

10/21/2009
Mr. Doug Lam
Trihydro Corporation
5000 State Route 128

Cleves OH 45002

Project Name: Hooven VI 2008-2009
Project #: 500-016-012
Workorder #: 0910189D

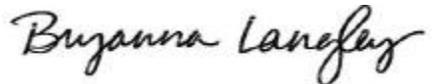
Dear Mr. Doug Lam

The following report includes the data for the above referenced project for sample(s) received on 10/7/2009 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Bryanna Langley
Project Manager

WORK ORDER #: 0910189D

Work Order Summary

CLIENT:	Mr. Doug Lam Trihydro Corporation 5000 State Route 128 Cleves, OH 45002	BILL TO:	Mr. Paul Michalski Trihydro Corporation 5000 State Route 128 Cleves, OH 45002
PHONE:	513-353-1323 ext 23	P.O. #	08-050WO-L
FAX:	513-353-4664	PROJECT #	500-016-012 Hooven VI 2008-2009
DATE RECEIVED:	10/07/2009	CONTACT:	Bryanna Langley
DATE COMPLETED:	10/21/2009		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
11A	TB-1,093009	Modified ASTM D-1946	28.2 "Hg	15 psi
12A	VW-139(10),093009	Modified ASTM D-1946	3.6 "Hg	15 psi
13A	VW-139(15),093009	Modified ASTM D-1946	3.4 "Hg	15 psi
14A	VW-139(20),093009	Modified ASTM D-1946	2.0 "Hg	15 psi
15A	BD1,093009	Modified ASTM D-1946	5.8 "Hg	15 psi
16A	VW-139(30),093009	Modified ASTM D-1946	3.8 "Hg	15 psi
17A	VW-139(40),093009	Modified ASTM D-1946	6.0 "Hg	15 psi
18A	VW-93(60),093009	Modified ASTM D-1946	5.0 "Hg	15 psi
19A	VW-93(50),093009	Modified ASTM D-1946	5.2 "Hg	15 psi
20A	VW-93(55),093009	Modified ASTM D-1946	5.2 "Hg	15 psi
21A	BD2,093009	Modified ASTM D-1946	5.2 "Hg	15 psi
21AA	BD2,093009 Lab Duplicate	Modified ASTM D-1946	5.2 "Hg	15 psi
22A	Lab Blank	Modified ASTM D-1946	NA	NA
22B	Lab Blank	Modified ASTM D-1946	NA	NA
23A	LCS	Modified ASTM D-1946	NA	NA

CERTIFIED BY: 
Laboratory Director

DATE: 10/21/09

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
 NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
 Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
 Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/10
 Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards
 This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

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 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Trihydro Corporation
Workorder# 0910189D

Eleven 1 Liter Summa Canister (100% Certified) samples were received on October 07, 2009. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Since Nitrogen is used to pressurize samples, the reported Nitrogen values are calculated by adding all the sample components and subtracting from 100%.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a $\geq 95\%$ accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The trip blank, sample TB-1,093009, has a reportable level of Oxygen present. Reanalysis confirmed the initial results.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: TB-1,093009

Lab ID#: 0910189D-11A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	0.14
Nitrogen	0.10	100

Client Sample ID: VW-139(10),093009

Lab ID#: 0910189D-12A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	13
Nitrogen	0.23	83
Carbon Dioxide	0.023	4.1

Client Sample ID: VW-139(15),093009

Lab ID#: 0910189D-13A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	10
Nitrogen	0.23	85
Carbon Dioxide	0.023	5.3

Client Sample ID: VW-139(20),093009

Lab ID#: 0910189D-14A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.44	14
Nitrogen	0.44	81
Carbon Dioxide	0.044	5.0

Client Sample ID: BD1,093009

Lab ID#: 0910189D-15A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	1.5
Nitrogen	0.25	90
Methane	0.00025	2.0

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: BD1,093009

Lab ID#: 0910189D-15A

Carbon Dioxide	0.025	5.8
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Client Sample ID: VW-139(30),093009

Lab ID#: 0910189D-16A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	9.3
Nitrogen	0.23	84
Carbon Dioxide	0.023	6.7

Client Sample ID: VW-139(40),093009

Lab ID#: 0910189D-17A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	1.6
Nitrogen	0.25	90
Methane	0.00025	2.0
Carbon Dioxide	0.025	5.8

Client Sample ID: VW-93(60),093009

Lab ID#: 0910189D-18A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	3.2
Nitrogen	0.24	89
Carbon Dioxide	0.024	7.6

Client Sample ID: VW-93(50),093009

Lab ID#: 0910189D-19A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Dioxide	0.024	3.2

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VW-93(55),093009

Lab ID#: 0910189D-20A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	4.6
Nitrogen	0.24	88
Carbon Dioxide	0.024	6.9

Client Sample ID: BD2,093009

Lab ID#: 0910189D-21A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Dioxide	0.024	3.2

Client Sample ID: BD2,093009 Lab Duplicate

Lab ID#: 0910189D-21AA

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Dioxide	0.024	3.1

Client Sample ID: TB-1,093009

Lab ID#: 0910189D-11A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101932	Date of Collection: 9/30/09
Dil. Factor:	1.00	Date of Analysis: 10/19/09 09:40 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	0.14
Nitrogen	0.10	100
Carbon Monoxide	0.010	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected
Ethane	0.0010	Not Detected
Ethene	0.0010	Not Detected
Helium	0.050	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-139(10),093009

Lab ID#: 0910189D-12A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101934	Date of Collection:	9/30/09 1:59:00 PM
Dil. Factor:	2.30	Date of Analysis:	10/19/09 10:27 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	13
Nitrogen	0.23	83
Carbon Monoxide	0.023	Not Detected
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	4.1
Ethane	0.0023	Not Detected
Ethene	0.0023	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-139(15),093009

Lab ID#: 0910189D-13A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101935	Date of Collection: 9/30/09 1:30:00 PM
Dil. Factor:	2.28	Date of Analysis: 10/19/09 10:59 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	10
Nitrogen	0.23	85
Carbon Monoxide	0.023	Not Detected
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	5.3
Ethane	0.0023	Not Detected
Ethene	0.0023	Not Detected
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-139(20),093009

Lab ID#: 0910189D-14A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101947	Date of Collection: 9/30/09 12:45:00 PM
Dil. Factor:	4.38	Date of Analysis: 10/20/09 11:22 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.44	14
Nitrogen	0.44	81
Carbon Monoxide	0.044	Not Detected
Methane	0.00044	Not Detected
Carbon Dioxide	0.044	5.0
Ethane	0.0044	Not Detected
Ethene	0.0044	Not Detected
Helium	0.22	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Client Sample ID: BD1,093009

Lab ID#: 0910189D-15A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101937	Date of Collection:	9/30/09
Dil. Factor:	2.50	Date of Analysis:	10/20/09 07:26 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	1.5
Nitrogen	0.25	90
Carbon Monoxide	0.025	Not Detected
Methane	0.00025	2.0
Carbon Dioxide	0.025	5.8
Ethane	0.0025	Not Detected
Ethene	0.0025	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-139(30),093009

Lab ID#: 0910189D-16A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101939	Date of Collection: 9/30/09 12:10:00 PM
Dil. Factor:	2.31	Date of Analysis: 10/20/09 08:10 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	9.3
Nitrogen	0.23	84
Carbon Monoxide	0.023	Not Detected
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	6.7
Ethane	0.0023	Not Detected
Ethene	0.0023	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-139(40),093009

Lab ID#: 0910189D-17A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101940	Date of Collection: 9/30/09 11:37:00 AM
Dil. Factor:	2.52	Date of Analysis: 10/20/09 08:33 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	1.6
Nitrogen	0.25	90
Carbon Monoxide	0.025	Not Detected
Methane	0.00025	2.0
Carbon Dioxide	0.025	5.8
Ethane	0.0025	Not Detected
Ethene	0.0025	Not Detected
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-93(60),093009

Lab ID#: 0910189D-18A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101942	Date of Collection:	9/30/09 5:22:00 PM
Dil. Factor:	2.42	Date of Analysis:	10/20/09 09:20 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	3.2
Nitrogen	0.24	89
Carbon Monoxide	0.024	Not Detected
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	7.6
Ethane	0.0024	Not Detected
Ethene	0.0024	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-93(50),093009

Lab ID#: 0910189D-19A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101943	Date of Collection: 9/30/09 4:46:00 PM
Dil. Factor:	2.44	Date of Analysis: 10/20/09 09:43 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Monoxide	0.024	Not Detected
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	3.2
Ethane	0.0024	Not Detected
Ethene	0.0024	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VW-93(55),093009

Lab ID#: 0910189D-20A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101944	Date of Collection:	9/30/09 4:35:00 PM
Dil. Factor:	2.44	Date of Analysis:	10/20/09 10:05 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	4.6
Nitrogen	0.24	88
Carbon Monoxide	0.024	Not Detected
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	6.9
Ethane	0.0024	Not Detected
Ethene	0.0024	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Client Sample ID: BD2,093009

Lab ID#: 0910189D-21A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101945	Date of Collection:	9/30/09
Dil. Factor:	2.44	Date of Analysis:	10/20/09 10:29 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Monoxide	0.024	Not Detected
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	3.2
Ethane	0.0024	Not Detected
Ethene	0.0024	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: BD2,093009 Lab Duplicate

Lab ID#: 0910189D-21AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101946	Date of Collection: 9/30/09
Dil. Factor:	2.44	Date of Analysis: 10/20/09 10:53 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Nitrogen	0.24	80
Carbon Monoxide	0.024	Not Detected
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	3.1
Ethane	0.0024	Not Detected
Ethene	0.0024	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Client Sample ID: Lab Blank

Lab ID#: 0910189D-22A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101931	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/19/09 08:53 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Nitrogen	0.10	Not Detected
Carbon Monoxide	0.010	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected
Ethane	0.0010	Not Detected
Ethene	0.0010	Not Detected

Container Type: NA - Not Applicable



Client Sample ID: Lab Blank

Lab ID#: 0910189D-22B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101930b	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/19/09 07:37 PM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

Client Sample ID: LCS

Lab ID#: 0910189D-23A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9101948	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/20/09 11:44 AM

Compound	%Recovery
Oxygen	100
Nitrogen	100
Carbon Monoxide	104
Methane	100
Carbon Dioxide	101
Ethane	99
Ethene	100
Helium	104

Container Type: NA - Not Applicable