Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/7/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel T. MACADAMS, C. WEIR, I. STONE

Type of Probe and Advancement Method

Sample Data	Sample ID	SG83B-05-1	SG83B-05-5	SG83B-05-7	PURGE TANK		
	Canister Serial No.	SC00979	SC00564	SC00791	SC00502		
	Flow Controller Serial No.	0A00080	0A00080	0A00080			
	Sample Depth (Ft.)	5	5	5			
	Tubing length	8	8	8			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1327	1437	1550			
	Initial Sample Train Vacuum (inches Hg)	27	27	25			
	Time Sample-Train Leak Test Ends	1329	1440	1554			
	Duration of Leak Test	2 min	3 min	4 min			
	Final Sample Train Vacuum (inches Hg)	27	27	25			
Purge	Purge Volume and Rate	44 cc @ 200 cc/min	132 cc @ 200 cc/min	308 cc @ 200 cc/min			
	Calculated Duration of Purge	13 sec	40 sec	92 sec			
	Time Beginning of Purge	1337:10	1501:00	1555:55			
	Time End of Purge	1337:23	1501:40	1557:27			
	Actual Duration of Purge	13 sec	40 sec	92 sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.0	-30.0	-30.0	-30.0		
	Time Canister Opened	1353	1503	1600			
	Measured Helium % initial	35.2	33.5				
	5 min.	47.0	18.92				
	10 min.	30.6	15.2				
	15 min.	28.5					
	20 min.	26.4					
	25 min.	29.0					
	30 min.	22.6					
	35 min.						
	40 min.						
	45 min.						
	Comments		HELIUM RAN OUT DURING SAMPLING	USED SHAVING CREAM			
	Time Canister Closed	1433	1541	1639			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1433	1541	1639			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/9/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. Weir, I. Stone

Type of Probe and Advancement Method

Sample Data	Sample ID	SG64B-05	SG41B-20	SG41B-20D			
	Canister Serial No.	SC00546	SC00560	SC00781			
	Flow Controller Serial No.	OA00019	OA00088	OA00088			
	Sample Depth (Ft.)	5	20	20			
	Tubing length	8ft	23ft	23ft			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1632	1748	1836			
	Initial Sample Train Vacuum (inches Hg)	23	21	20			
	Time Sample-Train Leak Test Ends	1634	1750	1838			
	Duration of Leak Test	2 min	2 min	2 min			
	Final Sample Train Vacuum (inches Hg)	23	21	20			
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	379.5 cc @ 200 cc/min				
	Calculated Duration of Purge	40 sec	114 sec = 1 min 54 sec				
	Time Beginning of Purge	1641:00	1750:45				
	Time End of Purge	1641:44	1751:25				
	Actual Duration of Purge	44 sec	40 sec				
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.1	-30.2	-30.1			
	Time Canister Opened	1645	1752	1839			
	Measured Helium % initial	27.7	32.5	24.2			
	5 min.	38.6	30.1	21.8			
	10 min.	55.3	28.0	19.6			
	15 min.	51.9	25.3	17.2			
	20 min.	48.8	23.1	14.9			
	25 min.	45.4	22.3	13.2			
	30 min.		21.2	11.4			
	35 min.		20.3				
	40 min.		*realized 20ft after 40sec purge and sample				
	45 min.			*no purge, duplicate sample			
	Comments						
	Time Canister Closed	1711	1830	1912			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1711	1830	1912			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/10/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. Weir, I. Stone, B. Goldsmith

Type of Probe and Advancement Method

Sample Data	Sample ID	SG43B-05	SG38B-20	SG40B-05	SG40B-05D		
	Canister Serial No.	SC00470	SC00970	SC00938	SC00289		
	Flow Controller Serial No.	OA00082	OA00085	OA00035	OA00035		
	Sample Depth (Ft.)	5	20	5	5		
	Tubing length	8ft	23ft	8f	8ft		
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0748	0912	1015	1054		
	Initial Sample Train Vacuum (inches Hg)	21	20	29	29		
	Time Sample-Train Leak Test Ends	0750	0914	1017	1056		
	Duration of Leak Test	2min	2min	2min	2min		
	Final Sample Train Vacuum (inches Hg)	21	20	29	29		
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	379.5cc @ 200 cc/min	132 cc @ 200 cc/min			
	Calculated Duration of Purge	40sec	1min 54sec	40sec			
	Time Beginning of Purge	0753:00	0915:00	1019:00			
	Time End of Purge	0753:45	0916:54	1019:40			
	Actual Duration of Purge	45 sec	1m 54sec	40sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.1	-30.0	-30.0	-29.9		
	Time Canister Opened	0754	0916	1020	1058		
	Measured Helium % initial	11.3	7.9	24.2	13.1		
	5 min.	11.3	4.3	22.7	7.8		
	10 min.	10.1	16.5	15.9	7.1		
	15 min.	8.3	15.3	10.6	5.9		
	20 min.	5.7	14.6	6.6	5.2		
	25 min.		9.9	9.1			
	30 min.		6.4	7.8			
	35 min.		6.3				
	40 min.						
	45 min.				NO purge because		
	Comments				duplicate		
	Time Canister Closed	0820	0953	1051	1118		
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0820	0953	1051	1118		

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

23ft x 5.5 = 126.5 cc x 3 vol = 379.5 cc x 1min/200cc = 1.9 min x 60sec/1min = 114sec = 1m 54s

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/14/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. Goldsmith I. Stone C. Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG44B-05	SG72B-05	SG39B-05	SG37B-20		
	Canister Serial No.	SC00868	SC00329	SC00223	SC00411		
	Flow Controller Serial No.	OA00033	OA00065	OA00034	OA00040		
	Sample Depth (Ft.)	5	5	5	20		
	Tubing length	8ft	8ft	8ft	23ft		
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1149	1318	1438	1610		
	Initial Sample Train Vacuum (inches Hg)	23	26	25	23		
	Time Sample-Train Leak Test Ends	1151	1320	1440	1612		
	Duration of Leak Test	2 min	2 min	2 min	2 min		
	Final Sample Train Vacuum (inches Hg)	23	26	25	23		
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200cc/min	132 cc @ 200cc/min	379.5cc @ 200cc/min		
	Calculated Duration of Purge	40sec	40sec	40sec	1m54sec		
	Time Beginning of Purge	1153:00	1321:00	1441:00	1613:00		
	Time End of Purge	1153:40	1321:40	1441:40	1614:54		
	Actual Duration of Purge	40sec	40sec	40sec	1m54sec		
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.0	-30.0	-28.9	-29.2		
	Time Canister Opened	1153	1323	1442	1615		
	Measured Helium % initial	7.4	11.2	10.1	19.7		
	5 min.	5.6	9.3	7.5	18.8		
	10 min.	5.8	5.7	5.1	16.7		
	15 min.	5.1	6.9	9.2	15.6		
	20 min.	8.2	8.4	7.0	13.2		
	25 min.	7.4	6.6	9.4	12.5		
	30 min.	6.5	7.0	6.3	11.4		
	35 min.	5.9	6.0	9.5	10.5		
	40 min.		5.1	5.3	9.6		
	45 min.			5.3			
	Comments						
	Time Canister Closed	1230	1402	1520	1700		
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1230	1402	1520	1700		

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/14/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. Goldsmith I. Stone C. Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG88B-05	SG73B-05	SG36B-20			
	Canister Serial No.	SC00796	SC00057	SC00910			
	Flow Controller Serial No.	OA00021	OA00078	OA00071			
	Sample Depth (Ft.)	5	5	20			
	Tubing length	8ft	8ft	23ft			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1305	1415	1553			
	Initial Sample Train Vacuum (inches Hg)	14.5	14.0	12.5			
	Time Sample-Train Leak Test Ends	1310	1417	1555			
	Duration of Leak Test	5min	2min	2min			
	Final Sample Train Vacuum (inches Hg)	14.5	14.0	12.5			
Purge	Purge Volume and Rate	132cc @ 200cc/min	132cc @ 200cc/min	379.5cc @ 200cc/min			
	Calculated Duration of Purge	40sec	40sec	1m54sec			
	Time Beginning of Purge	1311:00	1418:00	1556:00			
	Time End of Purge	1311:40	1418:40	1557:54			
	Actual Duration of Purge	40sec	40sec	1m54sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.0	-28.9	-29.0			
	Time Canister Opened	1316	1420	1558			
	Measured Helium % initial	7.6	12.0	16.6			
	5 min.	5.3	9.4	6.7			
	10 min.	16.7	8.5	6.1			
	15 min.	14.5	7.2	5.3			
	20 min.	10.8	6.4	27.5			
	25 min.	9.7	5.5	17.1			
	30 min.		10.5				
	35 min.		8.9				
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	1343	1457	1625			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1343	1457	1625			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/15/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B.Goldsmith I.Stone C.Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG70B-05	SG84B-05	SG85B-05	SG94B-05	SG89B-05	SG78B-05
	Canister Serial No.	SC00072	SC00886	SC00280	SC00640	SC00634	SC00379
	Flow Controller Serial No.	OA00566	OA00663	OA00089	OA00761	OA00762	OA00557
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8ft	8ft	8ft	8ft	8ft	8ft
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0843	1005	1312	1359	1505	1626
	Initial Sample Train Vacuum (inches Hg)	22	23	21.5	7.5	10	18
	Time Sample-Train Leak Test Ends	0845	1007	1314	1401	1507	1628
	Duration of Leak Test	2min	2min	2min	2min	2min	2min
	Final Sample Train Vacuum (inches Hg)	22	23	21.5	7.5	10	18
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40sec	40sec	40sec	40sec	40sec	40sec
	Time Beginning of Purge	0847:00	1009:00	1315:00	1401:00	1508:00	1628:00
	Time End of Purge	0847:40	1009:40	1315:40	1401:40	1508:40	1628:40
	Actual Duration of Purge	40sec	40sec	40sec	40sec	40sec	40sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.7	-26.1	-29.2	-27.9	-28.7	-29.3
	Time Canister Opened	0848	1010	1316	1405	1510	1629
	Measured Helium % initial	8.4	8.1	8.0	6.6	8.6	9.2
	5 min.	7.9	7.1	7.7	5.4	7.6	8.6
	10 min.	7.1	6.8	7.0	6.8	6.8	6.4
	15 min.	6.4	6.5		5.1	6.4	5.0
	20 min.	5.4	5.9		9.6	5.8	7.6
	25 min.	5.1	5.5		5.6	5.6	5.3
	30 min.	6.0	5.0			5.3	6.6
	35 min.	5.2				6.7	5.2
	40 min.					5.5	
	45 min.						
	Comments						
	Time Canister Closed	0922	1047	1330	1434	1552	1710
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0922	1047	1330	1434	1552	1710

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/15/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. GOLDSMITH, I. STONE, C. WEIR

Type of Probe and Advancement Method

Sample Data	Sample ID	SG65B-05	SG65B-05D	SG71B-05	SG35B-05	SG95B-05	SG75B-05
	Canister Serial No.	SC00201	SC00420	SC00571	SC00693	SC00671	SC00575
	Flow Controller Serial No.	0A00090	0A00090	0A00284	0A00569	0A00561	0A00560
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8	8	8	8	8	8
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0818	0846	0947	1256	1432	1548
	Initial Sample Train Vacuum (inches Hg)	9.5	5.5	4.0	2.0	27.5	26.0
	Time Sample-Train Leak Test Ends	0820	0848	0949	1258	1434	1550
	Duration of Leak Test	2 min	2 min 30 sec	2 min	2 min	2 min	2 min
	Final Sample Train Vacuum (inches Hg)	9.5	5.5	4.0	2.0	27.5	26.0
Purge	Purge Volume and Rate	132 cc @ 200 cc/min		132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40 sec		40 sec	40 sec	40 sec	40 sec
	Time Beginning of Purge	0821:00		0955:00	1259:00	1435:00	1531:00
	Time End of Purge	0821:40		0955:40	1259:40	1435:40	1531:40
	Actual Duration of Purge	40 sec		40 sec	40 sec	40 sec	40 sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-25.4	-29.0	-28.7	-29.2	-28.1	-29.3
	Time Canister Opened	0822	0850	0956	1300	1436	1552
	Measured Helium % initial	11.2	11.6	16.6	12.5	14.4	8.6
	5 min.	5.7	8.5	13.5	8.5	8.7	10.4
	10 min.	12.7	6.5	10.1	5.9	6.0	7.7
	15 min.	6.2	5.7	8.6	17.0	12.9	7.3
	20 min.	5.3	5.1		10.5	8.1	6.4
	25 min.				8.9	6.1	6.1
	30 min.				5.4	5.1	5.4
	35 min.						5.0
	40 min.						
	45 min.						
	Comments		NO PURGE; DUPLICATE				
	Time Canister Closed	0844	0910	1030	1332	1509	1629
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0844	0910	1030	1332	1509	1629

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/15/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. GOLDSMITH, I. STONE, C. WEIR

Type of Probe and Advancement Method

Sample Data	Sample ID	SG76B-05					
	Canister Serial No.	5C00630					
	Flow Controller Serial No.	0A00038					
	Sample Depth (Ft.)	5					
	Tubing length	8					
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1711					
	Initial Sample Train Vacuum (inches Hg)	26.0					
	Time Sample-Train Leak Test Ends	1313					
	Duration of Leak Test	2 min					
	Final Sample Train Vacuum (inches Hg)	26.0					
Purge	Purge Volume and Rate	132 cc @ 200 cc/min					
	Calculated Duration of Purge	40 sec					
	Time Beginning of Purge	1715:00					
	Time End of Purge	1715:40					
	Actual Duration of Purge	40 sec					
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.3					
	Time Canister Opened	1719					
	Measured Helium % initial	9.5					
	5 min.	13.7					
	10 min.	5.4					
	15 min.	16.7					
	20 min.	15.5					
	25 min.	8.1					
	30 min.	9.2					
	35 min.	5.1					
	40 min.	6.3					
	45 min.						
	Comments						
	Time Canister Closed	1800					
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1800					

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/16/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel I. Stone B. Golasmith C. Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG19B-05	SG80B-05	SG22B-05	SG28B-05	SG28B-05D	
	Canister Serial No.	SC00265	SC00887	SC00957	SC00702	SC00632	
	Flow Controller Serial No.	OA00763	OA00550	OA00757	OA00759	OA00769	
	Sample Depth (Ft.)	5	5	5	5	5	
	Tubing length	8ft	8ft	8ft	8ft	8ft	
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0902	1020	1142	1332	1356	
	Initial Sample Train Vacuum (inches Hg)	25.0	23.0	22.0	14.0	13.0	
	Time Sample-Train Leak Test Ends	0906	1022	1144	1334	1358	
	Duration of Leak Test	4 min	2 min	2 min	2 min	2 min	
	Final Sample Train Vacuum (inches Hg)	25.0	23.0	22.0	14.0	13.0	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min		
	Calculated Duration of Purge	40sec	40sec	40sec	40sec		
	Time Beginning of Purge	0907:00	1023:00	1145:00	1334:05		
	Time End of Purge	0907:40	1023:40	1145:40	1334:45		
	Actual Duration of Purge	40sec	40sec	40sec	40sec		
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.8	-29.2	-29.2	-28.9	-28.2	
	Time Canister Opened	0908	1027	1146	1335	1359	
	Measured Helium % initial	9.9	15.0	12.8	8.8	8.7	
	5 min.	8.9	11.3	10.3	7.5	5.7	
	10 min.	6.5	8.4		5.0	16.5	
	15 min.	11.3	6.1		8.4	12.1	
	20 min.	8.4	5.1				
	25 min.	5.7	11.4				
	30 min.	9.9	8.3	5.8			
	35 min.	7.7		14.2			
	40 min.			9.8			
	45 min.						
	Comments					no purge because duplicate	
	Time Canister Closed	0944	1100	1225	1353	1416	
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0944	1100	1225	1353	1416	

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date: 5/16/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel: T. Stone, B. Goldsmith, C. Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG02B-05	SG01B-05	SG26B-05	SG26B-05D	SG80B-05	SG27B-05
	Canister Serial No.	SC00616	SC00380	SC00833	SC00621	SC00274	SC00931
	Flow Controller Serial No.	0A00563	0A00765	0A00758	0A00758	0A00767	0A00760
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8ft	8ft	8ft	8ft	8ft	8ft
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0834	0938	1054	1126	1248	1400
	Initial Sample Train Vacuum (inches Hg)	15.5	18.5	12.5	11.5	14.5	15
	Time Sample-Train Leak Test Ends	0836	0940	1056	1128	1250	1402
	Duration of Leak Test	2min	2min	2min	2min	2min	2min
	Final Sample Train Vacuum (inches Hg)	15.5	18.5	12.5	11.5	14.5	15
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min		132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40sec	40sec	40sec		40sec	40sec
	Time Beginning of Purge	0837:40	0940:00	1056:00		1250:00	1404:00
	Time End of Purge	0839:00	0940:40	1056:40		1250:40	1404:40
	Actual Duration of Purge	1min 20sec	40sec	40sec		40sec	40sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.3	-29.2	-29.2	-29.3	-29.2	-29.0
	Time Canister Opened	0840	0941	1057	1128	1251	1405
	Measured Helium % initial	16.6	7.0	7.5	14.6	14.6	13.2
	5 min.	14.3	5.9	6.8	10.3	10.5	7.4
	10 min.	9.8	6.3	7.8	9.3	7.2	6.3
	15 min.	7.6	5.2	5.6	7.6	5.2	5.3
	20 min.	13.0	6.3	6.7	5.3	7.6	7.6
	25 min.	7.8	5.0	5.3	6.9	5.2	6.8
	30 min.	5.2	7.6		5.5	6.9	5.3
	35 min.		5.3			5.5	5.1
	40 min.		5.7				
	45 min.						
	Comments				no purge because duplicate		
	Time Canister Closed	0915	1024	1125	1200	1333	1442
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0915	1024	1125	1200	1333	1442

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/17/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel: B. Goldsmith ; C. Weir ; I. Stone

Type of Probe and Advancement Method

Sample Data	Sample ID	SG32B-05	SG83B-05	SG83B-05D	SG62B-05	SG07B-05	SG07B-05D
	Canister Serial No.	SC00335	SC00955	SC00869	SC00624	SC00283	SC00104
	Flow Controller Serial No.	OA00773	OA00556	OA00556	OA00077	OA00566	OA00566
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8ft	8ft	8ft	8ft	8ft	8ft
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1117	1220	1302	1401	1544	1622
	Initial Sample Train Vacuum (inches Hg)	10.5	7.5	7	12	9.5	9
	Time Sample-Train Leak Test Ends	1119	1222	1304	1403	1546	1624
	Duration of Leak Test	2min	2min	2min	2min	2min	2min
	Final Sample Train Vacuum (inches Hg)	10.5	7.5	7	12	9.5	9
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min		132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40sec	40sec		40sec	40sec	
	Time Beginning of Purge	1119:00	1223:00		1404:00	1546:00	
	Time End of Purge	1119:40	1223:40		1404:40	1546:40	
	Actual Duration of Purge	40sec	40sec		40sec	40sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.4	-28.5	-28.6	-28.6	-28.0	-28.4
	Time Canister Opened	1120	1225	1305	1405	1547	1625
	Measured Helium % initial	10.9	9.0	13.6	12.0	14.0	13.7
	5 min.	9.8	8.6	9.8	11.0	13.6	8.7
	10 min.	6.5	7.5	8.4	9.6	12.2	6.4
	15 min.	5.4	5.0	7.6	8.1	11.2	5.1
	20 min.	8.3	9.2	7.0	7.5	6.9	7.6
	25 min.	7.9	8.6	6.5	7.0	7.1	9.6
	30 min.	7.2	9.9	5.9	6.4	5.4	6.1
	35 min.	5.2	5.0		5.4		5.0
	40 min.	6.8			5.0		
	45 min.						
	Comments			no purge because duplicate			no purge because duplicate
	Time Canister Closed	1200	1300	1332	1447	1620	1705
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1200	1300	1332	1447	1620	1705

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/17/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel I. Stone ; C. Weir ; B. Goldsmith

Type of Probe and Advancement Method

Sample Data	Sample ID	SG63B-05	SG64B-05	SG33B-05			
	Canister Serial No.	SC00994	SC00762	SC00322			
	Flow Controller Serial No.	OA00769	OA00766	OA00569			
	Sample Depth (Ft.)	5	5	5			
	Tubing length	8ft	8ft	8ft			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1209	1317	1513			
	Initial Sample Train Vacuum (inches Hg)	12.5	11.5	4.0			
	Time Sample-Train Leak Test Ends	1211	1321	1515			
	Duration of Leak Test	2min	2min	2min			
	Final Sample Train Vacuum (inches Hg)	12.5	11.5	4.0			
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min			
	Calculated Duration of Purge	40sec	40sec	40sec			
	Time Beginning of Purge	1212:00	1325:00	1516:00			
	Time End of Purge	1212:40	1325:40	1516:40			
	Actual Duration of Purge	40sec	40sec	40sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.5	-28.6	-28.6			
	Time Canister Opened	1213	1327	1517			
	Measured Helium % initial	8.1	9.8	5.9			
	5 min.	5.3	7.0	11.5			
	10 min.	6.7	13.8	7.5			
	15 min.	5.6		5.5			
	20 min.	10.6		9.2			
	25 min.	8.7					
	30 min.						
	35 min.						
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	1239	1338	1538			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1239	1338	1538			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/18/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. Goldsmith C. Weir

Type of Probe and Advancement Method

Sample Data	Sample ID	SG12B-05	SG09B-05	SG08B-05	SG10B-05	SG18B-05	
	Canister Serial No.	SC00846	SC00924	SC00578	SC00539	SC00441	
	Flow Controller Serial No.	0A00873	0A00867	0A00870	0A00866	0A00871	
	Sample Depth (Ft.)	5	5	5	5	5	
	Tubing length	8ft	8ft	8ft	8ft	8ft	
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0602	0702	0801	0905	1013	
	Initial Sample Train Vacuum (inches Hg)	10	10	10	8	8	
	Time Sample-Train Leak Test Ends	0604	0704	0803	0907	1014	
	Duration of Leak Test	2min	2min	2min	2min	2min	
	Final Sample Train Vacuum (inches Hg)	10	10	10	8	8	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40sec	40sec	40sec	40sec	40sec	
	Time Beginning of Purge	0604:00	0704:00	0804:00	0907:00	1014:00	
	Time End of Purge	0604:40	0704:40	0804:40	0907:40	1014:40	
	Actual Duration of Purge	40sec	40sec	40sec	40sec	40sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.0	-29.8	-29.8	-29.8	-28.0	
	Time Canister Opened	0605	0705	0805	0908	1015	
	Measured Helium % initial	12.6	7.8	6.6	7.1	8.5	
	5 min.	11.8	7.5	6.3	6.9	8.5	
	10 min.	11.6	7.2	5.8	6.7	8.3	
	15 min.	11.4	6.5	5.8	6.8	6.3	
	20 min.	10.8	6.1	5.2	6.5	15.4	
	25 min.	10.3	5.7	5.1	6.1	10.6	
	30 min.	9.7	5.3	5.4	6.0	7.3	
	35 min.	9.0		5.1	5.7	5.1	
	40 min.					5.7	
	45 min.						
	Comments						
	Time Canister Closed	0645	0740	0844	0947	1055	
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0645	0740	0844	0947	1055	

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/18/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. Weir B. Goldsmith

Type of Probe and Advancement Method

Sample Data	Sample ID	SG11B-05	SG10B-05	SG17B-05			
	Canister Serial No.	SC00953	SC00773	SC00720			
	Flow Controller Serial No.	OA00762	OA00761	OA00869			
	Sample Depth (Ft.)	5	5	5			
	Tubing length	8ft	8ft	8ft			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0610	0738	0913			
	Initial Sample Train Vacuum (inches Hg)	-10.0	-10.0	-10.0			
	Time Sample-Train Leak Test Ends	0612	0740	0915			
	Duration of Leak Test	2 min	2 min	2 min			
	Final Sample Train Vacuum (inches Hg)	-10.0	-10.0	-10.0			
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min			
	Calculated Duration of Purge	40 sec	40 sec	40 sec			
	Time Beginning of Purge	0614:00	0741:00	0916:00			
	Time End of Purge	0614:40	0741:40	0916:40			
	Actual Duration of Purge	40 sec	40 sec	40 sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.4	-28.4	-28.4			
	Time Canister Opened	0615	0745	0950			
	Measured Helium % initial	13.2	7.7	11.3			
	5 min.	10.6	9.2	10.1			
	10 min.	9.1	8.5	8.9			
	15 min.	8.2	7.4	8.3			
	20 min.	6.7	6.0	7.6			
	25 min.	5.9		6.5			
	30 min.	5.1		5.4			
	35 min.	10.2					
	40 min.	8.3					
	45 min.						
	Comments						
	Time Canister Closed	0655	0805	1028			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0655	0805	1028			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/19/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG77B-05	SG30B-05	SG29B-05	SG59B-05	SG31B-05	
	Canister Serial No.	SC00799	SC00705				
	Flow Controller Serial No.	0A00868	0A00664				
	Sample Depth (Ft.)	5	5				
	Tubing length	8	8				
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0824	0948				
	Initial Sample Train Vacuum (inches Hg)	-20.0	-28.5				
	Time Sample-Train Leak Test Ends	0826	0950				
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	
	Final Sample Train Vacuum (inches Hg)	-20.0	-28.5				
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
	Time Beginning of Purge	0829:00	0951:00	1108:00	1245:00	1405:00	
	Time End of Purge	0829:40	0951:40	1108:40	1245:40	1405:40	
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.5	-28.6	-28.5	-28.5	-28.4	
	Time Canister Opened	0830	0952	1109	1246	1407	
	Measured Helium % initial	7.1	13.0	7.9	7.2	5.9	
	5 min.	9.3	12.2	9.4	11.9	6.3	
	10 min.	6.5	9.7	8.7	9.4	10.3	
	15 min.	5.9	8.5	7.3	7.0	6.4	
	20 min.	5.3	6.6	6.7	5.7	9.7	
	25 min.	5.0	5.3	6.3	7.3	8.1	
	30 min.		7.7		5.0	6.1	
	35 min.		6.3			5.0	
	40 min.		5.2		*CHANGED		
	45 min.				0A00284		
	Comments				USED 0A00035		
	Time Canister Closed	0901	1035	1143	1320	1443	
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0901	1035	1143	1320	1443	

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/20/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG60B-05	SG58B-05	SG56B-05	SG56B-05D	SG55B-05	SG57B-05
	Canister Serial No.	SC00811	SC00664				
	Flow Controller Serial No.	0A00040	0A00033				
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8	8	8	8	8	8
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0832	1036	1205	1251	1412	1522
	Initial Sample Train Vacuum (inches Hg)	-19.5	-18.0	-17.5	-18.0	-17.5	-18.0
	Time Sample-Train Leak Test Ends	0834	1038	1207	1253	1414	1524
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	2 min
	Final Sample Train Vacuum (inches Hg)	-19.5	-18.0	-17.5	-18.0	-17.5	-18.0
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min		132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40 sec	40 sec	40 sec		40 sec	40 sec
	Time Beginning of Purge	0846:00	1038:00	1208:00		1415:00	
	Time End of Purge	0846:40	1038:40	1208:40		1415:40	
	Actual Duration of Purge	40 sec	40 sec	40 sec		40 sec	40 sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.2	-28.1	-28.4	-28.5	-28.4	-28.4
	Time Canister Opened	0847	1039	1209	1253	1416	1525
	Measured Helium % initial	7.2	14.0	11.7	7.5	9.3	10.8
	5 min.	9.0	13.8	5.0	5.1	7.0	9.8
	10 min.	6.9	8.1	5.9	6.5	5.5	9.2
	15 min.	5.0	13.8	9.6	7.5	5.0	8.7
	20 min.	7.2	10.2	11.9	6.6		8.3
	25 min.	5.9	5.2	5.3	5.9		7.7
	30 min.	12.9		5.7	5.3		5.1
	35 min.	6.3		6.4	5.0		
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	0924	1106	1248	1331	1439	1558
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0924	1106	1248	1331	1439	1558

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/20/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. GOLDSMITH

Type of Probe and Advancement Method

Sample Data	Sample ID	SG13B-05	SG15B-05	SG14B-05	SG06B-05		
	Canister Serial No.	SC00428	SC00817	SC00051	SC00189		
	Flow Controller Serial No.	07A00809	07A00806	07A00800	07A00807		
	Sample Depth (Ft.)	5	5	5	5		
	Tubing length	8	8	8	8		
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1127	1220	1309	1409		
	Initial Sample Train Vacuum (inches Hg)	7	8	8	8		
	Time Sample-Train Leak Test Ends	1129	1222	1311	1411		
	Duration of Leak Test	2 min	2 min	2 min	2 min		
	Final Sample Train Vacuum (inches Hg)	7	8	8	8		
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min		
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec		
	Time Beginning of Purge	1129:00	1222:00	1311:00	1411:00		
	Time End of Purge	1129:40	1222:40	1311:40	1411:40		
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec		
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.5	-28.5	-28.5	-28.5		
	Time Canister Opened	1130	1223	1312	1412		
	Measured Helium % initial	8.7	10.6	8.4	9.6		
	5 min.	8.4	10.2	7.6	6.5		
	10 min.	8.0	9.6	6.3	5.0		
	15 min.	7.6	9.0	5.7	9.3		
	20 min.	7.4	7.6	5.0	7.2		
	25 min.	6.9	6.3	6.8	6.9		
	30 min.	6.3	5.1	5.2	5.1		
	35 min.				6.7		
	40 min.				5.0		
	45 min.						
	Comments						
	Time Canister Closed	1200	1300	1350	1453		
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1200	1300	1350	1453		

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/21/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG42B-05	SG69B-05	SG48B-05	SG47B-05	SG53B-05	SG53B-05D
	Canister Serial No.	SC00510	SC00834	SC00786	SC00995	SC00627	SC00043
	Flow Controller Serial No.	0A00820	0A00814	0A00019	0A00034	0A00089	0A00089
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8'	8	8	8	8	8
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0645	0740	0849	1009	1250	1339
	Initial Sample Train Vacuum (inches Hg)	-12.5	-15.5	-15.5	-15.5	-14.0	
	Time Sample-Train Leak Test Ends	0647	0742	0851	1011	1252	1341
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	2 min
	Final Sample Train Vacuum (inches Hg)	-12.5	-15.5	-15.5	-15.5	-14.0	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
	Time Beginning of Purge	0648:00	0742:00	0852:00	1011:00	1252:00	
	Time End of Purge	0648:40	0742:40	0852:40	1011:40	1252:40	
	Actual Duration of Purge	40sec	40sec	40sec	40sec	40 sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.9	-29.9	-29.9	-29.7	-29.6	-29.6
	Time Canister Opened	0649	0743	0853	1012	1253	1342
	Measured Helium % initial	8.6	9.2	10.0	12.6	11.5	7.8
	5 min.	7.1	6.6	7.6	8.8	8.1	5.4
	10 min.	5.0	5.7	6.9	8.0	5.2	5.1
	15 min.	12.2	5.1	6.3	7.3	15.6	
	20 min.	10.9	11.1	6.0	6.8	9.4	
	25 min.	10.2	8.9	5.5	6.1	8.9	
	30 min.		8.1	5.0	5.6	8.4	
	35 min.						
	40 min.						
	45 min.						
	Comments						* NO PURGE. DUPLICATE
	Time Canister Closed	0715	0819	0930	1045	1328	1357
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0715	0819	0930	1045	1328	1357

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/21/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. GOLDSMITH

Type of Probe and Advancement Method

Sample Data	Sample ID	SG91B-05	SG93B-05	SG46B-05	SG68B-05	SG67B-05	SG51B-05
	Canister Serial No.	SC00912	SC00372	SC00651	SC00526	SC00533	SC00105
	Flow Controller Serial No.	OA00810	OA00817	OA00821	OA00819	OA00801	OA00808
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8	8	8	8	8	8
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0620	0717	0829	0927	1032	
	Initial Sample Train Vacuum (inches Hg)	23.5	24	26.5	25	26	
	Time Sample-Train Leak Test Ends	0622	0719	0831	0929	1034	
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	2 min
	Final Sample Train Vacuum (inches Hg)	23.5	24	26.5	25	26	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	40 sec
	Time Beginning of Purge	0622:00	0719:00	0831:00	0929:00	1034:00	1252:00
	Time End of Purge	0622:40	0719:40	0831:40	0929:40	1034:40	1252:40
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	40 sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.5	-28.5	-27.9	-28.3	-29.6	-29.6
	Time Canister Opened	0623	0720	0832	0930	1035	1253
	Measured Helium % initial	6.8	8.7	7.7	5.7	8.0	12.6
	5 min.	6.0	5.3	7.3	5.5	6.4	10.3
	10 min.	5.1	9.7	6.6	5.6	5.0	8.6
	15 min.	7.6	6.4	5.0	5.3	6.2	6.3
	20 min.	6.9	9.2	5.7	5.0	5.1	—
	25 min.	5.3	5.7	7.6	8.3	5.9	6.1
	30 min.	5.8	8.7	5.4	7.9	5.9	6.5
	35 min.	5.0			6.0		5.3
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	0700	0754	0905	1008	1107	1333
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0700	0754	0905	1008	1107	1333

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/21/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel B. GOLDSMITH

Type of Probe and Advancement Method

Sample Data	Sample ID	SG51B-05D					
	Canister Serial No.	SC00292					
	Flow Controller Serial No.	OA00808					
	Sample Depth (Ft.)	5					
	Tubing length	8					
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1333					
	Initial Sample Train Vacuum (inches Hg)	5.5					
	Time Sample-Train Leak Test Ends	1335					
	Duration of Leak Test	2 min					
	Final Sample Train Vacuum (inches Hg)	5.5					
Purge	Purge Volume and Rate						
	Calculated Duration of Purge						
	Time Beginning of Purge						
	Time End of Purge						
	Actual Duration of Purge						
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.0					
	Time Canister Opened	1336					
	Measured Helium % initial	7.6					
	5 min.	5.8					
	10 min.	5.2					
	15 min.	7.5					
	20 min.	6.9					
	25 min.	6.3					
	30 min.	5.4					
	35 min.	5.0					
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	1415					
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1415					

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/22/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG49B-05	SG50D-05	SG45B-05			
	Canister Serial No.	SC00547	SC00553	SC00908			
	Flow Controller Serial No.	0A00802	0A00559	0A00662			
	Sample Depth (Ft.)	5	5	5			
	Tubing length	8	8	8			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0900	1144	1310			
	Initial Sample Train Vacuum (inches Hg)	-5.0	-5.0	-5.0			
	Time Sample-Train Leak Test Ends	0902	1146	1312			
	Duration of Leak Test	2 min	2 min	2 min			
	Final Sample Train Vacuum (inches Hg)	-5.0	-5.0	-5.0			
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min			
	Calculated Duration of Purge	40 sec	40 sec	40 sec			
	Time Beginning of Purge	0902:00	1146:00	1312:00			
	Time End of Purge	0902:40	1146:40	1392:40			
	Actual Duration of Purge	40 sec	40 sec	40 sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.3	-29.4	-29.3			
	Time Canister Opened	0903	1147	1313			
	Measured Helium % initial	13.6	17.3	9.4			
	5 min.	9.8	16.2	9.0			
	10 min.	8.8	14.8	7.6			
	15 min.	6.3	12.7	6.7			
	20 min.	5.0	11.7				
	25 min.	11.3	10.1				
	30 min.	8.0	9.2				
	35 min.						
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	0936	1218	1328			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0936	1218	1328			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/22/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG66B-05	SG87B-05	SG54B-05			
	Canister Serial No.	SC00042	SC00660	SC00295			
	Flow Controller Serial No.	OA00813	OA00563	OA00564			
	Sample Depth (Ft.)	5	5	5			
	Tubing length	8	8	8			
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0906	1159	1254			
	Initial Sample Train Vacuum (inches Hg)	-13.5	-6.5	-10.0			
	Time Sample-Train Leak Test Ends	0908	1201	1256			
	Duration of Leak Test	2 min	2 min	2 min			
	Final Sample Train Vacuum (inches Hg)	-13.5	-6.5	-10.2			
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min			
	Calculated Duration of Purge	40 sec	40 sec	40 sec			
	Time Beginning of Purge	0910:00	1202:00	1257:00			
	Time End of Purge	0910:40	1202:40	1257:40			
	Actual Duration of Purge	40 sec	40 sec	40 sec			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)						
	Time Canister Opened	0911	1203	1257			
	Measured Helium % initial	6.8	8.2	10.3			
	5 min.	13.6	6.7	7.5			
	10 min.	12.8	6.4	7.1			
	15 min.	11.2	6.3	6.2			
	20 min.	10.0	5.9	5.7			
	25 min.	9.5					
	30 min.	9.0					
	35 min.						
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	0947	1227	1319			
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0947	1227	1319			

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/28/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG21B-05	SG24B-05	SG90B-05	SG19B-05	SG20B-05	SG52B-05
	Canister Serial No.	SC00699	SC00622	SC00248	SC00821	SC00234	SC00861
	Flow Controller Serial No.	OA00555	OA00815	OA00822	OA00812	OA00823	OA00020
	Sample Depth (Ft.)	5	5	5	5	5	5
	Tubing length	8	8	8	8	8	8
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0940:30	1049:00	1152	1408	1526	1643
	Initial Sample Train Vacuum (inches Hg)	-11.0	-9.5	-10	-9.0	-9.5	-9.0
	Time Sample-Train Leak Test Ends	0942:30	1051:00	1154	1410	1528	1645
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	2 min
	Final Sample Train Vacuum (inches Hg)	-11.0	-9.5	-10	-9.0	-9.5	-9.0
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	40 sec
	Time Beginning of Purge	0944:00	1052:00	1155:00	1410:00	1529:00	1646:00
	Time End of Purge	0944:40	1052:40	1155:40	1410:40	1529:40	1646:40
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	40 sec
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-27	-27	-26.5	-25.5	-29.5	-27.0
	Time Canister Opened	0945	1053	1155	1411	1530	1648
	Measured Helium % initial	8.3	6.2	7.2	5.9	9.7	9.1
	5 min.	6.8	5.5	5.2	5.7	6.6	7.3
	10 min.	6.2	8.7	10.3	5.6	6.1	5.6
	15 min.	5.7	7.8	10.1	5.4	5.4	7.0
	20 min.	5.2	7.1	10.0	5.0	5.2	6.5
	25 min.		6.6	9.7	6.7	7.0	6.1
	30 min.			9.4	6.4	6.0	5.5
	35 min.					5.3	5.1
	40 min.					5.1	
	45 min.						
	Comments						
	Time Canister Closed	1008	1126	1232	1442	1615	1725
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1008	1126	1232	1442	1615	1725

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/28/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG23B-05	SG25B-05	SG34B-05	SG74B-05		
	Canister Serial No.	SC00692	SC00114	SC00097	SC00878		
	Flow Controller Serial No.	0A00767	0A00773	0A00757	0A00553		
	Sample Depth (Ft.)	5	5	5	5		
	Tubing length	8	8	8	8		
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1405	1515	1635	1739		
	Initial Sample Train Vacuum (inches Hg)	-5.0	-1.0	-5.5	-5.0		
	Time Sample-Train Leak Test Ends	1407	1517	1637	1741		
	Duration of Leak Test	2 min	2 min	2 min	2 min		
	Final Sample Train Vacuum (inches Hg)	-5.0	-1.0	-5.5	-5.0		
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min		
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec		
	Time Beginning of Purge	1407:00	1517:00	1637:00	1741:00		
	Time End of Purge	1407:40	1517:40	1637:40	1741:40		
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec		
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.1	-29.1	-29.2	-29.2		
	Time Canister Opened	1408	1517	1637	1742		
	Measured Helium % Initial	15.5	11.2	10.0	10.7		
	5 min.	13.8	10.0	8.6	9.5		
	10 min.	10.7	8.8	6.8	7.4		
	15 min.	8.6	6.8	5.8	5.9		
	20 min.	6.0	12.9	5.0	8.8		
	25 min.	5.5	9.8	9.9	7.1		
	30 min.	8.1	7.1	8.2			
	35 min.	6.1		7.3			
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	1448	1552	1714	1816		
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1448	1552	1714	1816		

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/29/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WER, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG42BR-05	SG94BR-05	SG03B-05	SG01B-05	SG02B-05	
	Canister Serial No.	SC00520	SC00801	SC00369	SC00971	SC00865	
	Flow Controller Serial No.	0A00804	0A00771	0A00768	0A00770	0A00080	
	Sample Depth (Ft.)	5	5	5	5	5	
	Tubing length	8	8	8	8	8	
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0740	0843	1031	1150	1256	
	Initial Sample Train Vacuum (inches Hg)	-3.5	-2.0	-2.0	-29.5	-26.5	
	Time Sample-Train Leak Test Ends	0742	0845	1033	1152	1258	
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	
	Final Sample Train Vacuum (inches Hg)	-3.5	-20	-2.0	-29.5	-26.5	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
	Time Beginning of Purge	0742:00	0846:00	1034:00	1153:00	1258:00	
	Time End of Purge	0742:40	0846:40	1034:40	1153:40	1258:40	
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-30.1	-30.1	-30.2	-30.2	-29.3	
	Time Canister Opened	0743	0846	1034	1153	1258	
	Measured Helium % initial	8.4	21.0	8.6	9.7	8.5	
	5 min.	7.0	16.9	7.9	7.5	5.6	
	10 min.	6.8	11.0	6.4	6.8	7.9	
	15 min.	6.5	8.5	5.1	6.1	6.8	
	20 min.	6.1	5.9	11.8	5.7	5.9	
	25 min.	5.9	9.4	10.9	5.2	5.4	
	30 min.		5.7	10.2	7.2	5.0	
	35 min.			8.5			
	40 min.						
	45 min.						
	Comments						
	Time Canister Closed	0809	0920	1112	1227	1333	
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0809	0920	1112	1227	1333	

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/29/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. ALVIZURI, C. WEIR

Type of Probe and Advancement Method

Sample Data	Sample ID	SG60BR-05	SG92B-05	SG04B-05	SG05B-05	SG65BR-05	SG65BR-05D
	Canister Serial No.	SC00795	SC00363	SC00952	SC00800	SC00477	SC00774
	Flow Controller Serial No.	OA00551	OA00568	OA00833	OA00832		
	Sample Depth (Ft.)	5	5	5	5	5	
	Tubing length	8	8	8	8	8	
2-Minute Leak Test	Time Sample-Train Leak Test Begins	0805	0925	1052	1228	1440	
	Initial Sample Train Vacuum (inches Hg)	-9	-8.5	-8.5	-8.0	-8.0	
	Time Sample-Train Leak Test Ends	0807	0927	1054	1230	1442	
	Duration of Leak Test	2 min	2 min	2 min	2 min	2 min	
	Final Sample Train Vacuum (inches Hg)	-9	-8.5	-8.5	-8.0	-8.0	
Purge	Purge Volume and Rate	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	132 cc @ 200 cc/min	
	Calculated Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
	Time Beginning of Purge	0808:00	0927:00	1054:00	1230:00	1458:00	
	Time End of Purge	0808:40	0927:40	1054:40	1230:40	1458:40	
	Actual Duration of Purge	40 sec	40 sec	40 sec	40 sec	40 sec	
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-28.5	-29.0	-29.5	-26.5		
	Time Canister Opened	0809	0928	1055	1231	1459	
	Measured Helium % initial	9.7	7.3	7.2	6.1	7.4	50) 6.6
	5 min.	9.2	6.8	6.9	5.8	5.3	55) 6.2
	10 min.	8.5	6.1	5.1	5.6	7.1	60) 5.9
	15 min.	7.1	5.7	7.4	5.3	7.0	65) 8.0
	20 min.	6.3	5.6	5.9	5.0	6.8	
	25 min.	5.8	5.4	5.7	7.4	6.3	
	30 min.	6.2	5.1	5.5	7.3	5.8	
	35 min.			5.3		5.2	
	40 min.			5.1		7.8	
	45 min.					7.3	
	Comments					*SAME MEASUREMENTS EXCEPT FOR CANISTER #	
	Time Canister Closed	0840	1002	1141	1305	1609	
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	0840	1002	1141	1305	1609	

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

Soil Vapor Sample Collection Data

ENSR | AECOM

1220 Avenida Acaso, Camarillo, California 93012
T 805.388.3775 F 805.388.3577 www.ensr.aecom.com

Client: Tronox LLC | Date 5/29/08

Project Number: 04020-023-4311

Site Location: Henderson, Nevada

Field Personnel C. WEIR, C. ALVIZURI

Type of Probe and Advancement Method

Sample Data	Sample ID	SG53BR-05	SG53BR-05D				
	Canister Serial No.	SC00366	SC00065				
	Flow Controller Serial No.	0A00021	0A00021				
	Sample Depth (Ft.)	5					
	Tubing length	8					
2-Minute Leak Test	Time Sample-Train Leak Test Begins	1700					
	Initial Sample Train Vacuum (inches Hg)	-26.0					
	Time Sample-Train Leak Test Ends	1702					
	Duration of Leak Test	2 min					
	Final Sample Train Vacuum (inches Hg)	-26.0					
Purge	Purge Volume and Rate	132 cc @ 200 cc/min					
	Calculated Duration of Purge	40 sec					
	Time Beginning of Purge	1703:00					
	Time End of Purge	1703:40					
	Actual Duration of Purge	40 sec					
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (inches Hg, from digital gauge)	-29.3					
	Time Canister Opened	1703					
	Measured Helium % initial	7.6	50) 5.7				
	5 min.	5.3	55) 5.1				
	10 min.	5.2	60) 7.7				
	15 min.	5.1	65) 6.9				
	20 min.	6.6	70) 6.5				
	25 min.	6.2	75) 10.6				
	30 min.	5.5	~~80~~				
	35 min.	5.1					
	40 min.	6.7					
	45 min.	6.1					
	Comments	* IDENTICAL MEASUREMENTS EXCEPT FOR CANISTER #					
	Time Canister Closed	1820	1820				
	Final Canister Pressure (inches Hg, from analog gauge)						
	Time of Sample Collection	1820	1820				

Notes:
Calculating Purge Volume: Length of tube (ft.) x 5.5 cc/linear foot (1/4" OD Teflon Tube)
Sample Calculation: 5' depth + 2' stickup = 7' tubing * 5.5 cc/ft = 38.5 cc = 1 vol * 3 vols = 115.5 cc @ 200 cc/min = 0.5775 minutes * 60 sec/min = 34.65 or 35 seconds = purge time

ENSR

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Tronox LLC	Henderson, Nevada	04020-023-430

Photo No.	Date:
1	May-08

Activity:
Soil gas sampling

Description:
Preparation of sample point. Surface is sealed at the surface with bentonite, and covered with aluminum foil.

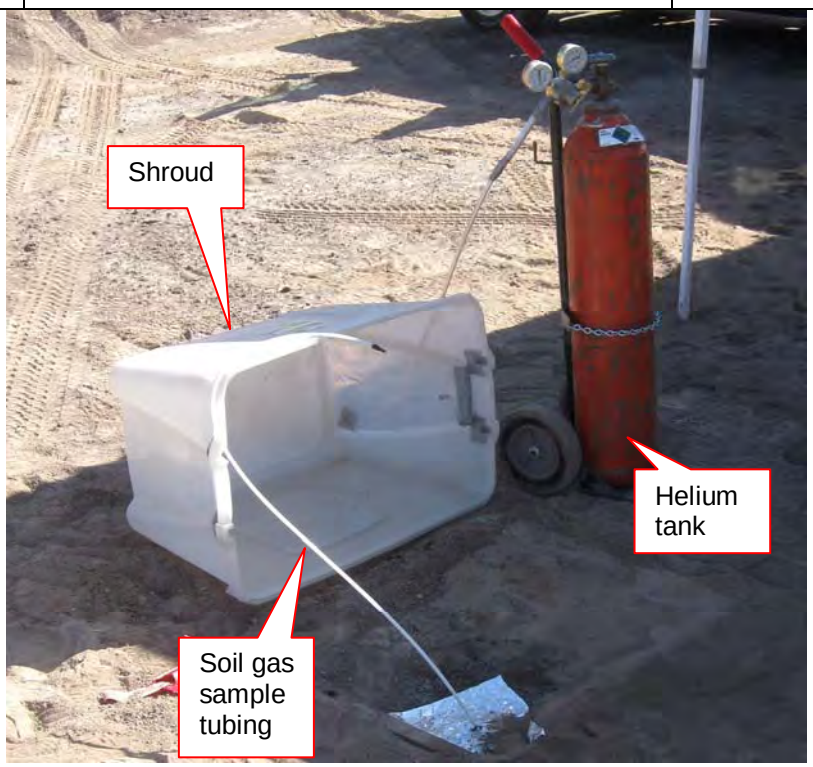
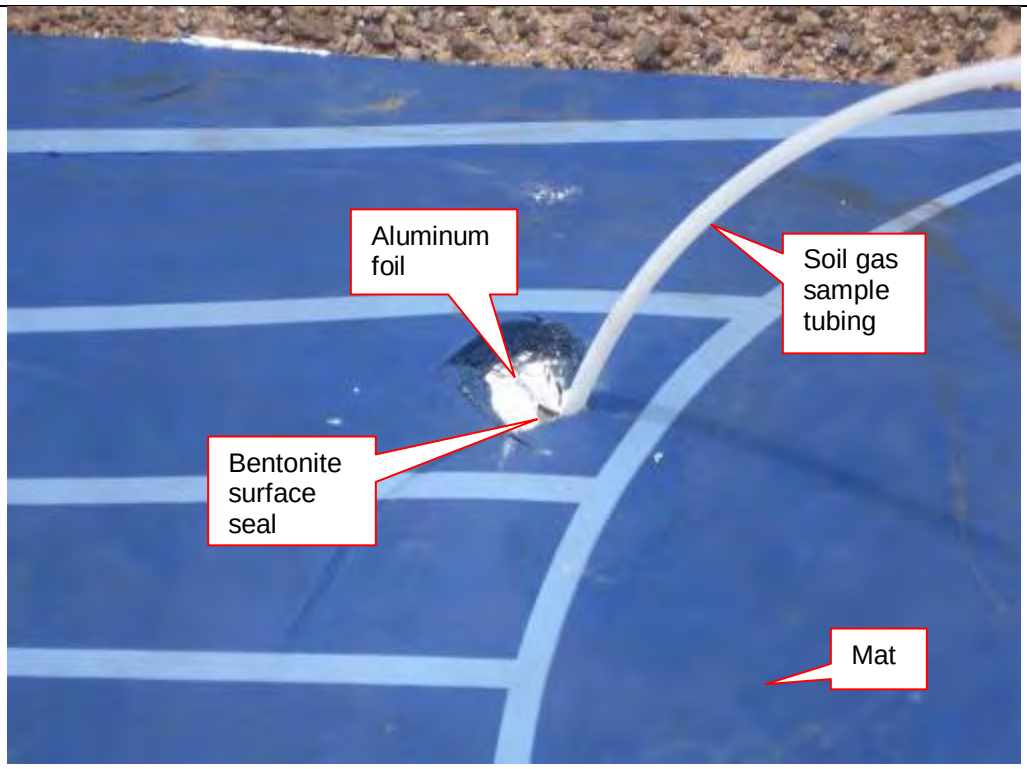


Photo No.	Date:
2	May-08

Activity:
Soil gas sampling

Description:
Preparation of sample point. Mat acts as seal for shroud.



ENSR

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Tronox LLC	Henderson, Nevada	04020-023-430

Photo No.	Date:
3	May-08

Activity:
Soil gas sampling

Description:
Setup of purge and sample canisters. Soil gas-sampling tubing is connected to intake valve. A critical orifice maintains purge and sample rate at 200 cc per minute. Vacuum gauge monitors continuously vacuum of system.

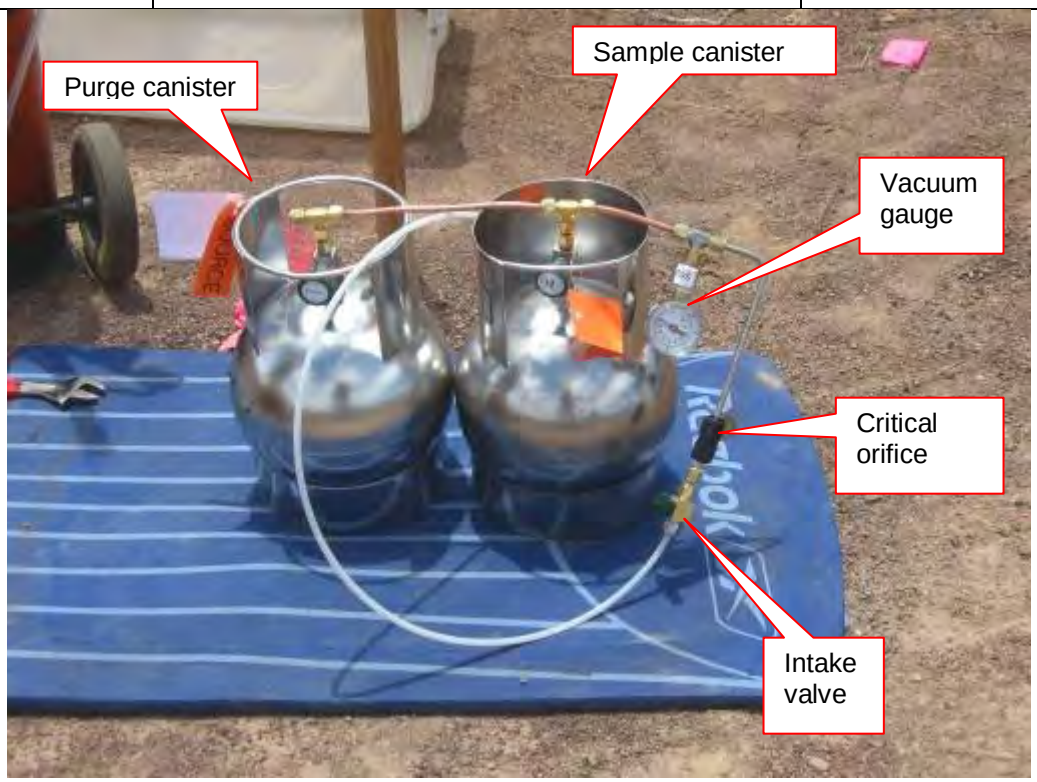
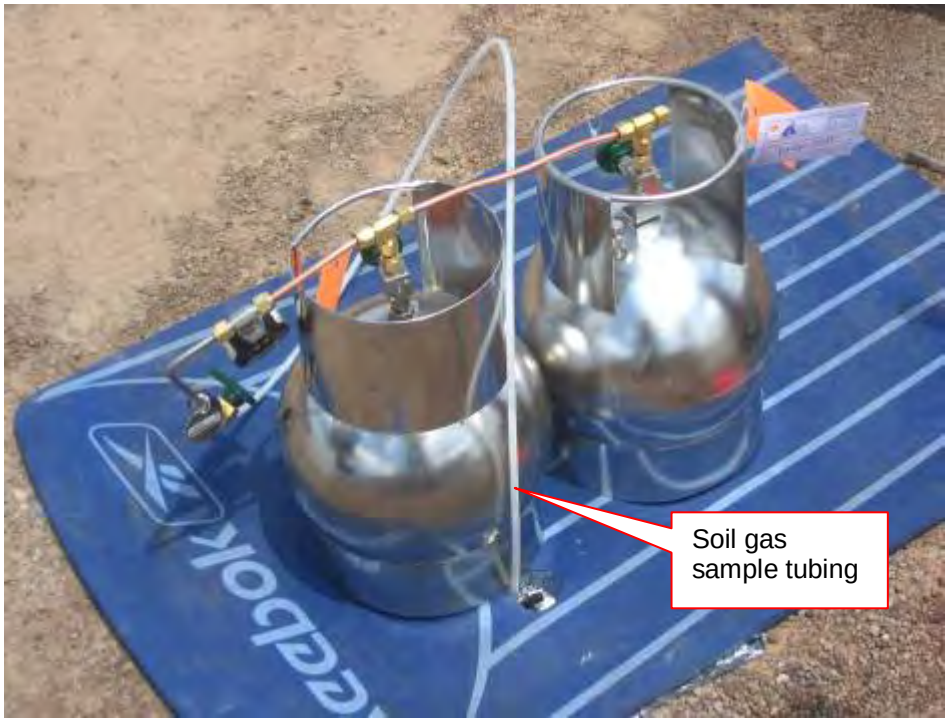


Photo No.	Date:
4	May-08

Activity:
Soil gas sampling

Description:
Setup of purge and sample canisters. Soil gas probe is set at 5 feet below ground surface. Soil gas flows from soil through tubing, to the intake valve, critical orifice, vacuum gauge, and into Summa canister.



ENSR

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
Tronox LLC	Henderson, Nevada	04020-023-430

Photo No.	Date:
5	May-08

Activity:
Soil gas sampling

Description:
Sampling system in place and operational. Shroud is placed over the Summa canisters, gauge, valves, and tubing connections. Helium flows into the shroud creating a helium-enriched atmosphere.

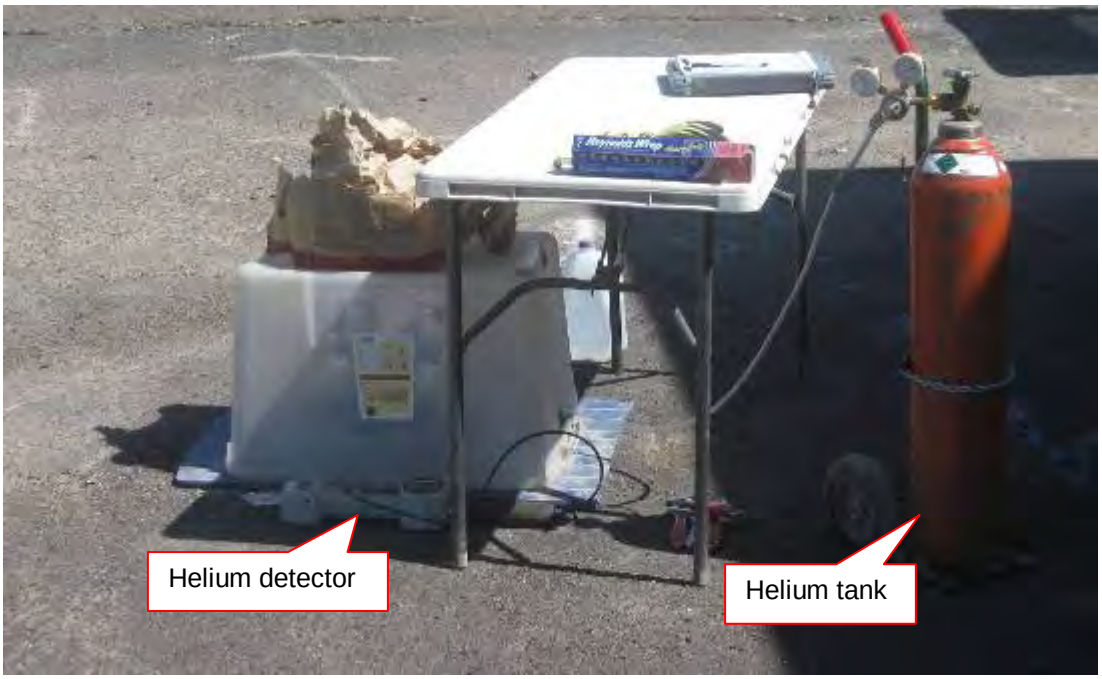


Photo No.	Date:
6	May-08

Activity:
Soil gas sampling

Description:
Sampling system in place and operational. Helium concentration inside the shroud is monitored with a handheld helium detector while the soil gas sample is being collected.