
		Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	Benzene	Toluene	Ethyl-benzene	Xylenes	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Naphthalene	2-Methylnaphthalene	Phenanthrene	Benzo[a]pyrene	Indeno[1,2,3-c,d]pyrene	Total PAH
Location	Depth	Lab #	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																																	
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	1	3	5	5	100	500	1000	NV	NV	NV	NV	NV	5	NV	10	1	5	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	1	520	230	210	NV	NV	NV	NV	56000	NV	90	5600	NV	NV	NV	1	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	1.5	520	230	210	NV	NV	NV	NV	280000	NV	450	28000	50	NV	100	5	50	100
Helena East DUP12		18265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East DUP2		17697	-	<0.5	3	<5	18	0.2	37	-	5	190	190	-	0.16	16	19	76	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East Dup22		18826	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	130	500	30	ND	-	-	-	-	-	-	-	-	-
Helena East DUP3		18005	-	-	-	<5	-	<0.1	8	-	-	3	7	-	<0.02	1	-	2	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East DUP4		18029	-	-	-	<5	-	<0.1	18	<1	-	8	19	-	0.22	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP5		18032	-	-	-	7	-	<0.1	22	-	-	18	27	-	0.03	7	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup6		18307	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East Dup7		18329	-	-	-	6	-	<0.1	19	-	-	5	19	-	<0.02	8	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup8		18337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
Helena East Dup9		18345	-	-	-	10	-	0.8	49	-	-	300	340	-	1.4	53	-	170	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East FB 10		19255	-	-	<2	<5	<1	<0.1	<1	-	-	<1	<1	<1	<0.02	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB 11		19133	-	-	<2	<5	<1	<0.1	<1	-	-	<1	<1	<1	<0.02	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB 13		19916	-	-	-	21	70	0.2	30	-	-	100	53	-	0.056	16	8	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB1		17675	-	-	<2	<5	<1	<0.1	<1	-	<1	<1	<1	-	<0.02	<1	<2	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East FB2		17698	-	-	<2	<5	<1	<0.1	<1	-	<1	<1	<1	-	<0.02	<1	<2	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB3		18007	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB4		18030	-	-	-	<5	-	<0.1	<1	<1	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB6		18282	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB7		18576	ND	<1	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	<0.1	<0.1	<0.1	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB8		18482	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East FB9		18769	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East TB 12		19897	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB1		17739	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB2		17738	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB3		18006	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB4		18031	-	-	-	<5	-	<0.1	<1	<1	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB5		18306	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
Helena East TB6		18283	-	-	-	-	-	-	-	-	-	-	<1	-	<0.02	<1	-	<1	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	<0.4	<0.8	<0.8	-	-	-	-	-	-
Helena East TB6		18283	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East TH10		19254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	<0.1	<0.1	<0.1	<0.2	<0.2	<2.5
ATAS DUP 15		18607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS DUP 17		18484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS TB7		18577	-	-	-	<5	-	<0.1	<1	-	-	<1	<1	-	<0.02	<1	-	<1	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS TB8		18483	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.3	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-
ATAS TB9		18768	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	ND	-	-	-	-	-	-	-	-	-

*Asbestos: A denotes Amosite, C deontes Crysotile, Cr denotes Crocidolite.
- Indicates not analysed
ND Indicates not detected

SOIL ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Monocyclic Aromatic Hydrocarbons														PAH	Halogenated Aliphatic Hydrocarbons																
			Benzene	Toluene	Ethylbenzene	m & p-Xylenes	o-Xylene	Styrene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	Chloromethane	Vinyl chloride	Bromomethane	1,1-Dichloroethane	trans-1,2-Dichloroethene	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	Carbon tetrachloride	1,1-Dichloropropene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	1,1,2-Trichloroethane	Tetrachloroethene	1,1,1,2-Tetrachloroethane	Hexachlorobutadiene
			SOIL ASSESSMENT CRITERIA (mg/kg)															SOIL ASSESSMENT CRITERIA (mg/kg)																
EIL/20 DAF SSL			1	3	5	5		4	NV	NV	NV	NV	NV	NV	NV	NV	5	NV	0.01	NV	23	0.7	0.06	0.4	2	0.07	NV	0.02	0.06	0.03	0.02	0.06	0.003	2
HIL-A			1	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	60	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
HIL-F			1.5	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	190	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Location	Depth	ARL#	SOIL ANALYTICAL RESULTS (mg/kg)															SOIL ANALYTICAL RESULTS (mg/kg)																
ATA-4	0.25	17664	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	0.5	17665	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	1.0	17666	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	2.0	17668	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	3.0	17670	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	4.0	17672	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	4.8	17673	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-4	8.0	17674	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-6	2.0	17694	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-6	2.0	17694	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-7	1.0	17701	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-7	1.0	17701	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-14	1.0	18293	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-14	1.5	18294	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-14	2.5	18296	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATA-14	3.5	18298	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-1	0.0	18669	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-1	1.0	18671	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-1	3.0	18675	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-1	3.5	18676	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-2	0.5	18316	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-2	1.0	18317	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-2	2.0	18319	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-2	2.5	18320	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-2	3.0	18321	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-3	2.0	18350	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-4	1.5	18311	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-4	6.5	18563	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-4	7	18564	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-4	7.5	18565	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-4	2.5	18313	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	1.0	18658	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	1.5	18659	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

SOIL ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Monocyclic Aromatic Hydrocarbons													PAH	Halogenated Aliphatic Hydrocarbons																
			Benzene	Toluene	Ethylbenzene	m & p-Xylenes	o-Xylene	Styrene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	Chloromethane	Vinyl chloride	Bromomethane	1,1-Dichloroethane	trans-1,2-Dichloroethene	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	Carbon tetrachloride	1,1-Dichloropropene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	1,1,2-Trichloroethane	Tetrachloroethene	1,1,1,2-Tetrachloroethane	Hexachlorobutadiene
			SOIL ASSESSMENT CRITERIA (mg/kg)															SOIL ASSESSMENT CRITERIA (mg/kg)																
EIL/20 DAF SSL			1	3	5	5		4	NV	NV	NV	NV	NV	NV	NV	NV	5	NV	0.01	NV	23	0.7	0.06	0.4	2	0.07	NV	0.02	0.06	0.03	0.02	0.06	0.003	2
HIL-A			1	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	60	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
HIL-F			1.5	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	190	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Location	Depth	ARL#	SOIL ANALYTICAL RESULTS (mg/kg)															SOIL ANALYTICAL RESULTS (mg/kg)																
ATAS-5	3.0	18662	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	3.5	18663	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	5.0	18665	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	6.5	18667	<1.0	<1.0	<1.0	4.9	3.8	<1.0	1.1	3.4	24	<1.0	48	3	4.7	<1.0	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-5	7.0	18668	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-6	0.5	18323	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-6	1.0	18324	<1.0	<1.0	1.1	4.2	<1.0	<1.0	1.0	3.2	34	<1.0	27	1.7	2.3	<1.0	34	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.9	<1.0	<1.0	<1.0	<1.0	2.4	<1.0	<1.0	56	<1.0	<1.0
ATAS-6	1.5	18325	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	5.8	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	16	<1.0	<1.0
ATAS-6	2.0	18326	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-6	3.0	18328	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-7	1.0	18332	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-7	2.0	18334	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-7	3.0	18336	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-8	2.5	18343	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-9	2.5	18547	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-12	2.5	18358	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-13	0.5	18361	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-13	1.5	18363	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-13	2.0	18364	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-13	3.0	18366	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-14	1.5	18270	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-14	2.0	18271	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-14	3.0	18273	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-15	1.5	18277	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-15	2.0	18278	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-15	3.0	18280	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-16	0.0	18374	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-17	2.5	18289	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-18	1.0	18246	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-18	2.5	18249	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-19	2.0	18255	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-19	2.5	18256	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

SOIL ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

		Monocyclic Aromatic Hydrocarbons													PAH	Halogenated Aliphatic Hydrocarbons																
		Benzene	Toluene	Ethylbenzene	m & p-Xylenes	o-Xylene	Styrene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	Chloromethane	Vinyl chloride	Bromomethane	1,1-Dichloroethane	trans-1,2-Dichloroethene	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	Carbon tetrachloride	1,1-Dichloropropene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	1,1,2-Trichloroethane	Tetrachloroethene	1,1,1,2-Tetrachloroethane	Hexachlorobutadiene
		SOIL ASSESSMENT CRITERIA (mg/kg)														SOIL ASSESSMENT CRITERIA (mg/kg)																
EIL/20 DAF SSL		1	3	5	5		4	NV	NV	NV	NV	NV	NV	NV	NV	5	NV	0.01	NV	23	0.7	0.06	0.4	2	0.07	NV	0.02	0.06	0.03	0.02	0.06	0.003	2
HIL-A		1	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	60	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
HIL-F		1.5	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	190	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Location	Depth	ARL#	SOIL ANALYTICAL RESULTS (mg/kg)															SOIL ANALYTICAL RESULTS (mg/kg)																
ATAS-19	3.0	18257	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-20	3.0	18264	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-24	0.5	18601	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-24	3.0	18606	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	3.5	18632	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	4.0	18633	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	5.0	18634	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	7.0	18637	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	9.0	18639	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-36	9.5	18640	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-37	3.0	18647	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.1	4.3	<1.0	11	<1.0	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	50	<1.0	<1.0
ATAS-39	1.0	18773	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-39	2.0	18775	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-39	3.0	18777	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-40	1.5	18781	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-40	5.0	18786	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-42	4.0	18801	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-42	8.0	18805	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-44	2.0	18811	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-44	7.0	18817	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-44	9.0	18819	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-44	15.0	18825	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-52	3.0	18491	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-53	2.0	18496	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-53	3.0	18498	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS-53	4.0	18500	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
		Quality Control Analytical Results (mg/kg)														Quality Control Analytical Results(mg/kg)																
Helena East Dup6		18307	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East Dup8		18337	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East Dup9		18345	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East Dup10		18367	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East DUP11		18281	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

SOIL ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

		Monocyclic Aromatic Hydrocarbons														PAH	Halogenated Aliphatic Hydrocarbons																		
		Benzene	Toluene	Ethylbenzene	m & p-Xylenes	o-Xylene	Styrene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	4-Isopropyltoluene	n-Butylbenzene	Naphthalene	Chloromethane	Vinyl chloride	Bromomethane	1,1-Dichloroethane	trans-1,2-Dichloroethene	1,1-Dichloroethene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	Carbon tetrachloride	1,1-Dichloropropene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	1,1,2-Trichloroethane	Tetrachloroethene	1,1,1,2-Tetrachloroethane	Hexachlorobutadiene
		SOIL ASSESSMENT CRITERIA (mg/kg)															SOIL ASSESSMENT CRITERIA (mg/kg)																		
EIL/20 DAF SSL		1	3	5	5		4	NV	NV	NV	NV	NV	NV	NV	NV	5	NV	0.01	NV	23	0.7	0.06	0.4	2	0.07	NV	0.02	0.06	0.03	0.02	0.06	0.003	2
HIL-A		1	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	60	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
HIL-F		1.5	520	230	210		NV	NV	NV	NV	NV	NV	NV	NV	NV	190	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV	NV
Location	Depth ARL#	SOIL ANALYTICAL RESULTS (mg/kg)															SOIL ANALYTICAL RESULTS (mg/kg)																		
Helena East DUP12	18265	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS DUP 15	18607	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS DUP 17	18484	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East FB1	17675	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East TB1	17139	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East TB2	17738	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East TB5	18306	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Helena East TB6	18283	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS TB7	18577	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS TB8	18483	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ATAS TB9	18768	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:
Samples with **bold** IDs have detectable concentrations of one or more VOC compounds.
Samples with red IDs exceed either EIL of 20DAF guidelines for one or more VOC compounds.
No trihalomethanes, halogenated aromatic hydrocarbons, oxygenated compounds, or sulfonated compounds were detected in any sample.

SOIL LABORATORY SPIKE RECOVERIES
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

ARL Lab#	As	Cd	Cr	Cr^{VI}	Cu	Hg	Ni	Pb	Zn	BTEX	TPHs	PAHs
17643-17675	108%	91%	98%	-	104%	93%	101%	92%	106%	107%	98%	-
17684-17706	93%	96%	104%	-	101%	89%	93%	95%	102%	109%, 118%, 120%	103%	-
17998-18057	92%	105%, 101%	100%, 92%	102%, 94%	110%	102%, 120%	102%, 96%	105%, 114%	104%, 105%	-	102%	-
17691 etc	106%	101%	98%	91%	100%	104%	102%	113%	111%	-	-	-
18223-18290	94%	93%, 97%	86%, 102%	-	89%,100%	84%, 103%	92%, 98%	108%, 104%	101%, 128%	100%	94%	-
18291-18374	88%,80%	97%, 102%	120%,105%	-	93%,102%	83%, 104%	98%, 120%	105%, 80%	80%	88%, 93%,92%, 109%	102%	-
18482-18565	97%	101%, 102%	90%, 106		98%	106%	94%, 94%	100%, 103%	99%, 101%	116%	93%	-
18576-18678	110%	108%, 104%	108%, 104%	-	103%, 128%	108%, 105%	108%, 100%	104%, 105%	114%, 104%	114%, 114%, 118%	92%, 96%	-
18768-18826	85%	91%	88%	-	87%	99%	90%	93%	88%	102%, 103%	109%	75%-111%
19132-19309	92%, 96%, 97%	95% 99%, 99%, 99%	82%, 90%, 102%, 106%	-	76%, 114%, 94%	95%, 95%, 94%	90%, 100%, 110%, 96%	85%, 100%, 96%	89%, 100%	116%	104%	84%, 74%
19894-19934	87%	94%	102%	-	95%	89%	92%	106%	100%	-	-	-

SOIL RPD CALCULATIONS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														Total Petroleum Hydrocarbons								BTEX				Polycyclic Aromatic Hydrocarbons				
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene	2-Methylnaphthalene	Fluorene	Phenanthrene	Total PAH
Location	Depth	ARL#	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																								SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)									
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	100	500	1000	NV	NV	NV	NV	NV	1	3	5	5	5	NV	NV	10	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	NV	NV	NV	NV	56000	NV	90	5600	1	520	230	210	NV	NV	NV	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	NV	NV	NV	NV	280000	NV	450	28000	1.5	520	230	210	50	NV	NV	100	100
			RELATIVE PERCENT DIFFERENCE (RPD) CALCULATIONS																								RELATIVE PERCENT DIFFERENCE (RPD) CALCULATIONS									
ATA-4	3.0	17670	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	100	510	120	20	100	411	116	0.1	0.1	0.1	0.3	-	-	-	-	-
ATA-4	3.0	17670 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
ATA-8	0.0	17998	-	-	-	11	-	1	43	-	-	510	930	-	1.6	20	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-8	0.0	17998REP	-	-	-	11	-	0.9	42	-	-	530	820	-	1.5	23	-	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	11%	2%	-	-	4%	13%	-	6%	14%	-	13%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	8.5	18050	-	-	-	5	-	0.1	17	-	-	3	19	-	0.02	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-12	8.5	18050REP	-	-	-	5	-	0.1	15	-	-	5	22	-	0.02	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	13%	-	-	50%	15%	-	0%	0%	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-13	3.0	18057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
ATA-13	3.0	18057REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-14	0.5	18292	-	-	-	5	-	0.1	96	-	-	7	20	-	0.02	4	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATA-14	0.5	18292REP	-	-	-	5	-	0.1	110	-	-	3	13	-	0.02	4	-	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	14%	-	-	**80%**	42%	-	0%	0%	-	16%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-1	1.0	18671	-	-	-	5	-	0.1	19	-	-	3	-	-	-	-	-	-	0.2	0.2	0..4	0..4	ND	-	0.8	0.8	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	2.5
ATAS-1	1.0	18671REP	-	-	-	5	-	0.1	19	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	0%	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-4	7.5	18565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-4	7.5	18565 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-6	1.0	18324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	310	210	40	-	-	131	117	0.1	0.1	4.8	28	-	-	-	-	-
ATAS-6	1.0	18324 REP	-	-	-	5	-	0.1	16	-	-	4	17	-	0.02	7	-	1	-	-	-	-	-	-	-	-	0.1	0.1	4.4	26	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	9%	7%	-	-	-	-	-
ATAS-6	2.0	18326	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-
ATAS-6	2.0	18326 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	0.0	18549	-	-	-	14	-	1.8	42	-	-	270	300	-	1.3	41	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	0.0	18549 REP	-	-	-	14	-	1.9	55	-	-	290	310	-	1.3	43	-	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	5%	27%	-	-	7%	3%	-	0%	5%	-	10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-13	0.5	18361	ND	-	-	40	-	0.1	23	-	-	4900	680	-	0.16	23	-	1100	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-
ATAS-13	0.5	18361 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-13	3.0	18366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	-	-	<0.8	<0.8	0.1	0.1	0.1	0.3	-	-	-	-	-
ATAS-13	3.0	18366 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
ATAS-17	2.5	18289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	0.4	-	-	-	-	-	-	-	-	-	-	-
ATAS-17	2.5	18289REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-22	1.0	18511	ND	1	-	5	-	0.1	5	-	-	18	17	-	0.04	5	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-22	1.0	18511 REP	-	-	-	5	-	0.1	5	-	-	23	13	-	0.03	5	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	0%	-	-	24%	27%	-	29%	0%	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	1.0	18536	-	1	-	9	-	0.1	41	1	-	66	20	-	0.03	25	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-28	1.0	18536 REP	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL RPD CALCULATIONS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

			Other		Heavy Metals														Total Petroleum Hydrocarbons								BTEX				Polycyclic Aromatic Hydrocarbons				
			Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene	2-Methylnaphthalene	Fluorene	Phenanthrene	Total PAH
Location	Depth	ARL#	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																								SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)									
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	100	500	1000	NV	NV	NV	NV	NV	1	3	5	5	5	NV	NV	10	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	NV	NV	NV	NV	56000	NV	90	5600	1	520	230	210	NV	NV	NV	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	NV	NV	NV	NV	280000	NV	450	28000	1.5	520	230	210	50	NV	NV	100	100
RPD (%)			-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.0	18266	ND	1	2	5	5	0.1	3	-	1	1	17	-	0.04	1	8	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.0	18266REP	-	-	-	5	-	0.1	3	-	-	1	18	-	0.02	1	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	0%	-	-	0%	6%	-	**67%**	0%	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.5	18223	ND	-	2	5	14	0.6	27	-	3	67	40	-	0.08	5	24	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-32	0.5	18223REP	-	-	-	5	-	0.05	22	-	-	57	38	-	0.05	5	-	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	**169%**	20%	-	-	16%	5%	-	46%	0%	-	11%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	1.0	18643	-	-	2	5	9	0.6	19	-	5	88	64	-	0.1	8	7	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	1.0	18643 REP	-	-	2	5	9	0.6	15	-	5	83	61	-	0.11	8	7	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	0%	0%	0%	0%	24%	-	0%	6%	5%	-	10%	0%	-	12%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-37	3.0	18647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0..4	0..4	ND	-	-	-	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	2.5
ATAS-37	3.0	18647 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0..4	0..4	ND	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	2.5
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	0%	0%	0%	0%	0%
ATAS-40	5.0	18786	-	-	-	6	-	<0.1	4	-	-	7	5	-	0.02	1	-	1	0.2	600	2200	54	-	600	776	1428	0.1	0.1	0.1	0.3	0.1	2.2	0.1	1.2	5.7
ATAS-40	5.0	18786REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	2.4	0.1	1.2	5.9
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	9%	0%	0%	3%
ATAS-40	7.0	18788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	1400	5200	250	-	1400	2330	3120	<0.1	0.1	0.1	0.3	2.3	14	<0.1	3.9	22.5
ATAS-40	7.0	18788 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400	2010	2910	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	15%	7%	-	-	-	-	-	-	-	-	-
ATAS-42	1.5	18797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	2.3	210	45	9.4	2.5	130	125	0.1	0.1	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<2.5
ATAS-42	1.5	18797 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
ATAS-44	2.0	18811	-	-	-	5	-	0.1	11	-	-	7	9	-	0.03	3	-	1	0.2	970	2800	130	-	0.4	1685	1242	0.1	0.1	0.1	0.3	<0.1	0.6	<0.1	1.6	<4.2
ATAS-44	2.0	18811 REP	-	-	-	5	-	0.1	12	-	-	8	10	-	0.03	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	9%	-	-	13%	11%	-	0%	0%	-	**67%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-44	7.0	18817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	1100	3500	160	-	1100	1788	1870	0.1	0.1	0.1	0.3	2.6	19	2.2	3.8	29.6
ATAS-44	7.0	18817REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4	22	2.5	4.5	34.6
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27%	15%	13%	17%	16%
ATAS-44	8.0	18818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
ATAS-44	8.0	18818 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-
ATAS-44	15.0	18825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	0.4	0.8	0.8	-	-	-	-	0.1	0.1	0.1	0.1	2.5
ATAS-44	15.0	18825REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	2.5
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	0%
ATAS-47	1.0	19288	-	-	2	5	3	0.1	19	-	-	4	17	8	0.1	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47	1.0	19288 REP	-	-	2	5	3	0.1	30	-	-	6	21	16	0.07	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	0%	0%	0%	0%	45%	-	-	40%	21%	**67%**	35%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-54	1.5	19267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	2.5
ATAS-54	1.5	19267 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-54	3.0	19270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.4	<0.4	-	-	-	-	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	2.5
ATAS-54	3.0	19270 REP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
ATAS-58	1.5	19233	-	-	2	5	13	0.1	7	-	-	25	130	86	0.08	7	18	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-58	1.5	19233 REP	-	-	2	5	7	0.1	6	-	-	12	150	64	0.06	4	10	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL RPD CALCULATIONS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

		Other		Heavy Metals														Total Petroleum Hydrocarbons								BTEX				Polycyclic Aromatic Hydrocarbons				
		Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene	2-Methylnaphthalene	Fluorene	Phenanthrene	Total PAH
Location	Depth	ARL#	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																							SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)									
EIL			NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	100	500	1000	NV	NV	NV	NV	NV	1	3	5	5	5	NV	NV	10	20
HIL 'A'			NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	NV	NV	NV	NV	56000	NV	90	5600	1	520	230	210	NV	NV	NV	NV	20
HIL 'F'			NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	NV	NV	NV	NV	280000	NV	450	28000	1.5	520	230	210	50	NV	NV	100	100
RPD (%)			-	-	0%	0%	**60%**	0%	15%	-	-	**70%**	14%	29%	29%	**55%**	**57%**	15%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-60	1.0	19904	-	-	-	6	9	0.1	12	-	-	5	15	-	0.02	3	2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-60	1.0	19904 REP	-	-	-	5	9	0.1	12	-	-	5	16	-	0.03	3	2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	18%	0%	0%	0%	0%	-	-	0%	6%	-	40%	0%	0%	5%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-64	0.5	19201	ND	-	8	5	45	0.1	15	-	-	160	120	120	0.07	17	50	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-64	0.5	19201 REP	-	-	7	9	46	0.1	17	-	-	120	110	140	0.07	21	43	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	13%	**57%**	2%	0%	13%	-	-	29%	9%	15%	0%	21%	15%	13%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP4		18029	-	-	-	5	-	0.1	18	1	-	8	19	-	0.22	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP4		18029REP	-	-	-	5	-	0.1	22	-	-	8	24	-	0.18	5	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	20%	-	-	0%	23%	-	20%	0%	-	40%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup6		18307	-	-	-	5	-	0.1	1	-	-	1	1	-	0.02	1	-	1	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-	-
Helena East Dup6		18307 REP	-	-	-	5	-	0.1	17	-	-	3	17	-	0.02	3	-	1	0.2	0.2	0.4	0.4	ND	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	0%	-	0%	**178%**	-	-	**100%**	**178%**	-	0%	**100%**	-	0%	0%	0%	0%	0%	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-
Helena East DUP2		17697	-	0.5	3	5	18	0.2	37	-	5	190	190	-	0.16	16	19	76	0.2	0.2	0.4	0.4	ND	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-	-
ATAS-6	0.5	18323	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-
Helena East DUP3		18005	-	-	-	5	-	0.1	8	-	-	3	7	-	0.02	1	-	2	0.2	0.2	0.4	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-8	3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP4		18029	-	-	-	5	-	0.1	18	1	-	8	19	-	0.22	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-11	1.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 6		18307	-	-	-	5	-	0.1	1	-	-	1	1	-	0.02	1	-	1	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-	-
ATAS-14	1.5	18270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	0.4	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-
Helena East Dup7		18329	-	-	-	6	-	0.1	19	-	-	5	19	-	0.02	8	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-6	0.5	18323	ND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup8		18337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-	-
ATAS-7	1.0	18332	-	-	-	5	-	<0.1	25	-	-	4	32	-	0.02	6	-	12	0.2	0.2	0.4	0.4	-	-	0.8	0.8	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	0%	0%	0%	0%	0%	0%	-	-	-	-	-	-
Helena East Dup9		18345	-	-	-	10	-	0.8	49	-	-	300	340	-	1.4	53	-	170	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-8	2.5	18343	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup10		18367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	1100	5600	3800	2100	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-13	1.5	18363	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	**200%**	**200%**	**200%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP11		18281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	99	370	63	12	99.2	172	281	0.1	0.1	0.1	0.3	-	-	-	-	-	-
ATAS-14	3.0	18273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	120	370	58	11	120.2	146	282	0.1	0.1	0.1	0.3	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	19%	0%	8%	9%	19%	16%	7%	0%	0%	0%	0%	-	-	-	-	-	-
Helena East DUP12		18265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	<0.4	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-26	0.5	18580	-	1	2	5	52	0.1	14	-	4	18	12	-	0.05	4	7	5	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 13		18236	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-31	1.5	18232	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL RPD CALCULATIONS
HELENA EAST REMEDIATION AND REDEVELOPMENT PER

		Other		Heavy Metals														Total Petroleum Hydrocarbons								BTEX				Polycyclic Aromatic Hydrocarbons				
		Asbestos*	Total Cyanide	Antimony	Arsenic	Barium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Lead	Manganese	Mercury	Nickel	Tin	Zinc	C_{6-9}	C_{10-14}	C_{15-28}	C_{29-36}	$C_{>36}$	C_{6-15}	C_{16-35} aromatics	C_{16-35} aliphatics	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene	2-Methylnaphthalene	Fluorene	Phenanthrene	Total PAH
Location Depth	ARL#	SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)																								SOIL ASSESSMENT CRITERIA (mg/kg, unless otherwise noted)								
EIL		NV	10	20	20	400	3	50	NV	50	60	300	500	1	60	50	200	100	500	1000	NV	NV	NV	NV	NV	1	3	5	5	5	NV	NV	10	20
HIL 'A'		NV	250	30	100	5370	20	NV	100	100	1000	300	1500	15	600	46900	7000	NV	NV	NV	NV	56000	NV	90	5600	1	520	230	210	NV	NV	NV	NV	20
HIL 'F'		NV	1250	820	500	100000	100	NV	500	500	5000	1500	7500	75	3000	100000	35000	NV	NV	NV	NV	280000	NV	450	28000	1.5	520	230	210	50	NV	NV	100	100
RPD (%)		-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS DUP 15	18607	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
ATAS-24 3.0	18606	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
ATAS DUP 17	18484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-1 0.0	18669	ND	-	-	12	-	0.6	180	-	-	320	-	-	-	-	-	-	0.2	1000	1800	220	34	-	614	1460	0.1	0.1	0.1	0.3	34	68	0.1	3.1	107
RPD (%)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	**200%**	**200%**	**199%**	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 18	18516	-	-	-	29	-	1.1	49	1	-	3300	370	-	0.23	140	-	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-18 0.5	18245	C	-	-	87	-	0.8	36	-	-	5100	1900	-	0.84	22	-	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	-	**100%**	-	32%	31%	-	-	43%	**135%**	-	**114%**	**146%**	-	**156%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 19	18541	-	-	-	5	-	0.5	18	-	-	4000	110	-	0.02	67	-	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-27 2.5	18529	ND	-	-	18	-	9.6	21	<1	-	16000	290	-	0.08	33	-	6200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	-	**113%**	-	**180%**	15%	-	-	**120%**	**90%**	-	**120%**	**68%**	-	**171%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 20	18770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
ATAS-39 1.5	18774	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup22	18826	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	130	500	30	-	130	-	-	-	-	-	-	-	-	-	-	-
ATAS-44 8.0	18818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**199%**	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 23	19256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	2.5
ATAS-41 1.0	19259	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	0.4	-	-	-	-	0.1	0.1	0.1	0.3	-	-	-	-	-
RPD (%)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	0%	0%	0%	-	-	-	-	0%	0%	0%	0%	-	-	-	-	-
Helena East DUP 24	19285	-	-	2	5	3	0.1	10	-	-	2	8	5	0.03	1	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-45 2.0	19282	-	-	2	5	3	0.1	10	-	-	2	11	6	0.02	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	0%	0%	0%	0%	0%	-	-	0%	32%	18%	40%	0%	0%	**133%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 25	19293	-	-	2	5	13	0.1	11	-	-	18	20	40	0.04	2	2	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-47 0.5	19287	ND	-	2	5	9	0.1	9	-	-	39	66	70	0.08	6	13	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	0%	0%	36%	0%	20%	-	-	**74%**	**107%**	**55%**	**67%**	**100%**	**147%**	**180%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 26	19141	-	-	6	5	16	0.2	24	-	-	140	2000	150	0.32	13	13	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-49 0.0	19142	ND	-	2	5	10	0.1	13	-	-	12	65	91	0.03	4	4	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	**100%**	0%	46%	**67%**	**59%**	-	-	**168%**	**187%**	49%	**166%**	**106%**	**106%**	**117%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 28	19199	-	-	2	5	74	0.1	10	-	-	74	14	110	0.03	16	12	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-67 1.5	19195	-	-	2	5	83	0.1	22	-	-	190	64	280	0.05	20	23	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	0%	0%	11%	0%	**75%**	-	-	**88%**	**128%**	**87%**	50%	22%	**63%**	**140%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 29	19214	-	-	2	5	4	0.1	29	-	-	3	27	140	0.02	2	10	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-65 1.0	19209	-	-	2	5	5	0.1	9	-	-	3	13	100	0.02	3	10	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	0%	0%	22%	0%	**105%**	-	-	0%	**70%**	33%	0%	40%	0%	**51%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East DUP 30	19222	-	-	2	5	9	0.1	15	-	-	8	28	210	0.02	3	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-66 0.5	19216	-	-	61	11	71	0.2	35	-	-	560	200	390	0.09	48	490	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	**187%**	**75%**	**155%**	**67%**	**80%**	-	-	**194%**	**151%**	**60%**	**127%**	**176%**	**198%**	**193%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helena East Dup 32	19918	-	-	-	5	1	0.1	1	-	-	1	1	-	0.02	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATAS-62 1.0	19911	-	-	-	18	52	0.1	19	-	-	170	150	-	0.09	18	21	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RPD (%)		-	-	-	**113%**	**192%**	0%	**180%**	-	-	**198%**	**197%**	-	**127%**	**179%**	**165%**	**198%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-