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**ENVIRONMENTAL ANALYTICAL SERVICES**

TEST REPORT

<b>RESULTS:</b> Karla Reesor Peace River Area Monitoring Program Committee  <b>INVOICE:</b> Office Manager	403 807 2995	<b>CLIENT SAMPLE ID</b> PRAMP_Reno-20190223	<b>CANISTER ID</b> 11037	<b>Matrix</b> Ambient Air	<b>Priority</b> Normal
	<b>DESCRIPTION:</b> Methane Trigger				
		<b>DATE SAMPLED:</b> 23-Feb-19	20:20	<b>DATE RECEIVED:</b> 27-Feb-19	
		<b>REPORT CREATED:</b> 12-Mar-19		<b>REPORT NUMBER:</b> 19020199	
				<b>VERSION:</b> Version 01	

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-001	1-Butene	K, T, U	< 0.16	ppmv	0.16	NA-025	01-Mar-19
19020199-001	Acetylene	K, T, U	< 0.13	ppmv	0.13	NA-025	01-Mar-19
19020199-001	n-Butane	K, T, U	< 0.3	ppmv	0.3	NA-025	01-Mar-19
19020199-001	cis-2-Butene	K, T, U	< 0.06	ppmv	0.06	NA-025	01-Mar-19
19020199-001	Ethane	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-001	Ethylacetylene	K, T, U	< 0.10	ppmv	0.10	NA-025	01-Mar-19
19020199-001	Ethylene	K, T, U	< 0.11	ppmv	0.11	NA-025	01-Mar-19
19020199-001	Isobutane	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-001	Isobutylene	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-001	Methane		6.1	ppmv	0.2	NA-025	01-Mar-19
19020199-001	n-Propane	K, T, U	< 0.11	ppmv	0.11	NA-025	01-Mar-19
19020199-001	Propylene	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-001	Propyne	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-001	trans-2-Butene	K, T, U	< 0.15	ppmv	0.15	NA-025	01-Mar-19
19020199-001	2,5-Dimethylthiophene	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	2-Ethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	2-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	3-Methylthiophene	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: March 12, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>	
PRAMP_Reno-20190223	11037	Ambient Air	23-Feb-19	20:20
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-001	Butyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Carbon disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	Carbonyl sulphide	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Dimethyl disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	Dimethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	Ethyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Ethyl sulphide	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Hydrogen sulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	28-Feb-19
19020199-001	Isobutyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Isopropyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Methyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	Pentyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	28-Feb-19
19020199-001	Propyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	28-Feb-19
19020199-001	tert-Butyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-001	Thiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-001	1,1,1-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,1,2-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,1-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,1-Dichloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	05-Mar-19
19020199-001	1,2,3-Trimethylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-001	1,2,4-Trichlorobenzene	K, T, U	< 1.3	ppbv	1.3	AC-058	05-Mar-19
19020199-001	1,2,4-Trimethylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-001	1,2-Dibromoethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,2-Dichlorobenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	05-Mar-19

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PRAMP_Reno-20190223	11037	Ambient Air	23-Feb-19	20:20
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-001	1,2-Dichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	1,2-Dichloropropane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	1,3,5-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,3-Butadiene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1,3-Dichlorobenzene	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-001	1,4-Dioxane	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-001	1-Butene/Isobutylene	U	0.04	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	1-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2,2,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2,2-Dimethylbutane		0.06	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2,3,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2,3-Dimethylbutane		0.17	ppbv	0.03	AC-058	05-Mar-19
19020199-001	2,3-Dimethylpentane		0.06	ppbv	0.03	AC-058	05-Mar-19
19020199-001	2,4-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2-Methylheptane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2-Methylhexane		0.07	ppbv	0.02	AC-058	05-Mar-19
19020199-001	2-Methylpentane		0.57	ppbv	0.02	AC-058	05-Mar-19
19020199-001	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	3-Methylhexane		0.13	ppbv	0.03	AC-058	05-Mar-19
19020199-001	3-Methylpentane		0.38	ppbv	0.02	AC-058	05-Mar-19
19020199-001	Acetone		0.7	ppbv	0.6	AC-058	05-Mar-19
19020199-001	Acrolein	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-001	Benzene		0.02	ppbv	0.02	AC-058	05-Mar-19

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<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19
			<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19020199-001	Benzyl chloride	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-001	Bromodichloromethane	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Bromoform	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Bromomethane	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Carbon disulfide	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Carbon tetrachloride	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Chlorobenzene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Chloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Chloroform	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Chloromethane		0.54 ppbv	0.03	AC-058	05-Mar-19
19020199-001	cis-1,2-Dichloroethene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	cis-1,3-Dichloropropene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	cis-2-Butene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	cis-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Cyclohexane		0.79 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Cyclopentane		0.17 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Dibromochloromethane	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Ethanol	K, T, U	< 0.5 ppbv	0.5	AC-058	05-Mar-19
19020199-001	Ethyl acetate	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-001	Ethylbenzene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Freon-11	I	0.19 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Freon-113	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	Freon-114	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Freon-12	I	0.47 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Hexachloro-1,3-butadiene	K, T, U	< 0.81 ppbv	0.81	AC-058	05-Mar-19

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<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-001	Isobutane		0.85	ppbv	0.03	AC-058	05-Mar-19
19020199-001	Isopentane		1.20	ppbv	0.05	AC-058	05-Mar-19
19020199-001	Isoprene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	Isopropyl alcohol	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-001	Isopropylbenzene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	m,p-Xylene	K, T, U	< 0.05	ppbv	0.05	AC-058	05-Mar-19
19020199-001	m-Diethylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	05-Mar-19
19020199-001	m-Ethyltoluene	K, T, U	< 0.13	ppbv	0.13	AC-058	05-Mar-19
19020199-001	Methyl butyl ketone	K, T, U	< 0.81	ppbv	0.81	AC-058	05-Mar-19
19020199-001	Methyl ethyl ketone	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-001	Methyl isobutyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-001	Methyl methacrylate	K, T, U	< 0.11	ppbv	0.11	AC-058	05-Mar-19
19020199-001	Methyl tert butyl ether	K, T, U	< 0.05	ppbv	0.05	AC-058	05-Mar-19
19020199-001	Methylcyclohexane		0.75	ppbv	0.02	AC-058	05-Mar-19
19020199-001	Methylcyclopentane		0.62	ppbv	0.03	AC-058	05-Mar-19
19020199-001	Methylene chloride	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-001	n-Butane		0.83	ppbv	0.05	AC-058	05-Mar-19
19020199-001	n-Decane	K, T, U	< 0.10	ppbv	0.10	AC-058	05-Mar-19
19020199-001	n-Dodecane	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-001	n-Heptane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-001	n-Hexane		0.08	ppbv	0.02	AC-058	05-Mar-19
19020199-001	n-Octane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-001	n-Pentane		0.4	ppbv	0.2	AC-058	05-Mar-19
19020199-001	n-Propylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-001	n-Undecane	K, T, U	< 0.8	ppbv	0.8	AC-058	05-Mar-19

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<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>	
PRAMP_Reno-20190223	11037	Ambient Air	23-Feb-19	20:20
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19020199-001	Naphthalene	K, T, U	< 0.8 ppbv	0.8	AC-058	05-Mar-19
19020199-001	n-Nonane	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	o-Ethyltoluene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	o-Xylene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	p-Diethylbenzene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	p-Ethyltoluene	K, T, U	< 0.11 ppbv	0.11	AC-058	05-Mar-19
19020199-001	Styrene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	Tetrachloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	Tetrahydrofuran	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-001	Toluene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	trans-1,2-Dichloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	trans-1,3-Dichloropropylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	trans-2-Butene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-001	trans-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-001	Trichloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-001	Vinyl acetate	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-001	Vinyl chloride	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19

<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>	
PRAMP_Reno-20190224	S5619	Ambient Air	24-Feb-19	19:40
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-002	1-Butene	K, T, U	< 0.15	ppmv	0.15	NA-025	01-Mar-19
19020199-002	Acetylene	K, T, U	< 0.12	ppmv	0.12	NA-025	01-Mar-19
19020199-002	n-Butane	K, T, U	< 0.3	ppmv	0.3	NA-025	01-Mar-19
19020199-002	cis-2-Butene	K, T, U	< 0.06	ppmv	0.06	NA-025	01-Mar-19
19020199-002	Ethane	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-002	Ethylacetylene	K, T, U	< 0.09	ppmv	0.09	NA-025	01-Mar-19
19020199-002	Ethylene	K, T, U	< 0.11	ppmv	0.11	NA-025	01-Mar-19
19020199-002	Isobutane	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-002	Isobutylene	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-002	Methane		4.1	ppmv	0.2	NA-025	01-Mar-19
19020199-002	n-Propane	K, T, U	< 0.11	ppmv	0.11	NA-025	01-Mar-19
19020199-002	Propylene	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-002	Propyne	K, T, U	< 0.2	ppmv	0.2	NA-025	01-Mar-19
19020199-002	trans-2-Butene	K, T, U	< 0.14	ppmv	0.14	NA-025	01-Mar-19
19020199-002	2,5-Dimethylthiophene	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	2-Ethylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	2-Methylthiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	3-Methylthiophene	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Butyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Carbon disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	Carbonyl sulphide	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Dimethyl disulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	Dimethyl sulphide	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	Ethyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Ethyl sulphide	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19

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PRAMP_Reno-20190224	S5619	Ambient Air	24-Feb-19	19:40
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-002	Hydrogen sulphide	K, T, U	< 0.2	ppbv	0.2	NA-024	28-Feb-19
19020199-002	Isobutyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Isopropyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Methyl mercaptan	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	Pentyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	28-Feb-19
19020199-002	Propyl mercaptan	K, T, U	< 0.6	ppbv	0.6	NA-024	28-Feb-19
19020199-002	tert-Butyl mercaptan	K, T, U	< 0.5	ppbv	0.5	NA-024	28-Feb-19
19020199-002	Thiophene	K, T, U	< 0.3	ppbv	0.3	NA-024	28-Feb-19
19020199-002	1,1,1-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,1,2,2-Tetrachloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,1,2-Trichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,1-Dichloroethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,1-Dichloroethylene	K, T, U	< 0.06	ppbv	0.06	AC-058	05-Mar-19
19020199-002	1,2,3-Trimethylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-002	1,2,4-Trichlorobenzene	K, T, U	< 1.2	ppbv	1.2	AC-058	05-Mar-19
19020199-002	1,2,4-Trimethylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-002	1,2-Dibromoethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,2-Dichlorobenzene	K, T, U	< 0.05	ppbv	0.05	AC-058	05-Mar-19
19020199-002	1,2-Dichloroethane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	1,2-Dichloropropane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	1,3,5-Trimethylbenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,3-Butadiene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1,3-Dichlorobenzene	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-002	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-002	1,4-Dioxane	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19

Report certified by: Rebecca Holgate, Account Coordinator

On behalf of: PJ Pretorius, Manager, Analysis and Testing Services

Date: March 12, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca



<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>	
PRAMP_Reno-20190224	S5619	Ambient Air	24-Feb-19	19:40
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-002	1-Butene/Isobutylene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1-Hexene/2-Methyl-1-pentene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	1-Pentene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2,2,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2,2-Dimethylbutane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2,3,4-Trimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2,3-Dimethylbutane		0.06	ppbv	0.03	AC-058	05-Mar-19
19020199-002	2,3-Dimethylpentane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	2,4-Dimethylpentane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2-Methylheptane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2-Methylhexane		0.04	ppbv	0.02	AC-058	05-Mar-19
19020199-002	2-Methylpentane		0.28	ppbv	0.02	AC-058	05-Mar-19
19020199-002	3-Methylheptane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	3-Methylhexane		0.04	ppbv	0.03	AC-058	05-Mar-19
19020199-002	3-Methylpentane		0.17	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Acetone	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-002	Acrolein	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-002	Benzene		0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Benzyl chloride	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-002	Bromodichloromethane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	Bromoform	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	Bromomethane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Carbon disulfide	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Carbon tetrachloride	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Chlorobenzene	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19

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<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>
PRAMP_Reno-20190224	S5619	Ambient Air	24-Feb-19 19:40
<b>DESCRIPTION:</b>	Methane Trigger		
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19
			<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19020199-002	Chloroethane	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Chloroform	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Chloromethane		0.48 ppbv	0.03	AC-058	05-Mar-19
19020199-002	cis-1,2-Dichloroethene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	cis-1,3-Dichloropropene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-002	cis-2-Butene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	cis-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Cyclohexane		0.29 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Cyclopentane		0.07 ppbv	0.02	AC-058	05-Mar-19
19020199-002	Dibromochloromethane	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	Ethanol	K, T, U	< 0.5 ppbv	0.5	AC-058	05-Mar-19
19020199-002	Ethyl acetate	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-002	Ethylbenzene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	Freon-11	I	0.20 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Freon-113	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	Freon-114	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Freon-12		0.47 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Hexachloro-1,3-butadiene	K, T, U	< 0.76 ppbv	0.76	AC-058	05-Mar-19
19020199-002	Isobutane		0.83 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Isopentane		0.87 ppbv	0.05	AC-058	05-Mar-19
19020199-002	Isoprene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	Isopropyl alcohol	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-002	Isopropylbenzene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	m,p-Xylene	K, T, U	< 0.05 ppbv	0.05	AC-058	05-Mar-19
19020199-002	m-Diethylbenzene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19

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Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19020199-002	m-Ethyltoluene	K, T, U	< 0.12	ppbv	0.12	AC-058	05-Mar-19
19020199-002	Methyl butyl ketone	K, T, U	< 0.76	ppbv	0.76	AC-058	05-Mar-19
19020199-002	Methyl ethyl ketone	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-002	Methyl isobutyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-002	Methyl methacrylate	K, T, U	< 0.11	ppbv	0.11	AC-058	05-Mar-19
19020199-002	Methyl tert butyl ether	K, T, U	< 0.05	ppbv	0.05	AC-058	05-Mar-19
19020199-002	Methylcyclohexane		0.33	ppbv	0.02	AC-058	05-Mar-19
19020199-002	Methylcyclopentane		0.33	ppbv	0.03	AC-058	05-Mar-19
19020199-002	Methylene chloride	K, T, U	< 0.5	ppbv	0.5	AC-058	05-Mar-19
19020199-002	n-Butane		0.89	ppbv	0.05	AC-058	05-Mar-19
19020199-002	n-Decane	K, T, U	< 0.09	ppbv	0.09	AC-058	05-Mar-19
19020199-002	n-Dodecane	K, T, U	< 0.6	ppbv	0.6	AC-058	05-Mar-19
19020199-002	n-Heptane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	n-Hexane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	n-Octane	K, T, U	< 0.03	ppbv	0.03	AC-058	05-Mar-19
19020199-002	n-Pentane		0.3	ppbv	0.2	AC-058	05-Mar-19
19020199-002	n-Propylbenzene	K, T, U	< 0.08	ppbv	0.08	AC-058	05-Mar-19
19020199-002	n-Undecane	K, T, U	< 0.8	ppbv	0.8	AC-058	05-Mar-19
19020199-002	Naphthalene	K, T, U	< 0.8	ppbv	0.8	AC-058	05-Mar-19
19020199-002	n-Nonane	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	o-Ethyltoluene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	o-Xylene	K, T, U	< 0.02	ppbv	0.02	AC-058	05-Mar-19
19020199-002	p-Diethylbenzene	K, T, U	< 0.06	ppbv	0.06	AC-058	05-Mar-19
19020199-002	p-Ethyltoluene	K, T, U	< 0.11	ppbv	0.11	AC-058	05-Mar-19
19020199-002	Styrene	K, T, U	< 0.06	ppbv	0.06	AC-058	05-Mar-19

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PRAMP_Reno-20190224	S5619	Ambient Air	24-Feb-19	19:40
<b>DESCRIPTION:</b>	Methane Trigger			
<b>REPORT NUMBER:</b>	19020199	<b>REPORT CREATED:</b>	12-Mar-19	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19020199-002	Tetrachloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-002	Tetrahydrofuran	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-002	Toluene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	trans-1,2-Dichloroethylene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	trans-1,3-Dichloropropylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-002	trans-2-Butene	K, T, U	< 0.02 ppbv	0.02	AC-058	05-Mar-19
19020199-002	trans-2-Pentene	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19
19020199-002	Trichloroethylene	K, T, U	< 0.06 ppbv	0.06	AC-058	05-Mar-19
19020199-002	Vinyl acetate	K, T, U	< 0.6 ppbv	0.6	AC-058	05-Mar-19
19020199-002	Vinyl chloride	K, T, U	< 0.03 ppbv	0.03	AC-058	05-Mar-19



PO Bag 4000  
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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

### Revision History

Order ID	Ver	Date	Reason
19020199	01	12-Mar-19	Report created

## **Methods**

<b>Method</b>	<b>Description</b>
AC-058	Determination of Volatile Organic Compounds in Ambient Air by Gas Chromatography Mass Spectrometry
NA-024	Analysis for Reduced Sulfur Compounds in Air Samples
NA-025	Determination of Light Hydrocarbons (C1C4) in Ambient Air by Gas Chromatography Flame Ionization Detector

## Qualifiers

### Data Qualifier Translation

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B	Blank contamination; Analyte detected above the method reporting limit in an associated blank
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J1	Reported value is estimated; Surrogate recoveries limits were exceeded
J2	Reported value is estimated; No known QC criteria for this component
J3	Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy
J4	Reported value is estimated; The sample matrix interfered with the analysis
K	Off-scale low. Actual value is known to be less than the value given
L	Off-scale high. Actual value is known to be greater than value given
N	Non-target analyte; Tentatively identified compound (using mass spectroscopy)
Q	Sample held beyond the accepted holding time
R	Rejected data; Not suitable for the projects intended use
T	Value reported is less than the laboratory method detection limit
U	Compound was analyzed for but not detected
V	Analyte was detected in both the sample and the associated method blank



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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

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### **Order Comments**

19020199

Send results to [pramptech@prampairshed.ca](mailto:pramptech@prampairshed.ca). Unknowns to be reported. Return sample to reception for isotope analysis.





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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

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### Sample Comments



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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

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### **Result Comments**

*Note: Results relate only to items tested*