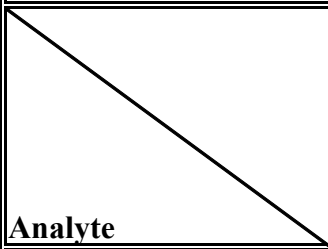


CLIENT: City of Redlands
LABORATORY NO: 22-513
SAMPLING DATE: 05/27/22
RECEIVING DATE: 05/27/22
ANALYSIS DATE: 05/27/22
REPORT DATE: 06/01/22

Laboratory Analysis Report

Analysis Method	SQAQMD 307-91		
Detection Limits	0.05 PPMV		
 Analyte	Client ID	Effluent Outlet	Influent Inlet
	Sampling Date	5/27/2022	05/27/22
	Sampling Time	-	-
	Lab ID	14722-3	14722-4
	Units	PPMV	PPMV
Hydrogen Sulfide		<0.05	<0.05
Carbonyl Sulfide		<0.05	<0.05
Methyl Mercaptan		<0.05	<0.05
Ethyl Mercaptan		<0.05	<0.05
Un-Identified S Compounds		0.08	0.73
Total Sulfur as H ₂ S		0.08	0.73



Dr. Andrew Kitto
 President

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Quality Assurance Report

Duplicate Analysis

Sample ID: Influent Inlet

Lab ID: 14722-4

Analysis Method		SQAQMD 307-91		
Detection Limit		0.05 PPMV		
Analyte	Aver. Conc. PPMV	Dil. Factor Ambient Air	DF*A/CF PPMV	% Sample Recovery*
Hydrogen Sulfide	<0.05	1	<0.05	N/A
Carbonyl Sulfide	<0.05	1	<0.05	N/A
Methyl Mercaptan	<0.05	1	<0.05	N/A
Ethyl Mercaptan	<0.05	1	<0.05	N/A
Unidentified S Compounds	0.73	1	0.73	100
Total Sulfur as H ₂ S	0.73	1	0.73	100

N/A: Not Applicable

*Must be ±10%



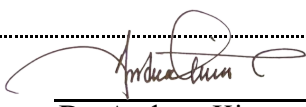
Dr. Andrew Kitto
 President

CLIENT: **City of Redlands**
 LABORATORY NO: **22-513**
 SAMPLING DATE: **05/27/22**
 RECEIVING DATE: **05/27/22**
 ANALYSIS DATE: **05/27/22**
 REPORT DATE: **06/01/22**

Laboratory Analysis Report

Analysis Method: ASTM 1945-03 ; HHV Calculations: ASTM 3588-98

Analyte, Units	Sample ID	Effluent Outlet	Influent Inlet
	Sample Date	05/27/22	05/27/22
	Sample Time	-	-
	Lab ID	14722-3	14722-4
	Units	Mole %	Mole %
Methane, %		66.24	61.89
Ethane, %		<0.01	<0.01
Ethylene, %		<0.01	<0.01
Propane, %		<0.01	<0.01
Propylene, %		<0.01	<0.01
i-Butane, %		<0.01	<0.01
n-Butane, %		<0.01	<0.01
1-Butene, %		<0.01	<0.01
i-Butylene, %		<0.01	<0.01
trans-2-Butene, %		<0.01	<0.01
cis-2-Butene, %		<0.01	<0.01
i-Pentane, %		<0.01	<0.01
n-Pentane, %		<0.01	<0.01
2,2-Dimethyl Butane, %		<0.01	<0.01
2,3-Dimethyl Butane, %		<0.01	<0.01
2-Methyl Pentane, %		<0.01	<0.01
3-Methyl Pentane, %		<0.01	<0.01
n-Hexane, %		<0.01	<0.01
C6+, %		<0.01	<0.01
CO ₂ , %		31.58	37.12
CO, %		<0.01	<0.01
O ₂ , %		0.08	0.12
N ₂ , %		2.10	0.84
H ₂ , %		<0.01	<0.01
H ₂ S, %		<0.01	<0.01
Average Molecular Weight		25.140	26.564
Total Wt.% Adjusted Sp. Gravity		0.8680	0.9172
Compressibility Factor (14.696 Psi, 60 F)		0.9975	0.9974
NET BTU/Cub. Ft		602	564
GROSS BTU/Cub. Ft		669	627
CHONS		%	%
Carbon		46.74	44.85
Hydrogen		10.62	9.41
Oxygen		40.30	44.86
Nitrogen		2.34	0.88
Sulfur		<0.01	<0.01
Dry F Factor (60 F, 1 Atm);		9067	9162
SDCF/MMBTU, ASTM 3588			


 Dr. Andrew Kitto
 President



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CLIENT: City of Redlands
LAB PROJ NO: 22-513
SAMPLING DATE: 05/27/22
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REPORT DATE: 06/01/22

Laboratory Analysis Report

Analysis Method	SCAQMD 25.1			
Detection Limits	1.0 PPMV			
Sample ID #	Lab Sample ID	Methane Mole %	Ethane PPMV	TNMNEOC PPMV
Effluent Outlet	14722-3	66.2	<1.0	1.44
Influent Inlet	14722-4	61.9	<1.0	1816

TNMNEOC: Total non-Methane non-Ethane Organic Carbon

A handwritten signature in black ink, appearing to read "Andrew Kitto", is positioned above a horizontal line.

Dr. Andrew Kitto
President

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Quality Control/Quality Assurance Report (Method 25.1)

I- Blank

Lab ID	Analyte	Result
N2 Blank - Open	NMNEOC	<1.0
N2 Blank - Close	NMNEOC	<1.0

II- Initial Calibration Verification Standard

Lab ID	Analyte	Theoretical Value PPMV	Tested Value PPMV	% Recovery*
ICV	Methane	96.80	97.54	101%
ICV	Ethylene	97.00	97.79	101%
ICV	Ethane	98.70	99.55	101%
ICV	TNMNEOC	99.80	100.88	101%

* Must be $\pm 10\%$

III- Backflush & Closing Calibration Standard

Lab ID	Analyte	Theoretical Value PPMV	Tested Value PPMV	% Recovery**
CCV 1	TNMNEOC	10.00	10.10	101%
CCV 2	TNMNEOC	1000	1029	103%

TNMNEOC: Total non-Methane non-Ethane Organic carbon

**Must be $\pm 10\%$



Dr. Andrew Kitto
 President



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Email: andrewkitto.quantum@gmail.com

Page:

of:

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