

All4, Inc.

2393 Kimberton Road
Kimberton, PA 19442

U.S. Steel Corp – Clairton Works
Clairton, PA
Client Project # 00701-0002.00

Analytical Report
(1022-150)

EPA Method TO-15

TO-15 Target Compound List



Enthalpy Analytical, LLC

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I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)

This analytical report was prepared in Portable Document Format (.PDF) and contains 45 pages.

Report Issued: 12/12/22



Results

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC01-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1865
 Sampling Date 2022-11-22 11:05
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202374.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 20:56
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC01-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	2.59	0.0677	0.0614	4.45	0.117	0.106	
Freon 12 (CCl2F2)	0.377	0.0687	0.0614	1.87	0.339	0.303	
Freon 114 (C2Cl2F4)	ND	0.703	0.0614	ND	4.91	0.429	
Chloromethane	0.474	0.0694	0.0614	0.978	0.143	0.127	
Chloroethene (Vinyl chloride)	ND	0.0701	0.0614	ND	0.179	0.157	
1,3-Butadiene	0.0824	0.0682	0.0614	0.182	0.151	0.136	
Bromomethane	ND	0.0688	0.0614	ND	0.267	0.238	
Chloroethane	ND	0.0713	0.0614	ND	0.188	0.162	
Bromoethene (Vinyl bromide)	ND	0.0686	0.0614	ND	0.300	0.268	
Freon 11 (CCl3F)	0.202	0.0740	0.0614	1.14	0.415	0.345	
Ethanol	2.88	0.0695	0.0701	5.42	0.131	0.132	
Acrolein	0.222	0.0691	0.0614	0.508	0.158	0.141	
Freon 113 (C2Cl3F3)	ND	0.0712	0.0614	ND	0.545	0.470	
1,1-Dichloroethene	ND	0.0705	0.0614	ND	0.280	0.243	
Acetone	1.75	0.0703	0.0614	4.14	0.167	0.146	
Carbon disulfide	ND	0.0699	0.0614	ND	0.218	0.191	
Isopropyl alcohol	0.391	0.0699	0.0614	0.960	0.172	0.151	
Allyl chloride (3-chloropropene)	ND	0.0757	0.0614	ND	0.237	0.192	
Acetonitrile	0.144	0.0699	0.0614	0.242	0.117	0.103	m
Methylene chloride	0.118	0.0718	0.0614	0.409	0.249	0.213	
trans-1,2-Dichloroethene	ND	0.0715	0.0614	ND	0.283	0.243	
Methyl tert-butyl ether	ND	0.0721	0.0614	ND	0.260	0.221	
Acrylonitrile	ND	0.0714	0.0614	ND	0.155	0.133	
Hexane	0.319	0.0713	0.0614	1.12	0.251	0.216	
1,1-Dichloroethane	ND	0.0696	0.0614	ND	0.282	0.248	
Vinyl acetate	ND	0.0717	0.0614	ND	0.252	0.216	
cis-1,2-Dichloroethene	ND	0.0708	0.0614	ND	0.281	0.243	
Methyl ethyl ketone (2-Butanone)	0.472	0.0725	0.0614	1.39	0.214	0.181	
Ethyl acetate	ND	0.0700	0.0614	ND	0.252	0.221	
Chloroform	ND	0.0703	0.0614	ND	0.343	0.299	

Enthalpy Analytical

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 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202374.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 20:56
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC01-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0710	0.0614	ND	0.209	0.181	
1,1,1-Trichloroethane	ND	0.0708	0.0614	ND	0.386	0.335	
Cyclohexane	0.183	0.0719	0.0614	0.629	0.247	0.211	
Carbon tetrachloride	0.0619	0.0706	0.0614	0.389	0.444	0.386	J
Benzene	5.10	0.0705	0.0614	16.3	0.225	0.196	
2,2,4-trimethylpentane	0.106	0.0725	0.0614	0.494	0.339	0.287	
1,2-Dichloroethane	ND	0.0722	0.0614	ND	0.292	0.248	
Heptane	0.173	0.0710	0.0614	0.707	0.291	0.251	
Trichloroethene	ND	0.0709	0.0614	ND	0.381	0.330	
1,2-Dichloropropane	ND	0.0706	0.0614	ND	0.326	0.283	
Methyl methacrylate	ND	0.0734	0.0614	ND	0.300	0.251	
1,4-Dioxane	ND	0.0703	0.0614	ND	0.253	0.221	
Bromodichloromethane	ND	0.0708	0.0614	ND	0.474	0.411	
cis-1,3-Dichloropropene	ND	0.0696	0.0614	ND	0.316	0.278	
Methyl isobutyl ketone	ND	0.0729	0.0614	ND	0.298	0.251	
Toluene	1.79	0.0714	0.0614	6.73	0.269	0.231	
trans-1,3-Dichloropropene	ND	0.0724	0.0614	ND	0.328	0.278	
1,1,2-Trichloroethane	ND	0.0713	0.0614	ND	0.389	0.335	
Tetrachloroethene	ND	0.0717	0.0614	ND	0.486	0.416	
2-Hexanone (Methyl butyl ketone)	ND	0.0717	0.0614	ND	0.294	0.251	
Dibromochloromethane	ND	0.0707	0.0614	ND	0.602	0.522	
1,2-Dibromoethane	ND	0.0717	0.0614	ND	0.551	0.471	
Chlorobenzene	ND	0.0722	0.0614	ND	0.332	0.282	
Ethylbenzene	0.0858	0.0696	0.0614	0.372	0.302	0.266	
1,1,1,2-Tetrachloroethane	ND	0.0707	0.0614	ND	0.485	0.421	
m-/p-Xylenes	0.320	0.0711	0.0614	1.39	0.309	0.266	
o-Xylene	0.105	0.0703	0.0614	0.454	0.305	0.266	
Styrene	0.0731	0.0687	0.0614	0.311	0.293	0.261	
Bromoform	ND	0.0703	0.0614	ND	0.727	0.634	
1,1,2,2-Tetrachloroethane	ND	0.0709	0.0614	ND	0.486	0.421	

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Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

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 Batch Xavier_X112922B.v1
 Data File X2202374.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 20:56
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC01-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
4-Ethyltoluene	0.0887	0.0713	0.0614	0.436	0.350	0.301	m
2-Chlorotoluene	ND	0.0708	0.0614	ND	0.366	0.317	
1,3,5-Trimethylbenzene	ND	0.0711	0.0614	ND	0.349	0.301	
1,2,4-Trimethylbenzene	0.115	0.0702	0.0614	0.563	0.345	0.301	
1,3-Dichlorobenzene	ND	0.0713	0.0614	ND	0.428	0.369	
1,4-Dichlorobenzene	ND	0.0705	0.0614	ND	0.423	0.369	
Benzyl chloride	ND	0.0705	0.0614	ND	0.365	0.317	
1,2-Dichlorobenzene	ND	0.0710	0.0614	ND	0.427	0.369	
1,2,4-Trichlorobenzene	ND	0.0698	0.0614	ND	0.518	0.455	
Hexachlorobutadiene	ND	0.0693	0.0614	ND	0.738	0.654	
Naphthalene	0.0628	0.0706	0.0614	0.329	0.370	0.321	J, m
1-Bromopropane	ND	0.0696	0.0614	ND	0.350	0.308	
1-Octene	ND	0.0692	0.0614	ND	0.317	0.281	
n-Octane	0.0637	0.0722	0.0614	0.297	0.337	0.287	J
Isopropylbenzene	ND	0.0713	0.0614	ND	0.350	0.301	
n-Propylbenzene	0.0665	0.0720	0.0614	0.327	0.353	0.301	J

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	875,174	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,134,158	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,747,763	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC02-221122-S
 Sample Info. 1022-150; 500mL Load; Can #R5024
 Sampling Date 2022-11-22 10:58
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202376.D
 Dilution 1.000
 Pressurization Factor 1.763
 Acquisition Date 2022-11-29 22:44
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC02-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	2.75	0.0681	0.0617	4.73	0.117	0.106	
Freon 12 (CCl2F2)	0.379	0.0691	0.0617	1.87	0.341	0.305	
Freon 114 (C2Cl2F4)	ND	0.707	0.0617	ND	4.94	0.431	
Chloromethane	0.522	0.0698	0.0617	1.08	0.144	0.127	
Chloroethene (Vinyl chloride)	ND	0.0705	0.0617	ND	0.180	0.158	
1,3-Butadiene	0.0708	0.0686	0.0617	0.157	0.152	0.136	
Bromomethane	ND	0.0692	0.0617	ND	0.269	0.239	
Chloroethane	ND	0.0717	0.0617	ND	0.189	0.163	
Bromoethene (Vinyl bromide)	ND	0.0690	0.0617	ND	0.302	0.270	
Freon 11 (CCl3F)	0.197	0.0744	0.0617	1.10	0.418	0.347	m
Ethanol	1.76	0.0699	0.0705	3.31	0.132	0.133	
Acrolein	0.185	0.0695	0.0617	0.423	0.159	0.141	m
Freon 113 (C2Cl3F3)	ND	0.0716	0.0617	ND	0.548	0.473	
1,1-Dichloroethene	ND	0.0710	0.0617	ND	0.281	0.245	
Acetone	1.51	0.0707	0.0617	3.59	0.168	0.147	m
Carbon disulfide	ND	0.0703	0.0617	ND	0.219	0.192	
Isopropyl alcohol	0.143	0.0703	0.0617	0.351	0.173	0.152	
Allyl chloride (3-chloropropene)	ND	0.0762	0.0617	ND	0.238	0.193	
Acetonitrile	0.126	0.0703	0.0617	0.211	0.118	0.104	
Methylene chloride	0.185	0.0722	0.0617	0.642	0.251	0.214	m
trans-1,2-Dichloroethene	ND	0.0719	0.0617	ND	0.285	0.245	
Methyl tert-butyl ether	ND	0.0725	0.0617	ND	0.261	0.222	
Acrylonitrile	ND	0.0718	0.0617	ND	0.156	0.134	
Hexane	0.326	0.0717	0.0617	1.15	0.252	0.217	
1,1-Dichloroethane	ND	0.0700	0.0617	ND	0.283	0.250	
Vinyl acetate	ND	0.0722	0.0617	ND	0.254	0.217	
cis-1,2-Dichloroethene	ND	0.0712	0.0617	ND	0.282	0.245	
Methyl ethyl ketone (2-Butanone)	0.528	0.0729	0.0617	1.56	0.215	0.182	
Ethyl acetate	ND	0.0704	0.0617	ND	0.254	0.222	
Chloroform	ND	0.0707	0.0617	ND	0.345	0.301	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC02-221122-S
 Sample Info. 1022-150; 500mL Load; Can #R5024
 Sampling Date 2022-11-22 10:58
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202376.D
 Dilution 1.000
 Pressurization Factor 1.763
 Acquisition Date 2022-11-29 22:44
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC02-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0714	0.0617	ND	0.210	0.182	
1,1,1-Trichloroethane	ND	0.0712	0.0617	ND	0.388	0.337	
Cyclohexane	0.316	0.0723	0.0617	1.09	0.249	0.212	m
Carbon tetrachloride	0.0634	0.0710	0.0617	0.399	0.447	0.388	J
Benzene	2.11	0.0710	0.0617	6.75	0.227	0.197	
2,2,4-trimethylpentane	0.0837	0.0729	0.0617	0.391	0.341	0.288	
1,2-Dichloroethane	ND	0.0726	0.0617	ND	0.294	0.250	
Heptane	0.200	0.0714	0.0617	0.818	0.293	0.253	
Trichloroethene	ND	0.0713	0.0617	ND	0.383	0.331	
1,2-Dichloropropane	ND	0.0710	0.0617	ND	0.328	0.285	
Methyl methacrylate	ND	0.0738	0.0617	ND	0.302	0.253	
1,4-Dioxane	ND	0.0707	0.0617	ND	0.255	0.222	
Bromodichloromethane	ND	0.0712	0.0617	ND	0.477	0.413	
cis-1,3-Dichloropropene	ND	0.0700	0.0617	ND	0.318	0.280	
Methyl isobutyl ketone	0.0708	0.0733	0.0617	0.290	0.300	0.253	J
Toluene	2.00	0.0718	0.0617	7.53	0.270	0.232	
trans-1,3-Dichloropropene	ND	0.0728	0.0617	ND	0.330	0.280	
1,1,2-Trichloroethane	ND	0.0717	0.0617	ND	0.391	0.337	
Tetrachloroethene	ND	0.0722	0.0617	ND	0.489	0.418	
2-Hexanone (Methyl butyl ketone)	ND	0.0722	0.0617	ND	0.295	0.253	
Dibromochloromethane	ND	0.0711	0.0617	ND	0.605	0.525	
1,2-Dibromoethane	ND	0.0722	0.0617	ND	0.554	0.474	
Chlorobenzene	ND	0.0726	0.0617	ND	0.334	0.284	
Ethylbenzene	0.102	0.0700	0.0617	0.441	0.304	0.268	
1,1,1,2-Tetrachloroethane	ND	0.0711	0.0617	ND	0.488	0.423	
m-/p-Xylenes	0.382	0.0715	0.0617	1.66	0.310	0.268	
o-Xylene	0.127	0.0707	0.0617	0.550	0.307	0.268	
Styrene	0.0866	0.0691	0.0617	0.369	0.294	0.263	
Bromoform	ND	0.0707	0.0617	ND	0.731	0.638	
1,1,2,2-Tetrachloroethane	ND	0.0713	0.0617	ND	0.489	0.423	

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Instrument Method TO15_SCNV6.M
Matrix Air
Analyst TDD
Instrument Xavier
Enthalpy ID 1022-150.VOC02-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
4-Ethyltoluene	ND	0.0717	0.0617	ND	0.352	0.303	
2-Chlorotoluene	ND	0.0712	0.0617	ND	0.368	0.319	
1,3,5-Trimethylbenzene	ND	0.0715	0.0617	ND	0.351	0.303	
1,2,4-Trimethylbenzene	0.0764	0.0706	0.0617	0.376	0.347	0.303	
1,3-Dichlorobenzene	ND	0.0717	0.0617	ND	0.431	0.371	
1,4-Dichlorobenzene	ND	0.0709	0.0617	ND	0.426	0.371	
Benzyl chloride	ND	0.0710	0.0617	ND	0.367	0.319	
1,2-Dichlorobenzene	ND	0.0714	0.0617	ND	0.429	0.371	
1,2,4-Trichlorobenzene	ND	0.0703	0.0617	ND	0.521	0.458	
Hexachlorobutadiene	ND	0.0697	0.0617	ND	0.743	0.658	
Naphthalene	0.493	0.0710	0.0617	2.58	0.372	0.323	
1-Bromopropane	ND	0.0700	0.0617	ND	0.352	0.310	
1-Octene	ND	0.0696	0.0617	ND	0.319	0.283	
n-Octane	0.104	0.0726	0.0617	0.484	0.339	0.288	
Isopropylbenzene	ND	0.0717	0.0617	ND	0.352	0.303	
n-Propylbenzene	ND	0.0724	0.0617	ND	0.356	0.303	

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	867,862	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,129,849	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,759,287	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-S
 Sample Info. 1022-150; 500mL Load; Can #0826
 Sampling Date 2022-11-22 10:52
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202377.D
 Dilution 1.000
 Pressurization Factor 1.754
 Acquisition Date 2022-11-29 23:39
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC03-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	2.81	0.0678	0.0614	4.83	0.117	0.106	
Freon 12 (CCl2F2)	0.390	0.0687	0.0614	1.93	0.339	0.303	
Freon 114 (C2Cl2F4)	ND	0.703	0.0614	ND	4.91	0.429	
Chloromethane	0.536	0.0694	0.0614	1.11	0.143	0.127	
Chloroethene (Vinyl chloride)	ND	0.0701	0.0614	ND	0.179	0.157	
1,3-Butadiene	0.0849	0.0683	0.0614	0.188	0.151	0.136	
Bromomethane	ND	0.0688	0.0614	ND	0.267	0.238	
Chloroethane	ND	0.0713	0.0614	ND	0.188	0.162	
Bromoethene (Vinyl bromide)	ND	0.0686	0.0614	ND	0.300	0.268	
Freon 11 (CCl3F)	0.198	0.0740	0.0614	1.11	0.416	0.345	
Ethanol	1.66	0.0695	0.0702	3.13	0.131	0.132	
Acrolein	0.136	0.0691	0.0614	0.312	0.158	0.141	
Freon 113 (C2Cl3F3)	0.0637	0.0712	0.0614	0.488	0.545	0.470	J
1,1-Dichloroethene	ND	0.0706	0.0614	ND	0.280	0.243	
Acetone	1.43	0.0703	0.0614	3.40	0.167	0.146	m
Carbon disulfide	0.0686	0.0699	0.0614	0.213	0.218	0.191	J
Isopropyl alcohol	0.166	0.0699	0.0614	0.408	0.172	0.151	
Allyl chloride (3-chloropropene)	ND	0.0758	0.0614	ND	0.237	0.192	
Acetonitrile	0.268	0.0699	0.0614	0.450	0.117	0.103	
Methylene chloride	0.116	0.0718	0.0614	0.402	0.249	0.213	m
trans-1,2-Dichloroethene	ND	0.0716	0.0614	ND	0.284	0.243	
Methyl tert-butyl ether	ND	0.0721	0.0614	ND	0.260	0.221	
Acrylonitrile	ND	0.0714	0.0614	ND	0.155	0.133	
Hexane	0.238	0.0713	0.0614	0.839	0.251	0.216	m
1,1-Dichloroethane	ND	0.0697	0.0614	ND	0.282	0.248	
Vinyl acetate	ND	0.0718	0.0614	ND	0.253	0.216	
cis-1,2-Dichloroethene	ND	0.0709	0.0614	ND	0.281	0.243	
Methyl ethyl ketone (2-Butanone)	0.501	0.0725	0.0614	1.48	0.214	0.181	
Ethyl acetate	0.197	0.0700	0.0614	0.708	0.252	0.221	
Chloroform	ND	0.0704	0.0614	ND	0.343	0.300	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-S
 Sample Info. 1022-150; 500mL Load; Can #0826
 Sampling Date 2022-11-22 10:52
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202377.D
 Dilution 1.000
 Pressurization Factor 1.754
 Acquisition Date 2022-11-29 23:39
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC03-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0710	0.0614	ND	0.209	0.181	
1,1,1-Trichloroethane	ND	0.0709	0.0614	ND	0.386	0.335	
Cyclohexane	0.136	0.0719	0.0614	0.469	0.247	0.211	
Carbon tetrachloride	0.0662	0.0706	0.0614	0.416	0.444	0.386	J
Benzene	4.72	0.0706	0.0614	15.1	0.225	0.196	
2,2,4-trimethylpentane	ND	0.0725	0.0614	ND	0.339	0.287	
1,2-Dichloroethane	ND	0.0722	0.0614	ND	0.292	0.248	
Heptane	0.0979	0.0711	0.0614	0.401	0.291	0.251	
Trichloroethene	ND	0.0709	0.0614	ND	0.381	0.330	
1,2-Dichloropropane	ND	0.0706	0.0614	ND	0.326	0.284	
Methyl methacrylate	ND	0.0735	0.0614	ND	0.301	0.251	
1,4-Dioxane	ND	0.0704	0.0614	ND	0.253	0.221	
Bromodichloromethane	ND	0.0709	0.0614	ND	0.475	0.411	
cis-1,3-Dichloropropene	ND	0.0697	0.0614	ND	0.316	0.278	
Methyl isobutyl ketone	0.0729	0.0729	0.0614	0.299	0.298	0.251	
Toluene	2.64	0.0714	0.0614	9.94	0.269	0.231	
trans-1,3-Dichloropropene	ND	0.0724	0.0614	ND	0.328	0.278	
1,1,2-Trichloroethane	ND	0.0714	0.0614	ND	0.389	0.335	
Tetrachloroethene	ND	0.0718	0.0614	ND	0.486	0.416	
2-Hexanone (Methyl butyl ketone)	ND	0.0718	0.0614	ND	0.294	0.251	
Dibromochloromethane	ND	0.0707	0.0614	ND	0.602	0.523	
1,2-Dibromoethane	ND	0.0718	0.0614	ND	0.551	0.471	
Chlorobenzene	ND	0.0723	0.0614	ND	0.332	0.282	
Ethylbenzene	0.0769	0.0697	0.0614	0.334	0.302	0.266	
1,1,1,2-Tetrachloroethane	ND	0.0707	0.0614	ND	0.485	0.421	
m-/p-Xylenes	0.324	0.0711	0.0614	1.41	0.309	0.266	
o-Xylene	0.105	0.0703	0.0614	0.456	0.305	0.266	
Styrene	0.123	0.0688	0.0614	0.522	0.293	0.261	
Bromoform	ND	0.0704	0.0614	ND	0.727	0.634	
1,1,2,2-Tetrachloroethane	ND	0.0709	0.0614	ND	0.487	0.421	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-S
Sample Info. 1022-150; 500mL Load; Can #0826
Sampling Date 2022-11-22 10:52
Received Date 2022-11-28 00:00
Sample Type Sample
Batch Xavier_X112922B.v1
Data File X2202377.D
Dilution 1.000
Pressurization Factor 1.754
Acquisition Date 2022-11-29 23:39
Instrument Method TO15_SCNV6.M
Matrix Air
Analyst TDD
Instrument Xavier
Enthalpy ID 1022-150.VOC03-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
4-Ethyltoluene	0.0976	0.0714	0.0614	0.479	0.351	0.302	m
2-Chlorotoluene	ND	0.0708	0.0614	ND	0.366	0.318	
1,3,5-Trimethylbenzene	0.0695	0.0711	0.0614	0.341	0.349	0.302	J
1,2,4-Trimethylbenzene	0.130	0.0702	0.0614	0.639	0.345	0.302	
1,3-Dichlorobenzene	ND	0.0713	0.0614	ND	0.428	0.369	
1,4-Dichlorobenzene	ND	0.0705	0.0614	ND	0.424	0.369	
Benzyl chloride	ND	0.0706	0.0614	ND	0.365	0.318	
1,2-Dichlorobenzene	ND	0.0711	0.0614	ND	0.427	0.369	
1,2,4-Trichlorobenzene	ND	0.0699	0.0614	ND	0.518	0.455	
Hexachlorobutadiene	ND	0.0693	0.0614	ND	0.739	0.654	
Naphthalene	1.21	0.0706	0.0614	6.34	0.370	0.322	
1-Bromopropane	ND	0.0696	0.0614	ND	0.350	0.309	
1-Octene	ND	0.0692	0.0614	ND	0.318	0.282	
n-Octane	0.0638	0.0723	0.0614	0.298	0.337	0.287	J
Isopropylbenzene	ND	0.0713	0.0614	ND	0.350	0.302	
n-Propylbenzene	0.0778	0.0720	0.0614	0.382	0.354	0.302	

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	853,066	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,128,899	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,762,416	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-D
 Sample Info. 1022-150; 500mL Load; Can #1705
 Sampling Date 2022-11-22 10:53
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202378.D
 Dilution 1.000
 Pressurization Factor 1.773
 Acquisition Date 2022-11-30 00:33
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC03-221122-D.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	2.78	0.0685	0.0621	4.79	0.118	0.107	m
Freon 12 (CCl2F2)	0.377	0.0694	0.0621	1.86	0.343	0.307	
Freon 114 (C2Cl2F4)	ND	0.711	0.0621	ND	4.96	0.434	
Chloromethane	0.462	0.0701	0.0621	0.954	0.145	0.128	
Chloroethene (Vinyl chloride)	ND	0.0709	0.0621	ND	0.181	0.159	
1,3-Butadiene	0.111	0.0690	0.0621	0.246	0.153	0.137	
Bromomethane	ND	0.0696	0.0621	ND	0.270	0.241	
Chloroethane	ND	0.0721	0.0621	ND	0.190	0.164	
Bromoethene (Vinyl bromide)	ND	0.0694	0.0621	ND	0.303	0.271	
Freon 11 (CCl3F)	0.198	0.0748	0.0621	1.11	0.420	0.348	
Ethanol	1.62	0.0703	0.0709	3.05	0.132	0.134	
Acrolein	ND	0.0699	0.0621	ND	0.160	0.142	
Freon 113 (C2Cl3F3)	0.0652	0.0720	0.0621	0.499	0.551	0.475	J
1,1-Dichloroethene	ND	0.0713	0.0621	ND	0.283	0.246	
Acetone	2.10	0.0711	0.0621	4.99	0.169	0.147	
Carbon disulfide	ND	0.0707	0.0621	ND	0.220	0.193	
Isopropyl alcohol	0.168	0.0707	0.0621	0.413	0.174	0.152	
Allyl chloride (3-chloropropene)	ND	0.0766	0.0621	ND	0.240	0.194	
Acetonitrile	0.231	0.0707	0.0621	0.388	0.119	0.104	
Methylene chloride	0.120	0.0726	0.0621	0.417	0.252	0.215	
trans-1,2-Dichloroethene	ND	0.0723	0.0621	ND	0.287	0.246	
Methyl tert-butyl ether	ND	0.0729	0.0621	ND	0.263	0.224	
Acrylonitrile	ND	0.0722	0.0621	ND	0.157	0.135	
Hexane	0.250	0.0721	0.0621	0.882	0.254	0.219	
1,1-Dichloroethane	ND	0.0704	0.0621	ND	0.285	0.251	
Vinyl acetate	ND	0.0726	0.0621	ND	0.255	0.218	
cis-1,2-Dichloroethene	ND	0.0716	0.0621	ND	0.284	0.246	
Methyl ethyl ketone (2-Butanone)	0.462	0.0733	0.0621	1.36	0.216	0.183	
Ethyl acetate	ND	0.0708	0.0621	ND	0.255	0.223	
Chloroform	ND	0.0711	0.0621	ND	0.347	0.303	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-D
 Sample Info. 1022-150; 500mL Load; Can #1705
 Sampling Date 2022-11-22 10:53
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202378.D
 Dilution 1.000
 Pressurization Factor 1.773
 Acquisition Date 2022-11-30 00:33
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC03-221122-D.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0718	0.0621	ND	0.212	0.183	
1,1,1-Trichloroethane	ND	0.0716	0.0621	ND	0.391	0.338	
Cyclohexane	0.135	0.0727	0.0621	0.463	0.250	0.213	
Carbon tetrachloride	0.0699	0.0714	0.0621	0.439	0.449	0.390	J, m
Benzene	4.54	0.0713	0.0621	14.5	0.228	0.198	
2,2,4-trimethylpentane	ND	0.0733	0.0621	ND	0.342	0.290	
1,2-Dichloroethane	ND	0.0730	0.0621	ND	0.295	0.251	
Heptane	0.129	0.0718	0.0621	0.527	0.294	0.254	
Trichloroethene	ND	0.0717	0.0621	ND	0.385	0.333	
1,2-Dichloropropane	ND	0.0714	0.0621	ND	0.330	0.287	
Methyl methacrylate	ND	0.0743	0.0621	ND	0.304	0.254	
1,4-Dioxane	ND	0.0711	0.0621	ND	0.256	0.223	
Bromodichloromethane	ND	0.0716	0.0621	ND	0.480	0.416	
cis-1,3-Dichloropropene	ND	0.0704	0.0621	ND	0.319	0.281	
Methyl isobutyl ketone	0.0625	0.0737	0.0621	0.256	0.302	0.254	J
Toluene	1.99	0.0722	0.0621	7.51	0.272	0.234	
trans-1,3-Dichloropropene	ND	0.0732	0.0621	ND	0.332	0.281	
1,1,2-Trichloroethane	ND	0.0721	0.0621	ND	0.393	0.338	
Tetrachloroethene	ND	0.0726	0.0621	ND	0.492	0.421	
2-Hexanone (Methyl butyl ketone)	ND	0.0726	0.0621	ND	0.297	0.254	
Dibromochloromethane	ND	0.0715	0.0621	ND	0.609	0.528	
1,2-Dibromoethane	ND	0.0726	0.0621	ND	0.557	0.477	
Chlorobenzene	ND	0.0731	0.0621	ND	0.336	0.286	
Ethylbenzene	ND	0.0704	0.0621	ND	0.306	0.269	
1,1,1,2-Tetrachloroethane	ND	0.0715	0.0621	ND	0.490	0.426	
m-/p-Xylenes	0.209	0.0719	0.0621	0.906	0.312	0.269	
o-Xylene	0.0908	0.0711	0.0621	0.394	0.308	0.269	
Styrene	ND	0.0695	0.0621	ND	0.296	0.264	
Bromoform	ND	0.0711	0.0621	ND	0.735	0.641	
1,1,2,2-Tetrachloroethane	ND	0.0717	0.0621	ND	0.492	0.426	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC03-221122-D
 Sample Info. 1022-150; 500mL Load; Can #1705
 Sampling Date 2022-11-22 10:53
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202378.D
 Dilution 1.000
 Pressurization Factor 1.773
 Acquisition Date 2022-11-30 00:33
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC03-221122-D.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
4-Ethyltoluene	ND	0.0721	0.0621	ND	0.354	0.305	
2-Chlorotoluene	ND	0.0716	0.0621	ND	0.370	0.321	
1,3,5-Trimethylbenzene	0.0641	0.0719	0.0621	0.315	0.353	0.305	J
1,2,4-Trimethylbenzene	0.0881	0.0710	0.0621	0.433	0.349	0.305	
1,3-Dichlorobenzene	ND	0.0721	0.0621	ND	0.433	0.373	
1,4-Dichlorobenzene	ND	0.0713	0.0621	ND	0.428	0.373	
Benzyl chloride	ND	0.0713	0.0621	ND	0.369	0.321	
1,2-Dichlorobenzene	ND	0.0718	0.0621	ND	0.432	0.373	
1,2,4-Trichlorobenzene	ND	0.0706	0.0621	ND	0.524	0.460	
Hexachlorobutadiene	ND	0.0701	0.0621	ND	0.747	0.661	
Naphthalene	0.0806	0.0714	0.0621	0.422	0.374	0.325	
1-Bromopropane	ND	0.0704	0.0621	ND	0.354	0.312	
1-Octene	ND	0.0700	0.0621	ND	0.321	0.285	
n-Octane	ND	0.0731	0.0621	ND	0.341	0.290	
Isopropylbenzene	ND	0.0721	0.0621	ND	0.354	0.305	
n-Propylbenzene	ND	0.0728	0.0621	ND	0.357	0.305	

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	858,722	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,086,115	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,765,785	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC04-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1884
 Sampling Date 2022-11-22 10:44
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202379.D
 Dilution 1.000
 Pressurization Factor 1.762
 Acquisition Date 2022-11-30 01:27
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC04-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	2.63	0.0681	0.0617	4.53	0.117	0.106	
Freon 12 (CCl2F2)	0.388	0.0690	0.0617	1.92	0.341	0.305	
Freon 114 (C2Cl2F4)	ND	0.706	0.0617	ND	4.93	0.431	
Chloromethane	0.482	0.0697	0.0617	0.995	0.144	0.127	
Chloroethene (Vinyl chloride)	ND	0.0704	0.0617	ND	0.180	0.158	
1,3-Butadiene	ND	0.0686	0.0617	ND	0.152	0.136	
Bromomethane	ND	0.0691	0.0617	ND	0.268	0.239	
Chloroethane	ND	0.0716	0.0617	ND	0.189	0.163	
Bromoethene (Vinyl bromide)	ND	0.0689	0.0617	ND	0.301	0.270	
Freon 11 (CCl3F)	0.211	0.0743	0.0617	1.18	0.417	0.346	
Ethanol	2.16	0.0698	0.0705	4.06	0.131	0.133	
Acrolein	0.182	0.0694	0.0617	0.418	0.159	0.141	m
Freon 113 (C2Cl3F3)	0.0641	0.0715	0.0617	0.491	0.548	0.472	J, m
1,1-Dichloroethene	ND	0.0709	0.0617	ND	0.281	0.244	
Acetone	1.82	0.0706	0.0617	4.32	0.168	0.146	m
Carbon disulfide	0.0687	0.0703	0.0617	0.214	0.219	0.192	J
Isopropyl alcohol	0.203	0.0703	0.0617	0.499	0.173	0.151	
Allyl chloride (3-chloropropene)	ND	0.0761	0.0617	ND	0.238	0.193	
Acetonitrile	0.439	0.0703	0.0617	0.737	0.118	0.103	
Methylene chloride	0.141	0.0722	0.0617	0.488	0.250	0.214	
trans-1,2-Dichloroethene	ND	0.0719	0.0617	ND	0.285	0.244	
Methyl tert-butyl ether	ND	0.0724	0.0617	ND	0.261	0.222	
Acrylonitrile	ND	0.0717	0.0617	ND	0.156	0.134	
Hexane	0.229	0.0716	0.0617	0.808	0.252	0.217	
1,1-Dichloroethane	ND	0.0700	0.0617	ND	0.283	0.249	
Vinyl acetate	ND	0.0721	0.0617	ND	0.254	0.217	
cis-1,2-Dichloroethene	ND	0.0712	0.0617	ND	0.282	0.244	
Methyl ethyl ketone (2-Butanone)	0.627	0.0729	0.0617	1.85	0.215	0.182	
Ethyl acetate	0.165	0.0703	0.0617	0.596	0.253	0.222	
Chloroform	ND	0.0707	0.0617	ND	0.345	0.301	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC04-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1884
 Sampling Date 2022-11-22 10:44
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202379.D
 Dilution 1.000
 Pressurization Factor 1.762
 Acquisition Date 2022-11-30 01:27
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC04-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0713	0.0617	ND	0.210	0.182	
1,1,1-Trichloroethane	ND	0.0712	0.0617	ND	0.388	0.336	
Cyclohexane	0.127	0.0722	0.0617	0.437	0.248	0.212	
Carbon tetrachloride	0.0663	0.0710	0.0617	0.417	0.446	0.388	J
Benzene	9.73	0.0709	0.0617	31.1	0.226	0.197	
2,2,4-trimethylpentane	ND	0.0729	0.0617	ND	0.340	0.288	
1,2-Dichloroethane	ND	0.0725	0.0617	ND	0.293	0.249	
Heptane	0.130	0.0714	0.0617	0.534	0.292	0.253	
Trichloroethene	ND	0.0712	0.0617	ND	0.383	0.331	
1,2-Dichloropropane	ND	0.0710	0.0617	ND	0.328	0.285	
Methyl methacrylate	ND	0.0738	0.0617	ND	0.302	0.252	
1,4-Dioxane	ND	0.0707	0.0617	ND	0.255	0.222	
Bromodichloromethane	ND	0.0712	0.0617	ND	0.477	0.413	
cis-1,3-Dichloropropene	ND	0.0700	0.0617	ND	0.317	0.280	
Methyl isobutyl ketone	0.0647	0.0732	0.0617	0.265	0.300	0.252	J
Toluene	3.08	0.0717	0.0617	11.6	0.270	0.232	
trans-1,3-Dichloropropene	ND	0.0727	0.0617	ND	0.330	0.280	
1,1,2-Trichloroethane	ND	0.0717	0.0617	ND	0.391	0.336	
Tetrachloroethene	ND	0.0721	0.0617	ND	0.489	0.418	
2-Hexanone (Methyl butyl ketone)	ND	0.0721	0.0617	ND	0.295	0.252	
Dibromochloromethane	ND	0.0710	0.0617	ND	0.605	0.525	
1,2-Dibromoethane	ND	0.0721	0.0617	ND	0.554	0.473	
Chlorobenzene	ND	0.0726	0.0617	ND	0.334	0.284	
Ethylbenzene	0.0753	0.0700	0.0617	0.327	0.304	0.268	
1,1,1,2-Tetrachloroethane	ND	0.0710	0.0617	ND	0.487	0.423	
m-/p-Xylenes	0.325	0.0715	0.0617	1.41	0.310	0.268	
o-Xylene	0.101	0.0706	0.0617	0.437	0.306	0.268	
Styrene	0.109	0.0691	0.0617	0.466	0.294	0.262	
Bromoform	ND	0.0707	0.0617	ND	0.730	0.637	
1,1,2,2-Tetrachloroethane	ND	0.0712	0.0617	ND	0.489	0.423	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC04-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1884
 Sampling Date 2022-11-22 10:44
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202379.D
 Dilution 1.000
 Pressurization Factor 1.762
 Acquisition Date 2022-11-30 01:27
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC04-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
4-Ethyltoluene	0.108	0.0717	0.0617	0.528	0.352	0.303	m
2-Chlorotoluene	ND	0.0711	0.0617	ND	0.368	0.319	
1,3,5-Trimethylbenzene	ND	0.0715	0.0617	ND	0.351	0.303	
1,2,4-Trimethylbenzene	0.0989	0.0705	0.0617	0.486	0.347	0.303	
1,3-Dichlorobenzene	ND	0.0716	0.0617	ND	0.430	0.370	
1,4-Dichlorobenzene	ND	0.0708	0.0617	ND	0.426	0.370	
Benzyl chloride	ND	0.0709	0.0617	ND	0.367	0.319	
1,2-Dichlorobenzene	ND	0.0714	0.0617	ND	0.429	0.370	
1,2,4-Trichlorobenzene	ND	0.0702	0.0617	ND	0.521	0.457	
Hexachlorobutadiene	ND	0.0696	0.0617	ND	0.742	0.657	
Naphthalene	0.515	0.0710	0.0617	2.70	0.372	0.323	
1-Bromopropane	ND	0.0699	0.0617	ND	0.351	0.310	
1-Octene	ND	0.0695	0.0617	ND	0.319	0.283	
n-Octane	ND	0.0726	0.0617	ND	0.339	0.288	
Isopropylbenzene	ND	0.0716	0.0617	ND	0.352	0.303	
n-Propylbenzene	0.0820	0.0723	0.0617	0.403	0.355	0.303	

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	846,881	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,080,720	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,727,411	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC05-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1808
 Sampling Date 2022-11-22 11:12
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202380.D
 Dilution 1.000
 Pressurization Factor 1.835
 Acquisition Date 2022-11-30 02:21
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC05-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	3.38	0.0709	0.0642	5.82	0.122	0.110	
Freon 12 (CCl2F2)	0.375	0.0719	0.0642	1.85	0.355	0.317	
Freon 114 (C2Cl2F4)	ND	0.735	0.0642	ND	5.14	0.449	
Chloromethane	0.473	0.0726	0.0642	0.976	0.150	0.133	
Chloroethene (Vinyl chloride)	ND	0.0733	0.0642	ND	0.187	0.164	
1,3-Butadiene	0.182	0.0714	0.0642	0.402	0.158	0.142	
Bromomethane	ND	0.0720	0.0642	ND	0.279	0.249	
Chloroethane	ND	0.0746	0.0642	ND	0.197	0.169	
Bromoethene (Vinyl bromide)	ND	0.0718	0.0642	ND	0.314	0.281	
Freon 11 (CCl3F)	0.211	0.0774	0.0642	1.18	0.435	0.361	
Ethanol	2.23	0.0727	0.0734	4.19	0.137	0.138	
Acrolein	0.218	0.0723	0.0642	0.500	0.166	0.147	
Freon 113 (C2Cl3F3)	ND	0.0745	0.0642	ND	0.571	0.492	
1,1-Dichloroethene	ND	0.0738	0.0642	ND	0.293	0.254	
Acetone	1.97	0.0735	0.0642	4.69	0.175	0.152	m
Carbon disulfide	0.639	0.0732	0.0642	1.99	0.228	0.200	
Isopropyl alcohol	0.366	0.0732	0.0642	0.900	0.180	0.158	
Allyl chloride (3-chloropropene)	ND	0.0793	0.0642	ND	0.248	0.201	
Acetonitrile	2.06	0.0732	0.0642	3.46	0.123	0.108	
Methylene chloride	0.133	0.0752	0.0642	0.461	0.261	0.223	
trans-1,2-Dichloroethene	ND	0.0749	0.0642	ND	0.297	0.254	
Methyl tert-butyl ether	ND	0.0755	0.0642	ND	0.272	0.231	
Acrylonitrile	ND	0.0747	0.0642	ND	0.162	0.139	
Hexane	0.274	0.0746	0.0642	0.967	0.263	0.226	
1,1-Dichloroethane	ND	0.0729	0.0642	ND	0.295	0.260	
Vinyl acetate	ND	0.0751	0.0642	ND	0.264	0.226	
cis-1,2-Dichloroethene	ND	0.0741	0.0642	ND	0.294	0.254	
Methyl ethyl ketone (2-Butanone)	0.519	0.0759	0.0642	1.53	0.224	0.189	
Ethyl acetate	ND	0.0733	0.0642	ND	0.264	0.231	
Chloroform	ND	0.0736	0.0642	ND	0.359	0.313	

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC05-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1808
 Sampling Date 2022-11-22 11:12
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202380.D
 Dilution 1.000
 Pressurization Factor 1.835
 Acquisition Date 2022-11-30 02:21
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC05-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Tetrahydrofuran	ND	0.0743	0.0642	ND	0.219	0.189	
1,1,1-Trichloroethane	ND	0.0741	0.0642	ND	0.404	0.350	
Cyclohexane	0.130	0.0752	0.0642	0.446	0.259	0.221	
Carbon tetrachloride	0.0664	0.0739	0.0642	0.417	0.465	0.404	J
2,2,4-trimethylpentane	ND	0.0759	0.0642	ND	0.354	0.300	
1,2-Dichloroethane	ND	0.0755	0.0642	ND	0.306	0.260	
Heptane	0.120	0.0744	0.0642	0.492	0.305	0.263	m
Trichloroethene	ND	0.0742	0.0642	ND	0.399	0.345	
1,2-Dichloropropane	ND	0.0739	0.0642	ND	0.341	0.297	
Methyl methacrylate	ND	0.0769	0.0642	ND	0.315	0.263	
1,4-Dioxane	ND	0.0736	0.0642	ND	0.265	0.231	
Bromodichloromethane	ND	0.0741	0.0642	ND	0.496	0.430	
cis-1,3-Dichloropropene	ND	0.0729	0.0642	ND	0.331	0.291	
Methyl isobutyl ketone	ND	0.0763	0.0642	ND	0.312	0.263	
Toluene	7.79	0.0747	0.0642	29.3	0.281	0.242	
trans-1,3-Dichloropropene	ND	0.0758	0.0642	ND	0.344	0.291	
1,1,2-Trichloroethane	ND	0.0747	0.0642	ND	0.407	0.350	
Tetrachloroethene	ND	0.0751	0.0642	ND	0.509	0.435	
2-Hexanone (Methyl butyl ketone)	ND	0.0751	0.0642	ND	0.307	0.263	
Dibromochloromethane	ND	0.0740	0.0642	ND	0.630	0.547	
1,2-Dibromoethane	ND	0.0751	0.0642	ND	0.577	0.493	
Chlorobenzene	ND	0.0756	0.0642	ND	0.348	0.295	
Ethylbenzene	0.0995	0.0729	0.0642	0.432	0.316	0.279	
1,1,1,2-Tetrachloroethane	ND	0.0740	0.0642	ND	0.508	0.441	
m-/p-Xylenes	0.958	0.0744	0.0642	4.16	0.323	0.279	
o-Xylene	0.241	0.0735	0.0642	1.05	0.319	0.279	
Styrene	0.365	0.0719	0.0642	1.55	0.306	0.273	
Bromoform	ND	0.0736	0.0642	ND	0.761	0.663	
1,1,2,2-Tetrachloroethane	ND	0.0742	0.0642	ND	0.509	0.441	
4-Ethyltoluene	0.0817	0.0747	0.0642	0.402	0.367	0.316	m

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC05-221122-S
 Sample Info. 1022-150; 500mL Load; Can #1808
 Sampling Date 2022-11-22 11:12
 Received Date 2022-11-28 00:00
 Sample Type Sample
 Batch Xavier_X112922B.v1
 Data File X2202380.D
 Dilution 1.000
 Pressurization Factor 1.835
 Acquisition Date 2022-11-30 02:21
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID 1022-150.VOC05-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
2-Chlorotoluene	ND	0.0741	0.0642	ND	0.383	0.332	
1,3,5-Trimethylbenzene	0.0790	0.0744	0.0642	0.388	0.366	0.316	
1,2,4-Trimethylbenzene	0.157	0.0735	0.0642	0.770	0.361	0.316	m
1,3-Dichlorobenzene	ND	0.0746	0.0642	ND	0.448	0.386	
1,4-Dichlorobenzene	ND	0.0738	0.0642	ND	0.443	0.386	
Benzyl chloride	ND	0.0738	0.0642	ND	0.382	0.332	
1,2-Dichlorobenzene	ND	0.0744	0.0642	ND	0.447	0.386	
1,2,4-Trichlorobenzene	ND	0.0731	0.0642	ND	0.542	0.476	
Hexachlorobutadiene	ND	0.0725	0.0642	ND	0.773	0.685	
Naphthalene	9.49	0.0739	0.0642	49.7	0.387	0.336	
1-Bromopropane	ND	0.0728	0.0642	ND	0.366	0.323	
1-Octene	ND	0.0724	0.0642	ND	0.332	0.295	
n-Octane	ND	0.0756	0.0642	ND	0.353	0.300	
Isopropylbenzene	ND	0.0746	0.0642	ND	0.366	0.316	
n-Propylbenzene	0.0652	0.0753	0.0642	0.320	0.370	0.316	J

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	843,657	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,127,124	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,736,186	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name VOC05-221122-S
Sample Info. 1022-150; *10=50mL Load; Can #1808
Sampling Date 2022-11-22 11:12
Received Date 2022-11-28 00:00
Sample Type Sample
Batch Xavier_X112922B.v1
Data File X2202386.D
Dilution 10.000
Pressurization Factor 1.835
Acquisition Date 2022-11-30 07:39
Instrument Method TO15_SCNV6.M
Matrix Air
Analyst TDD
Instrument Xavier
Enthalpy ID 1022-150.VOC05-221122-S.Can

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Benzene	71.9	0.738	0.642	229	2.36	2.05	

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	768,413	11.04	5.21	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical -- Canister Pressurization

Job No. 1022-150
 Company All4, Inc.
 Site U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Can Number	0826	1705	1808	1865	1884	R5024
Job	1022-150	1022-150	1022-150	1022-150	1022-150	1022-150
Sample ID	VOC03-221122-S	VOC03-221122-D	VOC05-221122-S	VOC01-221122-S	VOC04-221122-S	VOC02-221122-S
CleanDate	10/13/2022	10/13/2022	10/13/2022	10/13/2022	08/09/2022	10/13/2022
LeakCheckDate	10/17/2022	10/17/2022	10/17/2022	10/17/2022	08/10/2022	10/17/2022
LeakCheckAnalyst	aamears	aamears	aamears	aamears	aamears	aamears
BlankCheckRef	T2202836	T2202837	X2201845	X2201840	X2201552	X2201842
Weather Station ID	81	81	81	81	81	81
Weather Station Exp.	12/14/2022	12/14/2022	12/14/2022	12/14/2022	12/14/2022	12/14/2022
Transducer ID	3	3	3	3	3	3
Transducer Exp.	02/22/2023	02/22/2023	02/22/2023	02/22/2023	02/22/2023	02/22/2023
Can Size (L)	6	6	6	6	6	6
Evac Temp (F)	68.3	68.3	68.3	68.3	68.3	68.3
Evac Pbar (mmHg)	772.4	772.4	772.4	772.4	772.4	772.4
Evac Gauge (mmHg)	-772.4	-772.4	-772.4	-772.4	-772.4	-772.4
Evac Analyst	aamears	aamears	aamears	aamears	aamears	aamears
Evac Time	11/29/22 16:05	11/29/22 16:07	11/29/22 16:09	11/29/22 10:01	11/29/22 16:09	11/29/22 16:03
Evac Vol (L)	0.000	0.000	0.000	0.000	0.000	0.000
Recd. Temp (F)	68.1	68.1	68.1	68.1	68.1	68.1
Recd. Pbar (mmHg)	769.9	769.9	769.9	769.9	769.9	769.9
Recd. Gauge (mmHg)	-51.0	-149.0	-134.0	-37.0	-53.0	-124.0
Recd Vol (L)	5.674	4.901	5.019	5.785	5.658	5.098
P1 Temp (F)	68.1	68.1	68.1	68.1	68.1	68.1
P1 Pbar (mmHg)	769.9	769.9	769.9	769.9	769.9	769.9
P1 Gauge (mmHg)	491.0	331.0	397.0	515.0	493.0	369.0
P1 Analyst	aamears	aamears	aamears	aamears	aamears	aamears
P1 Time	11/29/22 16:06	11/29/22 16:07	11/29/22 16:10	11/29/22 10:01	11/29/22 16:09	11/29/22 16:04
P1 Vol (L)	9.952	8.689	9.210	10.142	9.968	8.989
P1 DF Override	false	false	false	false	false	false
P1 Dilution Factor	1.754	1.773	1.835	1.753	1.762	1.763

Lab QC

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs
 All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 1022-150.VOC01-221122-S.LD
 Sample Info. 1022-150; 500mL Load; Can #1865
 Sampling Date 2022-11-22 11:05
 Received Date 2022-11-28 00:00
 Sample Type LabDup
 Batch Xavier_X112922B.v1
 Data File X2202375.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 21:50
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 1022-150.VOC01-221122-S.LD

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Dup Diff (%)	Flags
Propylene	2.46	0.0677	0.0614	4.24	0.117	0.106	4.9	pass
Freon 12 (CCl2F2)	0.380	0.0687	0.0614	1.88	0.339	0.303	0.7	pass
Freon 114 (C2Cl2F4)	ND	0.703	0.0614	ND	4.91	0.429		
Chloromethane	0.502	0.0694	0.0614	1.04	0.143	0.127	5.7	pass
Chloroethene (Vinyl chloride)	ND	0.0701	0.0614	ND	0.179	0.157		
1,3-Butadiene	0.0704	0.0682	0.0614	0.156	0.151	0.136	15.6	pass
Bromomethane	ND	0.0688	0.0614	ND	0.267	0.238		
Chloroethane	ND	0.0713	0.0614	ND	0.188	0.162		
Bromoethene (Vinyl bromide)	ND	0.0686	0.0614	ND	0.300	0.268		
Freon 11 (CCl3F)	0.207	0.0740	0.0614	1.16	0.415	0.345	2.2	pass
Ethanol	2.90	0.0695	0.0701	5.45	0.131	0.132	0.6	pass
Acrolein	0.130	0.0691	0.0614	0.298	0.158	0.141	52.1	fail, m
Freon 113 (C2Cl3F3)	0.0643	0.0712	0.0614	0.493	0.545	0.470	5.2	pass, J
1,1-Dichloroethene	ND	0.0705	0.0614	ND	0.280	0.243		
Acetone	1.69	0.0703	0.0614	4.01	0.167	0.146	3.3	pass, m
Carbon disulfide	ND	0.0699	0.0614	ND	0.218	0.191		
Isopropyl alcohol	0.362	0.0699	0.0614	0.889	0.172	0.151	7.7	pass
Allyl chloride (3-chloropropene)	ND	0.0757	0.0614	ND	0.237	0.192		
Acetonitrile	0.122	0.0699	0.0614	0.205	0.117	0.103	16.7	pass, m
Methylene chloride	0.107	0.0718	0.0614	0.371	0.249	0.213	9.6	pass
trans-1,2-Dichloroethene	ND	0.0715	0.0614	ND	0.283	0.243		
Methyl tert-butyl ether	ND	0.0721	0.0614	ND	0.260	0.221		
Acrylonitrile	ND	0.0714	0.0614	ND	0.155	0.133		
Hexane	0.338	0.0713	0.0614	1.19	0.251	0.216	5.8	pass
1,1-Dichloroethane	ND	0.0696	0.0614	ND	0.282	0.248		
Vinyl acetate	ND	0.0717	0.0614	ND	0.252	0.216		
cis-1,2-Dichloroethene	ND	0.0708	0.0614	ND	0.281	0.243		
Methyl ethyl ketone (2-Butanone)	0.410	0.0725	0.0614	1.21	0.214	0.181	14.1	pass
Ethyl acetate	ND	0.0700	0.0614	ND	0.252	0.221		
Chloroform	ND	0.0703	0.0614	ND	0.343	0.299		
Tetrahydrofuran	ND	0.0710	0.0614	ND	0.209	0.181		
1,1,1-Trichloroethane	ND	0.0708	0.0614	ND	0.386	0.335		
Cyclohexane	0.162	0.0719	0.0614	0.559	0.247	0.211	11.9	pass
Carbon tetrachloride	0.0633	0.0706	0.0614	0.398	0.444	0.386	2.2	pass, J, m

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs
 All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 1022-150.VOC01-221122-S.LD
 Sample Info. 1022-150; 500mL Load; Can #1865
 Sampling Date 2022-11-22 11:05
 Received Date 2022-11-28 00:00
 Sample Type LabDup
 Batch Xavier_X112922B.v1
 Data File X2202375.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 21:50
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 1022-150.VOC01-221122-S.LD

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Dup Diff (%)	Flags
Benzene	5.01	0.0705	0.0614	16.0	0.225	0.196	1.8	pass
2,2,4-trimethylpentane	0.0999	0.0725	0.0614	0.467	0.339	0.287	5.8	pass
1,2-Dichloroethane	ND	0.0722	0.0614	ND	0.292	0.248		
Heptane	0.156	0.0710	0.0614	0.639	0.291	0.251	10.2	pass
Trichloroethene	ND	0.0709	0.0614	ND	0.381	0.330		
1,2-Dichloropropane	ND	0.0706	0.0614	ND	0.326	0.283		
Methyl methacrylate	ND	0.0734	0.0614	ND	0.300	0.251		
1,4-Dioxane	ND	0.0703	0.0614	ND	0.253	0.221		
Bromodichloromethane	ND	0.0708	0.0614	ND	0.474	0.411		
cis-1,3-Dichloropropene	ND	0.0696	0.0614	ND	0.316	0.278		
Methyl isobutyl ketone	ND	0.0729	0.0614	ND	0.298	0.251		
Toluene	1.74	0.0714	0.0614	6.56	0.269	0.231	2.5	pass
trans-1,3-Dichloropropene	ND	0.0724	0.0614	ND	0.328	0.278		
1,1,2-Trichloroethane	ND	0.0713	0.0614	ND	0.389	0.335		
Tetrachloroethene	ND	0.0717	0.0614	ND	0.486	0.416		
2-Hexanone (Methyl butyl ketone)	ND	0.0717	0.0614	ND	0.294	0.251		
Dibromochloromethane	ND	0.0707	0.0614	ND	0.602	0.522		
1,2-Dibromoethane	ND	0.0717	0.0614	ND	0.551	0.471		
Chlorobenzene	ND	0.0722	0.0614	ND	0.332	0.282		
Ethylbenzene	0.0821	0.0696	0.0614	0.356	0.302	0.266	4.4	pass
1,1,1,2-Tetrachloroethane	ND	0.0707	0.0614	ND	0.485	0.421		
m-/p-Xylenes	0.314	0.0711	0.0614	1.36	0.309	0.266	1.9	pass
o-Xylene	0.0947	0.0703	0.0614	0.411	0.305	0.266	10.0	pass, m
Styrene	0.0749	0.0687	0.0614	0.319	0.293	0.261	2.4	pass
Bromoform	ND	0.0703	0.0614	ND	0.727	0.634		
1,1,2,2-Tetrachloroethane	ND	0.0709	0.0614	ND	0.486	0.421		
4-Ethyltoluene	0.0816	0.0713	0.0614	0.401	0.350	0.301	8.3	pass, m
2-Chlorotoluene	ND	0.0708	0.0614	ND	0.366	0.317		
1,3,5-Trimethylbenzene	ND	0.0711	0.0614	ND	0.349	0.301		
1,2,4-Trimethylbenzene	0.108	0.0702	0.0614	0.532	0.345	0.301	5.7	pass
1,3-Dichlorobenzene	ND	0.0713	0.0614	ND	0.428	0.369		
1,4-Dichlorobenzene	ND	0.0705	0.0614	ND	0.423	0.369		
Benzyl chloride	ND	0.0705	0.0614	ND	0.365	0.317		
1,2-Dichlorobenzene	ND	0.0710	0.0614	ND	0.427	0.369		

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs
 All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 1022-150.VOC01-221122-S.LD
 Sample Info. 1022-150; 500mL Load; Can #1865
 Sampling Date 2022-11-22 11:05
 Received Date 2022-11-28 00:00
 Sample Type LabDup
 Batch Xavier_X112922B.v1
 Data File X2202375.D
 Dilution 1.000
 Pressurization Factor 1.753
 Acquisition Date 2022-11-29 21:50
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 1022-150.VOC01-221122-S.LD

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Dup Diff (%)	Flags
1,2,4-Trichlorobenzene	ND	0.0698	0.0614	ND	0.518	0.455		
Hexachlorobutadiene	ND	0.0693	0.0614	ND	0.738	0.654		
Naphthalene	ND	0.0706	0.0614	ND	0.370	0.321		
1-Bromopropane	ND	0.0696	0.0614	ND	0.350	0.308		
1-Octene	ND	0.0692	0.0614	ND	0.317	0.281		
n-Octane	0.0672	0.0722	0.0614	0.314	0.337	0.287	5.3	pass, J
Isopropylbenzene	ND	0.0713	0.0614	ND	0.350	0.301		
n-Propylbenzene	0.0665	0.0720	0.0614	0.327	0.353	0.301	0.0	pass, J

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	888,369	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,222,231	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,789,151	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 1022-150.VOC05-221122-S.LD
Sample Info. 1022-150; *10=50mL Load; Can #1808
Sampling Date 2022-11-22 11:12
Received Date 2022-11-28 00:00
Sample Type LabDup
Batch Xavier_X112922B.v1
Data File X2202387.D
Dilution 10.000
Pressurization Factor 1.835
Acquisition Date 2022-11-30 08:26
Instrument Method TO15_SCNV6.M
Matrix Air
Enthalpy ID 1022-150.VOC05-221122-S.LD

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Dup Diff (%)	Flags
Benzene	70.4	0.738	0.642	225	2.36	2.05	2.1	pass

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	773,836	11.04	5.21	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name Humid Blank #1861
 Sample Info. 500mL Load; Can #1862
 Sample Type Blank
 Batch Xavier_X112922B.v1
 Data File X2202373.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 20:02
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID Humid Blank #1861

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Propylene	ND	0.0386	0.0350	ND	0.0665	0.0602	pass
Freon 12 (CCl2F2)	ND	0.0392	0.0350	ND	0.194	0.173	pass
Freon 114 (C2Cl2F4)	ND	0.401	0.0350	ND	2.80	0.245	pass
Chloromethane	ND	0.0396	0.0350	ND	0.0816	0.0722	pass
Chloroethene (Vinyl chloride)	ND	0.0400	0.0350	ND	0.102	0.0894	pass
1,3-Butadiene	ND	0.0389	0.0350	ND	0.0860	0.0774	pass
Bromomethane	ND	0.0392	0.0350	ND	0.152	0.136	pass
Chloroethane	ND	0.0406	0.0350	ND	0.107	0.0923	pass
Bromoethene (Vinyl bromide)	ND	0.0391	0.0350	ND	0.171	0.153	pass
Freon 11 (CCl3F)	ND	0.0422	0.0350	ND	0.237	0.197	pass
Ethanol	0.0739	0.0396	0.0400	0.139	0.0746	0.0753	pass
Acrolein	ND	0.0394	0.0350	ND	0.0903	0.0802	pass
Freon 113 (C2Cl3F3)	ND	0.0406	0.0350	ND	0.311	0.268	pass
1,1-Dichloroethene	ND	0.0402	0.0350	ND	0.159	0.139	pass
Acetone	0.0742	0.0401	0.0350	0.176	0.0951	0.0831	pass
Carbon disulfide	ND	0.0399	0.0350	ND	0.124	0.109	pass
Isopropyl alcohol	0.0412	0.0399	0.0350	0.101	0.0980	0.0860	pass
Allyl chloride (3-chloropropene)	ND	0.0432	0.0350	ND	0.135	0.109	pass
Acetonitrile	ND	0.0399	0.0350	ND	0.0669	0.0587	pass
Methylene chloride	ND	0.0410	0.0350	ND	0.142	0.122	pass
trans-1,2-Dichloroethene	ND	0.0408	0.0350	ND	0.162	0.139	pass
Methyl tert-butyl ether	ND	0.0411	0.0350	ND	0.148	0.126	pass
Acrylonitrile	ND	0.0407	0.0350	ND	0.0883	0.0759	pass
Hexane	ND	0.0406	0.0350	ND	0.143	0.123	pass
1,1-Dichloroethane	ND	0.0397	0.0350	ND	0.161	0.142	pass
Vinyl acetate	ND	0.0409	0.0350	ND	0.144	0.123	pass
cis-1,2-Dichloroethene	ND	0.0404	0.0350	ND	0.160	0.139	pass
Methyl ethyl ketone (2-Butanone)	ND	0.0414	0.0350	ND	0.122	0.103	pass
Ethyl acetate	ND	0.0399	0.0350	ND	0.144	0.126	pass
Chloroform	ND	0.0401	0.0350	ND	0.196	0.171	pass
Tetrahydrofuran	ND	0.0405	0.0350	ND	0.119	0.103	pass
1,1,1-Trichloroethane	ND	0.0404	0.0350	ND	0.220	0.191	pass

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name Humid Blank #1861
 Sample Info. 500mL Load; Can #1862
 Sample Type Blank
 Batch Xavier_X112922B.v1
 Data File X2202373.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 20:02
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID Humid Blank #1861

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
Cyclohexane	ND	0.0410	0.0350	ND	0.141	0.120	pass
Carbon tetrachloride	ND	0.0403	0.0350	ND	0.253	0.220	pass
Benzene	ND	0.0402	0.0350	ND	0.128	0.112	pass
2,2,4-trimethylpentane	ND	0.0414	0.0350	ND	0.193	0.163	pass
1,2-Dichloroethane	ND	0.0412	0.0350	ND	0.166	0.142	pass
Heptane	ND	0.0405	0.0350	ND	0.166	0.143	pass
Trichloroethene	ND	0.0404	0.0350	ND	0.217	0.188	pass
1,2-Dichloropropane	ND	0.0403	0.0350	ND	0.186	0.162	pass
Methyl methacrylate	ND	0.0419	0.0350	ND	0.171	0.143	pass
1,4-Dioxane	ND	0.0401	0.0350	ND	0.144	0.126	pass
Bromodichloromethane	ND	0.0404	0.0350	ND	0.271	0.234	pass
cis-1,3-Dichloropropene	ND	0.0397	0.0350	ND	0.180	0.159	pass
Methyl isobutyl ketone	ND	0.0416	0.0350	ND	0.170	0.143	pass
Toluene	ND	0.0407	0.0350	ND	0.153	0.132	pass
trans-1,3-Dichloropropene	ND	0.0413	0.0350	ND	0.187	0.159	pass
1,1,2-Trichloroethane	ND	0.0407	0.0350	ND	0.222	0.191	pass
Tetrachloroethene	ND	0.0409	0.0350	ND	0.277	0.237	pass
2-Hexanone (Methyl butyl ketone)	ND	0.0409	0.0350	ND	0.168	0.143	pass
Dibromochloromethane	ND	0.0403	0.0350	ND	0.343	0.298	pass
1,2-Dibromoethane	ND	0.0409	0.0350	ND	0.314	0.269	pass
Chlorobenzene	ND	0.0412	0.0350	ND	0.190	0.161	pass
Ethylbenzene	ND	0.0397	0.0350	ND	0.172	0.152	pass
1,1,1,2-Tetrachloroethane	ND	0.0403	0.0350	ND	0.277	0.240	pass
m-/p-Xylenes	ND	0.0406	0.0350	ND	0.176	0.152	pass
o-Xylene	ND	0.0401	0.0350	ND	0.174	0.152	pass
Styrene	ND	0.0392	0.0350	ND	0.167	0.149	pass
Bromoform	ND	0.0401	0.0350	ND	0.414	0.362	pass
1,1,2,2-Tetrachloroethane	ND	0.0404	0.0350	ND	0.277	0.240	pass
4-Ethyltoluene	ND	0.0407	0.0350	ND	0.200	0.172	pass
2-Chlorotoluene	ND	0.0404	0.0350	ND	0.209	0.181	pass
1,3,5-Trimethylbenzene	ND	0.0406	0.0350	ND	0.199	0.172	pass
1,2,4-Trimethylbenzene	ND	0.0400	0.0350	ND	0.197	0.172	pass

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name Humid Blank #1861
 Sample Info. 500mL Load; Can #1862
 Sample Type Blank
 Batch Xavier_X112922B.v1
 Data File X2202373.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 20:02
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Analyst TDD
 Instrument Xavier
 Enthalpy ID Humid Blank #1861

Target Compound	Concentration (ppbv)	RL (ppbv)	MDL (ppbv)	Concentration (ug/m³)	RL (ug/m³)	MDL (ug/m³)	Flags
1,3-Dichlorobenzene	ND	0.0406	0.0350	ND	0.244	0.210	pass
1,4-Dichlorobenzene	ND	0.0402	0.0350	ND	0.242	0.210	pass
Benzyl chloride	ND	0.0402	0.0350	ND	0.208	0.181	pass
1,2-Dichlorobenzene	ND	0.0405	0.0350	ND	0.243	0.210	pass
1,2,4-Trichlorobenzene	ND	0.0398	0.0350	ND	0.295	0.260	pass
Hexachlorobutadiene	ND	0.0395	0.0350	ND	0.421	0.373	pass
Naphthalene	ND	0.0403	0.0350	ND	0.211	0.183	pass
1-Bromopropane	ND	0.0397	0.0350	ND	0.199	0.176	pass
1-Octene	ND	0.0395	0.0350	ND	0.181	0.161	pass
n-Octane	ND	0.0412	0.0350	ND	0.192	0.163	pass
Isopropylbenzene	ND	0.0406	0.0350	ND	0.200	0.172	pass
n-Propylbenzene	ND	0.0410	0.0350	ND	0.202	0.172	pass

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	803,406	11.04	5.21	pass
1,4-Difluorobenzene (IS)	2,977,516	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,546,342	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS
 Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
 Sample Type QC
 Batch Xavier_X112922B.v1
 Data File X2202370.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 17:26
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 5ppbv TO15 LCS

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Recovery (%)	Flags
Propylene	651,529	4.69	4.83	97.2	pass
Freon 12 (CCl2F2)	1,844,064	4.60	4.90	94.0	pass
Freon 114 (C2Cl2F4)	2,018,711	4.87	5.01	97.2	pass
Chloromethane	737,898	5.11	4.95	103.4	pass
Chloroethene (Vinyl chloride)	487,986	5.73	5.00	114.7	pass, m
1,3-Butadiene	869,501	6.06	4.87	124.5	pass
Bromomethane	464,349	5.04	4.91	102.8	pass
Chloroethane	337,525	4.93	5.08	97.1	pass
Bromoethene (Vinyl bromide)	796,091	4.84	4.89	98.9	pass
Freon 11 (CCl3F)	2,086,762	5.23	5.28	99.1	pass
Ethanol	333,760	4.15	4.96	83.7	pass
Acrolein	263,770	4.65	4.93	94.5	pass
Freon 113 (C2Cl3F3)	1,403,556	4.87	5.08	95.9	pass
1,1-Dichloroethene	1,248,165	4.85	5.03	96.3	pass
Acetone	1,474,605	4.98	5.01	99.3	pass
Carbon disulfide	1,912,543	4.72	4.99	94.7	pass
Isopropyl alcohol	1,439,581	4.74	4.99	95.1	pass
Allyl chloride (3-chloropropene)	277,918	4.79	5.04	95.1	pass
Acetonitrile	721,727	5.29	4.99	106.2	pass
Methylene chloride	1,084,560	4.93	5.12	96.2	pass
trans-1,2-Dichloroethene	1,002,966	4.77	5.10	93.6	pass
Methyl tert-butyl ether	1,617,891	4.56	5.14	88.7	pass
Acrylonitrile	556,453	4.98	5.09	97.9	pass
Hexane	1,059,632	4.98	5.08	98.0	pass
1,1-Dichloroethane	1,193,938	4.68	4.97	94.2	pass
Vinyl acetate	2,136,673	5.14	5.12	100.5	pass, m
cis-1,2-Dichloroethene	1,165,278	5.03	5.05	99.6	pass
Methyl ethyl ketone (2-Butanone)	287,836	4.52	5.17	87.4	pass
Ethyl acetate	312,724	5.07	4.99	101.5	pass
Chloroform	1,497,513	4.95	5.02	98.8	pass
Tetrahydrofuran	273,827	4.62	5.06	91.3	pass, m
1,1,1-Trichloroethane	1,466,665	4.69	5.05	93.0	pass
Cyclohexane	1,127,176	5.21	5.13	101.7	pass

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

AI4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS
 Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
 Sample Type QC
 Batch Xavier_X112922B.v1
 Data File X2202370.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 17:26
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 5ppbv TO15 LCS

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Recovery (%)	Flags
Carbon tetrachloride	1,658,323	4.73	5.04	94.0	pass
Benzene	1,902,709	4.55	5.03	90.5	pass
2,2,4-trimethylpentane	3,698,757	5.04	5.17	97.4	pass
1,2-Dichloroethane	978,279	4.37	5.15	84.9	pass
Heptane	703,205	4.80	5.07	94.7	pass
Trichloroethene	1,210,554	4.90	5.06	97.0	pass
1,2-Dichloropropane	857,935	4.93	5.04	98.0	pass
Methyl methacrylate	701,409	4.80	5.24	91.7	pass
1,4-Dioxane	458,917	4.76	5.02	95.0	pass
Bromodichloromethane	1,654,237	4.90	5.05	97.0	pass
cis-1,3-Dichloropropene	1,136,501	4.49	4.97	90.5	pass
Methyl isobutyl ketone	2,518,268	5.42	5.20	104.4	pass
Toluene	2,838,412	4.75	5.09	93.4	pass
trans-1,3-Dichloropropene	1,133,678	4.18	5.16	81.0	pass
1,1,2-Trichloroethane	968,623	4.61	5.09	90.7	pass
Tetrachloroethene	1,624,953	4.69	5.12	91.7	pass
2-Hexanone (Methyl butyl ketone)	2,224,499	4.83	5.12	94.4	pass
Dibromochloromethane	2,247,009	5.10	5.04	101.2	pass
1,2-Dibromoethane	1,810,366	4.90	5.12	95.7	pass
Chlorobenzene	2,484,255	4.75	5.15	92.2	pass
Ethylbenzene	3,616,412	4.64	4.97	93.5	pass
1,1,1,2-Tetrachloroethane	1,468,287	4.76	5.04	94.4	pass
m-/p-Xylenes	2,636,438	4.48	5.07	88.3	pass
o-Xylene	2,777,942	4.53	5.01	90.4	pass
Styrene	2,348,002	4.87	4.90	99.4	pass
Bromoform	2,375,489	5.16	5.02	102.9	pass
1,1,2,2-Tetrachloroethane	2,290,087	4.89	5.06	96.8	pass
4-Ethyltoluene	4,497,777	5.10	5.09	100.3	pass, m
2-Chlorotoluene	3,495,352	4.80	5.05	95.1	pass
1,3,5-Trimethylbenzene	3,601,948	4.92	5.07	97.0	pass
1,2,4-Trimethylbenzene	3,575,320	4.79	5.01	95.6	pass
1,3-Dichlorobenzene	3,171,298	5.23	5.08	103.0	pass
1,4-Dichlorobenzene	3,240,278	5.25	5.03	104.4	pass, m

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS
Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
Sample Type QC
Batch Xavier_X112922B.v1
Data File X2202370.D
Dilution 1.000
Pressurization Factor 1.000
Acquisition Date 2022-11-29 17:26
Instrument Method TO15_SCNV6.M
Matrix Air
Enthalpy ID 5ppbv TO15 LCS

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Recovery (%)	Flags
Benzyl chloride	3,306,695	5.09	5.03	101.2	pass
1,2-Dichlorobenzene	3,118,411	5.34	5.07	105.5	pass
1,2,4-Trichlorobenzene	2,886,039	5.72	4.98	114.9	pass
Hexachlorobutadiene	2,300,239	5.24	4.94	106.0	pass
Naphthalene	7,378,133	6.39	5.04	126.9	pass
1-Bromopropane	1,570,026	5.03	4.96	101.4	pass
1-Octene	535,400	4.38	4.94	88.8	pass
n-Octane	698,384	4.31	5.02	85.9	pass
Isopropylbenzene	4,309,981	4.84	5.08	95.2	pass
n-Propylbenzene	4,966,233	4.96	5.13	96.7	pass

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	870,853	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,337,966	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,992,223	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS LD
 Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
 Sample Type QcDup
 Batch Xavier_X112922B.v1
 Data File X2202371.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 18:14
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 5ppbv TO15 LCS LD

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Parent Conc (ppbv)	Recovery (%)	Diff (%)	Flags
Propylene	722,340	4.85	4.83	4.69	100.4%	3.3	pass
Freon 12 (CCl2F2)	1,916,545	4.46	4.90	4.60	91.0%	3.2	pass
Freon 114 (C2Cl2F4)	2,129,310	4.79	5.01	4.87	95.6%	1.7	pass
Chloromethane	798,235	5.15	4.95	5.11	104.2%	0.8	pass
Chloroethene (Vinyl chloride)	470,734	5.15	5.00	5.73	103.1%	10.6	pass, m
1,3-Butadiene	854,784	5.55	4.87	6.06	114.1%	8.7	pass
Bromomethane	460,459	4.66	4.91	5.04	95.0%	7.9	pass, m
Chloroethane	348,184	4.74	5.08	4.93	93.4%	3.9	pass
Bromoethene (Vinyl bromide)	819,552	4.64	4.89	4.84	94.9%	4.1	pass
Freon 11 (CCl3F)	2,171,307	5.07	5.28	5.23	96.1%	3.1	pass
Ethanol	356,484	4.13	4.96	4.15	83.3%	0.5	pass
Acrolein	279,238	4.59	4.93	4.65	93.2%	1.3	pass
Freon 113 (C2Cl3F3)	1,500,637	4.85	5.08	4.87	95.6%	0.4	pass
1,1-Dichloroethene	1,242,874	4.50	5.03	4.85	89.4%	7.5	pass
Acetone	1,471,995	4.63	5.01	4.98	92.4%	7.2	pass
Carbon disulfide	2,034,739	4.68	4.99	4.72	93.9%	0.8	pass
Isopropyl alcohol	1,510,978	4.64	4.99	4.74	93.1%	2.2	pass
Allyl chloride (3-chloropropene)	288,104	4.63	5.04	4.79	91.9%	3.4	pass
Acetonitrile	767,085	5.24	4.99	5.29	105.2%	0.9	pass
Methylene chloride	1,135,682	4.81	5.12	4.93	93.9%	2.4	pass
trans-1,2-Dichloroethene	1,061,096	4.71	5.10	4.77	92.3%	1.4	pass
Methyl tert-butyl ether	1,728,247	4.54	5.14	4.56	88.3%	0.4	pass
Acrylonitrile	581,753	4.85	5.09	4.98	95.4%	2.6	pass
Hexane	1,128,485	4.94	5.08	4.98	97.3%	0.7	pass
1,1-Dichloroethane	1,261,420	4.60	4.97	4.68	92.7%	1.5	pass
Vinyl acetate	2,205,407	4.95	5.12	5.14	96.7%	3.9	pass
cis-1,2-Dichloroethene	1,247,976	5.02	5.05	5.03	99.4%	0.2	pass
Methyl ethyl ketone (2-Butanone)	314,082	4.59	5.17	4.52	88.9%	1.7	pass
Ethyl acetate	341,101	5.15	4.99	5.07	103.2%	1.6	pass
Chloroform	1,545,132	4.76	5.02	4.95	95.0%	3.9	pass
Tetrahydrofuran	291,851	4.59	5.06	4.62	90.7%	0.7	pass, m
1,1,1-Trichloroethane	1,592,669	4.75	5.05	4.69	94.1%	1.2	pass
Cyclohexane	1,188,498	5.12	5.13	5.21	99.9%	1.7	pass

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

All4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS LD
 Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
 Sample Type QcDup
 Batch Xavier_X112922B.v1
 Data File X2202371.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 18:14
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 5ppbv TO15 LCS LD

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Parent Conc (ppbv)	Recovery (%)	Diff (%)	Flags
Carbon tetrachloride	1,815,118	4.83	5.04	4.73	95.9%	2.0	pass
Benzene	1,997,266	4.72	5.03	4.55	93.8%	3.6	pass
2,2,4-trimethylpentane	3,850,172	5.17	5.17	5.04	100.1%	2.7	pass
1,2-Dichloroethane	1,006,314	4.44	5.15	4.37	86.2%	1.5	pass
Heptane	731,601	4.93	5.07	4.80	97.3%	2.7	pass
Trichloroethene	1,265,013	5.06	5.06	4.90	100.1%	3.1	pass, m
1,2-Dichloropropane	875,375	4.97	5.04	4.93	98.7%	0.7	pass
Methyl methacrylate	727,226	4.91	5.24	4.80	93.9%	2.3	pass
1,4-Dioxane	452,256	4.63	5.02	4.76	92.4%	2.8	pass
Bromodichloromethane	1,674,870	4.89	5.05	4.90	96.9%	0.1	pass
cis-1,3-Dichloropropene	1,155,261	4.51	4.97	4.49	90.8%	0.3	pass
Methyl isobutyl ketone	2,520,766	5.36	5.20	5.42	103.1%	1.2	pass
Toluene	2,865,594	4.82	5.09	4.75	94.7%	1.4	pass
trans-1,3-Dichloropropene	1,149,219	4.26	5.16	4.18	82.5%	1.8	pass
1,1,2-Trichloroethane	999,178	4.78	5.09	4.61	94.0%	3.6	pass
Tetrachloroethene	1,657,237	4.81	5.12	4.69	93.9%	2.4	pass
2-Hexanone (Methyl butyl ketone)	2,247,428	4.90	5.12	4.83	95.8%	1.5	pass
Dibromochloromethane	2,286,712	5.21	5.04	5.10	103.5%	2.2	pass
1,2-Dibromoethane	1,842,806	5.01	5.12	4.90	97.9%	2.2	pass
Chlorobenzene	2,559,898	4.91	5.15	4.75	95.4%	3.5	pass
Ethylbenzene	3,675,981	4.74	4.97	4.64	95.5%	2.1	pass
1,1,1,2-Tetrachloroethane	1,517,255	4.94	5.04	4.76	98.0%	3.8	pass
m-/p-Xylenes	2,753,375	4.70	5.07	4.48	92.7%	4.8	pass
o-Xylene	2,819,086	4.62	5.01	4.53	92.1%	1.9	pass
Styrene	2,403,518	5.01	4.90	4.87	102.2%	2.8	pass
Bromoform	2,412,312	5.26	5.02	5.16	104.9%	2.0	pass
1,1,2,2-Tetrachloroethane	2,339,023	5.02	5.06	4.89	99.4%	2.6	pass
4-Ethyltoluene	4,588,746	5.23	5.09	5.10	102.9%	2.5	pass
2-Chlorotoluene	3,532,380	4.87	5.05	4.80	96.5%	1.5	pass
1,3,5-Trimethylbenzene	3,666,108	5.03	5.07	4.92	99.2%	2.2	pass
1,2,4-Trimethylbenzene	3,653,743	4.92	5.01	4.79	98.2%	2.6	pass
1,3-Dichlorobenzene	3,236,424	5.37	5.08	5.23	105.6%	2.5	pass
1,4-Dichlorobenzene	3,306,996	5.38	5.03	5.25	107.1%	2.5	pass, m

Enthalpy Analytical

Job No.: 1022-150-1 EPA Method TO-15 Analysis -- Runs

Alt4, Inc. 00701-0002.00 U.S. Steel Corp-Clariton Works-Clariton, PA ICR

Sample Name 5ppbv TO15 LCS LD
 Sample Info. 125mL load; Can #2052; GCMSPrepPg1199
 Sample Type QcDup
 Batch Xavier_X112922B.v1
 Data File X2202371.D
 Dilution 1.000
 Pressurization Factor 1.000
 Acquisition Date 2022-11-29 18:14
 Instrument Method TO15_SCNV6.M
 Matrix Air
 Enthalpy ID 5ppbv TO15 LCS LD

Target Compound	Response	Concentration (ppbv)	Expected Conc (ppbv)	Parent Conc (ppbv)	Recovery (%)	Diff (%)	Flags
Benzyl chloride	3,393,725	5.25	5.03	5.09	104.4%	3.1	pass
1,2-Dichlorobenzene	3,159,714	5.44	5.07	5.34	107.4%	1.8	pass
1,2,4-Trichlorobenzene	2,952,963	5.88	4.98	5.72	118.1%	2.8	pass
Hexachlorobutadiene	2,357,763	5.39	4.94	5.24	109.2%	2.9	pass
Naphthalene	7,445,800	6.48	5.04	6.39	128.6%	1.4	pass
1-Bromopropane	1,664,854	4.97	4.96	5.03	100.2%	1.2	pass
1-Octene	539,096	4.43	4.94	4.38	89.8%	1.2	pass
n-Octane	705,681	4.37	5.02	4.31	87.2%	1.5	pass
Isopropylbenzene	4,394,641	4.95	5.08	4.84	97.5%	2.4	pass
n-Propylbenzene	5,060,994	5.08	5.13	4.96	99.0%	2.4	pass

Compound	Response	Retention Time (min)	Concentration (ppbv)	Flag
Bromochloromethane (IS)	934,356	11.04	5.21	pass
1,4-Difluorobenzene (IS)	3,381,522	12.47	5.16	pass
Chlorobenzene-d5 (IS)	2,978,149	16.60	4.92	pass

(ND) = Not Detected

(J) = Below Calibration Range, (E) = Above Calibration Range, (m) = Manual Integration

IS Acceptance Criteria: RT +/- 20 sec, Response +/- 40%

Narrative Summary

Enthalpy Analytical Narrative Summary

Company	All4, Inc.
Analyst	TDD
Parameters	EPA Method TO-15

Client #	00701-0002.00; U.S. Steel Corp – Clairton Works
Job #	1022-150
# Samples	6 Canisters

Custody

Alyssa Miller received the samples on 11/28/22 after being relinquished by All4, Inc. The samples were received at ambient temperature and in good condition.

Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, LLC.

Analysis

The samples were analyzed for the TO-15 target compound list using the analytical procedures in EPA Method TO-15, *Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)*.

Upon receipt, the canister pressures were measured and recorded. The canisters were then pressurized with UHP nitrogen and a dilution ratio was calculated for each canister. See the Canister Pressurization Datasheet located in the Results section of this report.

All samples were analyzed undiluted. Sample **VOC05-221122-S** was analyzed at a subsequent 10-fold analytical dilution to bring benzene within the calibrated range of the instrument

The Agilent Technologies Model 6890N, Gas Chromatograph "Xavier" (S/N US10721018) equipped with a 5975C VL Mass Selective Detector (S/N US71215962) was used for this analysis. All samples and standards were introduced directly to the analyzer using an Entech 7200 Preconcentrator.

Calibration

The associated BFB tune analyses associated with the initial and continuing calibrations met all method acceptance criteria.

The initial calibration (**X100722A-TO15**) met the 30% RSD criteria. The initial calibration verification (ICV) met the 70-130% recovery criteria. The continuing calibration (CCV) met the 30% difference criteria. Full calibration data is available upon request.



Enthalpy Analytical Narrative Summary (continued)

Chromatographic Conditions

The acquisition method (*TO15-SCNv6.M*) may be made available upon request.

QC Notes

All internal standard area responses and retention time criteria were met for these analyses.

The Laboratory Control Samples (LCS) associated with this sample data met the 70-130% recovery criteria.

The Laboratory Duplicates (LD) associated with this sample data met the 25% difference acceptance criteria, with the exception of acrolein. The LCS was also analyzed in duplicate and met the 25% difference criteria for all compounds.

The laboratory humid blank associated with this analysis did not contain any of the target analytes at a concentration greater than 3x their MDL.

The samples were analyzed within the 7-day holding time requested in the ICR protocol.

Reporting Notes

These analyses met the requirements of the TNI Standard. Any deviations from the requirements of the reference method or TNI Standard have been stated above.

The results presented in this report are representative of the samples as provided to the laboratory.

General Reporting Notes

The following are general reporting notes that are applicable to all Enthalpy Analytical, LLC data reports, unless specifically noted otherwise.

- Any analysis which refers to the method as “**Type**” represents a planned deviation from the reference method. For instance a Hydrogen Sulfide assay from a Tedlar bag would be labeled as “EPA Method 16-Type” because Tedlar bags are not mentioned as one of the collection options in EPA Method 16.
- The acronym **MDL** represents the Minimum Detection Limit. Below this value the laboratory cannot determine the presence of the analyte of interest reliably.
- The acronym **LOQ** represents the Limit of Quantification. Below this value the laboratory cannot quantitate the analyte of interest within the criteria of the method.
- The acronym **ND** following a value indicates a non-detect or analytical result below the MDL.
- The letter **J** in the Qualifier or Flag column in the results indicates that the value is between the MDL and the LOQ. The laboratory can positively identify the analyte of interest as present, but the value should be considered an estimate.
- The letter **E** in the Qualifier or Flag column indicates an analytical result exceeding 100% of the highest calibration point. The associated value should be considered as an estimate.
- Sample results are presented ‘as measured’ for single injection methodologies, or an average value if multiple injections are made. If all injections are below the MDL, the sample is considered non-detect and the ND value is presented. If one, but not all, are below the MDL, the MDL value is used for any injections that are below the MDL. For example, if the MDL is 0.500 and LOQ is 1.00, and the instrument measures 0.355, 0.620, and 0.442 - the result reported is the average of 0.500, 0.620, and 0.500 - - - i.e. 0.540 with a J flag.
- When a spike recovery (Bag Spike, Collocated Spike Train, or liquid matrix spike) is being calculated, the native (unspiked) sample result is used in the calculations, as long as the value is above the MDL. If a sample is ND, then 0 is used as the native amount (not the MDL value).
- The acronym **DF** represents Dilution Factor. This number represents dilution of the sample during the preparation and/or analysis process. The analytical result taken from a laboratory instrument is multiplied by the DF to determine the final undiluted sample results.
- The addition of **MS** to the Sample ID represents a Matrix Spike. An aliquot of an actual sample is spiked with a known amount of analyte so that a percent recovery value can be determined. The MS analysis indicates what effect the sample matrix may have on the target analyte, i.e. whether or not anything in the sample matrix interferes with the analysis of the analyte(s).



General Reporting Notes

(continued)

- The addition of **MSD** to the Sample ID represents a Matrix Spike Duplicate. Prepared in the same manner as a MS, the use of duplicate matrix spikes allows further confirmation of laboratory quality by showing the consistency of results gained by performing the same steps multiple times.
- The addition of **LD** to the Sample ID represents a Laboratory Duplicate. The analyst prepares an additional aliquot of sample for testing and the results of the duplicate analysis are compared to the initial result. The result should have a difference value of within 10% of the initial result (if the results of the original analysis are greater than the LOQ).
- The addition of **AD** to the Sample ID represents an Alternate Dilution. The analyst prepares an additional aliquot at a different dilution factor (usually double the initial factor). This analysis helps confirm that no additional compound is present and coeluting or sharing absorbance with the analyte of interest, as they would have a different response/absorbance than the analyte of interest.
- The Sample ID **LCS** represents a Laboratory Control Sample. Clean matrix, similar to the client sample matrix, prepared and analyzed by the laboratory using the same reagents, spiking standards and procedures used for the client samples. The LCS is used to assess the control of the laboratory's analytical system. Whenever spikes are prepared for our client projects, two spikes are retained as LCSs. The LCSs are labeled with the associated project number and kept in-house at the appropriate temperature conditions. When the project samples are received for analysis, the LCSs are analyzed to confirm that the analyte could be recovered from the media, separate from the samples which were used on the project and which may have been affected by source matrix, sample collection, and/or sample transport.
- **Significant Figures:** Where the reported value is much greater than unity (1.00) in the units expressed, the number is rounded to a whole number of units, rather than to 3 significant figures. For example, a value of 10,456.45 ug catch is rounded to 10,456 ug. There are five significant digits displayed, but no confidence should be placed on more than two significant digits. In the case of small numbers, generally 3 significant figures are presented, but still only 2 should be used with confidence. Many neat materials are only certified to 3 digits, and as the mathematically correct final result is always 1 digit less than all its pre-cursors - 2 significant figures are what are most defensible.
- **Manual Integration:** The data systems used for processing will flag manually integrated peaks with an "M". There are several reasons a peak may be manually integrated. These reasons will be identified by the following two letter designations on sample chromatograms, if provided in the report. The peak was *not integrated* by the software "**NI**", the peak was *integrated incorrectly* by the software "**II**" or the *wrong peak* was integrated by the software "**WP**". These codes will accompany the analyst's manual integration stamp placed next to the compound name on the chromatogram.



Sample Custody



ENTHALPY

ANALYTICAL

Air Chain of Custody Record

Lab No:

Page:

of

1

Turn Around Time (rush by advanced notice only)

Standard:

5 Day:

3 Day:

2 Day:

1 Day:

Custom TAT:

X

Enthalpy Analytical - Durham

800 Capitola Drive, Suite 1, Durham, NC 27713

Phone 919-850-4392

CUSTOMER INFORMATION

Company:

ALL4 LLC

Report To:

Dustin Snare

Email:

dsnare@all4inc.com

Address:

2393 Kimberton Rd, Kimberton, PA

Phone:

610-422-1126

Fax:

N/A

PROJECT INFORMATION

Name:

U. S. Steel Corp - Clairton Works

Number:

00701-0002.00

P.O. #:

Address:

Clairton, PA

Global ID:

N/A

Sampled By:

Special Instructions:

Analysis Requested

Sample ID	Type	Equipment Information			Sampling Information						TO-15 VOC										
	(I) Indoor (A) Ambient (SV) Soil Vapor (S) Source	Canister ID	Size (1L, 3L, 6L, 15L)	Flow Controller ID	Sample Start Date	Sample Start Time	Vacuum Start ("Hg)	Sample End Date	Sample End Time	Vacuum End ("Hg)											
1	VOC01 - 221122 - S	A	1865	6L	SB-01803	22/11/22	11:05 AM	36	22/11/23	11:05	2.5	X									
2	VOC02 - 221122 - S	A	R6024	6L	SB-15977	22/11/22	10:58 AM	29	22/11/23	10:58	6	X									
3	VOC03 - 221122 - S	A	0824	6L	SB-01538	22/11/22	10:52 AM	29	22/11/23	10:52	1	X									
4	VOC03 - 221122 - D	A	1705	6L	SB-15647	22/11/22	10:53 AM	30	22/11/23	10:52	7.5	X									
5	VOC04 - 221122 - S	A	1884	6L	SB-01722	22/11/22	10:44 AM	30	22/11/23	10:44	5	X									
6	VOC05 - 221122 - S	A	1808	6L	SB-11938	22/11/22	11:12 AM	29	22/11/23	11:12	5.5	X									
7																					
8																					
9	Ambient temp good condition																				
10	Ambient 11-28-22																				

Signature

Print Name

Company / Title

Date / Time

1 Relinquished By:

Stacy Arner

Stacy Arner

ALL4 LLC

22/11/23 - 12:35 PM

1 Received By:

Alyssa Miller

Alyssa Miller

PA

11-28-22 1310

2 Relinquished By:

2 Received By:

3 Relinquished By:

3 Received By:

**This Is The Last Page
Of This Report.**