

Table E-8
Calculated Helium Percent Leak for Phase B Soil Gas Samples
Phase B Source Area Soil Gas Investigation
Tronox Facility, Henderson, Nevada

Soil Gas Sample ID ¹	Soil Gas Probe Resampled Because of Elevated Helium (yes/no)	Re-sampled Soil Gas Sample ID	Helium Concentration Reported in the Soil Gas Sample (ppmV) ²	Starting helium concentration (%)	Helium concentration (%) inside the shroud measured every five minutes								Average helium concentration inside the shroud		% Average Leak ⁴	
					5 (min)	10 (min)	15 (min)	20 (min)	25 (min)	30 (min)	35 (min)	40 (min)	%	Converted ppmV ³		
SG42B-05	Yes. 5/29/08	SG42BR-05	14,000	8.6	7.1	5.0	12.2	10.9	10.2					9.1	90,800	15.4
SG53B-05	Yes. 5/29/08	SG53BR-05	5,000	11.5	8.1	5.2	15.6	9.4	8.9	8.4				9.3	92,667	5.4
SG64B-05	No	--	60	27.7	38.6	55.3	51.9	48.8	45.4					48.0	480,000	0.0
SG29B-05	No	--	120	7.9	9.4	8.7	7.3	6.7	6.3					7.7	76,800	0.2
SG60B-05	Yes. 5/29/08	SG60BR-05	1,100	7.2	9.0	6.9	5.0	7.2	5.9	12.9	6.3			7.6	76,000	1.4
SG76B-05	No	--	44	9.5	13.7	5.4	16.7	15.5	8.1	9.2	5.1	6.3		10.0	100,000	0.0
SG86B-05	No	--	83	14.6	10.5	7.2	5.2	7.6	5.2	6.9	5.5			6.9	68,714	0.1
SG32B-05	No	--	110	10.9	9.8	6.5	5.4	8.3	7.9	7.2	5.2	6.8		7.1	71,375	0.2
SG17B-05 ⁵	No	see note 5	2,100	11.3	10.1	8.9	8.3	7.6	6.5	5.4				7.8	78,000	2.7
SG18B-05	No	--	190	8.5	8.5	8.3	6.3	15.4	10.6	7.3	5.1	5.7		8.4	84,000	0.2
SG23B-05	No	--	45	15.5	13.8	10.7	8.6	6.0	5.5	8.1	6.1			8.4	84,000	0.1
SG73B-05	No	--	160	12.0	9.4	8.5	7.2	6.4	5.5	10.5	8.9			8.1	80,571	0.2
SG36B-20	No	--	110	16.6	6.7	6.1	5.3	27.5	17.1					12.5	125,400	0.1
SG94B-05	Yes. 5/29/08	SG94BR-05	1,700	6.6	5.4	6.8	5.1	9.6	5.6					6.5	65,000	2.6

Notes

- 1 The list of samples identifies the 14 soil gas samples (of the more than 100 samples collected) that contained detectable concentrations of helium.
- 2 All soil gas samples were tested for helium by the laboratory. Only those samples where helium was detected are shown.
- 3 Conversion factor: 1% v/v = 10,000 ppm
- 4 % Average leak = 100 x (He concentration (ppmV) in soil gas sample) / (average He concentration (%) x 10,000 ppmV).
- 5 The soil gas probe (SG17B-05) could not be resampled because the laboratory data was reported after sampling equipment had been removed from the site.
- Not applicable.