ENVIRONMENT

Environmental Assurance
Environmental Monitoring and
Evaluation
Monitoring Program Delivery

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File No(s). 2008 – 071A/096A

June 26, 2008

Mike Bisaga
Program Manager
Peace Airshed Zone Association
Otonabee Consulting Ltd
13440 – 62 Street
Edmonton, Alberta
T5A 0V7

Dear Mike

Re: Peace Air Shed Zone Association (PASZA) Ambient Air Monitoring Station Audits

Attached are the results from the PASZA air monitoring station audit conducted from June 16, 2008 to June 20, 2008.

Audits consist of station inspections as well as performance audits of all continuous parameters. All continuous analyzers were audited according to the guidelines set forth in the Air Monitoring Directive (AMD), Audit Protocol Document as well as operational limits specified by the manufacturer to ensure quality data.

Audit non-compliance items found, manufacture specifications not met and inspection issues found at the time of the AENV audit are listed below:

Smokey Heights

Audit failures:

- TEOM main flow failed.

Manufacturer specifications not met:

- The ambient temperature sensor is outside the +/- 1 deg tolerance used by the auditors.

Inspection items:

- Manifold is dirty – cleaned by contractor.
- Sample TEOM heads dirty.

Beaverlodge

Audit failures:

- TEOM main flow failed.

Manufacturer specifications not met:

- None at the time of the audit.

Inspection items:

- The site documentation is completed but was not available at the trailer.
- Sample lines are dirty.
- Manifold is dirty.

Spirit River - Rover

Audit failures:

- The NO2 failed the last GPT point as it was greater than 15% out.

Manufacturer specifications not met:

- The station temperature sensor is outside the +/- 1 deg tolerance used by the auditors.
- The ambient temperature sensor is outside the +/- 1 deg tolerance used by the auditors.

Inspection items:

- Manifold is dirty.

Henry Pirker

Audit failures:

- None at the time of the audit

Manufacturer specifications not met:

- The station temperature sensor is outside the +/- 1 deg tolerance used by the auditors.

Inspection items:

- Sample lines dirty.
- Teom heads are dirty

Evergreen

Audit failures:

- None at the time of the audit.

Manufacturer specifications not met:

- None at the time of the audit.

Inspection items:

- The site documentation is completed but was not available at the trailer.
- Manifold is dirty – cleaned during audit by contractor.
- Sample lines dirty.
- Spare manifold ports not capped.
- Pumps not properly exhausted from the room or scrubbed.
- TEOM heads are dirty.
- TEOM bypass filter dirty

Girouxville - PAML

Audit failures:

- None at the time of the audit.

Manufacturer specifications not met:

- None at the time of the audit.

Inspection items:

- Manifold dirty.
- Sample lines dirty.

Valleyview

Audit failures:

- None at the time of the audit

Manufacturer specifications not met:

- The station temperature sensor is outside the +/- 1 deg tolerance used by the auditors.
- The ambient temperature sensor is outside the +/- 1 deg tolerance used by the auditors.

Inspection items:

- Site documentation not on site.
- Pumps not properly exhausted from the room or scrubbed.
- Teom heads are dirty

During the audit the QAP was assessed on sections 2.3 through 3.0. A few observations were noted as follows. The AGAT SOPs are listed under PASZA reference number 13.0. Contractor stated is Focus. Also as per 8.3 monitoring/procedures, the monitoring methods are not separated, they are mentioned all as one. PASZA's QAP references contractor as being responsible for monitoring methods, but nothing from the contractor is actually listed.

Please address the issues noted above by July 25th, 2008, in writing indicating what corrective actions have been taken. If you have any questions please contact the undersigned at 780-427-7888.

Yours truly,

Joléne Scott
Monitoring Systems Auditor
Northern Region

Attachment(s): None

cc: Park Powell: District Approvals Manager
Greg Smith: District Compliance Manager
Marilyn Albert: Industrial Monitoring Assessment Technologist
Janine Ross: Ambient Air Support Tech
Gerald Feschuk: Industrial Approvals Engineer

Alberta
ENVIRONMENT

SUMMARY OF AUDIT RESULTS DATE: June 16 – 20, 2008
STATION/MONITORING SITE AUDITED

PARAMETER AUDITED	Smokey Heights June 16, 2008	Beaverlodge June 17, 2008	Spirit River June 17, 2008	Henry Pirker June 18, 2008	Evergreen June 18, 2008
NO 0.85-1.15	N/A	Pass 0.9751	Pass 0.9818	Pass 0.9982	N/A
NOX 0.85-1.15	N/A	Pass 0.9725	Pass 0.9955	Pass 1.0063	N/A
NO2 0.85-1.15	N/A	Pass 1.0117	Fail[4] 0.9932	Pass 1.008	N/A
NH3 0.85-1.15	N/A	N/A	N/A	N/A	N/A
OZONE 0.85-1.15	N/A	Pass 1.0127	Pass 1.0212	Pass 0.9998	N/A
TRS 0.85-1.15	Pass 0.9535	N/A	Pass 1.0092	Pass 1.0237	Pass 1.0041
H2S 0.85-1.15	N/A	N/A	N/A	N/A	N/A
SO2 0.85-1.15	Pass 0.9882	Pass 0.9965	Pass 0.9684	Pass 1.0121	Pass 0.9842
CO 0.85-1.15	N/A	N/A	N/A	Pass 0.9877	N/A
THC 0.85-1.15	N/A	N/A	N/A	Pass 1.0364	N/A
PAR/GSR	N/A	N/A	N/A	Good	N/A
ORIENTATION	Good	Good	Good	Good	Good
RH/Temp Rainfall	N/A/Fail[1] N/A	Pass/Pass N/A	Pass/Fail1[1&3] N/A	Pass/Fail[1] N/A	N/A/Pass N/A
PM 2.5	Fail[2]	Fail[2]	N./A	Pass	Pass

1. Station temperature outside manufacturer's specification of +/- 1 °C
2. Main flow outside manufacturer's specification of +/- 0.2 lpm
3. Ambient temperature outside manufacturer's specification of +/- 1°C
4. Last NO2 point greater than 15% out from calculated value

Audit Performed by: J. Scott

ENVIRONMENT

SUMMARY OF AUDIT RESULTS
STATION/MONITORING SITE AUDITED

DATE: June 16 – 20, 2008

PARAMETER AUDITED	Girouxville June 19, 2008	Valleyview June 20, 2008			
NO 0.85-1.15	N/A	N/A			
NOX 0.85-1.15	Pass 0.9701	N/A			
NO2 0.85-1.15	N/A	N/A			
NH3 0.85-1.15	Pass 1.0529	N/A			
OZONE 0.85-1.15	N/A	N/A			
TRS 0.85-1.15	Pass 0.9535	N/A			
H2S 0.85-1.15	Pass 0.9574	Pass 0.9735			
SO2 0.85-1.15	Pass 0.9749	Pass 0.9904			
CO 0.85-1.15	N/A	N/A			
THC 0.85-1.15	N/A	N/A			
PAR/GSR	N/A	N/A			
ORIENTATION	Good	Good			
RH/Temp Rainfall	N/A/Pass N/A	Pass/Fail[1&2] N/A			
PM 2.5	N/A	N/A			

1. Station temperature outside manufacturer's specification of +/- 1 °C
2. Ambient temperature outside manufacturer's specification of +/- 1°C

Audit Performed by: J. Scott

Alberta
ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA

Facility Name: Smokey Heights

Approval No.: N/A

Site Name: Smokey Heights

GENERAL

	YES	NO	N/A
Has the location remained unchanged from previous audit?	X		
Is site secure?	X		
Are station operating conditions adequate?	X		

DATA ACQUISITION

	YES	NO	N/A
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		

SYSTEM COMPONENTS

	YES	NO	N/A
Is a glass sampling manifold installed?	X		
Is sampling manifold clean?		X	
Is a trap in place?	X		
Are spare manifold ports capped	X		
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?	X		
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?	X		
Are zero and span systems operational?	X		

WIND EQUIPMENT

	YES	NO	N/A
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS: Manifold cleaned during audit.

AUDITOR: J. Scott

DATE: June 16, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 069A / 071A

Date: June 16, 2008 Performed by: J. Scott

Station

Name: Smokey Heights Location: Smokey Heights

Facility/Zone: PASZA Operator: FOCUS

Temp: 23 Barometric Press: 700 mmHg

Location

Latitude N 55 23'47.8"

Longitude W 118 16'51.3"

Elevation 1011m

Status of Site Documentation Good

Manifold Material Good

Manifold Condition Good

Meteorological

	Observed	Audit Value
Wind Speed Direction	228.9 Deg 29 kph	W 20 - 30 kph
Station Temperature	28 C	22.96 C
Relative Humidity	N/A	N/A
Ambient Temperature	20.86 C	21.03 C
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 069A

Date: June 16, 2008 Performed by: J. Scott

Station

Name: Smokey Heights Location: Smokey Heights

Facility/Zone: PASZA Operator: FOCUS

Temp: 23 Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 43i Serial No: 701120009

Inlet flow (sccm): 442 Full Scale Range ppm: 0.5

Last cal. Date: May 23, 2008 Old C.F. 0.9841

Zero/Bkg 6.3

Span Coef 0.712

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5547	0.00	5547	0.0000	0.0014		
5125	36.61	5164	0.3716	0.3686	-1.2%	± 15%
5134	18.13	5152	0.1749	0.1749	-0.8%	± 15%
5092	9.08	5101	0.0885	0.0889	-1.1%	± 15%
				Absolute Average Percent Difference	1.0%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9882	0.85-1.15
b (Intercept as % of full scale)=	0.3163	± 3% F.S.

Remarks:

Form No. F-AA-005
Version No. 1.1

Alberta ENVIRONMENT

TRS ANALYZER AUDIT

File No. 2008 - 070A

Date: June 16, 2008 Performed by: J. Scott

Station

Name: Smokey Heights Location: Smokey Heights

Facility/Zone: PASZA Operator: FOCUS

Temp: 23 Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 43 C Serial No: 436610004

Inlet flow (sccm): 743 Full Scale Range ppm: 0.1

Last cal. Date: May 23, 2008 Old C.F. 0.9672

Zero/Bkg 11.6

Span Coef 1.006

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5547	0.00	5547	0.0000	0.0004		
5126	37.63	5164	0.0729	0.0700	-4.5%	± 15%
5135	17.33	5152	0.0336	0.0334	-1.9%	± 15%
5092	8.75	5101	0.0172	0.0173	-1.5%	± 15%
				Absolute Average Percent Difference	2.6%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9999	**≥ 0.995**
m (Slope)=	0.9535	**0.85-1.15**
b (Intercept as % of full scale)=	0.7973	**± 3% F.S.**

Remarks:

Alberta ENVIRONMENT

TEOM AUDIT

File No. 2008 - 071A

Date: June 16, 2008 Performed by: J. Scott

Station

Name:	Smokey Heights	Location:	Smokey Heights
Facility/Zone:	PASZA	Operator:	FOCUS
Temp.	23.0 C	Barometric Press.	700 mmHg

Audit Transfer Standard

Make/Model:	BIOS DC 2	Cell s/n:	106010
Serial Number:	105395		

Sampler Set-up and current readings

Make/Model	R&P 1400a	F-Main Set Pt (l/min)	3.00
Unit #	P.M. 2.5	F-Aux Set Pt (l/min)	13.67
Control unit s/n	140AB246340305	Filter Load (%)	32
Transducer s/n	140AB246340305	K_O Factor	12122
		Temp (°C)	20.1
		Press (ATM)	0.923

Conversion from mm Hg or " Hg to ATM (Atmospheres)

ATM = (mm Hg) X (1.316×10^{-3}) or ATM = ("Hg) X (3.34207×10^{-2})

Note: Tolerances are noted as **BOLD** in Brackets

Zero flow

Pump Off		Pump On (Time to reach set points)	
F-Main (l/min)	0.00	(45-60 Sec)	38
F-Aux (l/min)	-0.01	(45-60 Sec)	45

Temperature/Pressure

Measured Temp (± 1 °C)	20.5	Δ°C	0.4
Measured Press (± 1.5% ATM)	0.921	Δ% ATM	0.20%

Flow Audit

		Δ% from Set-point	
Indicated Main/Aux Flow (l/min)	3.00 / 13.68	(± 2%)	0.0 % / 0.01%
Total Flow = Main + Aux (l/min)	16.68	(± 2%)	0.01%
Measured Total Flow (l/min)	16.13	(± 1.0 l/min.	0.54 lpm / 3.3%
Measured Main Flow (l/min)	2.73	(± 0.2 l/min.	0.27 LPM / 9.9%

Leak Check

		Actual leakage = Pump On – Pump Off
Main (< 0.15 l/min)	0.01	0.01
Aux (< 0.15 l/min)	0.00	0.01

K_O Factor

Measured	12137	Heads are dirty.
K_O % Difference (± 2.5%)	0.12	

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Industrial Performance Audit
Station Summary

Company: PASZA

Facility Name: Beaverlodge

Approval No.: N/A

Site Name: Beaverlodge

	YES	NO	N/A
GENERAL			
Has the location remained unchanged from previous audit?	X		
Is site secure?	X		
Are station operating conditions adequate?	X		
DATA ACQUISITION			
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		
SYSTEM COMPONENTS			
Is a glass sampling manifold installed?	X		
Is sampling manifold clean?		X	
Is a trap in place?	X		
Are spare manifold ports capped	X		
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?		X	
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?	X		
Are zero and span systems operational?	X		
WIND EQUIPMENT			
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS:

AUDITOR: J. Scott

DATE: June 17, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 072A / 075A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Beaverlodge Location: Beaverlodge

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.5 C Barometric Press: 692mmHg

Location

Latitude N 55 11'46.7"

Longitute W 119 23'50.7"

Elevation 743m

Status of Site Documentation Not on Site - completed

Manifold Material Glass

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	290 Deg 7kph	W 5-10kph
Station Temperature	N/A	N/A
Relative Humidity	56.70%	57.20%
Ambient Temperature	14.9 C	14.7 C
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 072A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Beaverlodge Location: Beaverlodge

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.5 C Barometric Press: 692mmHg

Monitor

Make/Model: Teco 43i-TLE Serial No: AMU 1753

Inlet flow (sccm): 470 Full Scale Range ppm: 0.1

Last cal. Date: May 12, 2008 Old C.F. 0.9857

Zero/Bkg 2.54

Span Coef 0.950

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : SV-14616 Cyl. Conc PPM: 10.8

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5029	0.00	5029	0.0000	-0.0002		
5043	32.61	5076	0.0694	0.0689	-0.4%	± 15%
5103	18.06	5121	0.0381	0.0380	0.3%	± 15%
5089	9.19	5098	0.0195	0.0192	-0.4%	± 15%
				Absolute Average Percent Difference	0.2%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9965	0.85-1.15
b (Intercept as % of full scale)=	-0.1495	± 3% F.S.

Remarks:

Form No. F-AA-008
Version No. 1.1

Alberta ENVIRONMENT

NO-NOx-NO2 Analyzer Audit

File No. 2008 - 073A

Date: June 17, 2008 Performed by: J. Scott

Station: Name: Beaverlodge Location: Beaverlodge Operator: FOCUS
Facility/Zone: PASZA Temp. 24.5 C BP: 692 mmHg

Monitor: Make/Model: Teco 42C Serial No. AMU 1524
Inlet flow (sccm): 782 / 85 Range ppm: 1.0
Last cal. Date: May 12, 2008 Old C.F.'s NO: 0.9849
NOx: 0.9935
NO2: 1.0223

NO Bkg 1.3
NOx Bkg 1.3
NO Coef 1.074
NOx Coef 0.999
NO2 Coef 1.000

Calibration Method: Gas Dilution / GPT
Calibrator: Make/Model: Sabio 2010 AMU# 1749
NO cylinder # CAL 013770 NO conc. ppm 50.0 NOx conc. ppm 50.3

Calibrator Flows			Calc. Conc.		Indicated Concentration		% Difference vs Audit Gas	
Air	Gas	Total	NO (ppm)	NOx (ppm)	NO (ppm)	NOx (ppm)	NO	NOx
4825	0.00	4825	0.0000	0.0000	-0.0003	-0.0002	Limit ± 15%	
4852	79.11	4931	0.8022	0.8070	0.7817	0.7846	-2.5%	-2.7%
4894	39.41	4933	0.3995	0.4018	0.3880	0.3902	-2.8%	-2.8%
4898	19.69	4918	0.2002	0.2014	0.1938	0.1955	-3.0%	-2.8%
					Absolute Average Percent Difference		2.8%	2.8%

Linear Regression Analysis: *y=mx+b (where x=calculated concentration, y=indicated concentration)*

	NO	NOx	NO_2	LIMITS
Correlation Coeff.=	1.0000	1.0000	1.0000	≥ 0.995
m (Slope)=	0.9751	0.9725	1.0117	0.85-1.15
b (Intercept as % of full scale)=	-0.0943	-0.0340	-0.9093	± 3% F.S.

O_3 Setting	Set Point	Flow Rate	Indicated Conc. (ppm)			NO Decrease	NO_2 Increase	% Difference vs Audit Gas	
			NO	NOx	NO_2				%Dif Limit
0.00 V		4931	0.7648	0.7693	0.0027				
0.75 V		4931	0.3881	0.7633	0.3749	0.3767	0.3722	-0.0119	± 15%
0.40 V		4931	0.5911	0.7613	0.1688	0.1737	0.1661	-0.0438	± 15%
0.20 V		4931	0.7087	0.7603	0.0507	0.0561	0.0480	-0.1444	± 15%
						Absolute Average Percent Difference		-0.0667	

Converter Efficiency

Average Converter Efficiency 93.3%

Remarks:

Form No. F-AA-009
Version No. 1.1

Alberta ENVIRONMENT

O_3 ANALYZER AUDIT

File No. 2008 - 074A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Beaverlodge Location: Beaverlodge

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.5 C Barometric Press: 692mmHg

Monitor

Make/Model: Teco 49C Serial No: AMU 1614

Inlet flow (sccm): 737 / 690 Full Scale Range ppm: 0.5

Last cal. Date: May 13, 2008 Old C.F. 0.9907

Zero/Bkg -0.2

Span Coeff. 1.023

Calibrator

Calibration Method: Gas Dilution / GPT

Make/Model: Sabio 2010 AMU # : 1749

NO cylinder # : CAL 013770 NO concentration ppm: 50.0

Ozone Setting	Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Conc. (ppm)	% Difference	
	Air	Gas	Total			vs Audit Gas	Limits
0.00V	4931		4931	0.0000	0.0005		
0.75V	4931		4931	0.3767	0.3792	0.5%	± 15%
0.40V	4931		4931	0.1737	0.1709	-1.9%	± 15%
0.20V	4931		4931	0.0561	0.0495	-12.7%	± 15%
					Absolute Average Percent Difference	4.7%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9998	≥ 0.995
m (Slope)=	1.0127	0.85-1.15
b (Intercept as % of full scale)=	-0.7044	± 3% F.S.

Remarks:

Form No. F-AA-012
Version No. 1.1

Alberta ENVIRONMENT

TEOM AUDIT

File No. 2008 - 075A

Date: June 17, 2008 Performed by: J. Scott

Station

Name:	Beaverlodge	Location:	Beaverlodge
Facility/Zone:	PASZA	Operator:	FOCUS
Temp.	24.5 C	Barometric Press.	692 mmHg

Audit Transfer Standard

Make/Model:	BIOS DC 2	Cell s/n:	106010
Serial Number:	105395		

Sampler Set-up and current readings

Make/Model	R&P 1400a	F-Main Set Pt (l/min)	3.00
Unit #	P.M. 2.5	F-Aux Set Pt (l/min)	13.67
Control unit s/n	140AB252560407	Filter Load (%)	34%
Transducer s/n	140AB252560407	K_O Factor	14237
		Temp (°C)	14.7
		Press (ATM)	0.913

Conversion from mm Hg or " Hg to ATM (Atmospheres)

ATM = (mm Hg) X (1.316×10^{-3}) or ATM = ("Hg) X (3.34207×10^{-2})

Note: Tolerances are noted as **BOLD** in Brackets

Zero flow

Pump Off		Pump On (Time to reach set points)	
F-Main (l/min)	0.01	(45-60 Sec)	41
F-Aux (l/min)	0.01	(45-60 Sec)	53

Temperature/Pressure

Measured Temp (± 1 °C)	14.71	Δ°C	0.01%
Measured Press (± 1.5% ATM)	0.911	Δ% ATM	0.20%

Flow Audit

		Δ% from Set-point	
Indicated Main/Aux Flow (l/min)	3.00 / 13.65	(± 2%)	0.0% / 0.1%
Total Flow = Main + Aux (l/min)	16.65	(± 2%)	0.10%
Measured Total Flow (l/min)	16.55	(± 1.0 l/min.	0.12 lpm / 0.3%
Measured Main Flow (l/min)	2.76	(± 0.2 l/min.	0.24 lpm / 8.7%

Leak Check

		Actual leakage = Pump On – Pump Off
Main (< 0.15 l/min)	0.00	0.01
Aux (< 0.15 l/min)	0.07	0.06

K_O Factor

Measured	14376
K_O % Difference (± 2.5%)	0.62%

Alberta
ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA Facility Name: Spirit River

Approval No.: N/A Site Name: Rover

	YES	NO	N/A
GENERAL			
Has the location remained unchanged from previous audit?		X	
Is site secure?	X		
Are station operating conditions adequate?	X		
DATA ACQUISITION			
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		
SYSTEM COMPONENTS			
Is a glass sampling manifold installed?	X		
Is sampling manifold clean?		X	
Is a trap in place?	X		
Are spare manifold ports capped	X		
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?	X		
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?	X		
Are zero and span systems operational?	X		
WIND EQUIPMENT			
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS:

AUDITOR: J. Scott *DATE:* June 17, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 076A / 079A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Rover Location: Spirit River

Facility/Zone: PASZA Operator: FOCUS

Temp: 22.5C Barometric Press: 704 mmHg

Location

Latitude N 55 48'41.0"

Longitute W 118 51'53.9"

Elevation 592m

Status of Site Documentation On site - good

Manifold Material Glass

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	298 Deg 5.5 kph	NW 5-10 kph
Station Temperature	31 C	28.14 C
Relative Humidity	66.30%	56.54%
Ambient Temperature	14.0 C	16.42C
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 076A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Rover Location: Spirit River

Facility/Zone: PASZA Operator: FOCUS

Temp: 22.5C Barometric Press: 704 mmHg

Monitor

Make/Model: Teco 43C Serial No: 609716239

Inlet flow (sccm): 487 Full Scale Range ppm: 0.5

Last cal. Date: June 12, 2008 Old C.F. 1.0039

Zero/Bkg 7.9

Span Coef 1.137

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5105	0.00	5105	0.0000	0.0000		
5123	38.39	5161	0.3697	0.3582	-3.1%	± 15%
5128	18.19	5146	0.1757	0.1701	-3.2%	± 15%
5106	9.16	5115	0.0890	0.0868	-2.5%	± 15%
				Absolute Average Percent Difference	2.9%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9684	0.85-1.15
b (Intercept as % of full scale)=	0.0398	± 3% F.S.

Remarks:

Form No. F-AA-005
Version No. 1.1

Alberta ENVIRONMENT

TRS ANALYZER AUDIT

File No. 2008 - 077A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Rover Location: Spirit River

Facility/Zone: PASZA Operator: FOCUS

Temp: 22.5C Barometric Press: 704 mmHg

Monitor

Make/Model: Teco 43C Serial No: 609716238

Inlet flow (sccm): 435 Full Scale Range ppm: 0.1

Last cal. Date: June 13, 2008 Old C.F. 0.971

Zero/Bkg 9.0

Span Coef 1.454

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5105	0.00	5105	0.0000	0.0005		
5124	37.20	5161	0.0721	0.0732	0.9%	± 15%
5129	17.25	5146	0.0335	0.0349	2.6%	± 15%
5106	8.77	5115	0.0171	0.0178	0.9%	± 15%
				Absolute Average Percent Difference	1.5%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	1.0092	0.85-1.15
b (Intercept as % of full scale)=	0.6321	± 3% F.S.

Remarks:

Form No. F-AA-008
Version No. 1.1

Alberta ENVIRONMENT

NO-NOx-NO2 Analyzer Audit

File No. 2008 - 078A

Date: June 17, 2008 Performed by: J. Scott

Station: Name: Rover Location: Spirit River Operator: FOCUS
Facility/Zone: PASZA Temp. 22.5 C BP: 704 mmHg

Monitor: Make/Model: Teco 42i Serial No. 701120011
Inlet flow (sccm): 515 / OK Range ppm: 0.5
Last cal. Date: June 12, 2008 Old C.F.'s NO: 0.9837
NOx: 0.9853
NO2: 1.0055

NO Bkg 5.2
NOx Bkg 5.5
NO Coef 0.910
NOx Coef 0.996
NO2 Coef 1.001

Calibration Method: Gas Dilution / GPT
Calibrator: Make/Model: Sabio 2010 AMU# 1749
NO cylinder # CAL 01370 NO conc. ppm 50.0 NOx conc. ppm 50.3

Calibrator Flows			Calc. Conc.		Indicated Concentration		% Difference vs Audit Gas	
Air	Gas	Total	NO (ppm)	NOx (ppm)	NO (ppm)	NOx (ppm)	NO	NOx
4885	0.00	4885	0.0000	0.0000	0.0001	0.0002	Limit ± 15%	
4891	39.38	4931	0.4044	0.4068	0.3972	0.4053	-1.8%	-0.4%
4907	19.89	4927	0.2018	0.2031	0.2004	0.2051	-0.8%	0.9%
4901	9.88	4911	0.1006	0.1012	0.0998	0.1022	-0.9%	0.8%
					Absolute Average Percent Difference		1.2%	0.4%

Linear Regression Analysis: *y=mx+b (where x=calculated concentration, y=indicated concentration)*

	NO	NOx	NO_2	LIMITS
Correlation Coeff.=	1.0000	1.0000	1.0000	≥ 0.995
m (Slope)=	0.9818	0.9955	0.9932	0.85-1.15
b (Intercept as % of full scale)=	0.1773	0.2465	1.2296	± 3% F.S.

O_3 Setting	Set Point	Flow Rate	Indicated Conc. (ppm)			NO Decrease	NO_2 Increase	% Difference vs Audit Gas	
			NO	NOx	NO_2				
0.00V		4931	0.3947	0.4013	0.0075				%Dif Limit
0.60V		4931	0.0893	0.4055	0.3168	0.3054	0.3093	1.28%	± 15%
0.30V		4931	0.2810	0.4071	0.1272	0.1137	0.1197	5.28%	± 15%
0.15V		4931	0.3630	0.4065	0.0447	0.0317	0.0372	17.35%	± 15%
						Absolute Average Percent Difference		7.97%	

Converter Efficiency
Average Converter Efficiency 108.0%

Remarks:

Form No. F-AA-009
Version No. 1.1

Alberta ENVIRONMENT

O_3 ANALYZER AUDIT

File No. 2008 - 079A

Date: June 17, 2008 Performed by: J. Scott

Station

Name: Rover Location: Spirit River

Facility/Zone: PASZA Operator: FOCUS

Temp: 22.5C Barometric Press: 704 mmHg

Monitor

Make/Model: Teco 49C Serial No: 609716240

Inlet flow (sccm): 668 / 667 Full Scale Range ppm: 0.5

Last cal. Date: June 12, 2008 Old C.F. 1.0196

Zero/Bkg 0.0

Span Coeff. 1.138

Calibrator

Calibration Method: Gas Dilution / GPT

Make/Model: Sabio 2010 AMU # : 1749

NO cylinder # : CAL 013770 NO concentration ppm: 50.0

Ozone Setting	Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Conc. (ppm)	% Difference	
	Air	Gas	Total			vs Audit Gas	Limits
0.00V	4931		4931	0.0000	0.0017		
0.75V	4931		4931	0.3767	0.3866	2.2%	± 15%
0.40V	4931		4931	0.1709	0.1742	0.9%	± 15%
0.20V	4931		4931	0.0495	0.0523	2.2%	± 15%
					Absolute Average Percent Difference	1.8%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	1.0212	0.85-1.15
b (Intercept as % of full scale)=	0.2521	± 3% F.S.

Remarks:

Alberta ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA Facility Name: Henry Pirker

Approval No.: N/A Site Name: Henry Pirker

	YES	NO	N/A
GENERAL			
Has the location remained unchanged from previous audit?	X		
Is site secure?	X		
Are station operating conditions adequate?	X		
DATA ACQUISITION			
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		
SYSTEM COMPONENTS			
Is a glass sampling manifold installed?	X		
Is sampling manifold clean?	X		
Is a trap in place?	X		
Are spare manifold ports capped	X		
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?		X	
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?	X		
Are zero and span systems operational?	X		
WIND EQUIPMENT			
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS:

AUDITOR: J. Scott *DATE:* June 18, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 080A / 086A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Location

Latitude N 55 10'37.1"

Longitute W 118 48'26.7"

Elevation 650 m

Status of Site Documentation Good

Manifold Material Glass

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	204 3 Deg 6.6 kph	SSW 5-10 kph
Station Temperature	30 C	24.19C
Relative Humidity	42.80%	37.76%
Ambient Temperature	19.3C	18.88C
Solar Radiation	742.3	Sunny with scattered clouds 1317mst
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-002
Version No. 1.1

Alberta ENVIRONMENT

CO ANALYZER AUDIT

File No. 2008 - 080A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 48C Serial No: AMU 1652

Inlet flow (sccm): 1132 Full Scale Range ppm: 50.0

Last cal. Date: June 9, 2008 Old C.F. 1.0003

Zero/Bkg. 1.725

Span Coeff. 1.017

Calibrator

Calibration Method: Gas Dilution

Make/Model: R&R MFC 201 AMU # : 1691

CO cylinder # : FF 13298 CO concentration ppm: 2520

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
2989	0.00	2989	0.00	0.17		
2978	50.55	3029	42.06	41.66	-1.3%	± 15%
2984	22.63	3007	18.96	18.77	-1.9%	± 15%
2970	9.10	2979	7.70	7.62	-3.2%	± 15%
				Absolute Average Percent Difference	2.2%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9877	0.85-1.15
b (Intercept as % of full scale)=	0.1728	± 3% F.S.

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 081A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 43C Serial No: AMU 1702

Inlet flow (sccm): 495 Full Scale Range ppm: 0.5

Last cal. Date: June 4, 2008 Old C.F. 0.9830

Zero/Bkg 7.5

Span Coef 0.800

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5036	0.00	5036	0.0000	0.0000		
5071	37.52	5109	0.3650	0.3694	1.2%	± 15%
5087	18.03	5105	0.1755	0.1744	-0.6%	± 15%
5056	9.02	5065	0.0885	0.0887	0.2%	± 15%
				Absolute Average Percent Difference	0.3%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	1.0121	0.85-1.15
b (Intercept as % of full scale)=	-0.2068	± 3% F.S.

Remarks:

Form No. F-AA-005
Version No. 1.1

Alberta ENVIRONMENT

TRS ANALYZER AUDIT

File No. 2008 - 082A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 45C Serial No: AMU 1744

Inlet flow (sccm): 459 Full Scale Range ppm: 0.1

Last cal. Date: June 3, 2008 Old C.F. 1.0195

Zero/Bkg 17.9

Span Coef 0.871

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5036	0.00	5036	0.0000	-0.0011		
5072	36.75	5109	0.0719	0.0725	2.3%	± 15%
5088	17.35	5105	0.0340	0.0335	1.8%	± 15%
5056	8.74	5065	0.0173	0.0164	1.4%	± 15%
				Absolute Average Percent Difference	1.8%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	1.0237	0.85-1.15
b (Intercept as % of full scale)=	-1.1994	± 3% F.S.

Remarks:

Form No. F-AA-006
Version No. 1.1

HC ANALYZER AUDIT

File No. 2008 - 083A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 51 - LT Serial No: 79009390

Inlet flow (sccm): N/A Full Scale Range ppm: 25.0

Last cal. Date: June 6, 2008 Old C.F. 1.0268

Calibrator

Calibration Method: Gas Dilution

Make/Model: Sabio 2010 AMU # : 1749

HC cylinder # : SV-10993 HC concentration ppm: 991

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
2937	0.00	2937	0.00	0.05		
2925	59.14	2984	19.64	20.40	3.6%	± 15%
2922	29.55	2952	9.92	10.33	3.6%	± 15%
2937	14.79	2952	4.97	5.18	3.3%	± 15%
				Absolute Average Percent Difference	3.5%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	1.0364	0.85-1.15
b (Intercept as % of full scale)=	0.1783	± 3% F.S.

Remarks:

Form No. F-AA-008
Version No. 1.1

Alberta ENVIRONMENT

NO-NOx-NO2 Analyzer Audit

File No. 2008 - 084A

Date: June 18, 2008 Performed by: J. Scott

Station: Name: Henry Pirker Location: Grande Prairie Operator: FOCUS
Facility/Zone: PASZA Temp. 20.0 C BP: 700 mmHg

Monitor: Make/Model: Teco 42C Serial No. AMU 1658
Inlet flow (sccm): 755 / OK Range ppm: 0.5
Last cal. Date: June 4, 2008 Old C.F.'s NO: 0.9846
NOx: 0.9858
NO2: 1.0075

NO Bkg 8.2
NOx Bkg 8.6
NO Coef 0.719
NOx Coef 0.998
NO2 Coef 1.000

Calibration Method: Gas Dilution / GPT
Calibrator: Make/Model: Sabio 2010 AMU# 1749
NO cylinder # CAL 013770 NO conc. ppm 50.0 NOx conc. ppm 50.3

Calibrator Flows			Calc. Conc.		Indicated Concentration		% Difference vs Audit Gas	
Air	Gas	Total	NO (ppm)	NOx (ppm)	NO (ppm)	NOx (ppm)	NO	NOx
4826	0.00	4826	0.0000	0.0000	0.0005	0.0006	Limit ± 15%	
4851	39.58	4891	0.4046	0.4070	0.4047	0.4106	-0.1%	0.7%
4888	19.75	4908	0.2012	0.2024	0.2034	0.2067	0.8%	1.8%
4895	9.90	4905	0.1009	0.1015	0.1028	0.1047	1.4%	2.5%
					Absolute Average Percent Difference		0.7%	1.7%

Linear Regression Analysis: *y=mx+b (where x=calculated concentration, y=indicated concentration)*

	NO	NOx	NO_2	LIMITS
Correlation Coeff.=	1.0000	1.0000	1.0000	≥ 0.995
m (Slope)=	0.9982	1.0063	1.0008	0.85-1.15
b (Intercept as % of full scale)=	0.2958	0.3567	-0.3312	± 3% F.S.

O_3 Setting	Set Point	Flow Rate	Indicated Conc. (ppm)			NO	NO_2	% Difference vs Audit Gas	
			NO	NOx	NO_2	Decrease	Increase		
0.00 V		4891	0.4017	0.4097	0.0078				%Dif Limit
0.60 V		4891	0.0904	0.4076	0.3177	0.3113	0.3099	-0.4497%	± 15%
0.30 V		4891	0.2802	0.4076	0.1277	0.1215	0.1199	-1.3169%	± 15%
0.15 V		4891	0.3645	0.4077	0.0434	0.0372	0.0356	-4.3011%	± 15%
						Absolute Average Percent Difference		-0.0202	

Converter Efficiency

Average Converter Efficiency 98.0%

Remarks:

Form No. F-AA-009
Version No. 1.1

Alberta ENVIRONMENT

O_3 ANALYZER AUDIT

File No. 2008 -085A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Henry Pirker Location: Grande Prairie

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 49C Serial No: AMU 1709

Inlet flow (sccm): 715 / 732 Full Scale Range ppm: 0.5

Last cal. Date: June 5, 2008 Old C.F. 1.0375

Zero/Bkg -0.7

Span Coeff. 1.023

Calibrator

Calibration Method: Gas Dilution / GPT

Make/Model: Sabio 2010 AMU # : 1749

NO cylinder # : CAL 013770 NO concentration ppm: 50.0

Ozone Setting	Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Conc. (ppm)	% Difference	
	Air	Gas	Total			vs Audit Gas	Limits
0.00 V	4891		4891	0.0000	0.0011		
0.75 V	4891		4891	0.3798	0.3819	0.3%	± 15%
0.40 V	4891		4891	0.1723	0.1728	-0.5%	± 15%
0.20 V	4891		4891	0.0499	0.0533	4.6%	± 15%
				Absolute Average Percent Difference		1.5%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9998	0.85-1.15
b (Intercept as % of full scale)=	0.3518	± 3% F.S.

Remarks:

Form No. F-AA-012
Version No. 1.1

Alberta ENVIRONMENT

TEOM AUDIT

File No. 2008 -086A

Date: June 18, 2008 Performed by: J. Scott

Station

Name:	Henry Pirker	Location:	Grande Prairie
Facility/Zone:	PASZA	Operator:	FOCUS
Temp.	19.5 C	Barometric Press.	700 mHg

Audit Transfer Standard

Make/Model:	BIOS DC 2	Cell s/n:	106010
Serial Number:	105395		

Sampler Set-up and current readings

Make/Model	R&P 1400a	F-Main Set Pt (l/min)	3.00
Unit #	P.M. 2.5	F-Aux Set Pt (l/min)	13.67
Control unit s/n	140AB258750510	Filter Load (%)	20%
Transducer s/n	140AB258750510	K_O Factor	13020
		Temp (°C)	17.3
		Press (ATM)	0.926

Conversion from mm Hg or " Hg to ATM (Atmospheres)

ATM = (mm Hg) X (1.316×10^{-3}) or ATM = ("Hg) X (3.34207×10^{-2})

Note: Tolerances are noted as **BOLD** in Brackets

Zero flow

Pump Off		Pump On (Time to reach set points)	
F-Main (l/min)	0.10	(45-60 Sec)	26
F-Aux (l/min)	0.27	(45-60 Sec)	49

Temperature/Pressure

Measured Temp (± 1 °C)	17.64	Δ°C	0.34
Measured Press (± 1.5% ATM)	0.921	Δ% ATM	0.50%

Flow Audit

		Δ% from Set-point	
Indicated Main/Aux Flow (l/min)	3.00 / 13.65	(± 2%)	0.0% / 0.1%
Total Flow = Main + Aux (l/min)	16.65	(± 2%)	0.10%
Measured Total Flow (l/min)	16.20	(± 1.0 l/min.	0.47 lpm / 2.9%
Measured Main Flow (l/min)	2.95	(± 0.2 l/min.	0.05 lpm / 1.7%

Leak Check

		Actual leakage = Pump On – Pump Off
Main (< 0.15 l/min)	0.12	0.02
Aux (< 0.15 l/min)	0.30	0.03

K_O Factor

Heads are dirty.

Measured	13024
K_O % Difference (± 2.5%)	0.03%

Alberta ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA Facility Name: Evergreen Park

Approval No.: N/A Site Name: Evergreen

GENERAL

	YES	NO	N/A
Has the location remained unchanged from previous audit?	X		
Is site secure?	X		
Are station operating conditions adequate?	X		

DATA ACQUISITION

Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		

SYSTEM COMPONENTS

Is a glass sampling manifold installed?	X		
Is sampling manifold clean?		X	
Is a trap in place?	X		
Are spare manifold ports capped		X	
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?		X	
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?		X	
Are zero and span systems operational?	X		

WIND EQUIPMENT

Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS: Manifold cleaned during audit.

AUDITOR: J. Scott *DATE:* June 18, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 087A / 089A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Evergreen Location: Evergreen Park

Facility/Zone: PASZA Operator: FOCUS

Temp: 23.0 C Barometric Press: 700 mmHg

Location

Latitude N 55 07'02.9"

Longitute W 118 45'54.1"

Elevation 650 m

Status of Site Documentation Good - not on site

Manifold Material Glass

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	313 Deg 6.5 kph	NNW 5 - 10kph
Station Temperature	23.0 C	22.06 C
Relative Humidity	N/A	N/A
Ambient Temperature	18.73 C	18.95 C
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 087A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Evergreen Location: Evergreen Park

Facility/Zone: PASZA Operator: FOCUS

Temp: 23.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 43i Serial No: 701120008

Inlet flow (sccm): 446 Full Scale Range ppm: 1.0

Last cal. Date: May 9, 2008 Old C.F. 0.9862

Zero/Bkg 9.1

Span Coef 0.945

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5089	0.00	5089	0.0000	0.0011		
2996	44.21	3040	0.7228	0.7127	-1.5%	± 15%
2997	22.60	3020	0.3719	0.3668	-1.7%	± 15%
2971	8.96	2980	0.1494	0.1487	-1.2%	± 15%
				Absolute Average Percent Difference	1.5%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9842	0.85-1.15
b (Intercept as % of full scale)=	0.1212	± 3% F.S.

Remarks:

Form No. F-AA-005
Version No. 1.1

Alberta ENVIRONMENT

TRS ANALYZER AUDIT

File No. 2008 - 088A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: Evergreen Location: Evergreen Park

Facility/Zone: PASZA Operator: FOCUS

Temp: 23.0 C Barometric Press: 700 mmHg

Monitor

Make/Model: Teco 43C Serial No: 426610005

Inlet flow (sccm): 464 Full Scale Range ppm: 0.1

Last cal. Date: May 9, 2008 Old C.F. 1.0187

Zero/Bkg 15.1

Span Coef 0.616

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5089	0.00	5089	0.0000	-0.0005		
3018	21.69	3040	0.0713	0.0712	0.5%	± 15%
3011	8.65	3020	0.0286	0.0291	3.3%	± 15%
2975	4.52	2980	0.0152	0.0149	1.5%	± 15%
				Absolute Average Percent Difference	1.8%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9999	≥ 0.995
m (Slope)=	1.0041	0.85-1.15
b (Intercept as % of full scale)=	-0.2334	± 3% F.S.

Remarks:

Form No. F-AA-012
Version No. 1.1

Alberta ENVIRONMENT

TEOM AUDIT

File No. 2008 - 089A

Date: June 18, 2008 Performed by: J. Scott

Station

Name:	Evergreen	Location:	Evergreen Park
Facility/Zone:	PASZA	Operator:	FOCUS
Temp.	23.0 C	Barometric Press.	700 mmHg

Audit Transfer Standard

Make/Model:	BIOS DC 2	Cell s/n:	1060101
Serial Number:	105395		

Sampler Set-up and current readings

Make/Model	R&P 1400a	F-Main Set Pt (l/min)	3.00
Unit #	P.M. 2.5	F-Aux Set Pt (l/min)	13.67
Control unit s/n	140AB215519705	Filter Load (%)	36%
Transducer s/n	140AB215549705	K_O Factor	10124
		Temp (°C)	19.1
		Press (ATM)	0.931

Conversion from mm Hg or " Hg to ATM (Atmospheres)

ATM = (mm Hg) X (1.316×10^{-3}) or ATM = ("Hg) X (3.34207×10^{-2})

Note: Tolerances are noted as **BOLD** in Brackets

Zero flow

Pump Off		Pump On (Time to reach set points)	
F-Main (l/min)	0.01	(45-60 Sec)	30
F-Aux (l/min)	-0.01	(45-60 Sec)	45

Temperature/Pressure

Measured Temp (± 1 °C)	18.93	Δ°C	0.17
Measured Press (± 1.5% ATM)	0.921	Δ% ATM	1.10%

Flow Audit

		Δ% from Set-point	
Indicated Main/Aux Flow (l/min)	3.00 / 13.67	(± 2%)	0.0% / 0.0%
Total Flow = Main + Aux (l/min)	16.67	(± 2%)	0.00%
Measured Total Flow (l/min)	16.36	(± 1.0 l/min.	0.31 lpm / 1.9%
Measured Main Flow (l/min)	2.92	(± 0.2 l/min.	0.08 lpm / 2.7%

Leak Check

		Actual leakage = Pump On – Pump Off
Main (< 0.15 l/min)	0.02	0.01
Aux (< 0.15 l/min)	0.09	0.10

K_O Factor

Measured	10278	Heads are dirty. Bypass filter dirty
K_O % Difference (± 2.5%)	1.52%	

Alberta ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA Facility Name: Girouxville

Approval No.: N/A Site Name: PAML

GENERAL

	YES	NO	N/A
Has the location remained unchanged from previous audit?			X
Is site secure?	X		
Are station operating conditions adequate?	X		

DATA ACQUISITION

	YES	NO	N/A
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		

SYSTEM COMPONENTS

	YES	NO	N/A
Is a glass sampling manifold installed?	X		
Is sampling manifold clean?		X	
Is a trap in place?	X		
Are spare manifold ports capped	X		
Is manifold mounted at a slight downward angle?	X		
Are manifold ports situated to prevent water entering monitors?	X		
Is manifold pump properly installed and operative?	X		
Do sample lines extend at least 3/4"into manifold?	X		
Are monitor sampling lines connected to manifold?	X		
Are sampling lines clean?		X	
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?	X		
Are zero and span systems operational?	X		

WIND EQUIPMENT

	YES	NO	N/A
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS:

AUDITOR: J. Scott *DATE:* June 19, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 090A / 094A

Date: June 19, 2008 Performed by: J. Scott

Station

Name: PAML Location: Girouxville

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.0 C Barometric Press: 710 mmHg

Location

Latitude N 55 41'32.7"

Longitute W 117 26'56.7"

Elevation 651 m

Status of Site Documentation Good

Manifold Material Glass

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	229 Deg 18 kph	10-20 WSW
Station Temperature	27 C	26.28 C
Relative Humidity	N/A	N/A
Ambient Temperature	N/A	N/A
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 090A

Date: June 19, 2008 Performed by: J. Scott

Station

Name: PAML Location: Girouxville

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.0 C Barometric Press: 710 mmHg

Monitor

Make/Model: 83 Serial No: AMU 1431

Inlet flow (sccm): 675 Full Scale Range ppm: 1.0

Last cal. Date: June 11, 2008 Old C.F. 0.9882

Zero/Bkg 0.83

Span Coef 4.71

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5105	0.00	5105	0.0000	0.0008		
5132	38.77	5171	0.3726	0.3648	-2.3%	± 15%
5166	18.21	5184	0.1746	0.1738	-0.9%	± 15%
5131	9.20	5140	0.0890	0.0903	0.6%	± 15%
				Absolute Average Percent Difference	0.9%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9749	0.85-1.15
b (Intercept as % of full scale)=	0.2367	± 3% F.S.

Remarks:

Form No. F-AA-004
Version No. 1.1

Alberta ENVIRONMENT

H_2S ANALYZER AUDIT

File No. 2008 - 091A

Date: June 19, 2008 Performed by: J. Scott

Station

Name: PAML Location: Girouxville

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.0 C Barometric Press: 710 mmHg

Monitor

Make/Model: Teco 45 A Serial No: AMU 1265

Inlet flow (sccm): 550 Full Scale Range ppm: 0.1

Last cal. Date: June 11, 2008 Old C.F. 1.0464

Zero/Bkg 3.59

Span Coef 0.56

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5105	0.00	5105	0.0000	-0.0005		
5133	37.56	5171	0.0726	0.0692	-4.0%	± 15%
5167	17.40	5184	0.0336	0.0323	-2.3%	± 15%
5131	8.85	5140	0.0172	0.0166	-0.7%	± 15%
				Absolute Average Percent Difference	2.3%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9999	≥ 0.995
m (Slope)=	0.9574	0.85-1.15
b (Intercept as % of full scale)=	-0.1405	± 3% F.S.

Remarks:

Form No. F-AA-005
Version No. 1.1

Alberta ENVIRONMENT

TRS ANALYZER AUDIT

File No. 2008 - 092A

Date: June 19, 2008 Performed by: J. Scott

Station

Name: PAML Location: Girouxville

Facility/Zone: PASZA Operator: FOCUS

Temp: 24.0 C Barometric Press: 710 mmHg

Monitor

Make/Model: Teco 45A Serial No: AMU 1264

Inlet flow (sccm): 675 Full Scale Range ppm: 0.1

Last cal. Date: June 11, 2008 Old C.F. 1.0507

Zero/Bkg 3.06

Span Coef 2.30

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5105	0.00	5105	0.0000	-0.0001		
5133	37.56	5171	0.0726	0.0688	-5.1%	± 15%
5167	17.40	5184	0.0336	0.0313	-6.4%	± 15%
5131	8.85	5140	0.0172	0.0151	-11.7%	± 15%
				Absolute Average Percent Difference	7.8%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9999	≥ 0.995
m (Slope)=	0.9535	0.85-1.15
b (Intercept as % of full scale)=	-0.6448	± 3% F.S.

Remarks:

Form No. F-AA-008
Version No. 1.1

Alberta ENVIRONMENT

NO-NOx-NO2 Analyzer Audit

File No. 2008 - 093A

Date: June 19, 2008 Performed by: J. Scott

Station: Name: PAML Location: Girouxville Operator: FOCUS
Facility/Zone: PASZA Temp. 24.0 C BP: 710 mmHg

Monitor: Make/Model: Teco 42 C Serial No. AMU 1437
Inlet flow (sccm): 17.2 VAC Range ppm: 2.0
Last cal. Date: June 10, 2008 Old C.F.'s NO:
NOx: 1.025
NO2:

NO Bkg 1.5
NOx Bkg 9.2
NO Coef 1.063
NOx Coef 1.385
NO2 Coef

Calibration Method: Gas Dilution / GPT
Calibrator: Make/Model: Sabio 2010 AMU# 1749
NO cylinder # CAL 013770 NO conc. ppm 50.0 NOx conc. ppm 50.3

Calibrator Flows			Calc. Conc.		Indicated Concentration		% Difference vs Audit Gas	
Air	Gas	Total	NO (ppm)	NOx (ppm)	NO (ppm)	NOx (ppm)	NO	NOx
4886	0.00	4886	0.0000	0.0000	N/A	-0.0007	Limit ± 15%	
4907	98.12	5005	0.9802	0.9861	N/A	0.9512	N/A	-3.5%
4922	49.55	4972	0.4983	0.5013	N/A	0.4605	N/A	-8.0%
4921	24.80	4946	0.2507	0.2522	N/A	0.2207	N/A	-12.2%
					Absolute Average Percent Difference		N/A	7.9%

Linear Regression Analysis: *y=mx+b (where x=calculated concentration, y=indicated concentration)*

	NO	NOx	NO_2	LIMITS
Correlation Coeff.=	N/A	0.9995	#DIV/0!	≥ 0.995
m (Slope)=	N/A	0.9701	#DIV/0!	0.85-1.15
b (Intercept as % of full scale)=	N/A	-0.6979	#DIV/0!	± 3% F.S.

O_3 Setting	Set Point	Flow Rate	Indicated Conc. (ppm) NO	NOx	NO_2	NO Decrease	NO_2 Increase	% Difference vs Audit Gas	
		5005							%Dif Limit
		5005				0.0000	0.0000	#DIV/0!	± 15%
		5005				0.0000	0.0000	#DIV/0!	± 15%
		5005				0.0000	0.0000	#DIV/0!	± 15%
					Absolute Average Percent Difference			#DIV/0!	

Converter Efficiency
Avcrage Converter Efficiency #DIV/0!

Remarks: NOx portion of the NH3 analyzer.

Form No. F-AA-010
Version No. 1.1

Alberta ENVIRONMENT

NH_3 ANALYZER AUDIT

File No. 2008 - 094A

Date: June 18, 2008 Performed by: J. Scott

Station

Name: PAML Location: Girouxville

Facility/Zone: PASZA Operator: FOCUS

Temp. 24.0 C Barometric Press. 710 mmHg

Monitor

Make/Model: Teco 42 Serial No: AMU 1437

Inlet flow (sccm): 17.2 VAC Full Scale Range ppm: 2.0

Last cal. Date: June 10, 2008 Old C.F. 0.9911

Zero/Bkg

Span Coef

Calibrator

Calibration Method: Dilution

Make/Model: Sabio 2010 AMU # : 1749

Perm Tube /Cylinder # : CLM 003257 Perm rate /Cyl. conc: 303.3

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
4886	0.00	4886	0.0000	-0.0034		
4921	24.72	4946	1.5159	1.5910	5.2%	± 15%
4898	14.92	4913	0.9211	0.9400	2.4%	± 15%
4982	7.50	4989	0.4560	0.4520	-0.1%	± 15%
				Absolute Average Percent Difference	2.5%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9998	≥ 0.995
m (Slope)=	1.0529	0.85-1.15
b (Intercept as % of full scale)=	-0.8306	± 3% F.S.

Remarks:

Alberta ENVIRONMENT

Industrial Performance Audit
Station Summary

Company: PASZA Facility Name: Valleyview

Approval No.: N/A Site Name: Valleyview

	YES	NO	N/A
GENERAL			
Has the location remained unchanged from previous audit?	X		
Is site secure?	X		
Are station operating conditions adequate?	X		
DATA ACQUISITION			
Are strip charts in use?		X	
Is a telemetry system for data acquisition in use?	X		
SYSTEM COMPONENTS			
Is a glass sampling manifold installed?		X	
Is sampling manifold clean?			X
Is a trap in place?			X
Are spare manifold ports capped			X
Is manifold mounted at a slight downward angle?			X
Are manifold ports situated to prevent water entering monitors?			X
Is manifold pump properly installed and operative?			X
Do sample lines extend at least 3/4"into manifold?			X
Are monitor sampling lines connected to manifold?			X
Are sampling lines clean?	X		
Are monitors properly mounted and secure?	X		
Are monitors properly exhausted from room or scrubbed?		X	
Are zero and span systems operational?	X		
WIND EQUIPMENT			
Is wind equipment properly oriented?	X		
Does wind equipment appear to be functioning properly?	X		

COMMENTS:

AUDITOR: J. Scott *DATE:* June 20, 2008

Form No. F-AA-001
Version No. 1.1

Alberta ENVIRONMENT

STATION AUDIT

File No. 2008 - 095A / 096A

Date: June 20, 2008 Performed by: J. Scott

Station

Name: Valleyview Location: Valleyview

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.5 C Barometric Press: 704 mmHg

Location

Latitude N 54 56'24.5

Longitute W 117 12'55.5"

Elevation 639 m

Status of Site Documentation Not on site

Manifold Material Teflon line

Manifold Condition Good

Meterological

	Observed	Audit Value
Wind Speed Direction	37 Deg 3.1 kph	NE 0-5 kph
Station Temperature	25 C	23.21 C
Relative Humidity	40.18%	30.21%
Ambient Temperature	18.5 C	23.38 C
Solar Radiation	N/A	N/A
Precipitation	N/A	N/A

Remarks:

Ambient and RH taken from the gound not at the sensor.

Form No. F-AA-003
Version No. 1.1

Alberta ENVIRONMENT

SO_2 ANALYZER AUDIT

File No. 2008 - 095A

Date: June 20, 2008 Performed by: J. Scott

Station

Name: Valleyview Location: Valleyview

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.5 C Barometric Press: 704 mmHg

Monitor

Make/Model: Teco 45 C Serial No: 45C-57531-313

Inlet flow (sccm): 473 Full Scale Range ppm: 1.0

Last cal. Date: June 2, 2008 Old C.F. 0.9778

Zero/Bkg 27.8

Span Coef 0.740

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CLM 008622 Cyl. Conc PPM: 49.7

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference	
Air	Gas	Total			vs Audit Gas	Limits
5029	0.00	5029	0.0000	-0.0003		
2960	43.81	3004	0.7248	0.7178	-0.9%	± 15%
2986	22.49	3008	0.3716	0.3717	0.1%	± 15%
2971	8.96	2980	0.1494	0.1497	0.4%	± 15%
			Absolute Average Percent Difference		0.1%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	1.0000	≥ 0.995
m (Slope)=	0.9904	0.85-1.15
b (Intercept as % of full scale)=	0.1239	± 3% F.S.

Remarks:

Form No. F-AA-004
Version No. 1.1

Alberta ENVIRONMENT

H_2S ANALYZER AUDIT

File No. 2008 - 096A

Date: June 20, 2008 Performed by: J. Scott

Station

Name: Valleyview Location: Valleyview

Facility/Zone: PASZA Operator: FOCUS

Temp: 20.5 C Barometric Press: 704 mmHg

Monitor

Make/Model: Teco 43i Serial No: 701120010

Inlet flow (sccm): 430 Full Scale Range ppm: 0.1

Last cal. Date: June 2, 2008 Old C.F. 1.0122

Zero/Bkg 4.7

Span Coef 1.026

Calibrator

Calibration Method: GAS DILUTION

Make/Model: R&R MFC 201 AMU # : 1691

Cylinder # : CAL 4119 Cyl. Conc PPM: 10.0

Calibrator Flow (sccm)			Calculated Conc. (ppm)	Indicated Concentration (ppm)	% Difference vs Audit Gas	% Difference Limits
Air	Gas	Total				
5029	0.00	5029	0.0000	0.0000		
2983	21.32	3004	0.0710	0.0691	-2.6%	± 15%
2999	8.59	3008	0.0286	0.0285	-0.2%	± 15%
2976	4.49	2980	0.0151	0.0147	-2.4%	± 15%
				Absolute Average Percent Difference	1.8%	

Linear Regression Analysis:

y=mx+b (where x=calculated concentration, y=indicated concentration)

		LIMITS
Correlation Coeff.=	0.9999	≥ 0.995
m (Slope)=	0.9735	0.85-1.15
b (Intercept as % of full scale)=	0.1865	± 3% F.S.

Remarks: