



PO Bag 4000
 Vegreville, Alberta
 Canada T9C 1T4
 (780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

RESULTS: Karla Reesor Peace River Area Monitoring Program Committee INVOICE: Office Manager	403 807 2995	CLIENT SAMPLE ID PRAMP_Reno-2019/03/10	CANISTER ID 28954	Matrix Ambient Air	Priority Normal
	DESCRIPTION: Methane trigger		DATE SAMPLED: 10-Mar-19 8:35	DATE RECEIVED: 12-Mar-19	REPORT NUMBER: 19030065
		REPORT CREATED: 21-Mar-19	VERSION: Version 01		

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19030065-001	1-Butene	K, T, U	< 0.15 ppmv	0.15	NA-025	13-Mar-19
19030065-001	Acetylene	K, T, U	< 0.12 ppmv	0.12	NA-025	13-Mar-19
19030065-001	n-Butane	K, T, U	< 0.3 ppmv	0.3	NA-025	13-Mar-19
19030065-001	cis-2-Butene	K, T, U	< 0.06 ppmv	0.06	NA-025	13-Mar-19
19030065-001	Ethane	K, T, U	< 0.2 ppmv	0.2	NA-025	13-Mar-19
19030065-001	Ethylacetylene	K, T, U	< 0.09 ppmv	0.09	NA-025	13-Mar-19
19030065-001	Ethylene	K, T, U	< 0.11 ppmv	0.11	NA-025	13-Mar-19
19030065-001	Isobutane	K, T, U	< 0.2 ppmv	0.2	NA-025	13-Mar-19
19030065-001	Isobutylene	K, T, U	< 0.2 ppmv	0.2	NA-025	13-Mar-19
19030065-001	Methane		14.4 ppmv	0.2	NA-025	13-Mar-19
19030065-001	n-Propane	K, T, U	< 0.11 ppmv	0.11	NA-025	13-Mar-19
19030065-001	Propylene	K, T, U	< 0.2 ppmv	0.2	NA-025	13-Mar-19
19030065-001	Propyne	K, T, U	< 0.2 ppmv	0.2	NA-025	13-Mar-19
19030065-001	trans-2-Butene	K, T, U	< 0.14 ppmv	0.14	NA-025	13-Mar-19
19030065-001	2,5-Dimethylthiophene	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	2-Ethylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	2-Methylthiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	3-Methylthiophene	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19

Report certified by: Rebecca Holgate, Account Coordinator

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

Date: March 21, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2019/03/10	28954	Ambient Air	10-Mar-19 8:35
DESCRIPTION:	Methane trigger		
REPORT NUMBER:	19030065	REPORT CREATED:	21-Mar-19
			VERSION: Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19030065-001	Butyl mercaptan	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Carbon disulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	Carbonyl sulphide		1.8 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Dimethyl disulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	Dimethyl sulphide	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	Ethyl mercaptan	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Ethyl sulphide	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Hydrogen sulphide		3.5 ppbv	0.2	NA-024	12-Mar-19
19030065-001	Isobutyl mercaptan	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Isopropyl mercaptan	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Methyl mercaptan	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	Pentyl mercaptan	K, T, U	< 0.6 ppbv	0.6	NA-024	12-Mar-19
19030065-001	Propyl mercaptan	K, T, U	< 0.6 ppbv	0.6	NA-024	12-Mar-19
19030065-001	tert-Butyl mercaptan	K, T, U	< 0.5 ppbv	0.5	NA-024	12-Mar-19
19030065-001	Thiophene	K, T, U	< 0.3 ppbv	0.3	NA-024	12-Mar-19
19030065-001	1,1,1-Trichloroethane	I	0.17 ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,1,2,2-Tetrachloroethane	I	0.20 ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,1,2-Trichloroethane	I	0.21 ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,1-Dichloroethane	I	0.22 ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,1-Dichloroethylene	I	0.23 ppbv	0.06	AC-058	20-Mar-19
19030065-001	1,2,3-Trimethylbenzene	I	0.22 ppbv	0.08	AC-058	20-Mar-19
19030065-001	1,2,4-Trichlorobenzene	K, T, U	< 1.2 ppbv	1.2	AC-058	20-Mar-19
19030065-001	1,2,4-Trimethylbenzene		0.49 ppbv	0.08	AC-058	20-Mar-19
19030065-001	1,2-Dibromoethane	I	0.17 ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,2-Dichlorobenzene	I	0.18 ppbv	0.05	AC-058	20-Mar-19

Report certified by: Graham Knox, Admin. & Ops. Supervisor

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

Date: March 21, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2019/03/10	28954	Ambient Air	10-Mar-19 8:35
DESCRIPTION:	Methane trigger		
REPORT NUMBER:	19030065	REPORT CREATED:	21-Mar-19
			VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19030065-001	1,2-Dichloroethane	I	0.28	ppbv	0.02	AC-058	20-Mar-19
19030065-001	1,2-Dichloropropane	I	0.22	ppbv	0.02	AC-058	20-Mar-19
19030065-001	1,3,5-Trimethylbenzene		0.50	ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,3-Butadiene	I	0.24	ppbv	0.03	AC-058	20-Mar-19
19030065-001	1,3-Dichlorobenzene	K, T, U	< 0.5	ppbv	0.5	AC-058	20-Mar-19
19030065-001	1,4-Dichlorobenzene	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	1,4-Dioxane	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	1-Butene/Isobutylene		0.64	ppbv	0.03	AC-058	20-Mar-19
19030065-001	1-Hexene/2-Methyl-1-pentene	I	0.43	ppbv	0.03	AC-058	20-Mar-19
19030065-001	1-Pentene		0.24	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2,2,4-Trimethylpentane		0.25	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2,2-Dimethylbutane		0.29	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2,3,4-Trimethylpentane		0.26	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2,3-Dimethylbutane		0.43	ppbv	0.03	AC-058	20-Mar-19
19030065-001	2,3-Dimethylpentane		0.33	ppbv	0.03	AC-058	20-Mar-19
19030065-001	2,4-Dimethylpentane		0.27	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2-Methylheptane		0.24	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2-Methylhexane		0.40	ppbv	0.02	AC-058	20-Mar-19
19030065-001	2-Methylpentane		0.98	ppbv	0.02	AC-058	20-Mar-19
19030065-001	3-Methylheptane		0.26	ppbv	0.03	AC-058	20-Mar-19
19030065-001	3-Methylhexane		0.41	ppbv	0.03	AC-058	20-Mar-19
19030065-001	3-Methylpentane		0.66	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Acetone		2.4	ppbv	0.6	AC-058	20-Mar-19
19030065-001	Acrolein	K, T, U	< 0.5	ppbv	0.5	AC-058	20-Mar-19
19030065-001	Benzene		0.69	ppbv	0.02	AC-058	20-Mar-19

Report certified by: Graham Knox, Admin. & Ops. Supervisor

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

Date: March 21, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2019/03/10	28954	Ambient Air	10-Mar-19 8:35
DESCRIPTION:	Methane trigger		
REPORT NUMBER:	19030065	REPORT CREATED:	21-Mar-19
			VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19030065-001	Benzyl chloride	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	Bromodichloromethane		0.16	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Bromoform	I	0.12	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Bromomethane	I	0.23	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Carbon disulfide	I	0.11	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Carbon tetrachloride	I	0.22	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Chlorobenzene	I	0.22	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Chloroethane	I	0.24	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Chloroform	I	0.24	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Chloromethane		0.83	ppbv	0.03	AC-058	20-Mar-19
19030065-001	cis-1,2-Dichloroethene	I	0.23	ppbv	0.02	AC-058	20-Mar-19
19030065-001	cis-1,3-Dichloropropene	I	0.11	ppbv	0.06	AC-058	20-Mar-19
19030065-001	cis-2-Butene		0.25	ppbv	0.03	AC-058	20-Mar-19
19030065-001	cis-2-Pentene		0.23	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Cyclohexane		0.92	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Cyclopentane		0.52	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Dibromochloromethane	I	0.13	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Ethanol		2.1	ppbv	0.5	AC-058	20-Mar-19
19030065-001	Ethyl acetate	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	Ethylbenzene		0.51	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Freon-11		0.49	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Freon-113	I	0.33	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Freon-114	I	0.15	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Freon-12		0.67	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Hexachloro-1,3-butadiene	K, T, U	< 0.76	ppbv	0.76	AC-058	20-Mar-19

Report certified by: Graham Knox, Admin. & Ops. Supervisor

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

Date: March 21, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED
PRAMP_Reno-2019/03/10	28954	Ambient Air	10-Mar-19 8:35
DESCRIPTION:	Methane trigger		
REPORT NUMBER:	19030065	REPORT CREATED:	21-Mar-19
			VERSION: Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
19030065-001	Isobutane		20.8	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Isopentane		5.21	ppbv	0.05	AC-058	20-Mar-19
19030065-001	Isoprene		0.18	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Isopropyl alcohol	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	Isopropylbenzene		0.27	ppbv	0.02	AC-058	20-Mar-19
19030065-001	m,p-Xylene		0.79	ppbv	0.05	AC-058	20-Mar-19
19030065-001	m-Diethylbenzene	I	0.27	ppbv	0.06	AC-058	20-Mar-19
19030065-001	m-Ethyltoluene	I	0.25	ppbv	0.12	AC-058	20-Mar-19
19030065-001	Methyl butyl ketone	K, T, U	< 0.76	ppbv	0.76	AC-058	20-Mar-19
19030065-001	Methyl ethyl ketone	K, T, U	< 0.5	ppbv	0.5	AC-058	20-Mar-19
19030065-001	Methyl isobutyl ketone	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	Methyl methacrylate	I	0.22	ppbv	0.11	AC-058	20-Mar-19
19030065-001	Methyl tert butyl ether	I	0.22	ppbv	0.05	AC-058	20-Mar-19
19030065-001	Methylcyclohexane		0.67	ppbv	0.02	AC-058	20-Mar-19
19030065-001	Methylcyclopentane		0.73	ppbv	0.03	AC-058	20-Mar-19
19030065-001	Methylene chloride	K, T, U	< 0.5	ppbv	0.5	AC-058	20-Mar-19
19030065-001	n-Butane		23.9	ppbv	0.05	AC-058	20-Mar-19
19030065-001	n-Decane		0.26	ppbv	0.09	AC-058	20-Mar-19
19030065-001	n-Dodecane	K, T, U	< 0.6	ppbv	0.6	AC-058	20-Mar-19
19030065-001	n-Heptane		0.70	ppbv	0.02	AC-058	20-Mar-19
19030065-001	n-Hexane		1.21	ppbv	0.02	AC-058	20-Mar-19
19030065-001	n-Octane		0.33	ppbv	0.03	AC-058	20-Mar-19
19030065-001	n-Pentane		3.5	ppbv	0.2	AC-058	20-Mar-19
19030065-001	n-Propylbenzene		0.24	ppbv	0.08	AC-058	20-Mar-19
19030065-001	n-Undecane	K, T, U	< 0.8	ppbv	0.8	AC-058	20-Mar-19

Report certified by: Graham Knox, Admin. & Ops. Supervisor

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

Date: March 21, 2019

Inquiries: (780) 632 8455

E-mail: EAS.Results@innotechalberta.ca

CLIENT SAMPLE ID	CANISTER ID	Matrix	DATE SAMPLED	
PRAMP_Reno-2019/03/10	28954	Ambient Air	10-Mar-19	8:35
DESCRIPTION:	Methane trigger			
REPORT NUMBER:	19030065	REPORT CREATED:	21-Mar-19	VERSION: Version 01

Lab ID	Parameter	Qualifier	Result Units	RDL	Method	Analysis Date
19030065-001	Naphthalene	K, T, U	< 0.8 ppbv	0.8	AC-058	20-Mar-19
19030065-001	n-Nonane		0.30 ppbv	0.02	AC-058	20-Mar-19
19030065-001	o-Ethyltoluene	I	0.24 ppbv	0.02	AC-058	20-Mar-19
19030065-001	o-Xylene		0.53 ppbv	0.02	AC-058	20-Mar-19
19030065-001	p-Diethylbenzene	I	0.23 ppbv	0.06	AC-058	20-Mar-19
19030065-001	p-Ethyltoluene		0.49 ppbv	0.11	AC-058	20-Mar-19
19030065-001	Styrene	I	0.42 ppbv	0.06	AC-058	20-Mar-19
19030065-001	Tetrachloroethylene	I	0.24 ppbv	0.06	AC-058	20-Mar-19
19030065-001	Tetrahydrofuran	K, T, U	< 0.6 ppbv	0.6	AC-058	20-Mar-19
19030065-001	Toluene		0.62 ppbv	0.02	AC-058	20-Mar-19
19030065-001	trans-1,2-Dichloroethylene	I	0.23 ppbv	0.02	AC-058	20-Mar-19
19030065-001	trans-1,3-Dichloropropylene	I	0.09 ppbv	0.06	AC-058	20-Mar-19
19030065-001	trans-2-Butene		0.27 ppbv	0.02	AC-058	20-Mar-19
19030065-001	trans-2-Pentene		0.21 ppbv	0.03	AC-058	20-Mar-19
19030065-001	Trichloroethylene	I	0.21 ppbv	0.06	AC-058	20-Mar-19
19030065-001	Vinyl acetate	K, T, U	< 0.6 ppbv	0.6	AC-058	20-Mar-19
19030065-001	Vinyl chloride	I	0.18 ppbv	0.03	AC-058	20-Mar-19



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 7 of 12

Revision History

Order ID	Ver	Date	Reason
19030065	01	21-Mar-19	Report created



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 8 of 12

Methods

Method	Description
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

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



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 10 of 12

Order Comments

19030065

Send results to Pramptech. Unknowns to be reported. Return sample to reception when finished, for isotope analysis.



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 11 of 12

Sample Comments



PO Bag 4000
Vegreville, Alberta
Canada T9C 1T4
(780) 632-8211

ENVIRONMENTAL ANALYTICAL SERVICES

TEST REPORT

Page 12 of 12

Result Comments

Note:

- 1. Results relate only to items tested and apply to the sample as received.*
- 2. This report shall not be reproduced, except in full, without the explicit approval of the laboratory.*