

2025 Benzene PLM Program



Sample Deployment Date		31-Dec-24	14-Jan-25	28-Jan-25	11-Feb-25	25-Feb-25	11-Mar-25							
Sample Retrieval Date		14-Jan-25	29-Jan-25	11-Feb-25	25-Feb-25	11-Mar-25	25-Mar-25							
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3							
384557mE, 4755365mN	Station #1	1.11	1.06	1.68	1.41	1.67	1.81							
384977mE, 4755264mN	Station #2	1.35	1.56	2.68	2.01	2.00	1.63							
384802mE, 4754965mN	Station #3	4.74	4.94	8.26	4.67	3.96	3.85							
384601mE, 4754820mN	Station #4	1.32	0.92	2.18	2.85	1.41	1.34							
384425mE, 4754949mN	Station #5	0.89	0.74	1.69	1.52	1.24	1.78							
384471mE, 4755177mN	Station #6	1.02	0.81	1.57	1.23	1.30	1.60							
383689mE, 4755204mN	Station #7	0.86	0.96	1.21	1.10	0.91	1.16							
383812mE, 4755079mN	Station #8	0.95	0.89	1.24	1.02	0.94	1.06							
383796mE, 4754993mN	Station #9	1.48	1.88	1.50	1.40	1.34	1.48							
383676mE, 4754870mN	Station #10	0.95	0.75	1.21	1.06	0.99	0.93							
383547mE, 4754954mN	Station #11	0.78	0.83	1.11	1.01	0.88	1.05							
383581mE, 4755077mN	Station #12	0.87	0.81	1.25	1.06	1.00	1.05							

Field QA/QC Data

Field Blank #1	Location	Station #1	Station #2	Station #3	Station #5	Station #6	Station #4		Station #2	Station #1	Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	<0.315	<0.004	<0.004	<0.311	<0.303	<0.301							
Field Duplicate	Location	Station #1	Station #2	Station #3	Station #5	Station #6	Station #22		Station #2	Station #1	Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	1.62	1.31	4.66	1.16	1.22	1.26							
	RPD (%)	5.00%	7.10%	3.43%	7.80%	6.20%	3.00%							
Field Blank #2	Location	Station #7	Station #8	Station #9	Station #25	Station #24	Station #22		Station #8	Station #7	Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	<0.312	<0.301	<0.301	<0.303	<0.303	<0.301							
Field Duplicate	Location	Station #7	Station #8	Station #9	Station #25	Station #24	Station #22		Station #8	Station #7	Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	1.20	0.86	1.50	1.40	0.88	0.90							
	RPD (%)	7.40%	6.80%	6.30%	7.60%	3.60%	2.90%							

Notes:



Sample Deployment Date		18-Jun-24	2-Jul-24	16-Jul-24	30-Jul-24	13-Aug-24	27-Aug-24	10-Sep-24	24-Sep-24	8-Oct-24	22-Oct-24	5-Nov-24	19-Nov-24	3-Dec-24	17-Dec-24
Sample Retrieval Date		2-Jul-24	16-Jul-24	30-Jul-24	13-Aug-24	27-Aug-24	10-Sep-24	24-Sep-24	8-Oct-24	22-Oct-24	5-Nov-24	19-Nov-24	3-Dec-24	17-Dec-24	31-Dec-24
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	3.31	3.03	1.79	2.01	2.47	2.55	1.13	2.14	2.28	2.02	1.14	0.83	1.22	1.62
384977mE, 4755264mN	Station #2	2.40	2.29	1.62	1.92	1.53	2.09	0.73	1.91	2.35	1.59	1.64	1.22	1.32	1.22
384802mE, 4754965mN	Station #3	3.70	2.85	2.09	2.74	2.56	3.85	1.25	3.37	3.95	7.40	9.72	3.73	3.66	2.86
384601mE, 4754820mN	Station #4	2.30	1.96	1.63	2.00	1.75	1.90	0.87	1.78	1.87	1.06	1.23	0.91	1.18	1.53
384425mE, 4754949mN	Station #5	2.54	2.40	2.03	3.04	1.90	2.26	2.01	2.81	2.30	1.18	1.69	1.02	1.34	1.86
384471mE, 4755177mN	Station #6	3.18	3.88	1.96	1.85	2.78	4.33	2.63	2.09	1.98	2.33	1.34	0.84	1.92	2.10
383689mE, 4755204mN	Station #7	3.49	4.71	2.84	2.19	4.16	2.83	2.76	3.36	2.80	1.78	0.84	0.59	1.11	1.12
383812mE, 4755079mN	Station #8	3.48	3.80	2.28	2.78	3.20	3.03	2.56	2.90	1.64	1.14	0.87	0.74	1.13	0.91
383796mE, 4754993mN	Station #9	5.33	6.03	3.39	4.10	7.78	5.88	20.70	6.20	2.14	2.95	1.03	1.19	1.95	1.10
383676mE, 4754870mN	Station #10	3.72	9.49	7.28	21.80	4.36	7.24	5.52	21.30	1.34	0.90	0.79	0.59	0.90	0.96
383547mE, 4754954mN	Station #11	4.13	2.70	2.58	4.49	3.70	4.54	16.00	3.65	1.42	0.97	1.02	0.69	1.15	1.04
383581mE, 4755077mN	Station #12	3.25	4.79	3.73	2.69	4.98	5.21	7.93	3.38	1.73	1.03	0.95	0.83	1.00	1.04

Field QA/QC Data

Field Blank #1	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.303	<0.303	<0.303	<0.302	<0.309	<0.309	<0.306
Field Duplicate	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	3.34	2.23	1.99	2.06	1.98	4.24	1.18	1.79	3.79	1.03	1.74	0.86	1.24	1.20
	RPD (%)	0.91%	2.62%	4.78%	3.00%	4.21%	2.08%	4.42%	6.28%	4.05%	2.83%	2.96%	1.78%	1.64%	1.64%
Field Blank #2	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.303	<0.304	<0.303	<0.303	<0.309	<0.309	<0.306
Field Duplicate	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	3.48	3.76	3.20	21.40	3.54	5.30	2.82	2.78	2.14	0.85	1.02	0.87	1.08	0.93
	RPD (%)	0.29%	1.05%	5.60%	1.83%	4.32%	1.73%	2.17%	4.14%	0.00%	5.90%	0.00%	4.56%	2.70%	1.64%

2024 Benzene PLM Program



Sample Deployment Date		19-Dec-23	2-Jan-24	16-Jan-24	30-Jan-24	13-Feb-24	27-Feb-24	12-Mar-24	26-Mar-24	9-Apr-24	23-Apr-24	7-May-24	21-May-24	4-Jun-24
Sample Retrieval Date		2-Jan-24	16-Jan-24	30-Jan-24	13-Feb-24	27-Feb-24	12-Mar-24	26-Mar-24	9-Apr-24	23-Apr-24	7-May-24	21-May-24	4-Jun-24	18-Jun-24
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	2.73	2.27	6.82	5.04	5.30	8.45	3.94	5.99	3.41	3.94	2.60	3.54	4.04
384977mE, 4755264mN	Station #2	3.58	8.57	24.60	3.54	4.14	3.38	4.14	2.75	2.82	2.86	4.35	2.23	2.08
384802mE, 4754965mN	Station #3	11.20	33.10	120.00	20.80	19.10	20.40	18.00	13.00	22.20	7.69	6.15	6.04	6.30
384601mE, 4754820mN	Station #4	5.55	4.17	9.71	5.00	3.48	4.94	7.64	13.60	5.92	4.94	2.79	3.04	2.08
384425mE, 4754949mN	Station #5	5.46	8.02	15.60	6.43	3.89	3.61	10.60	20.90	19.10	9.20	3.46	3.53	2.64
384471mE, 4755177mN	Station #6	9.05	4.28	6.23	6.94	7.57	12.50	5.62	12.50	4.46	7.69	3.59	4.03	3.21
383689mE, 4755204mN	Station #7	1.65	2.24	3.27	3.32	3.80	5.39	2.07	3.33	2.24	2.64	3.19	2.57	3.29
383812mE, 4755079mN	Station #8	3.40	6.58	7.23	3.97	4.40	3.70	4.04	4.38	3.36	3.63	3.29	2.86	3.24
383796mE, 4754993mN	Station #9	6.18	13.60	11.60	6.88	8.03	4.24	6.19	31.90	9.43	5.27	5.02	4.49	4.94
383676mE, 4754870mN	Station #10	8.51	4.18	23.60	7.31	5.20	4.01	7.91	17.40	17.30	10.90	10.40	5.35	3.47
383547mE, 4754954mN	Station #11	13.40	8.88	4.51	3.39	1.74	4.81	6.88	8.41	4.92	4.23	4.66	3.27	1.30
383581mE, 4755077mN	Station #12	3.88	2.39	4.60	4.30	5.89	6.33	2.46	3.56	1.94	3.11	2.94	3.78	2.44

Field QA/QC Data

Field Blank #1	Location	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	<0.307	<0.311	<0.311	<0.308	<0.309	<0.307	<0.308	<0.306	<0.304	<0.302	<0.302	<0.301	<0.301
Field Duplicate	Location	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	9.36	2.34	29.10	20.20	3.84	3.39	5.48	5.42	2.80	6.28	2.88	3.33	3.07
	RPD (%)	3.43%	3.08%	18.29%	2.88%	10.34%	6.09%	2.49%	9.52%	0.71%	18.34%	3.23%	5.67%	4.36%
Field Blank #2	Location	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	<0.307	<0.311	<0.311	<0.308	<0.309	<0.307	<0.308	<0.306	<0.304	<0.302	<0.302	<0.301	<0.301
Field Duplicate	Location	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	3.80	2.31	7.07	7.22	5.23	4.63	2.33	3.25	3.39	5.45	9.96	3.18	2.42
	RPD (%)	2.06%	3.12%	2.21%	4.94%	0.58%	3.74%	5.28%	2.40%	0.89%	3.42%	4.23%	2.75%	0.82%

Notes:

- 1) Event 2: Potential emission sources effecting station 3 has been identified as an LDAR Leaker.
- 2) Event 3: Potential emission sources effecting station 3 has been identified as the repair of an LDAR leaker.
- 3) Event 8: Potential emission sources effecting station 9 has been identified as Tank 8.

INEOS Styrolutions, Sarnia, ON  
2023 Benzene PLM Program

Web Reporting Summary - 2023 PLM Benzene Data (ug/m3)



Sample Deployment Date		20-Jun-23	4-Jul-23	18-Jul-23	1-Aug-23	15-Aug-23	29-Aug-23	12-Sep-23	26-Sep-23	10-Oct-23	24-Oct-23	7-Nov-23	21-Nov-23	5-Dec-23
Sample Retrieval Date		4-Jul-23	18-Jul-23	1-Aug-23	15-Aug-23	29-Aug-23	12-Sep-23	26-Sep-23	10-Oct-23	24-Oct-23	7-Nov-23	21-Nov-23	5-Dec-23	19-Dec-23
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	3.94	3.93	4.36	1.99	5.85	4.59	2.42	2.84	2.39	7.58	5.61	2.38	5.18
384977mE, 4755264mN	Station #2	3.53	6.18	4.57	3.74	4.91	5.40	2.83	3.01	3.17	7.34	4.83	7.11	5.61
384802mE, 4754965mN	Station #3	16.00	30.90	30.40	21.30	14.20	32.80	9.75	13.30	9.56	42.60	27.60	34.00	23.70
384601mE, 4754820mN	Station #4	7.66	4.71	3.97	4.39	4.30	4.46	3.43	4.42	2.43	5.62	7.22	4.49	2.35
384425mE, 4754949mN	Station #5	9.86	6.02	3.20	6.35	14.70	4.25	4.85	4.51	2.73	8.24	5.50	6.35	2.23
384471mE, 4755177mN	Station #6	7.15	4.26	3.26	2.56	3.92	4.07	4.57	3.33	1.90	3.79	5.19	3.56	7.90
383689mE, 4755204mN	Station #7	3.74	5.31	4.41	1.88	2.56	2.92	2.49	2.97	2.33	3.29	3.06	1.45	2.30
383812mE, 4755079mN	Station #8	3.54	4.08	4.19	2.55	2.42	2.80	2.19	2.60	2.51	7.47	3.36	4.16	6.48
383796mE, 4754993mN	Station #9	5.50	6.26	5.54	3.60	5.01	3.70	5.08	5.06	11.20	24.50	5.02	8.94	12.70
383676mE, 4754870mN	Station #10	16.60	10.10	3.97	11.00	11.60	3.75	14.80	7.77	9.48	13.20	6.02	11.20	1.60
383547mE, 4754954mN	Station #11	11.00	4.40	3.00	3.22	2.26	2.98	11.70	8.08	1.96	2.71	7.80	2.97	2.56
383581mE, 4755077mN	Station #12	6.29	3.79	3.74	2.21	2.25	2.34	4.74	4.32	1.99	2.41	2.92	2.87	3.18

Field QA/QC Data

Field Blank #1	Location	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.304	<0.304	<0.306	<0.308	<0.307
Field Duplicate	Location	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5
	Value (ug/m3)	7.92	4.64	4.88	3.74	13.50	4.77	4.42	3.32	2.40	7.31	25.00	4.52	2.07
	RPD (%)	19.68%	8.92%	11.93%	0.00%	4.93%	6.95%	8.87%	0.30%	0.42%	0.41%	9.42%	0.67%	7.17%
Field Blank #2	Location	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.301	<0.304	<0.304	<0.306	<0.308	<0.307
Field Duplicate	Location	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11
	Value (ug/m3)	10.40	3.90	4.43	2.60	5.06	3.66	10.90	4.40	2.30	7.78	5.00	10.30	2.37
	RPD (%)	5.45%	2.90%	0.45%	1.96%	1.00%	2.40%	6.84%	1.85%	1.29%	4.15%	0.40%	8.04%	7.42%

INEOS Styrolutions, Sarnia, ON  
2023 Benzene PLM Program

Web Reporting Summary - 2023 PLM Benzene Data (ug/m3)



Sample Deployment Date		20-Dec-22	3-Jan-23	17-Jan-23	31-Jan-23	14-Feb-23	28-Feb-23	14-Mar-23	28-Mar-23	11-Apr-23	25-Apr-23	9-May-23	23-May-23	6-Jun-23
Sample Retrieval Date		3-Jan-23	17-Jan-23	31-Jan-23	14-Feb-23	28-Feb-23	14-Mar-23	28-Mar-23	11-Apr-23	25-Apr-23	9-May-23	23-May-23	6-Jun-23	20-Jun-23
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	5.35	4.61	4.22	6.22	7.11	3.92	5.13	4.53	3.16	2.73	3.55	3.00	3.42
384977mE, 4755264mN	Station #2	6.25	4.99	5.09	6.38	3.50	5.40	4.80	4.06	6.40	3.24	5.76	4.06	5.27
384802mE, 4754965mN	Station #3	42.50	15.20	49.70	46.80	25.70	7.98	27.80	20.40	23.80	11.20	20.40	8.53	11.40
384601mE, 4754820mN	Station #4	3.71	52.40	7.63	3.18	9.95	19.00	6.70	3.11	5.47	6.67	4.38	8.08	9.57
384425mE, 4754949mN	Station #5	8.40	3.50	10.70	2.64	14.20	19.20	3.42	2.84	5.61	8.17	3.07	6.99	6.27
384471mE, 4755177mN	Station #6	7.19	12.80	5.48	5.70	8.33	4.18	2.58	6.27	4.16	6.18	3.52	5.75	4.00
383689mE, 4755204mN	Station #7	3.40	2.06	2.41	3.13	3.35	2.14	2.72	2.92	3.07	2.62	4.82	2.57	3.24
383812mE, 4755079mN	Station #8	3.99	2.90	4.49	5.76	4.10	3.48	4.54	3.06	4.70	7.59	5.02	3.49	3.43
383796mE, 4754993mN	Station #9	10.90	5.34	9.50	9.26	15.50	9.30	11.90	5.81	9.46	66.00	7.52	4.55	4.73
383676mE, 4754870mN	Station #10	16.00	3.67	9.58	1.59	13.00	30.70	6.80	4.58	12.00	10.00	9.26	8.61	12.20
383547mE, 4754954mN	Station #11	4.06	5.45	6.62	2.59	4.71	8.91	2.00	2.80	3.02	6.86	4.44	2.63	5.38
383581mE, 4755077mN	Station #12	2.66	7.60	2.74	2.28	4.22	3.54	1.47	2.77	4.50	4.53	3.83	3.61	4.97

Field QA/QC Data

Field Blank #1	Location	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4
	Value (ug/m3)	<0.307	<0.310	<0.309	<0.311	<0.308	<0.307	<0.309	<0.308	<0.302	<0.306	<0.302	<0.301	<0.301
Field Duplicate	Location	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4
	Value (ug/m3)	3.66	3.21	5.71	5.65	3.37	7.42	6.50	2.43	4.52	2.86	5.67	8.23	9.12
	RPD (%)	1.35%	8.29%	4.20%	9.16%	3.71%	7.02%	2.99%	14.44%	8.65%	4.76%	1.56%	3.52%	4.70%
Field Blank #2	Location	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10
	Value (ug/m3)	<0.307	<0.310	<0.309	<0.311	<0.308	<0.318	<0.309	<0.308	<0.302	<0.306	<0.302	<0.301	<0.301
Field Duplicate	Location	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10
	Value (ug/m3)	17.60	5.41	2.58	3.06	4.10	8.59	6.57	2.48	4.49	2.56	5.05	4.64	11.90
	RPD (%)	10.00%	0.73%	5.84%	2.24%	0.00%	7.63%	3.38%	11.43%	0.22%	2.29%	0.60%	1.98%	2.46%

Notes:

Event 1, Event 2, Event 3, and Event 4: Potential sources of emissions affecting Station 3 have been identified as MT-303 (Benzene storage tank).



Sample Deployment Date	21-Jun-22	5-Jul-22	19-Jul-22	2-Aug-22	16-Aug-22	30-Aug-22	13-Sep-22	27-Sep-22	11-Oct-22	25-Oct-22	8-Nov-22	22-Nov-22	6-Dec-22	
Sample Retrieval Date	5-Jul-22	19-Jul-22	2-Aug-22	16-Aug-22	30-Aug-22	13-Sep-22	27-Sep-22	11-Oct-22	25-Oct-22	8-Nov-22	22-Nov-22	6-Dec-22	20-Dec-22	
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
384557mE, 4755365mN	Station #1	4.06	3.64	3.33	6.38	6.58	10.40	8.33	2.42	4.95	4.23	2.45	6.81	2.67
384977mE, 4755264mN	Station #2	6.27	5.41	5.87	8.84	8.99	6.20	6.06	4.59	3.90	2.74	4.19	5.54	3.86
384802mE, 4754965mN	Station #3	41.00	27.00	73.00	46.60	77.30	17.80	39.80	20.20	31.00	28.20	27.50	43.00	13.90
384601mE, 4754820mN	Station #4	3.14	4.77	2.01	11.30	6.84	9.33	6.75	7.33	0.94	3.36	9.92	2.30	11.40
384425mE, 4754949mN	Station #5	3.36	4.65	2.04	13.70	5.90	18.20	8.82	12.20	1.01	4.02	6.69	2.78	23.40
384471mE, 4755177mN	Station #6	6.06	3.42	2.05	9.51	12.10	28.60	18.50	2.15	6.65	5.63	1.76	9.12	5.64
383689mE, 4755204mN	Station #7	7.50	4.43	4.72	4.84	4.32	3.44	6.00	4.54	3.98	3.76	2.34	4.12	1.87
383812mE, 4755079mN	Station #8	6.42	3.93	3.72	4.05	4.04	1.74	7.14	4.86	6.41	2.90	3.54	6.32	3.87
383796mE, 4754993mN	Station #9	9.20	5.89	5.87	5.88	6.06	2.76	12.20	5.37	74.30	4.78	9.38	9.97	6.96
383676mE, 4754870mN	Station #10	6.93	13.30	3.91	14.80	4.85	9.41	9.94	14.40	0.56	5.22	10.20	4.40	24.50
383547mE, 4754954mN	Station #11	2.65	5.84	1.67	3.39	3.30	5.25	5.26	2.74	0.97	3.05	5.76	2.41	7.35
383581mE, 4755077mN	Station #12	4.25	5.19	2.11	3.24	4.73	5.31	5.91	3.18	2.62	3.58	1.66	4.08	2.61

Field QA/QC Data

Field Blank #1	Location	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.322	<0.301	<0.302	<0.304	<0.303	<0.308	<0.307	<0.310
Field Duplicate	Location	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3
	Value (ug/m3)	40.80	4.87	2.09	9.21	6.83	6.07	39.30	7.42	0.99	5.04	2.43	5.81	13.90
	RPD (%)	0.49%	2.10%	2.45%	3.15%	3.80%	2.10%	1.26%	1.23%	2.08%	10.48%	0.82%	4.87%	0.00
Field Blank #2	Location	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9
	Value (ug/m3)	<0.301	<0.301	<0.301	<0.301	<0.301	<0.322	<0.301	<0.302	<0.304	<0.303	<0.308	<0.307	<0.310
Field Duplicate	Location	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9
	Value (ug/m3)	9.13	12.60	1.71	3.53	4.11	1.58	12.70	14.40	0.75	3.62	2.41	6.56	6.40
	RPD (%)	0.76%	5.26%	2.40%	8.95%	4.86%	9.20%	4.10%	0.00%	22.05%	1.12%	2.99%	3.80%	8.05%



Sample Deployment Date	21-Dec-21	4-Jan-22	18-Jan-22	1-Feb-22	15-Feb-22	1-Mar-22	15-Mar-22	29-Mar-22	12-Apr-22	26-Apr-22	10-May-22	24-May-22	7-Jun-22	
Sample Retrieval Date	4-Jan-22	18-Jan-22	1-Feb-22	15-Feb-22	1-Mar-22	15-Mar-22	29-Mar-22	12-Apr-22	26-Apr-22	10-May-22	24-May-22	7-Jun-22	21-Jun-22	
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
384557mE, 4755365mN	Station #1	2.48	2.36	3.71	3.06	3.21	2.86	2.25	3.79	3.08	3.86	5.21	4.17	3.75
384977mE, 4755264mN	Station #2	3.57	5.39	3.12	7.05	6.20	3.99	3.91	2.49	2.38	3.07	4.22	3.91	5.04
384802mE, 4754965mN	Station #3	27.90	47.10	30.00	122.00	26.40	26.50	20.20	15.10	18.60	8.05	29.60	20.50	26.20
384601mE, 4754820mN	Station #4	3.92	9.25	2.21	3.17	7.06	3.97	6.14	3.04	5.95	8.96	6.05	4.10	6.27
384425mE, 4754949mN	Station #5	3.62	7.33	1.98	2.23	4.52	3.66	4.23	4.17	4.53	7.16	10.20	6.41	5.50
384471mE, 4755177mN	Station #6	3.44	3.03	2.61	2.01	3.35	3.66	2.22	7.16	4.13	5.91	7.50	5.40	5.35
383689mE, 4755204mN	Station #7	2.29	1.86	2.51	5.96	2.33	2.89	2.16	1.92	1.59	2.40	2.24	4.84	5.68
383812mE, 4755079mN	Station #8	2.69	2.05	2.80	8.71	5.38	3.63	3.28	2.19	2.20	3.06	2.81	3.56	5.98
383796mE, 4754993mN	Station #9	4.09	4.94	4.16	12.80	9.77	6.54	4.55	3.44	3.82	4.51	4.19	4.53	7.49
383676mE, 4754870mN	Station #10	10.10	12.40	3.15	7.46	14.60	11.20	11.80	6.00	13.70	19.70	7.02	6.11	16.50
383547mE, 4754954mN	Station #11	6.39	5.70	1.73	1.46	3.11	4.20	5.25	4.67	3.57	7.33	3.44	7.21	6.17
383581mE, 4755077mN	Station #12	4.00	2.24	3.94	2.13	3.18	2.32	2.26	4.64	2.67	3.53	4.36	3.42	4.74

Field QA/QC Data

Field Blank #1	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	<0.30	<0.31	<0.31	<0.312	<0.311	<0.310	<0.308	<0.307	<0.304	<0.304	<0.301	<0.301	<0.301
Field Duplicate	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	3.81	46.90	2.21	2.18	3.17	2.75	4.04	15.00	6.20	7.33	7.95	3.98	5.06
	RPD (%)	6.72%	0.42%	0.00%	2.24%	5.37%	3.85%	3.32%	0.66%	4.20%	2.37%	6.00%	4.56%	0.40%
Field Blank #2	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	<0.30	<0.31	<0.31	<0.312	<0.311	<0.310	<0.308	<0.307	<0.304	<0.304	<0.301	<0.301	<0.301
Field Duplicate	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	2.59	4.92	3.18	1.38	3.12	2.66	3.33	3.33	14.10	7.74	4.13	4.69	5.79
	RPD (%)	3.72%	0.40%	0.95%	5.48%	1.89%	7.96%	1.52%	3.20%	2.92%	5.59%	5.28%	3.10%	3.18%

Notes:

- 1) Event 1 and 2: Potential sources of emissions affecting Station 3 have been identified as the contaminated material from the December 4th, 2021 hydrocarbon (benzene) release stored securely nearby until scheduled for removal.
- 2) Event 4, 18, 20 and 22: Potential sources of emissions affecting Station 3 have been identified as MT-303 (benzene storage tank).
- 3) Event 14, 16 and 17: Potential sources of emissions affecting Station 3 have been identified as MT-303 (benzene storage tank), as well as contaminated material from the planned maintenance outage stored securely nearby until scheduled for removal.
- 4) Event 22: No potential sources of emissions affecting Station 9 have been confirmed.

2021 Benzene PLM Program



Sample Deployment Date		22-Jun-21	6-Jul-21	20-Jul-21	3-Aug-21	17-Aug-21	31-Aug-21	14-Sep-21	28-Sep-21	12-Oct-21	26-Oct-21	9-Nov-21	23-Nov-21	7-Dec-21
Sample Retrieval Date		6-Jul-21	20-Jul-21	3-Aug-21	17-Aug-21	31-Aug-21	14-Sep-21	28-Sep-21	12-Oct-21	26-Oct-21	9-Nov-21	23-Nov-21	7-Dec-21	21-Dec-21
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	2.71	2.93	2.52	4.51	2.95	2.13	1.84	2.64	2.26	2.08	1.70	2.41	2.14
384977mE, 4755264mN	Station #2	4.59	3.35	4.29	4.01	5.12	2.69	2.40	2.03	3.72	3.51	2.57	3.80	6.33
384802mE, 4754965mN	Station #3	26.40	13.80	18.60	34.60	37.50	13.70	12.90	15.50	22.40	22.10	18.20	147.00	96.40
384601mE, 4754820mN	Station #4	3.10	5.88	3.57	2.77	5.49	3.71	1.94	8.08	3.29	6.46	2.07	3.39	4.40
384425mE, 4754949mN	Station #5	2.14	5.87	2.72	4.04	3.91	3.11	2.07	6.12	3.78	5.22	2.38	3.10	3.56
384471mE, 4755177mN	Station #6	2.06	3.23	2.39	3.19	2.54	1.85	2.63	3.91	2.33	1.86	2.11	2.74	3.56
383689mE, 4755204mN	Station #7	4.94	2.09	1.87	7.06	3.20	2.54	2.55	2.94	2.72	2.97	1.61	2.03	1.58
383812mE, 4755079mN	Station #8	6.23	2.40	1.92	5.53	3.28	2.66	2.94	2.58	3.37	2.73	see note 6	1.81	5.12
383796mE, 4754993mN	Station #9	10.20	3.41	2.75	7.80	4.67	3.48	4.41	3.18	6.19	3.74	4.34	3.04	10.20
383676mE, 4754870mN	Station #10	3.57	19.20	3.89	7.79	9.70	8.46	4.87	16.10	13.10	9.61	1.20	0.94	17.80
383547mE, 4754954mN	Station #11	2.29	7.03	2.14	3.30	4.23	5.50	4.33	6.42	2.01	2.47	3.27	2.37	4.12
383581mE, 4755077mN	Station #12	2.03	2.49	2.11	23.00	3.72	2.20	3.50	4.46	2.62	2.05	1.80	1.83	2.59

Field QA/QC Data

Field Blank #1	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.31
Field Duplicate	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	2.63	3.43	18.30	2.83	3.93	1.95	1.77	1.95	22.20	6.89	2.43	2.65	2.18
	RPD (%)	2.95%	2.39%	1.61%	2.17%	0.51%	5.41%	3.80%	3.94%	0.89%	6.66%	2.10%	3.28%	0.02
Field Blank #2	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.31
Field Duplicate	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	4.69	2.32	2.81	7.76	4.31	2.22	2.44	2.50	6.12	8.70	3.41	1.72	1.62
	RPD (%)	5.06%	3.33%	2.18%	0.39%	1.89%	0.91%	4.31%	3.10%	1.13%	9.47%	4.28%	6.01%	2.53%



2021 Benzene PLM Program



Sample Deployment Date		22-Dec-20	5-Jan-21	19-Jan-21	2-Feb-21	17-Feb-21	2-Mar-21	16-Mar-21	30-Mar-21	13-Apr-21	27-Apr-21	11-May-21	25-May-21	8-Jun-21
Sample Retrieval Date		5-Jan-21	19-Jan-21	2-Feb-21	17-Feb-21	2-Mar-21	16-Mar-21	30-Mar-21	13-Apr-21	27-Apr-21	11-May-21	25-May-21	8-Jun-21	22-Jun-21
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	2.74	2.56	2.71	2.75	3.06	2.28	3.86	3.67	See Note 4	2.52	3.18	2.93	3.62
384977mE, 4755264mN	Station #2	2.18	5.09	2.64	4.76	3.25	3.23	2.95	2.69	See Note 4	4.85	5.85	6.61	3.40
384802mE, 4754965mN	Station #3	17.40	20.30	7.48	25.90	19.60	18.40	14.10	19.10	See Note 4	18.70	36.40	39.20	13.00
384601mE, 4754820mN	Station #4	4.31	3.12	5.12	8.39	6.15	4.73	3.20	3.04	See Note 4	4.19	2.72	3.74	4.13
384425mE, 4754949mN	Station #5	3.00	3.35	3.84	4.48	4.00	3.71	2.37	2.69	See Note 4	3.19	2.44	3.37	3.37
384471mE, 4755177mN	Station #6	2.68	2.83	2.64	2.52	4.41	2.30	4.16	4.95	See Note 4	2.62	2.48	2.26	2.86
383689mE, 4755204mN	Station #7	2.78	2.88	1.66	2.75	7.55	2.45	6.31	3.65	See Note 4	2.81	6.16	4.21	2.25
383812mE, 4755079mN	Station #8	2.96	8.70	4.97	6.77	7.74	5.72	5.67	2.67	See Note 4	3.88	5.88	4.72	2.89
383796mE, 4754993mN	Station #9	5.91	15.30	9.67	14.40	14.60	10.10	8.01	3.79	See Note 4	14.90	8.07	7.80	4.15
383676mE, 4754870mN	Station #10	13.20	13.00	39.00	28.00	28.90	15.10	11.20	4.34	See Note 4	6.67	3.14	10.50	7.18
383547mE, 4754954mN	Station #11	6.46	5.95	5.92	6.01	9.98	6.78	5.27	6.27	See Note 4	4.19	2.88	2.16	5.54
383581mE, 4755077mN	Station #12	7.62	4.57	5.91	4.27	20.50	4.57	7.88	6.51	See Note 4	3.81	3.88	2.22	2.57

Field QA/QC Data

Field Blank #1	Location	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1		Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	<0.31	<0.31	<0.32	<0.30	<0.34	<0.31	<0.31	<0.31	See Note 4	<0.31	<0.30	<0.30	<0.30
Field Duplicate	Location	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1		Station #3	Station #4	Station #5	Station #6
	Value (ug/m3)	2.71	2.31	2.61	24.50	6.00	3.73	4.11	3.68	See Note 4	18.70	2.57	3.35	2.74
	RPD (%)	1.12%	9.77%	1.14%	5.41%	2.44%	0.54%	1.20%	0.27%	See Note 4	0.00%	5.51%	0.59%	4.20%
Field Blank #2	Location	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7		Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	<0.31	<0.31	<0.32	<0.30	<0.34	<0.31	<0.31	<0.31	See Note 4	<0.31	<0.30	<0.30	<0.30
Field Duplicate	Location	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7		Station #9	Station #10	Station #11	Station #12
	Value (ug/m3)	8.16	2.93	5.02	14.40	28.50	6.84	7.92	3.51	See Note 4	15.60	3.32	2.46	2.52
	RPD (%)	7.09%	1.74%	1.01%	0.00%	1.38%	0.88%	0.51%	3.84%	See Note 4	4.70%	5.73%	13.89%	1.95%

Notes:

- 1) Event 4 sampling period was 15 days. Sample retrieval was delayed due to weather (snow).
- 2) Event 5 sampling period was 13 days. Sample deployment was delayed due to weather (snow).
- 3) Event 3: Potential source of emissions affecting Station 10 has been identified as Tank 8 (benzene storage tank).
- 4) Event 9: no data available for this event due to laboratory instrumentation failure.
- 5) Events 11, 12, 17, & 18: Potential sources of emissions affecting Station 3 have been identified as MT-303 (benzene storage tank) and sewer drains in the Station 3 area.
- 6) Event 24: no data available for station 8 during this event due to damage to tube
- 7) Event 25: Potential sources of emissions affecting Station 3 include a hydrocarbon (benzene) release on-site on December 4, 2021. Foam was applied to affected area to reduce emissions, clean up occurred same day, and the release was reported to the MECP Spills Action Centre. CVECO Code 8 was also issued.
- 8) Event 26: Potential sources of emissions affecting Station 3 have been identified as the contaminated material from the December 4th, 2021 hydrocarbon (benzene) release stored securely nearby until scheduled for removal.

2020 Benzene PLM Program



Sample Deployment Date		23-Jun-20	7-Jul-20	21-Jul-20	4-Aug-20	18-Aug-20	1-Sep-20	15-Sep-20	29-Sep-20	13-Oct-20	27-Oct-20	10-Nov-20	24-Nov-20	8-Dec-20
Sample Retrieval Date		7-Jul-20	21-Jul-20	4-Aug-20	18-Aug-20	1-Sep-20	15-Sep-20	29-Sep-20	13-Oct-20	27-Oct-20	10-Nov-20	24-Nov-20	8-Dec-20	22-Dec-20
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	2.04	3.22	2.89	4.32	5.09	3.31	3.59	3.03	3.01	2.52	2.97	3.49	2.69
384977mE, 4755264mN	Station #2	4.14	5.42	4.25	4.20	5.78	2.39	5.89	4.19	3.32	4.39	3.46	6.60	4.12
384802mE, 4754965mN	Station #3	23.60	29.40	19.60	25.30	35.00	12.50	See Note 7	19.00	18.00	40.60	19.70	28.60	24.00
384601mE, 4754820mN	Station #4	6.84	4.87	6.20	6.43	3.02	4.20	See Note 7	2.73	4.09	1.67	3.53	2.93	6.77
384425mE, 4754949mN	Station #5	3.17	4.03	4.93	7.14	3.36	5.08	2.64	3.55	3.47	1.08	3.15	2.27	3.80
384471mE, 4755177mN	Station #6	2.34	3.79	2.84	4.47	3.38	3.09	3.23	3.84	3.10	1.64	2.81	3.27	2.51
383689mE, 4755204mN	Station #7	3.29	4.41	2.59	7.23	7.06	3.87	4.46	2.16	2.03	6.50	3.67	2.24	5.64
383812mE, 4755079mN	Station #8	7.00	6.76	4.28	8.14	8.02	3.15	See Note 7	4.46	3.66	11.10	5.61	11.30	8.61
383796mE, 4754993mN	Station #9	11.20	10.10	7.97	12.00	13.60	4.87	12.10	7.58	6.32	13.40	8.72	16.00	12.30
383676mE, 4754870mN	Station #10	9.94	18.20	25.20	18.50	9.96	16.90	4.54	6.99	11.30	1.19	9.21	1.51	22.30
383547mE, 4754954mN	Station #11	3.29	5.02	6.79	7.96	6.85	6.34	35.50	7.47	4.65	1.47	7.51	4.40	4.53
383581mE, 4755077mN	Station #12	3.79	6.53	3.54	6.09	6.23	5.66	See Note 7	3.29	2.49	4.19	5.31	3.76	5.35

Field QA/QC Data

Field Blank #1	Location	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31
Field Duplicate	Location	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5
	Value (ug/m3)	3.00	3.81	2.88	4.22	34.30	4.64	2.58	3.86	3.06	4.39	19.00	2.73	3.78
	RPD (%)	5.36%	0.53%	0.35%	0.48%	2.00%	10.48%	2.27%	0.52%	1.66%	0.00%	3.55%	6.83%	0.53%
Field Blank #2	Location	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31
Field Duplicate	Location	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11
	Value (ug/m3)	3.37	6.51	2.50	8.03	13.90	16.40	See Note 8	3.37	1.89	10.80	7.95	1.44	4.55
	RPD (%)	2.43%	0.31%	3.47%	1.35%	2.21%	2.96%	-----	2.43%	6.90%	2.70%	8.83%	4.64%	0.44%

2020 Benzene PLM Program



Sample Deployment Date		23-Dec-19	7-Jan-20	21-Jan-20	4-Feb-20	18-Feb-20	3-Mar-20	17-Mar-20	31-Mar-20	14-Apr-20	28-Apr-20	12-May-20	26-May-20	9-Jun-20
Sample Retrieval Date		7-Jan-20	21-Jan-20	4-Feb-20	18-Feb-20	3-Mar-20	17-Mar-20	31-Mar-20	14-Apr-20	28-Apr-20	12-May-20	26-May-20	9-Jun-20	23-Jun-20
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	2.41	2.59	2.71	2.65	3.31	5.77	----	----	----	4.23	3.70	3.64	3.38
384977mE, 4755264mN	Station #2	4.46	2.78	5.39	3.54	7.24	4.56	----	----	----	4.41	3.22	5.01	3.60
384802mE, 4754965mN	Station #3	37.70	17.90	28.70	30.00	44.40	46.30	----	----	----	21.00	22.00	29.30	17.50
384601mE, 4754820mN	Station #4	3.07	3.06	4.10	5.96	4.51	4.70	----	----	----	6.38	9.75	4.85	6.72
384425mE, 4754949mN	Station #5	4.00	No Value (See Note 2)	4.32	4.36	3.39	4.84	----	----	----	3.68	7.92	2.49	5.29
384471mE, 4755177mN	Station #6	3.46	4.08	No Value (See Note 3)	2.48	2.61	5.17	----	----	----	4.78	5.37	5.12	5.04
383689mE, 4755204mN	Station #7	5.61	2.85	7.04	3.48	3.46	3.85	----	----	----	4.49	3.61	3.20	4.46
383812mE, 4755079mN	Station #8	8.50	4.60	16.50	7.95	10.20	6.21	----	----	----	6.29	4.27	5.46	7.17
383796mE, 4754993mN	Station #9	16.30	7.22	26.40	13.90	16.50	9.07	----	----	----	7.07	5.77	7.93	10.50
383676mE, 4754870mN	Station #10	4.29	1.93	33.80	39.30	6.45	9.16	----	----	----	17.20	16.60	10.30	29.40
383547mE, 4754954mN	Station #11	7.29	15.80	21.30	8.23	2.81	6.06	----	----	----	3.88	8.86	2.13	4.91
383581mE, 4755077mN	Station #12	4.55	9.66	11.40	5.13	2.36	5.94	----	----	----	3.13	4.44	4.86	6.26

Field QA/QC Data

Field Blank #1		Station #4	Station #5	Station #6	Station #1	Station #2	Station #3				Station #1	Station #2	Station #3	Station #4
Location	Value (ug/m3)	<0.29	<0.31	<0.31	<0.32	<0.31	<0.31	----	----	----	<0.31	<0.31	<0.30	<0.30
Field Duplicate		Station #4	Station #5	Station #6	Station #1	Station #2	Station #3				Station #1	Station #2	Station #3	Station #4
Location	Value (ug/m3)	2.90	No Value (See Note 2)	No Value (See Note 3)	2.41	7.28	41.80	----	----	----	3.94	3.21	28.90	7.24
	RPD (%)	5.54%	#VALUE!	#VALUE!	9.06%	0.55%	9.72%	----	----	----	6.86%	0.31%	1.37%	7.74%
Field Blank #2		Station #10	Station #11	Station #12	Station #7	Station #8	Station #9				Station #7	Station #8	Station #9	Station #10
Location	Value (ug/m3)	<0.29	<0.31	<0.31	<0.32	<0.31	<0.31	----	----	----	<0.31	<0.31	<0.30	<0.30
Field Duplicate		Station #10	Station #11	Station #12	Station #7	Station #8	Station #9				Station #7	Station #8	Station #9	Station #10
Location	Value (ug/m3)	4.21	15.70	11.90	3.09	9.91	8.80	----	----	----	4.23	4.27	7.51	29.10
	RPD (%)	1.86%	0.63%	4.39%	11.21%	2.84%	2.98%	----	----	----	5.79%	0.00%	5.30%	1.02%

Notes:

- 1) Event 1, 4, 5, 6 & 18: Potential sources of emissions affecting Station 3 have been identified as MT-303 (benzene storage tank) and sewer drains in the Station 3 area.
- 2) Event 2 Station 5: No values reported due to error by field technician.
- 3) Event 3 Station 6: No values reported due to error by field technician.
- 4) Event 3 & 4: Potential source of emissions affecting Station 10 has been identified as 1Tank8 (benzene storage tank).
- 5) RPD is Relative Percent Difference (Difference / Mean expressed as a percent). Used as the default precision evaluation.
- 6) Events 7, 8 & 9: Due to COVID-19 measures, 3rd party contractor access to site has been limited with the main focus being to safeguard the health and safety of front-line personnel. Therefore, property line monitoring (PLM) was put on hold during this time. PLM will re-start April 28, 2020.
- 7) Event 20, Stations 3, 4, 8 & 12: Data for these samples have been omitted due to laboratory quality control criteria not meeting the method requirements.
- 8) Event 20, Station 11: The data for Station 11 is not reportable due to quality control criteria not meeting method requirements however, the duplicate sample for Station 11 was acceptable and has been reported as the data value for Station 11. It is expected that offsite work on benzene equipment owned by an external facility contributed to the value reported, based upon the nature of the work, wind direction, and proximity to the Station 11 monitor.
- 9) Event 23 Station 3: Wind direction during the sampling period points to MT-303 (benzene storage tank) as the most likely potential contributor to values measured at Station 3.

2019 Benzene PLM Program



Sample Deployment Date		25-Jun-19	9-Jul-19	23-Jul-19	6-Aug-19	20-Aug-19	3-Sep-19	17-Sep-19	1-Oct-19	15-Oct-19	29-Oct-19	12-Nov-19	26-Nov-19	10-Dec-19
Sample Retrieval Date		9-Jul-19	23-Jul-19	6-Aug-19	20-Aug-19	3-Sep-19	17-Sep-19	1-Oct-19	15-Oct-19	29-Oct-19	12-Nov-19	26-Nov-19	10-Dec-19	23-Dec-19
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	5.04	3.48	3.40	3.06	2.01	3.68	2.83	2.32	3.79	4.28	3.84	3.47	3.82
384977mE, 4755264mN	Station #2	5.81	4.40	4.59	3.15	3.51	3.31	3.43	2.41	4.49	5.59	6.47	2.86	3.56
384802mE, 4754965mN	Station #3	36.30	29.30	32.00	27.10	18.60	20.50	36.10	16.30	19.50	28.70	30.50	16.70	28.50
384601mE, 4754820mN	Station #4	7.68	3.42	5.47	4.84	3.91	7.05	6.64	6.22	3.69	6.24	6.62	4.58	2.47
384425mE, 4754949mN	Station #5	3.70	2.92	3.04	3.97	5.07	6.06	4.24	5.30	3.18	4.82	8.91	4.90	2.67
384471mE, 4755177mN	Station #6	4.34	2.45	3.23	2.78	3.02	4.05	3.41	3.52	4.39	3.30	4.51	2.66	3.24
383689mE, 4755204mN	Station #7	6.36	7.01	10.60	9.07	3.20	6.28	6.21	3.74	3.82	3.00	7.51	3.92	5.69
383812mE, 4755079mN	Station #8	11.80	9.61	12.60	6.82	3.79	5.89	8.30	3.73	3.93	7.76	12.00	5.13	9.12
383796mE, 4754993mN	Station #9	19.40	14.70	18.70	9.44	5.78	9.06	13.30	5.92	8.09	14.30	45.30	8.85	14.50
383676mE, 4754870mN	Station #10	15.50	12.60	22.10	30.70	15.40	32.50	17.20	22.80	8.05	19.80	12.90	12.60	4.35
383547mE, 4754954mN	Station #11	5.14	2.65	3.29	6.13	13.50	14.50	8.71	19.10	7.81	1.76	15.40	9.76	6.86
383581mE, 4755077mN	Station #12	6.40	6.20	6.51	8.82	6.00	8.78	8.98	6.81	5.39	4.42	9.58	3.36	9.44

Field QA/QC Data

Field Blank #1	Location	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31
Field Duplicate	Location	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3
	Value (ug/m3)	36.60	3.48	2.97	2.71	2.11	3.28	34.80	6.52	3.06	3.29	3.83	2.60	27.70
	RPD (%)	0.83%	1.75%	2.30%	2.52%	4.98%	0.91%	3.60%	4.82%	3.77%	0.30%	0.26%	9.09%	2.81%
Field Blank #2	Location	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.29	<0.34	<0.34	<0.31
Field Duplicate	Location	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9
	Value (ug/m3)	18.50	12.40	3.17	8.67	2.98	5.75	13.80	22.90	7.72	4.46	7.44	4.89	13.80
	RPD (%)	4.64%	1.59%	3.65%	1.70%	6.88%	2.38%	3.76%	0.44%	1.15%	0.90%	0.93%	4.68%	4.83%

2019 Benzene PLM Program



Sample Deployment Date		24-Dec-18	8-Jan-19	22-Jan-19	5-Feb-19	19-Feb-19	5-Mar-19	24-Dec-18	8-Jan-19	22-Jan-19	30-Apr-19	14-May-19	28-May-19	11-Jun-19
Sample Retrieval Date		8-Jan-19	22-Jan-19	5-Feb-19	19-Feb-19	5-Mar-19	19-Mar-19	2-Apr-19	16-Apr-19	30-Apr-19	14-May-19	28-May-19	11-Jun-19	25-Jun-19
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	3.29	3.27	9.26	3.34	3.25	5.23	6.03	4.13	4.34	1.94	3.98	3.48	3.41
384977mE, 4755264mN	Station #2	5.75	4.48	67.90	2.83	3.83	4.53	5.73	3.18	2.43	2.83	3.97	3.83	3.91
384802mE, 4754965mN	Station #3	27.50	14.10	>80	12.60	21.30	22.10	32.30	14.90	14.30	15.60	25.20	22.30	18.90
384601mE, 4754820mN	Station #4	3.83	4.34	3.55	12.20	10.40	6.21	8.08	9.03	8.34	12.80	8.63	7.61	6.75
384425mE, 4754949mN	Station #5	3.33	4.75	7.43	10.50	9.46	9.09	4.56	7.52	4.84	8.20	4.98	4.67	2.38
384471mE, 4755177mN	Station #6	4.87	4.86	4.79	5.12	7.05	6.67	3.73	4.82	5.67	8.70	5.42	4.05	3.95
383689mE, 4755204mN	Station #7	2.08	1.46	11.40	3.37	2.85	13.30	10.60	3.28	6.37	1.86	2.64	3.27	3.58
383812mE, 4755079mN	Station #8	1.39	1.31	53.00	5.30	7.49	17.30	14.30	5.08	3.61	3.56	4.51	6.37	5.63
383796mE, 4754993mN	Station #9	1.33	1.30	>80	10.20	15.90	38.50	18.30	10.10	5.32	5.68	6.70	10.20	8.99
383676mE, 4754870mN	Station #10	1.50	1.05	3.47	65.60	28.60	2.15	29.40	93.70	77.30	61.30	16.70	20.70	9.77
383547mE, 4754954mN	Station #11	2.13	1.59	8.70	8.36	15.20	27.30	3.23	20.50	15.40	5.85	8.16	6.68	4.32
383581mE, 4755077mN	Station #12	12.20	1.84	5.25	5.97	6.73	33.30	7.79	8.42	13.40	2.19	4.03	2.90	4.04

Field QA/QC Data

Field Blank #1	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	<0.29	<0.32	<0.32	<0.32	<0.32	<0.31	<0.31	<0.31	<0.31	<0.29	<0.31	<0.30	<0.30
Field Duplicate	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2
	Value (ug/m3)	5.79	13.40	3.39	10.90	7.18	5.25	5.60	13.90	8.37	8.30	5.22	3.55	3.88
	RPD (%)	0.70%	4.96%	4.51%	3.81%	1.84%	0.38%	2.27%	6.71%	0.36%	1.22%	3.69%	2.01%	0.77%
Field Blank #2	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	<0.29	<0.32	<0.32	<0.32	<0.32	<0.31	<0.31	<0.31	<0.31	<0.29	<0.31	<0.30	<0.30
Field Duplicate	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8
	Value (ug/m3)	1.36	1.31	3.54	8.43	6.83	12.70	13.80	9.48	75.50	5.76	3.99	3.55	5.27
	RPD (%)	2.16%	0.77%	2.02%	0.84%	1.49%	4.51%	3.50%	6.14%	2.33%	1.54%	0.99%	8.56%	6.39%

Notes:

- 1) RPD is Relative Percent Difference (Difference / Mean expressed as a percent). Used as the default precision evaluation.
- 2) Event 3 Stations 8 & 9: January 27 to January 28, 2019, during the re-filling of a benzene storage tank (after inspection), INEOS Styrolution Sarnia Site received. grab sample analysis indicating increased levels of benzene at Styrene 1. The Ministry of the Environment, Conservation & Parks (MECP) Spills Action Centre was notified and subsequent updates were provided. A portable thermal oxidizer to control emissions was utilized during tank filling. According to the CASA air quality monitoring data website, the winds were from the west during this time. Air quality results from the station were in the "good" range.
- 3) Event 3 Station 2 & 3, Event 7 Station 3: INEOS Styrolution Sarnia Site is investigating potential sources of emissions affecting Stations 2 and 3.
- 4) Event 4, 5 & 7 Station 10, Event 6 Station 9: During the January tank refill at Styrene 1 it was discovered that a flange was a source of benzene emissions. Repairs were attempted and have been confirmed successful.
- 5) Event 6 Stations 11 & 12: Demolition of obsolete non-benzene containing storage tanks in close proximity to stations 11 and 12 was occurring during this time. INEOS Styrolution Sarnia Site is investigating potential sources of emissions.
- 6) Event 8, 9, 10, 17 & 19: INEOS Styrolution is investigating potential sources of emissions affecting Station 10.
- 7) Event 14, 15, 16, 20 & 24: INEOS Styrolution is investigating potential sources of emissions affecting Station 3.
- 8) Event 24: INEOS Styrolution is investigating potential sources of emissions affecting Station 9.

2018 Benzene PLM Program



Sample Deployment Date		10-Jul-18	24-Jul-18	7-Aug-18	21-Aug-18	4-Sep-18	18-Sep-18	2-Oct-18	16-Oct-18	30-Oct-18	13-Nov-18	26-Nov-18	10-Dec-18
Sample Retrieval Date		24-Jul-18	7-Aug-18	21-Aug-18	4-Sep-18	18-Sep-18	2-Oct-18	16-Oct-18	30-Oct-18	13-Nov-18	26-Nov-18	10-Dec-18	24-Dec-18
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	6.77	4.79	3.87	5.41	3.55	2.65	3.46	1.91	3.20	2.59	2.25	5.69
384977mE, 4755264mN	Station #2	4.01	3.76	3.79	5.19	2.97	2.03	2.84	6.63	3.54	3.43	4.57	3.91
384802mE, 4754965mN	Station #3	25.80	30.50	15.20	37.70	10.10	13.70	17.00	23.90	12.90	13.70	14.00	23.80
384601mE, 4754820mN	Station #4	9.59	2.73	7.19	2.82	10.50	6.09	1.98	3.70	4.55	3.61	3.84	3.56
384425mE, 4754949mN	Station #5	12.30	3.32	6.55	4.51	16.60	5.41	2.15	3.72	4.07	3.63	2.43	3.34
384471mE, 4755177mN	Station #6	11.40	3.77	6.67	6.23	5.07	3.33	4.65	1.27	3.03	3.91	2.56	5.86
383689mE, 4755204mN	Station #7	4.19	4.97	2.62	4.97	2.88	2.97	3.09	2.23	1.45	0.97	0.99	2.11
383812mE, 4755079mN	Station #8	2.61	2.76	3.24	3.21	1.86	1.75	1.65	2.07	1.47	0.96	1.06	1.73
383796mE, 4754993mN	Station #9	2.83	2.60	2.25	2.03	2.02	1.66	1.44	1.56	1.70	1.45	1.27	1.82
383676mE, 4754870mN	Station #10	2.27	1.44	2.30	1.49	2.69	1.72	1.02	0.89	1.13	0.96	0.95	1.58
383547mE, 4754954mN	Station #11	2.74	1.54	1.78	1.91	3.60	2.79	1.52	1.11	1.71	1.34	1.73	2.23
383581mE, 4755077mN	Station #12	3.14	2.74	3.44	2.76	6.14	3.69	1.33	2.28	1.55	1.29	1.04	5.01

Field QA/QC Data

Field Blank #1	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.34	<0.31	<0.31
Field Duplicate	Location	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	4.00	29.50	7.67	4.36	4.89	2.38	2.75	23.30	4.48	3.56	2.49	5.48
	RPD (%)	0.25%	3.28%	6.68%	3.33%	3.55%	10.19%	3.17%	2.51%	1.54%	1.93%	2.73%	3.69%
Field Blank #2	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	<0.30	<0.30	<0.30	<0.30	<0.30	<0.31	<0.31	<0.31	<0.31	<0.34	<0.31	<0.31
Field Duplicate	Location	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	2.78	2.63	2.27	1.96	6.18	2.95	1.16	1.52	1.20	1.26	1.01	2.22
	RPD (%)	6.51%	1.15%	1.30%	2.62%	0.65%	0.67%	29.70%	2.56%	6.19%	5.97%	2.88%	5.21%

2018 Benzene PLM Program



Sample Deployment Date		9-Jan-18	23-Jan-18	6-Feb-18	20-Feb-18	6-Mar-18	20-Mar-18	3-Apr-18	17-Apr-18	1-May-18	15-May-18	29-May-18	12-Jun-18	26-Jun-18
Sample Retrieval Date		23-Jan-18	6-Feb-18	20-Feb-18	6-Mar-18	20-Mar-18	3-Apr-18	17-Apr-18	1-May-18	15-May-18	29-May-18	12-Jun-18	26-Jun-18	10-Jul-18
UTM Coordinates	Location	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
384557mE, 4755365mN	Station #1	6.86	11.70	12.80	6.67	2.69	4.61	2.77	3.93	6.49	4.80	3.77	5.50	8.98
384977mE, 4755264mN	Station #2	10.40	9.51	5.16	6.45	3.57	2.25	2.54	4.44	5.05	6.76	2.98	5.04	4.89
384802mE, 4754965mN	Station #3	56.80	58.50	40.80	20.80	26.70	14.60	17.40	18.80	31.30	28.80	23.40	22.10	38.70
384601mE, 4754820mN	Station #4	6.97	8.57	8.11	13.20	6.02	11.00	9.89	13.60	6.83	11.00	15.90	15.40	6.37
384425mE, 4754949mN	Station #5	6.09	23.70	15.60	30.40	9.02	9.26	8.84	6.45	5.86	9.02	36.30	29.60	9.55
384471mE, 4755177mN	Station #6	8.38	8.54	19.90	5.92	3.76	6.00	3.87	5.15	3.65	5.23	8.86	7.94	9.13
383689mE, 4755204mN	Station #7	6.80	4.03	5.84	4.51	2.16	2.42	2.89	6.49	7.95	7.04	5.79	3.10	5.58
383812mE, 4755079mN	Station #8	13.50	11.80	9.51	6.36	4.81	2.50	4.26	7.14	10.80	11.30	4.96	3.16	2.77
383796mE, 4754993mN	Station #9	24.10	22.20	13.80	10.50	8.36	3.02	6.83	10.40	18.50	16.50	6.88	4.68	2.41
383676mE, 4754870mN	Station #10	6.16	11.10	12.40	26.70	18.70	37.90	28.10	7.84	17.40	16.60	>76.0	5.87	1.96
383547mE, 4754954mN	Station #11	10.90	2.50	6.84	7.15	5.65	9.29	6.04	7.85	3.49	7.23	34.70	3.58	2.54
383581mE, 4755077mN	Station #12	15.50	5.33	5.82	2.96	2.87	3.46	5.69	5.39	3.19	5.20	8.28	4.37	5.68

Field QA/QC Data

Field Blank #1	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	<0.32	<0.32	<0.32	<0.31	<0.32	<0.31	<0.31	<0.31	<0.31	<0.30	<0.30	<0.30	<0.30
Field Duplicate	Location	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1	Station #2	Station #3	Station #4	Station #5	Station #6	Station #1
	Value (ug/m3)	6.64	9.46	39.40	12.20	8.80	6.29	2.67	4.03	30.50	10.70	35.70	7.83	9.24
	RPD (%)	3.21%	0.53%	3.43%	7.58%	2.44%	4.83%	3.61%	9.23%	2.56%	2.73%	1.65%	1.39%	2.90%
Field Blank #2	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	<0.32	<0.32	<0.32	<0.31	<0.32	<0.31	<0.31	<0.31	<0.31	<0.30	<0.30	<0.30	<0.30
Field Duplicate	Location	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7	Station #8	Station #9	Station #10	Station #11	Station #12	Station #7
	Value (ug/m3)	6.91	10.70	13.50	27.80	5.72	3.46	3.12	7.33	17.90	12.30	34.50	4.36	5.46
	RPD (%)	1.62%	9.32%	2.17%	4.12%	1.24%	0.00%	7.96%	2.66%	3.24%	25.90%	0.58%	0.23%	2.15%

Notes:

1) RPD is Relative Percent Difference (Difference / Mean expressed as a percent). Used as the default precision evaluation.

2) On June 10, 2018 during the cleaning of a decommissioned benzene storage tank (to prepare tank for inspection), INEOS Styrolution Sarnia Site received grab sample analyses indicating increased levels of benzene at Styrene I (located on Vidal St). The Ministry of Environment and Climate Change (MOECC Spills Action Centre) was notified and subsequent updates were provided to the MOECC (SAC) from June 10, 2018 to June 15, 2018. The third party consultant continued taking grab samples twice daily and results indicated a decrease in benzene levels. The tank of concern is located on the Southeast corner of Styrene I, directly adjacent to Ambient Monitoring Station #10 and collected elevated sample results for the two-week period occurring May 29, 2018 – June 12, 2018.

On February 27, 2019, INEOS Styrolution was notified by the third party analytical laboratory that previous air concentration values (specifically, the data value for Station #10) was reported incorrectly. Due to a manual data entry error, the value for nanograms was erroneously entered for the value of the total concentration (i.e. ug/m3). The table has been updated to reflect the corrected data.

3) October 23, 2018 - Corrected UTM coordinates