



<b>CLIENT SAMPLE ID</b> PRAMP_RENO_20170721	<b>CANISTER ID</b> H2825	<b>Matrix</b> Ambient Air	<b>DATE SAMPLED</b> 21-Jul-17 22:20	
<b>DESCRIPTION:</b>				
<b>REPORT NUMBER:</b> 17080188	<b>REPORT CREATED:</b> 12-Sep-17	<b>VERSION:</b> Version 01		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
17080188-001	Butyl mercaptan	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Carbon disulphide	K, T, U, Q	< 0.3	ppbv	0.3	NA-024	18-Aug-17
17080188-001	Carbonyl sulphide	Q	6.8	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Dimethyl disulphide	K, T, U, Q	< 0.3	ppbv	0.3	NA-024	18-Aug-17
17080188-001	Dimethyl sulphide	K, T, U, Q	< 0.3	ppbv	0.3	NA-024	18-Aug-17
17080188-001	Ethyl mercaptan	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Ethyl sulphide	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Hydrogen sulphide	Q	1.4	ppbv	0.1	NA-024	18-Aug-17
17080188-001	Isobutyl mercaptan	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Isopropyl mercaptan	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Methyl mercaptan	K, T, U, Q	< 0.3	ppbv	0.3	NA-024	18-Aug-17
17080188-001	Pentyl mercaptan	K, T, U, Q	< 0.5	ppbv	0.5	NA-024	18-Aug-17
17080188-001	Propyl mercaptan	K, T, U, Q	< 0.5	ppbv	0.5	NA-024	18-Aug-17
17080188-001	tert-Butyl mercaptan	K, T, U, Q	< 0.4	ppbv	0.4	NA-024	18-Aug-17
17080188-001	Thiophene	K, T, U, Q	< 0.3	ppbv	0.3	NA-024	18-Aug-17
17080188-001	1,1,1-Trichloroethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,1,2,2-Tetrachloroethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,1,2-Trichloroethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,1-Dichloroethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,1-Dichloroethylene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	1,2,3-Trimethylbenzene	K, T, U, Q	< 0.07	ppbv	0.07	AC-058	26-Aug-17
17080188-001	1,2,4-Trichlorobenzene	K, T, U, Q	< 1.1	ppbv	1.1	AC-058	26-Aug-17
17080188-001	1,2,4-Trimethylbenzene	Q	0.29	ppbv	0.07	AC-058	26-Aug-17
17080188-001	1,2-Dibromoethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,2-Dichlorobenzene	K, T, U, Q	< 0.04	ppbv	0.04	AC-058	26-Aug-17

**Report certified by:** Rebecca Holgate, Account Coordinator

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

**Date:** Tuesday, September 12, 2017

**Inquiries:** (780) 632 8455

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<b>CLIENT SAMPLE ID</b>	<b>CANISTER ID</b>	<b>Matrix</b>	<b>DATE SAMPLED</b>	
PRAMP_RENO_20170721	H2825	Ambient Air	21-Jul-17	22:20
<b>DESCRIPTION:</b>				
<b>REPORT NUMBER:</b>	17080188	<b>REPORT CREATED:</b>	12-Sep-17	<b>VERSION:</b> Version 01

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
17080188-001	1,2-Dichloroethane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	1,2-Dichloropropane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	1,3,5-Trimethylbenzene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,3-Butadiene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1,3-Dichlorobenzene	K, T, U, Q	< 0.4	ppbv	0.4	AC-058	26-Aug-17
17080188-001	1,4-Dichlorobenzene	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	1,4-Dioxane	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	1-Butene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1-Hexene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	1-Pentene	Q	0.02	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2,2,4-Trimethylpentane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2,2-Dimethylbutane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2,3,4-Trimethylpentane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2,3-Dimethylbutane	Q	0.04	ppbv	0.03	AC-058	26-Aug-17
17080188-001	2,3-Dimethylpentane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	2,4-Dimethylpentane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2-Methylheptane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2-Methylhexane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	2-Methylpentane	Q	0.02	ppbv	0.01	AC-058	26-Aug-17
17080188-001	3-Methylheptane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	3-Methylhexane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	3-Methylpentane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Acetone	Q	3.3	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Acrolein	K, T, U, Q	< 0.4	ppbv	0.4	AC-058	26-Aug-17
17080188-001	Benzene	Q	0.09	ppbv	0.01	AC-058	26-Aug-17

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<b>CLIENT SAMPLE ID</b> PRAMP_RENO_20170721	<b>CANISTER ID</b> H2825	<b>Matrix</b> Ambient Air	<b>DATE SAMPLED</b> 21-Jul-17 22:20	
<b>DESCRIPTION:</b>				
<b>REPORT NUMBER:</b> 17080188	<b>REPORT CREATED:</b> 12-Sep-17	<b>VERSION:</b> Version 01		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
17080188-001	Benzyl chloride	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Bromodichloromethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Bromoform	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Bromomethane	I, Q	0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Carbon disulfide	Q	1.09	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Carbon tetrachloride	I, Q	0.09	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Chlorobenzene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Chloroethane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Chloroform	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Chloromethane	I, Q	0.34	ppbv	0.03	AC-058	26-Aug-17
17080188-001	cis-1,2-Dichloroethene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	cis-1,3-Dichloropropene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	cis-2-Butene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	cis-2-Pentene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Cyclohexane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Cyclopentane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Dibromochloromethane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Ethanol	K, T, U, Q	< 0.4	ppbv	0.4	AC-058	26-Aug-17
17080188-001	Ethyl acetate	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Ethylbenzene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Freon-11	I, Q	0.29	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Freon-113	I, Q	0.08	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Freon-114	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Freon-12	Q	0.60	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Hexachloro-1,3-butadiene	K, T, U, Q	< 0.66	ppbv	0.66	AC-058	26-Aug-17

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Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
17080188-001	Isobutane	Q	0.30	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Isopentane	Q	0.17	ppbv	0.04	AC-058	26-Aug-17
17080188-001	Isoprene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Isopropyl alcohol	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Isopropylbenzene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	m,p-Xylene	K, T, U, Q	< 0.04	ppbv	0.04	AC-058	26-Aug-17
17080188-001	m-Diethylbenzene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	m-Ethyltoluene	K, T, U, Q	< 0.11	ppbv	0.11	AC-058	26-Aug-17
17080188-001	Methyl butyl ketone	K, T, U, Q	< 0.66	ppbv	0.66	AC-058	26-Aug-17
17080188-001	Methyl ethyl ketone	Q	0.4	ppbv	0.4	AC-058	26-Aug-17
17080188-001	Methyl isobutyl ketone	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Methyl methacrylate	K, T, U, Q	< 0.09	ppbv	0.09	AC-058	26-Aug-17
17080188-001	Methyl tert butyl ether	K, T, U, Q	< 0.04	ppbv	0.04	AC-058	26-Aug-17
17080188-001	Methylcyclohexane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	Methylcyclopentane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Methylene chloride	K, T, U, Q	< 0.4	ppbv	0.4	AC-058	26-Aug-17
17080188-001	n-Butane	Q	0.32	ppbv	0.04	AC-058	26-Aug-17
17080188-001	n-Decane	K, T, U, Q	< 0.08	ppbv	0.08	AC-058	26-Aug-17
17080188-001	n-Dodecane	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	n-Heptane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	n-Hexane	Q	0.02	ppbv	0.01	AC-058	26-Aug-17
17080188-001	n-Octane	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	n-Pentane	K, T, U, Q	< 0.1	ppbv	0.1	AC-058	26-Aug-17
17080188-001	n-Propylbenzene	K, T, U, Q	< 0.07	ppbv	0.07	AC-058	26-Aug-17
17080188-001	n-Undecane	K, T, U, Q	< 0.7	ppbv	0.7	AC-058	26-Aug-17

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<b>REPORT NUMBER:</b> 17080188	<b>REPORT CREATED:</b> 12-Sep-17	<b>VERSION:</b> Version 01		

Lab ID	Parameter	Qualifier	Result	Units	RDL	Method	Analysis Date
17080188-001	Naphthalene	K, T, U, Q	< 0.7	ppbv	0.7	AC-058	26-Aug-17
17080188-001	n-Nonane	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	o-Ethyltoluene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	o-Xylene	Q	0.02	ppbv	0.01	AC-058	26-Aug-17
17080188-001	p-Diethylbenzene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	p-Ethyltoluene	K, T, U, Q	< 0.09	ppbv	0.09	AC-058	26-Aug-17
17080188-001	Styrene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	Tetrachloroethylene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	Tetrahydrofuran	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Toluene	Q	0.06	ppbv	0.01	AC-058	26-Aug-17
17080188-001	trans-1,2-Dichloroethylene	I, Q	0.04	ppbv	0.01	AC-058	26-Aug-17
17080188-001	trans-1,3-Dichloropropylene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	trans-2-Butene	K, T, U, Q	< 0.01	ppbv	0.01	AC-058	26-Aug-17
17080188-001	trans-2-Pentene	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17
17080188-001	Trichloroethylene	K, T, U, Q	< 0.05	ppbv	0.05	AC-058	26-Aug-17
17080188-001	Vinyl acetate	K, T, U, Q	< 0.5	ppbv	0.5	AC-058	26-Aug-17
17080188-001	Vinyl chloride	K, T, U, Q	< 0.03	ppbv	0.03	AC-058	26-Aug-17



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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

### Revision History

Order ID	Ver	Date	Reason
17080188	01	12-Sep-17	Report created

## **Methods**

<b>Method</b>	<b>Description</b>
AC-058	VOC - GC/MS Volatile Organic Compounds
NA-024	RSC - GC/SCD Reduced Sulphur Compound Screening Analysis
NA-025	C1C4 or - GC/FID Hydrocarbon Analysis



## 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

17080188

Project PRAMP RENO Station. Send results to Anthony Traverse.



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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

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### **Sample Comments**

17080188-001

Sample past hold time due to late submission from client.



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## ENVIRONMENTAL ANALYTICAL SERVICES

### TEST REPORT

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### **Result Comments**

*Note: Results relate only to items tested*