AP-42 Test Data - Submission Checklist

FACILITY INFORMATION

Landfill Name:
Keller Canyon Landfill

Location:
901 Bailey Road, Pittsburg, CA

Owner:	LFG Operator:	
Contact Person: Michael O'Connor	Address: 3843 Brickway Blvd, Ste, 208, Santa Rosa, CA	
Email: moconnor@scsengineers.com	Phone: 707-546-9461	Fax:
Year Opened:	Year Gas Collection Started:	

Gas Collection Control Device Description:
LFG Flare

Co disposal: ☐ Yes ☐ No ☒ Unknown

ADMINISTRATIVE INFORMATION
Complete test reports must be submitted (see footnote[1]))

Sampling Date:	Analysis Date:
10/3/06	10/5/06

Description of sampling site:
LFG Flare

Description of sampling method:
Continuous emissions monitoring

QA/QC data included: ☒ Yes ☐ No

Chain of Custody included: ☒ Yes ☐ No

DATA SUMMARY

Type of Data:
- ☐ Header Draw
- ☐ Punch Probe (this data does not presently meet EPA requirements)
- ☒ Stack Test
- ☐ Other:

Header Draw data:

NMOC data:
- ☐ Yes
- ☐ No

NMOC (ppm as hexane):

Raw LFG Constituent data:
- ☐ Yes
- ☐ No

Sulfur Compound data:
- ☐ Yes
- ☐ No

NMOC Test Method:	LFG Test Methods:

Stack Testing data:
Device Tested (Flare, IC Engine, Turbine, Boiler):
Concentration (ppm)

NOx: 10.5 @ 15% O2	SOx:
CO: <1.2@15% O2	Dioxin/furans: NS
PM: NS	Aldehydes/metals: NS

Was sampling conducted after the control device? (Y/N): Y

Test Methods:BAAQMD ST-6, 13A, and ASTM D-5504

[1] According to USEPA, complete test reports should contain, at a minimum: Landfill name; physical description of the landfill, gas collection system and control device; description of sampling site and methods used to take samples; a sample matrix showing date of test and methods used for analysis; data results tables and discussion of results, identifying any data qualifiers or unusual circumstances affecting results; and QA/QC items such as field notes, laboratory notes, and a test QAPP or documentation of field and laboratory QA/QC procedures, including equipment calibrations and blank or spiked sample results.

Blue Sky Environmental, LLC
624 San Gabriel Avenue
Albany, CA 94706
Ph/fax (510) 525 1261
Cell (510) 508 3469
blueskyenvironmental@yahoo.com

November 3rd, 2006

Browning-Ferris Industries of CA / Allied Waste
Keller Canyon Landfill
901 Bailey Road
Pittsburg, CA 94565

Attn: Lochlin Caffey

Subject: Source test emission report for one Calledus flare (A-1) located at Keller Canyon Landfill (Allied Waste Industries) 901 Bailey Road, Pittsburg, BAAQMD Plant #4618. Re; Permit Condition 17309 & Reg 8 Rule 34.

Test Date(s): October 3rd, 2006.

Sampling Location: The flare is equipped with four 4" flange ports, accessible by 40' boom lift. Sampling was conducted using a stainless steel probe that was placed near the center of the flare using the available port.

Sampling Personnel: Sampling was performed by Guy Worthington of Blue Sky Environmental, LLC.

Observing Personnel: The BAAQMD were notified but no representatives from the BAAQMD present during the test program. Lochlin Caffey of BFI was onsite for part of the time to coordinate testing.

Process Description: The flare is used to continuously burn landfill gas generated in the active landfill. The flare is maintained at 1630°F, which is above the permitted minimum of 1450°F. The landfill gas fuel flow and flare temperature are continuously recorded.

Test Program: The test program objective was to comply with the prevailing Permit requirements for NOx, CO, THC Destruction and Removal Efficiency (DRE), Calderon and Sulfur compounds and Regulation 8 Rule 34 limits that came into effect on July 1, 2002.

Three 30-minute compliance tests were performed on the flare. The continuous emission monitoring system was checked for leaks before testing, and was calibrated before and after each run with EPA protocol calibration gas standards.

One landfill gas sample was collected and analyzed to determine the Calderon Compounds (TO-15 analysis), $\%CH_4$, BTU and F-Factors. A separate sample was collected and analyzed for sulfur species by ASTM D-5504. The LFG flowrate, BTU and F-Factor was used along with the Flare exhaust $\%O_2$ to determine the emission flowrate using EPA Method 19.

Readings of the flare temperature and LFG flowrate were made during each test run.

Sampling and Analysis Methods: The following BAAQMD sampling and analytical methods were used:

BAAQMD ST-5	CO_2
BAAQMD ST-6	CO
BAAQMD ST-7	NMOC
BAAQMD ST-13A	NOx
BAAQMD ST-14	O_2
EPA 19	Flare exhaust flowrate by calculation, DSCFM
ASTM 1945/3588	Gas analysis for BTU and F-Factor
Fuel Analysis for VOC's	TO-15/Calderon
Fuel Analysis for Sulfurs	ASTM D-5504

Stack gases were sampled continuously via a stainless steel probe, $^3/_8$ inch Teflon sampling line, glass impinger moisture condensers to dry the sample, a particulate filter, and a diaphragm pump. The sample is pumped under pressure (5 PSI) to a manifold where it is distributed to individual analyzers, controlled by rotameters. Calibration gas was introduced to the sample manifold at the same flow rate as the sample, for internal calibrations performed with every run

Instrumentation: The following continuous emissions analyzers were used:

Instrument	Analyte	Principle
TECO 42C	NO_x	Chemiluminescence
TECO 48C	CO	GFC/IR
Ratfisch, RS-55	THC	FID
Horiba PIR 2000	CO_2	IR
Rosemount 755R	O_2	Paramagnetic

Test Results: The emission results are presented in Table 1 on the following page. Toxic Air Contaminants found in the landfill gas are presented in Table 2. Concentrations and emissions from the flare were below the permit limits.

	Flare (A-1) Avg	Permit Limit
NOx ppm @ 15% O_2	**10.4**	**14**
CO ppm @ 15% O_2	**<1.2**	**114**
NMOC ppm as CH_4 @ 3% O_2	**<4.4**	**30**
THC (TOC) Destruction or Removal Efficiency (DRE)	**99.996%**	**98%**
TRS in Landfill Gas	**<67**	**300**

The appendices are organized as follows:

Calculations
: All the calculations performed on the continuous emissions monitoring (CEM) data and flow rate calculations are presented in this section.

Laboratory Reports
: All laboratory reports and chain of custody.

Field Data Sheets
: All the CEMS data, any transcribed data from the strip charts.

Strip Chart Records
: The strip chart records of all the CEM data.

Calibration Gas Certifications
: Certifications for the calibration gas standards.

Stack Diagram
: Sketch or photograph of the stack.

Sample System Diagram
: Schematic of the sampling system configuration

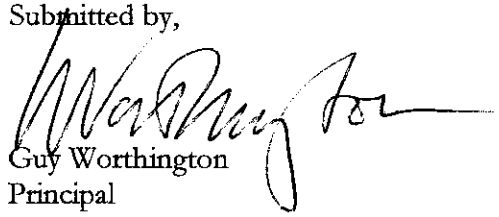
Permit to Operate / ATC
: Permit to Operate / Authority to Construct

Source Test Plan
: Sampling protocols submitted to the AQMD/APCD prior to testing

Comments: The details and results contained within this report are to the best of Blue Sky Environmental, LLC's knowledge an authentic and accurate representation of the test program. If this report is submitted for Compliance purposes, it should be only reproduced in its entirety.

If there are any questions concerning this report, please contact Guy Worthington at 510 525 1261.

Submitted by,



Guy Worthington
Principal

TABLE #1

BFI-Keller Canyon
Flare
1630°F

RUN	3	4	5	AVERAGE	LIMITS
Test Date	10/03/06	10/03/06	10/03/06		
Test Time	1013-1043	1055-1125	1137-1207		
Standard Temp., °F	70	70	70		
Flare Temp., °F	1,630	1,630	1,630	1,630	
Fuel Flow Rate, DSCFM	800	800	800	800	
Exhaust Flow Rate, DSCFM (Method 19)	10,488	10,538	10,786	10,604	
Oxygen, O_2, %	12.7	12.8	13.0	12.8	
Carbon Dioxide, CO_2, %	6.6	6.8	6.7	6.7	
NOx, ppm	14.0	14.5	14.5	14.3	
NOx, ppm @ 15% O_2	10.1	10.5	10.8	**10.5**	**14**
NOx, lbs/hr	1.05	1.09	1.12	1.09	
NOx, lbs/day	25.16	26.17	26.86	26.06	
CO, ppm	<1.8	<1.4	<1.6	<1.6	
CO, ppm @ 15% O_2	<1.3	<1.0	<1.2	**<1.2**	**114**
CO, lbs/hr	<0.1	<0.1	<0.1	<0.1	
CO, lbs/day	<1.9	<1.6	<1.7	<1.7	
THC, ppm	<2.0	<2.0	<0.8	<1.6	
THC, lbs/hr as CH_4	<0.1	<0.1	<0.0	<0.0	
CH_4, ppm	<2.0	<2.0	<0.8	<1.6	
NMHC, ppm as CH_4	<2.0	<2.0	<2.0	<2.0	
NMHC, lbs/hr as CH_4	<0.1	<0.1	<0.1	<0.1	
NMHC, ppm @ 3% O_2 as CH_4	<4.4	<4.4	<4.5	**<4.4**	**30**
INLET CH_4, ppm	547,000	547,000	547,000	497,000	
INLET NMHC ppm as CH_4	2,744	2,744	2,744	2,744	
INLET NMHC lbs/hr as CH_4	5.4	5.4	5.4	5.4	
NMHC Removal Efficiency	>99.0%	>99.0%	>99.0%	**>99.0%**	**98**
INLET THC (TOC) ppm as CH_4	549,744	549,744	549,744	497,000	
INLET THC (TOC) lbs/hr as CH_4	1,092	1,092	1,092	1,092	
THC (TOC) Removal Efficiency	99.995%	99.995%	99.998%	**99.996%**	**98**

WHERE,

ppm = Parts Per Million Concentration
Lbs/hr = Pound Per Hour Emission Rate
Tstd. = Standard Temp. (°R = °F+460)
MW = Molecular Weight
DSCFM = Dry Standard Cubic Feet Per Minute
NOx = Oxides of Nitrogen as NO_2 (MW = 46)
CO = Carbon Monoxide (MW = 28)
TOC = THC = Total Organic Carbon as Methane, NMHC+CH_4 (MW = 16)
THC = Total Hydrocarbons as Methane (MW = 16)
NMHC = Total Non-Methane Hydrocarbons as Methane (MW = 16)

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)
PPM @ 3% O_2 = ppm * 17.9 / (20.9 - %O_2)
Lbs/hr = ppm x 8.223 E-05 x DSCFM x MW / Tstd. °R
Lbs/day = Lbs/hr * 24
THC (TOC) Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr
NMHC Removal Efficiency = (inlet lbs/hr- outlet lbs/hr) / inlet lbs/hr

TABLE # 2

BFI-Keller Canyon

Toxic Air Contaminants

RUN	synonyms		LandfillGas			TAC limits	
Test Date			10/03/06				
Standard Temp., °F			70				
Fuel Flow Rate, DSCFM			800				
Acrylonitrile		ppb	<1			500	
Benzene		ppb	<1			10,000	
Carbon Tetrachloride		ppb	<1			100	
Chloroform		ppb	<1			100	
Ethylene Dibromide	1,2 Dibromoethane	ppb	<1			100	
Ethylene Dichloride	1,2-Dichloroethane	ppb	<1			400	
Methylene Chloride		ppb	<1			27,600	
Perchloroethylene	Tetrachloroethylene	ppb	<1			3,600	
Trichloroethylene		ppb	<1			2,300	
Vinyl Chloride		ppb	<1			1,600	
Test Date			10/17/06				
Carbon Disulfide		ppm	<0.05				
Carbonyl Sulfide		ppm	<0.05				
Dimethyl Sulfide		ppm	<0.05				
Ethyl Sulfide		ppm	<0.05				
Ethyl Mercaptan		ppm	<0.05				
Hydrogen Sulfide		ppm	55.9				
Methyl Mercaptan		ppm	<0.05				
TRS (SUM of the above)		ppm	55.9			300	
TRS (H2S * 1.2)		ppm	67.1			300	

Additional compounds are listed in the Laboratory Analysis Report found in the appendices

APPENDICES

Calculations

Laboratory Reports

Field Data Sheets

Strip Chart Records

QC Calibration Gas Certifications

Stack Diagram

Sample System Diagram

Permit/Authority to Construct

Source Test Plan

Calculations

CEM BIAS CORRECTION SUMMARY

Facility:	BFI-Keller Canyon	Barometric:	
Unit:	Flare	Leak Check:	OK
Condition:	1630°F	Strat. Check:	
Date:	10-03-06	Personnel:	gw

	O_2	CO_2	NOx	CO	THC	CH4			
Analyzer	755R	PIR 2000	951	48C	RS-55	RS-55			
Range	25	15	50	50	100	100			r
Units, ppm or %	%	%	ppm	ppm	ppm	ppm			
Span Gas Value	20.46	12.65	46.0	45.2	76.5	76.5			Ccal
Run 1	0.00	0.00	0.0	0.0	0.0	0.0			zero (initial), Cib
Test Time:	20.50	12.65	45.8	45.3	77.0	77.0			cal (initial), Cib
1013-1043	12.75	6.62	13.9	<2.0	<2.0	<2.0			TEST AVG, Cavg
	0.00	0.00	-0.3	0.5	0.0	0.0			zero (final), Cfb
	20.50	12.65	46.0	44.6	76.5	76.5			cal (final), Cfb
	0%	*0%*	*-1%*	*1%*	*0%*	*0%*			% zero drift
	0%	*0%*	*1%*	*-1%*	*-1%*	*-1%*			% cal drift
	12.73	**6.62**	**14.0**	**<1.8**	**<2.0**	**<2.0**			**Cgas**
Run 2	0.00	0.00	-0.3	0.5	0.0	0.0			zero (initial), Cib
Test Time:	20.50	12.65	46.0	44.6	76.5	76.5			cal (initial), Cib
1055-1125	12.75	6.75	14.3	<2.0	<2.0	<2.0			TEST AVG, Cavg
	0.13	0.00	-0.3	0.8	0.0	0.0			zero (final), Cfb
	20.30	12.65	45.5	44.3	74.0	74.0			cal (final), Cfb
	1%	*0%*	*0%*	*1%*	*0%*	*0%*			% zero drift
	-1%	*0%*	*-1%*	*-1%*	*-3%*	*-3%*			% cal drift
	12.76	**6.75**	**14.5**	**<1.4**	**<2.0**	**<2.0**			**Cgas**
Run 3	0.13	0.00	-0.3	0.8	0.0	0.0			zero (initial), Cib
Test Time:	20.30	12.65	45.5	44.3	74.0	74.0			cal (initial), Cib
1137-1207	12.88	6.68	14.3	<2.0	<2.0	<2.0			TEST AVG, Cavg
	0.13	0.00	-0.3	0.3	2.5	2.5			zero (final), Cfb
	20.25	12.52	45.8	44.0	71.0	71.0			cal (final), Cfb
	0%	*0%*	*0%*	*-1%*	*3%*	*3%*			% zero drift
	0%	*-1%*	*1%*	*-1%*	*-3%*	*-3%*			% cal drift
	12.95	**6.71**	**14.5**	**<1.6**	**<0.8**	**<0.8**			**Cgas**

Pollutant Concentration (Cgas) = (Cavg - Co) x Ccal / (Cbcal - Co)

Zero and Calibration Drift = 100 x (Cfb - Cib) / r

Co = (Cib + Cfb) / 2 for zero gas

Cbcal = (Cib + Cfb) / 2 for cal gas

STACK GAS FLOW RATE DETERMINATION -- Method 19

Facility: BFI-Keller Canyon
Unit: Flare
Condition: 1630°F
Date: 10/03/06

		Time:	1013-1043	1055-1125	1137-1207	
		Run:	1	2	3	
# cubic feet/rev	scfm		800	800	800	ft^3
# of seconds/rev			60	60	60	seconds
Gas Line Pressure (PSIG)			0.0	0.0	0.0	PSI Gauge
Gas Line Pressure (PSIA)			14.7	14.7	14.7	PSI Absolute
Gross Calorific Value @ 60°F			553.9	553.9	553.9	Btu / ft^3
Stack Oxygen			12.2	12.8	13.0	%
Gas Fd-Factor @ 60°F			9,257	9,257	9,257	DSCF/MMBtu
Gas Temperature (°F)			70	70	70	°F
Standard Temperature (°F) tstd			70	70	70	°F
Realtime Fuel Rate (CFM)			800.0	800.0	800.0	CFM
Corrected Fuel Rate (SCFM) @ Tstd			800.0	800.0	800.0	SCFM
Fuel Flowrate (SCFH)			48,000	48,000	48,000	SCFH
Million Btu per minute			0.435	0.435	0.435	MMBtu/min
Heat Input (MMBtu/hour)			26.1	26.1	26.1	MMBtu/Hr
Stack Gas Flow Rate @Tstd			**9,884**	**10,538**	**10,786**	**DSCFM**

WHERE:

Gas Fd-Factor = Fuel conversion factor (ratio of combustion gas volumes to heat inputs)
MMBtu = Million Btu

CALCULATIONS:

SCFM = CFM * (PSIA /14.7)*(460+tstd)/(460+gas°F)
SCFH = SCFM * 60
MMBtu/min = (SCFM * Btu/ft^3) * 520/(460+tstd)/ 1,000,000
MMBtu/hr Heat Input = MMBtu/min * 60
DSCFM = Gas Fd-Factor * MMBtu/min * 20.9/ (20.9 - O_2%) * (tstd+460)/520

BLUE SKY ENVIRONMENTAL, LLC

Fd-FACTOR CALCULATION

Landfill Gas

Sample ID: BFI-Keller Canyon
Date: 10/3/2006

	Molecular Weight	Ideal Gas Specific Gravity, G_i	Ideal Gas Total Calorific Value, H_i	Compressibility Summation Factor, $\sqrt{b_i}$	Specific Volume, ft^3/lb	Composition Mole Fraction, x_i	Specific Gravity Fraction, x_iG_i	Calorific Value Fraction, x_iH_i	Compressibility Fraction, $x_i\sqrt{b_i}$	x_iMW	Weight Fraction, $\xi_iMW / \Sigma xiMW$	CARBON Weight Fraction	HYDROGEN Weight Fraction	OXYGEN Weight Fraction	NITROGEN Weight Fraction	SULFUR Weight Fraction	CHONS SUM	Specific Volume, ft^3/lb
Helium‡	4.00	0.1382	0.0	-0.0170		0.0000	0.0000	0.0	0.0000	0.0000	0.0000							
Hydrogen (H_2) ‡	2.02	0.0696	324.9		187.723	0.0000	0.0000	0.0	0.0000	0.0000							0.0000	
Nitrogen	28.01	0.9672	0.0	0.0164	13.443	0.0470	0.0455	0.0	0.0008	1.3165	0.0471				0.0471		0.0471	0.6334
Oxygen	32.00	1.1053	0.0		11.819	0.0050	0.0055	0.0	0.0000	0.1600	0.0057			0.0057			0.0057	0.0677
Carbon Monoxide	28.01	0.9671	321.3	0.0217	13.506	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000
Carbon Dioxide‡	44.01	1.5194	0.0	0.0640	8.548	0.4020	0.6108	0.0	0.0257	17.6920	0.6332	0.1728	0.0000	0.4604			0.6332	5.4123
Methane	16.04	0.5539	1012.0	0.0436	23.565	0.5470	0.3030	553.6	0.0238	8.7739	0.3140	0.2351	0.0789				0.3140	7.3994
Ethane, C2	30.01	1.0382	1772.9	0.0917	12.455	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Propane C3	44.09	1.5224	2523.0	0.1342	8.365	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Isobutane	58.12	2.0067	3260.1	0.1744	6.321	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
n-Butane C4	58.12	2.0067	3269.6	0.1825	6.321	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Isopentane C5	72.14	2.4910	4009.4	0.2276	5.252	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
n-Pentane	72.14	2.4910	4018.5	0.2377	5.252	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Hexanes C6+	86.17	2.9753	4758.0	0.2830	4.398	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000	0.0000
Total						1.0010	**0.965**	**553.6**	0.0246	27.9424	1.0000	0.4079	0.0789	0.4661	0.0471	0.0000	1.0000	**13.51**
							SG	**Btu/ft³**	$\Sigma x_i\sqrt{b_i}$	$\Sigma xiMW$		**40.79%**	**7.89%**	**46.61%**	**4.71%**	**0.00%**		**ft³/lb**

‡ Omitted from Compressibility Factor Calculation

Calculated Specific Gravity (SG) *(Air = 1.000 @ 760mm Hg, 60°F)* **0.965**

Compressibility Factor (Z) **0.9994**

$Z = 1 - [(\Sigma x_i \sqrt{b_i})^2 + (2x_H - x_H^2)\ (0.0005)]$

Specific Gravity (corrected) **0.965**

Specific Volume, (SV) ft^3/lb **13.51** ft^3/lb

Gross Calorific Value (GCV) @ 60°F **553.9** **Btu/ft³ Gross**

Gross Calorific Value (GCV) @ 68°F **545.5** **Btu/ft³ Gross**

Gross Calorific Value (GCV) **7,485** **Btu/lb**

*Btu/lb = Btu/ft³ * ft³/lb*

Gas Fd-Factor @ 68°F **9,400** **DSCF/MMBtu**

$DSCF/MMBtu = 10^6 * ((3.64*\%H_2)+(1.53*\%C)+(0.57*\%S)+(0.14*\%N_2)-(0.46*\%O_2)) / Btu/lb$

Gas Fd-Factor @ 60°F **9,257** **DSCF/MMBtu**

Laboratory Reports

Atmospheric Analysis & Consulting, Inc.

CLIENT : Blue Sky Environmental, LLC
PROJECT NAME : BFI - KELLER
AAC PROJECT NO. : 060834
REPORT DATE : 10/05/2006

On October 04, 2006, Atmospheric Analysis & Consulting, Inc. received one (1) Tedlar Bag for ASTM D-1945/1946, which includes Hydrocarbons analysis by EPA method 18 and fixed gases analysis by EPA 3C. Upon receipt the sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab No.
LFG – 1	060834-19714

EPA 18 - An aliquot of the gaseous sample is injected into the GC/FID for analysis following EPA 18 as specified in the SOW.

EPA 3C - An aliquot of the gaseous sample is injected into the GC/FID for analysis following EPA 3C as specified in the SOW.

No problems were encountered during receiving, preparation, and/ or analysis of this sample. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-EPA 18 and EPA 3C.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. Release of the data contained in this hardcopy data package and its electronic data deliverable submitted on diskette has been authorized by the Laboratory Director or his designee, as verified by the following signature.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha S. Parmar, PhD
Technical Director

This report consists of 8 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

Client:	**: Blue Sky Environmental, LLC**	**Sampling Date**	**: 10/03/2006**
Project No.	**: 060834**	**Receiving Date**	**: 10/04/2006**
Matrix	**: air**	**Analysis Date**	**: 10/05/2006**
Units	**: %**	**Report Date**	**: 10/05/2006**

EPA Method 3C

Detection Limit: 0.1 %			Analyte				
Client ID	AAC ID	Hydrogen	Oxygen	Nitrogen	CO	Methane	CO2
LFG - 1	060834-19714	<PQL	0.5	4.7	<PQL	54.7	40.2

Dr. Sucha Parmar
Technical Director

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT:	**: Blue Sky Environmental**	**SAMPLING DATE**	**: 10/03/2006**
PROJECT NO.	**: 060834**	**RECEIVING DATE**	**: 10/04/2006**
MATRIX	**: AIR**	**ANALYSIS DATE**	**: 10/05/2006**
UNITS	**: PPMV**	**REPORT DATE**	**: 10/05/2006**

Client ID	AAC ID	*ANALYSIS METHOD*		*EPA Method 18*				
		Detection Limit		*0.3 ppmv*				
		C1	C2**	C3**	C4	C5	C6	C6+
LFG - 1	060834-19714	*	<15	35.4	39.3	55.7	73.7	220

* C1 Value from EPA 3C Report

** Due to the extremely high C1 concentration, the C2 concentration could not be measured below this PQL due to matrix interference.

Dr. Sucha Parmar
Technical Director

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 10/5/2006
Analyst: SW
Instrument ID: FID#3
Units: PPMV

I - Method Blank-EPA Method 18

AAC ID	Analyte	MB Concentration
Method Blank	Methane	ND
	Ethane	ND
	Propane	ND
	Butane	ND
	Pentane	ND
	Hexane	ND

II-Laboratory Control Spike & Duplicate - EPA Method 18

AAC ID	Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
Lab Control Standards	Methane	100.2	98.3	101.7	98	102	3.4
	Ethane	100.6	100.7	102.9	100	102	2.2
	Propane	100.0	100.8	103.5	101	103	2.7
	Butane	99.6	99.3	102.5	100	103	3.1
	Pentane	99.6	98.3	101.7	99	102	3.4
	Hexane	97.6	94.5	99.8	97	102	5.5

III - Duplicate Analysis - EPA Method 18

AAC ID	Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
060834-19714 (5000x)	Methane	696955	695867	696400	0.2
	Ethane	0.0	0.0	0.0	0.0
	Propane	0.0	0.0	0.0	0.0
	Butane	0.0	0.0	0.0	0.0
	Pentane	0.0	0.0	0.0	0.0
	Hexane	1313.5	1546.0	1430	16.3

IV-Matrix Spike & Duplicate- EPA Method 18

AAC ID	Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
060834-19714 (5000x)	Methane	69.6	50.0	117.6	121.5	96	104	7.8
	Ethane	0.0	50.0	47.4	48.5	95	97	2.5
	Propane	0.0	50.0	47.9	49.5	96	99	3.3
	Butane	0.0	50.0	47.8	48.3	96	97	1.0
	Pentane	0.0	50.0	47.1	47.8	94	96	1.5
	Hexane	0.1	50.0	45.9	46.3	91	92	1.0

** Must be 85-115%*
*** Must be 75-125%*
**** Must be < 25%*

Dr. Sucha Parmar
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Quality Control/Quality Assurance Report

Date Analyzed: 10/5/2006 **Instrument ID: FID#3**
Analyst: SW **Calibration Date: 03/20/06**

Opening Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
C1	679	688	**1.3**
C2	1349	1385	**2.6**
C3	1952	2015	**3.2**
C4	2591	2670	**3.0**
C5	3121	3232	**3.5**
C6	3601	3796	**5.3**

Closing Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
C1	679	653	**4.0**
C2	1349	1292	**4.3**
C3	1952	1905	**2.4**
C4	2591	2527	**2.5**
C5	3121	3060	**2.0**
C6	3601	3592	**0.3**

* Must be <15%
** Average Calibration Factor from Initial Calibration Curve

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Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 10/5/2006
Analyst: SW

Instrument ID: TCD#1
Units: %

I - Method Blank-EPA Method 3C

AAC ID	Analyte	MB Concentration
Method Blank	Hydrogen	ND
	Oxygen	ND
	Nitrogen	ND
	CO	ND
	Methane	ND
	CO2	ND

II-Laboratory Control Spike & Duplicate - EPA Method 3C

AAC ID	Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
Lab Control Standards	Hydrogen	20.0	19.9	19.9	100	100	0.0
	Nitrogen	20.0	20.1	20.1	101	101	0.0
	CO	20.0	19.4	19.4	97	97	0.0
	Methane	20.0	19.1	19.3	95	96	1.1
	CO2	20.0	19.7	19.6	99	98	0.6

III - Duplicate Analysis - EPA Method 3C

AAC ID	Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
060824-19628	Hydrogen	0.00	0.00	0.0	0.0
	Oxygen	0.0	0.0	0.0	0.0
	Nitrogen	68.0	68.0	68.0	0.0
	CO	0.0	0.0	0.0	0.0
	Methane	0.1	0.1	0.1	14.4
	CO2	9.4	9.4	9.4	0.2

IV-Matrix Spike & Duplicate- EPA Method 3C

AAC ID	Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
060824-19628	Hydrogen	0.0	10.0	9.4	9.2	94	92	1.9
	Nitrogen	34.0	10.0	44.5	44.6	105	106	1.2
	CO	0.0	10.0	10.1	10.0	101	100	0.6
	Methane	0.0	10.0	9.9	9.9	99	98	0.6
	CO2	4.7	10.0	14.4	14.4	97	97	0.6

** Must be 85-115%*
*** Must be 75-125%*
**** Must be < 25%*

Dr. Sucha Parmar
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Quality Control/Quality Assurance Report

Date Analyzed: 10/5/2006
Analyst: SW
Instrument ID: TCD#1
Calibration Date: 09/27/06

Opening Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
Hydrogen	2147	2190	**2.0**
Oxygen* **	58602	58608	**0.0**
Nitrogen	65056	64643	**0.6**
Carbon Monoxide	72946	68372	**6.5**
Methane	60595	58399	**3.7**
Carbon Dioxide	97830	94133	**3.9**

Closing Calibration Verification Standard

Analyte	xCF**	CF	%RPD*
Hydrogen	2147	2163	**0.8**
Nitrogen	65056	63631	**2.2**
Carbon Monoxide	72946	68184	**6.7**
Methane	60595	59185	**2.4**
Carbon Dioxide	97830	92631	**5.5**

* Must be <15%
** Average Calibration Factor from Initial Calibration Curve
*** Oxygen from Lab Air

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BLUE SKY ENVIRONMENTAL, LLC
624 San Gabriel Avenue
Albany, CA 94706
510.525.1261 ph/fax
Contact: Guy Worthington

LAB: AAC
ADDRESS:

060834

ph/fax
Contact:

Page __ of __

CHAIN OF CUSTODY RECORD

Project Name: BFI - KELLER

Project #:

SAMPLE Date	SAMPLE Time	grab or comp	Sample ID (Method-Run-Fraction)	Container Type/Size of container	Analysis Requested: 1945	Analysis Requested: TO-15
10/3/06		g	LFG-1	Tedlar 1Lt	✓	✓

19714

All samples submitted to laboratories for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the sample. Samples should be held for 90+ days. The laboratory reserves the right to return unused sample portions.

COMMENTS: TO-15 including acrylonitrile, benzene, carbon tetrachloride, chloroform, ethylene dibromide, methylene dichloride, methylene chloride, perchloroethylene, trichloroethylene, vinyl chloride

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	10-3-06	6:00	[signature]	10/3/06	6:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				10/4/06	8:50
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Atmospheric Analysis & Consulting, Inc.

CLIENT	: Blue Sky Environmental
PROJECT NAME	: BFI-Keller
AAC PROJECT NO.	: 060834
REPORT DATE	: 10/25/06

On October 4, 2006, Atmospheric Analysis & Consulting, Inc. received one (1) Tedlar Bag for Volatile Organic Compounds analysis by EPA method TO-15. Upon receipt the sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab No.	Initial Pressure	Final Pressure
LFG-1	060834-19714	-1.4	5.0

TO-14/15 Analysis - Up to a 500 ml aliquot of samples is concentrated, put through a water and CO2 management system, cryofocused and injected into the GC/MS (full scan mode) for analysis following EPA Method TO-14/15 as specified in the SOW.

On October 5, 2006, the Tedlar Bag was transferred to a Six-Liter Summa Canister. An initial reading of the canister's vacuum was taken and recorded. Subsequently the canisters were brought to positive pressure using UHP-He and the final pressure was also recorded.

No problems were encountered during receiving, preparation and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-TO-14/15. Estimated uncertainty of the test results will be provided upon request.

I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha S. Parmar, PhD
Technical Director

This report consists of 11 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	**: Blue Sky Environmental**	**DATE RECEIVED**	**: 10/04/06**
PROJECT NO	**: 060834**	**DATE REPORTED**	**: 10/25/06**
MATRIX	**: AIR**		
UNITS	**: PPB (v/v)**		

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	LFG-1			Sample Reporting Limit (RLxDF's)	Method Reporting Limit
AAC ID	060834-19714				
Date Sampled	10/3/2006				
Date Analyzed	10/22/2006				
Can Dilution Factor	1.41				
	Result	Qualifier	Dil. Fac.		
Chlorodifluoromethane	2360		1000	1413	1.0
Propylene	7980		1000	1413	1.0
Dichlorodifluoromethane	2560		1000	1413	1.0
Chloromethane	ND	U	1000	1413	1.0
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	U	1000	1413	1.0
Vinyl Chloride	ND	U	1000	1413	1.0
Methanol	8440		1000	7067	5.0
1,3-Butadiene	ND	U	1000	1413	1.0
Bromomethane	ND	U	1000	1413	1.0
Chloroethane	ND	U	1000	1413	1.0
Dichlorofluoromethane	ND	U	1000	1413	1.0
Ethanol	47400		1000	2827	2.0
Vinyl Bromide	ND	U	1000	1413	1.0
Acetone	31000		1000	2827	2.0
Trichlorofluoromethane	ND	U	1000	1413	1.0
Isopropyl Alcohol	18200		1000	2827	2.0
(1) Acrylonitrile	ND	U	1000	1413	1.0
1,1-Dichloroethylene	ND	U	1000	1413	1.0
Methylene Chloride	ND	U	1000	1413	1.0
Allyl Chloride (Chloroprene)	ND	U	1000	1413	1.0
Carbon Disulfide	ND	U	1000	1413	1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	1000	1413	1.0
t-1,2-Dichloroethylene	ND	U	1000	1413	1.0
1,1-Dichloroethane	ND	U	1000	1413	1.0
MTBE	ND	U	1000	1413	1.0
Vinyl Acetate	ND	U	1000	1413	1.0
2-Butanone (MEK)	17500		1000	1413	1.0
cis-1,2- Dichloroethene	ND	U	1000	1413	1.0
Hexane	2150		1000	1413	1.0
(4) Chloroform	ND	U	1000	1413	1.0
Ethyl Acetate	7100		1000	1413	1.0
Tetrahydrofuran	9320		1000	1413	1.0
1,2-Dichloroethane	ND	U	1000	1413	1.0
1,1,1-Trichloroethane	ND	U	1000	1413	1.0

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Atmospheric Analysis & Consulting, Inc.

Laboratory Analysis Report

CLIENT	: Blue Sky Environmental	DATE RECEIVED	: 10/04/06
PROJECT NO	: 060834	DATE REPORTED	: 10/25/06
MATRIX	: AIR		
UNITS	: PPB (v/v)		

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	LFG-1			Sample Reporting Limit (RLxDF's)	Method Reporting Limit
AAC ID	060834-19714				
Date Sampled	10/3/2006				
Date Analyzed	10/22/2006				
Can Dilution Factor	1.41				
	Result	Qualifier	Dil. Fac.		
Benzene	ND	U	1000	1413	1.0
Carbon Tetrachloride	ND	U	1000	1413	1.0
Cyclohexane	2380		1000	1413	1.0
1,2-Dichloropropane	ND	U	1000	1413	1.0
Bromodichloromethane	ND	U	1000	1413	1.0
1,4-Dioxane	ND	U	1000	1413	1.0
Trichloroethene	ND	U	1000	1413	1.0
2,2,4-Trimethylpentane	ND	U	1000	1413	1.0
Heptane	3870		1000	1413	1.0
cis-1,3-Dichloropropene	ND	U	1000	1413	1.0
4-Methyl-2-Pentanone (MiBK)	ND	U	1000	1413	1.0
t-1,3-Dichloropropene	ND	U	1000	1413	1.0
1,1,2-Trichloroethane	ND	U	1000	1413	1.0
Toluene	13700		1000	1413	1.0
2-Hexanone	ND	U	1000	1413	1.0
Dibromochloromethane	ND	U	1000	1413	1.0
1,2-Dibromoethane	ND	U	1000	1413	1.0
Tetrachloroethylene	ND	U	1000	1413	1.0
Chlorobenzene	ND	U	1000	1413	1.0
Ethylbenzene	3900		1000	1413	1.0
m- & p-Xylenes	8810		1000	2827	2.0
Bromoform	ND	U	1000	4240	3.0
Styrene	ND	U	1000	1413	1.0
1,1,2,2-Tetrachloroethane	ND	U	1000	1413	1.0
o-Xylene	2330		1000	1413	1.0
4-Ethyltoluene	ND	U	1000	1413	1.0
1,3,5-Trimethylbenzene	ND	U	1000	1413	1.0
1,2,4-Trimethylbenzene	ND	U	1000	1413	1.0
Benzyl Chloride	ND	U	1000	7067	5.0
1,3-Dichlorobenzene	ND	U	1000	1413	1.0
1,4-Dichlorobenzene	ND	U	1000	1413	1.0
1,2-Dichlorobenzene	ND	U	1000	1413	1.0
1,2,4-Trichlorobenzene	ND	U	1000	1413	1.0
Hexachlorobutadiene	ND	U	1000	1413	1.0
BFB-Surrogate Std. % Recovery	103%				70-130%

J- Analyte was detected. However the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Reporting Limit (RL).
E - Estimated value, result outside linear range of instrument.
U - Compound was analyzed for, but was not detected.
!! - Estimated

Sucha S. Parmar, PhD
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

ANALYSIS DATE : 10/22/06
ANALYST : JJG
INSTRUMENT ID : GC/MS-01
STD ID : PS102206-01

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-14/TO-15

Continuing Calibration Verification of the 10/22/06 Calibration

Compounds	Conc	Daily Conc	%REC
4-BFB (surrogate standard)***	10	10.90	109
Chlorodifluoromethane*	10	10.10	101
Propylene*	10	9.55	96
DiClDIFMethane*	10	10.55	106
CHLOROMETHANE*	10	10.22	102
1,2 DiCl-1,1,2,2-TetraFEthane*	10	10.42	104
VINYL CHLORIDE*	10	10.20	102
Methanol*	10	8.49	85
1,3-Butadiene*	10	10.45	105
BROMOMETHANE*	10	10.01	100
CHLOROETHANE*	10	10.21	102
Dichlorofluoromethane*	10	10.63	106
Ethanol*	10	10.37	104
Vinyl Bromide*	10	10.30	103
Acetone*	10	9.32	93
TRICHLOROFLUOROMETHANE*	10	10.70	107
Isopropanol*	10	9.76	98
Acrylonitrile*	10	7.95	80
1,1 DICHLOROETHENE*	10	10.48	105
METHYLENE CHLORIDE*	10	10.19	102
Allyl CHLORIDE*	10	10.75	108
Carbon disulfide*	10	9.15	92
1,1,2-TRICHLORO-1,2,2-TRIFLUO	10	9.39	94
trans-1,2- DICHLOROETHYLENE*	10	10.25	103
1,1- DICHLOROETHANE*	10	10.09	101
MTBE*	10	8.78	88
Vinyl Acetate*	10	7.56	76
MEK*	10	8.95	90
cis-1,2- DICHLOROETHYLENE*	10	10.18	102
Hexane*	10	10.06	101
CHLOROFORM*	10	9.56	96
Ethyl Acetate*	10	8.87	89
Tetrahydrofuran*	10	8.43	84
1,2-DICHLOROETHANE*	10	8.89	89
1,1,1-TRICHLOROETHANE*	10	9.28	93

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Atmospheric Analysis & Consulting, Inc.

ANALYSIS DATE : 10/22/06
ANALYST : JJG
INSTRUMENT ID : GC/MS-01
STD ID : PS102206-01

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-14/TO-15

Continuing Calibration Verification of the 10/22/06 Calibration

Compounds	*Conc*	*Daily Conc*	*%REC*
BENZENE**	10	7.51	75
CARBON TETRACHLORIDE**	10	10.24	102
Cyclohexane**	10	9.87	99
1,2-DICHLOROPROPANE**	10	7.36	74
Bromodichloromethane**	10	8.06	81
1,4-Dioxane**	10	8.41	84
TRICHLOROETHENE**	10	8.31	83
2,2,4-Trimethylpentane**	10	7.98	80
Heptane**	10	8.11	81
cis- 1,3 DICHLOROPROPENE**	10	7.44	74
MiBK**	10	8.98	90
trans 1,3 DICHLOROPROPENE**	10	7.55	76
1,1,2-TRICHLOROETHANE**	10	8.08	81
TOLUENE**	10	7.53	75
2-Hexanone**	10	9.10	91
Dibromochloromethane**	10	8.02	80
1,2 DIBROMOETHANE**	10	8.00	80
TETRACHLOROETHYLENE**	10	8.24	82
CHLOROBENZENE***	10	8.36	84
ETHYLBENZENE***	10	8.46	85
m-, & p- XYLENES***	20	16.85	84
Bromoform***	10	8.44	84
STYRENE***	10	8.34	83
1,1, 2,2- TETRACHLORETHANE***	10	8.89	89
o- XYLENE***	10	8.63	86
Ethyltoluene***	10	8.43	84
1,3,5- TRIMETHYLBENZENE***	10	8.68	87
1,2,4- TRIMETHYLBENZENE***	10	8.58	86
Benzyl Chloride***	10	7.79	78
1,3- DICHLOROBENZENE***	10	8.53	85
1,4- DICHLOROBENZENE***	10	8.45	85
1,2-DICHLOROBENZENE***	10	8.41	84
1,2,4-TRICHLOROBENZENE***	10	8.52	85
HEXACHLOROBUTADIENE***	10	8.93	89

* Internal std calculation IS1 : Bromochloromethane

** Internal std calculation IS2 : 1,4-Difluorobenzene

*** Internal std calculation IS3 : Chlorobenzene-d5

%REC should be 70-130%

!! Compound failed criteria and results should be considered estimated.

Sucha S. Parmar, PhD
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Quality Control/Quality Assurance Report

CLIENT ID	**: Laboratory Control Spike**	**DATE ANALYZED**	**: 10/22/06**
AAC ID	**: LCS/LCSD**	**DATE REPORTED**	**: 10/24/06**
MEDIA	**: Air**	**UNITS**	**: ppbv**

TO-14/15 Laboratory Control Spike Recovery

Compound	Sample Conc.	Spike Added	Spike Res	Dup Spike Res	Spike % Rec *	Spike Dup % Rec *	RPD** %
1,1-DICHLOROETHYLENE	0.0	10.00	10.48	10.48	105	105	0.0
METHYLENE CHLORIDE	0.0	10.00	10.19	10.22	102	102	0.3
BENZENE	0.0	10.00	7.51	8.07	75	81	7.2
TRICHLOROETHENE	0.0	10.00	8.31	8.89	83	89	6.7
TOLUENE	0.0	10.00	7.53	8.14	75	81	7.8
TETRACHLOROETHYLENE	0.0	10.00	8.24	8.96	82	90	8.4
CHLOROBENZENE	0.0	10.00	8.36	9.07	84	91	8.1
ETHYLBENZENE	0.0	10.00	8.46	9.32	85	93	9.7
m-, & p- XYLENES	0.0	20.00	16.85	18.51	84	93	9.4
o- XYLENE	0.0	10.00	8.63	9.66	86	97	11.3

* Must be 70-130%

** Must be < 25%

Sucha S. Parmar, PhD
Technical Director

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Atmospheric Analysis & Consulting, Inc.

Method Blank Analysis Report

MATRIX	**: AIR**	**ANALYSIS DATE**	**: 10/22/06**
UNITS	**: ppbv**	**REPORT DATE**	**: 10/24/06**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-14/TO-15

Client ID / *AAC ID*	Method Blank MB 102206	RL
Chlorodifluoromethane*	<RL	1.0
Propylene*	<RL	1.0
DiClDIFMethane*	<RL	1.0
CHLOROMETHANE*	<RL	1.0
1,2 DiCl-1,1,2,2-TetraFEthane*	<RL	1.0
VINYL CHLORIDE*	<RL	1.0
Methanol*	<RL	5.0
1,3-Butadiene*	<RL	1.0
BROMOMETHANE*	<RL	1.0
CHLOROETHANE*	<RL	1.0
Dichlorofluoromethane	<RL	1.0
Ethanol*	<RL	2.0
Vinyl Bromide*	<RL	1.0
Acetone*	<RL	2.0
TRICHLOROFLUOROMETHANE*	<RL	1.0
Isopropyl Alcohol*	<RL	2.0
Acrylonitrile*	<RL	1.0
1,1 DICHLOROETHENE*	<RL	1.0
METHYLENE CHLORIDE*	<RL	1.0
Allyl CHLORIDE*	<RL	1.0
Carbon disulfide*	<RL	1.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE*	<RL	1.0
trans-1,2- DICHLOROETHYLENE*	<RL	1.0
1,1- DICHLOROETHANE*	<RL	1.0
MTBE*	<RL	1.0
Vinyl Acetate*	<RL	1.0
MEK*	<RL	1.0
cis-1,2- DICHLOROETHYLENE*	<RL	1.0
Hexane*	<RL	1.0
CHLOROFORM*	<RL	1.0
Ethyl Acetate*	<RL	1.0
Tetrahydrofuran*	<RL	1.0
1,2-DICHLOROETHANE*	<RL	1.0
1,1,1-TRICHLOROETHANE*	<RL	1.0
BENZENE**	<RL	1.0
CARBON TETRACHLORIDE**	<RL	1.0
Cyclohexane**	<RL	1.0
1,2-DICHLOROPROPANE**	<RL	1.0
Bromodichloromethane**	<RL	1.0
1,4-Dioxane**	<RL	1.0
TRICHLOROETHENE**	<RL	1.0
2,2,4-Trimethylpentane**	<RL	1.0
Heptane**	<RL	1.0

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Method Blank Analysis Report

MATRIX	**: AIR**	**ANALYSIS DATE**	**: 10/22/06**
UNITS	**: ppbv**	**REPORT DATE**	**: 10/24/06**

VOLATILE ORGANIC COMPOUNDS BY EPA TO-14/TO-15

Client ID	Method Blank	RL
AAC ID	MB 102206	
cis- 1,3 DICHLOROPROPENE**	<RL	1.0
MiBK**	<RL	1.0
trans 1,3 DICHLOROPROPENE**	<RL	1.0
1,1,2-TRICHLOROETHANE**	<RL	1.0
TOLUENE**	<RL	1.0
2-Hexanone**	<RL	1.0
Dibromochloromethane**	<RL	1.0
1,2 DIBROMOETHANE**	<RL	1.0
TETRACHLOROETHYLENE**	<RL	1.0
CHLOROBENZENE***	<RL	1.0
ETHYLBENZENE***	<RL	1.0
m-, & p- XYLENES***	<RL	2.0
Bromoform***	<RL	3.0
STYRENE***	<RL	1.0
1,1, 2,2- TETRACHLORETHANE***	<RL	1.0
o- XYLENE***	<RL	1.0
Ethyltoluene***	<RL	1.0
1,3,5- TRIMETHYLBENZENE***	<RL	1.0
1,2,4- TRIMETHYLBENZENE***	<RL	1.0
Benzyl Chloride***	<RL	5.0
1,3- DICHLOROBENZENE***	<RL	1.0
1,4- DICHLOROBENZENE***	<RL	1.0
1,2-DICHLOROBENZENE***	<RL	1.0
1,2,4 TRICHLOROBENZENE***	<RL	1.0
HEXACHLOROBUTADIENE***	<RL	1.0
System Monitoring Compounds		
BFB-Surrogate Std. % Recovery	92%	--

RL - Reporting Limit

Sucha S. Parmar, PhD
Technical Director

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

AAC ID : 060893-20175
MATRIX : Air
DATE ANALYZED : 10/22/06
DATE REPORTED : 10/24/06
UNITS : ppbv

TO-14/TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Chlorodifluoromethane*	<RL	<RL	0.0
Propylene*	<RL	<RL	0.0
DiClDIFMethane*	1.9	1.9	2.1
CHLOROMETHANE*	<RL	<RL	0.0
1,2 DiCl-1,1,2,2-TetraFEthane*	<RL	<RL	0.0
VINYL CHLORIDE*	<RL	<RL	0.0
Methanol*	16.3	15.8	3.1
1,3-Butadiene*	<RL	<RL	0.0
BROMOMETHANE*	<RL	<RL	0.0
CHLOROETHANE*	<RL	<RL	0.0
Dichlorofluoromethane	<RL	<RL	0.0
Ethanol*	12.6	12.4	1.6
Vinyl Bromide*	<RL	<RL	0.0
Acetone*	30.7	30.5	0.7
TRICHLOROFLUOROMETHANE*	<RL	<RL	0.0
Isopropyl Alcohol*	<RL	<RL	0.0
Acrylonitrile*	<RL	<RL	0.0
1,1 DICHLOROETHENE*	<RL	<RL	0.0
METHYLENE CHLORIDE*	<RL	<RL	0.0
Allyl CHLORIDE*	<RL	<RL	0.0
Carbon disulfide*	<RL	<RL	0.0
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE*	<RL	<RL	0.0
trans-1,2- DICHLOROETHYLENE*	<RL	<RL	0.0
1,1- DICHLOROETHANE*	<RL	<RL	0.0
MTBE*	<RL	<RL	0.0
Vinyl Acetate*	<RL	<RL	0.0
MEK*	3.8	3.9	2.9
cis-1,2- DICHLOROETHYLENE*	<RL	<RL	0.0
Hexane*	<RL	<RL	0.0
CHLOROFORM*	<RL	<RL	0.0
Ethyl Acetate*	<RL	<RL	0.0
Tetrahydrofuran*	<RL	<RL	0.0
1,2-DICHLOROETHANE*	<RL	<RL	0.0
1,1,1-TRICHLOROETHANE*	<RL	<RL	0.0
BENZENE**	<RL	<RL	0.0
CARBON TETRACHLORIDE**	<RL	<RL	0.0

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

AAC ID	**: 060893-20175**	**DATE ANALYZED**	**: 10/22/06**
MATRIX	**: Air**	**DATE REPORTED**	**: 10/24/06**
		UNITS	**: ppbv**

TO-14/TO-15 Duplicate Analysis

Compound	Sample Conc	Duplicate Conc	% RPD
Cyclohexane**	<RL	<RL	0.0
1,2-DICHLOROPROPANE**	<RL	<RL	0.0
Bromodichloromethane**	<RL	<RL	0.0
1,4-Dioxane**	<RL	<RL	0.0
TRICHLOROETHENE**	<RL	<RL	0.0
2,2,4-Trimethylpentane**	<RL	<RL	0.0
Heptane**	<RL	<RL	0.0
cis- 1,3 DICHLOROPROPENE**	<RL	<RL	0.0
MiBK**	<RL	<RL	0.0
trans 1,3 DICHLOROPROPENE**	<RL	<RL	0.0
1,1,2-TRICHLOROETHANE**	<RL	<RL	0.0
TOLUENE**	<RL	<RL	0.0
2-Hexanone**	<RL	<RL	0.0
Dibromochloromethane**	<RL	<RL	0.0
1,2 DIBROMOETHANE**	<RL	<RL	0.0
TETRACHLOROETHYLENE**	<RL	<RL	0.0
CHLOROBENZENE***	<RL	<RL	0.0
ETHYLBENZENE***	<RL	<RL	0.0
m-, & p- XYLENES***	<RL	<RL	0.0
Bromoform***	<RL	<RL	0.0
STYRENE***	<RL	<RL	0.0
1,1,2,2-TETRACHLORETHANE***	<RL	<RL	0.0
o- XYLENE***	<RL	<RL	0.0
Ethyltoluene***	<RL	<RL	0.0
1,3,5- TRIMETHYLBENZENE***	<RL	<RL	0.0
1,2,4- TRIMETHYLBENZENE***	<RL	<RL	0.0
Benzyl Chloride***	<RL	<RL	0.0
1,3- DICHLOROBENZENE***	<RL	<RL	0.0
1,4- DICHLOROBENZENE***	<RL	<RL	0.0
1,2-DICHLOROBENZENE***	<RL	<RL	0.0
1,2,4 TRICHLOROBENZENE***	<RL	<RL	0.0
Hexachlorobutadiene***	<RL	<RL	0.0
System Monitoring Compounds			
BFB-Surrogate Std. % Recovery	89%	89%	0.1

RL - Reporting Limit

Sucha S. Parmar, PhD
Technical Director

BLUE SKY ENVIRONMENTAL, LLC
624 San Gabriel Avenue
Albany, CA 94706
510.525.1261 ph/fax
Contact Guy Worthington

LAB: AAC
ADDRESS

ph/fax
Contact

Page __ of __

CHAIN OF CUSTODY RECORD

Project Name: BFI - KELLER

Project #:

SAMPLE Date	SAMPLE Time	grab or comp	Sample ID (Method-Run-Fraction)	Type/Size of container	1945	TO-15					
10/3/06		g	LFG-1	Tedlar 1 of 1	✓	✓					

All samples submitted to laboratories for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the sample. Samples should be held for 90+ days. The laboratory reserves the right to return unused sample portions.

COMMENTS: TO-15 including acrylonitrile, benzene, carbon tetrachloride, chloroform, ethylene dibromide, methylene dichloride, methylene chloride, perchloroethylene, trichloroethylene, vinyl chloride

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	10-3-06	[illegible]	[signature]	10/3/06	6:[illegible]
Relinquished by:	Date:	Time:	Received by: [signature]	10/4/06	[illegible]
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Atmospheric Analysis & Consulting, Inc.

CLIENT : Blue Sky Environmental, LLC
PROJECT NAME : BF1-KELLER
AAC PROJECT NO. : 060901
REPORT DATE : 10/19/2006

On October 18, 2006, Atmospheric Analysis & Consulting, Inc. received one (1) Tedlar Bag for Sulfur Analysis by ASTM D-5504. Upon receipt the sample was assigned a unique Laboratory ID number as follows:

Client ID	Lab No.
BF1 - KELLER	060901-20239

ASTM D-5504 – Up to a 1mL aliquot of sample is injected into the GC/SCD for analysis following ASTM D-5504 as specified in the SOW.

No problems were encountered during receiving, preparation, and/ or analysis of this sample. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI- ASTM D-5504.

I certify that this data is technically accurate, complete, and in compliance with the terms and conditions of the contract. Release of the data contained in this hardcopy data package and its electronic data deliverable submitted on diskette has been authorized by the Laboratory Director or his designee, as verified by the following signature.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha S. Parmar, PhD
Technical Director

This report consists of 6 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT

CLIENT : **Blue Sky Environmental, LLC**
PROJECT NO. : **060901**
UNITS : **PPMV**

SAMPLING DATE : **10/17/2006**
RECEIVING DATE : **10/18/2006**
ANALYSIS DATE : **10/18/2006**
REPORT DATE : **10/19/2006**

Total Reduced Sulfur Compounds Analysis by ASTM D-5504

Compounds	Client ID. / AAC ID	BF1-KELLER / 060901-20239	MDL
Analysis Dilution Factor		**1.0**	
Can Dilution Factor		**1.0**	
H_2S		55.9	0.05
Carbonyl Sulfide & SO2		<PQL	0.05
Methyl Mercaptan		<PQL	0.05
Ethyl Mercaptan		<PQL	0.05
Dimethyl Sulfide		<PQL	0.05
n-Butyl mercaptan		<PQL	0.05
Carbon Disulfide		<PQL	0.05
Allyl Sulfide		<PQL	0.05
Propyl Sulfide		<PQL	0.05
Allyl disulfide		<PQL	0.05
Isopropyl Mercaptan		<PQL	0.05
t-Butyl mercaptan		<PQL	0.05
Propyl Mercaptan		<PQL	0.05
Butyl Sulfide		<PQL	0.05
Ethyl methyl sulfide		<PQL	0.05
Thiophene		<PQL	0.05
Isobutyl mercaptan		<PQL	0.05
Dimethyl disulfide		<PQL	0.05
Allyl mercaptan		<PQL	0.05
3-Methylthiophene		<PQL	0.05
Tetrahydrothiophene		<PQL	0.05
Diethyl sulfide		<PQL	0.05
2-Ethylthiophene		<PQL	0.05
2,5-Dimethylthiophene		<PQL	0.05
Diethyl disulfide		<PQL	0.05
Total Unidentified Sulfurs as H_2S		<PQL	0.05
Total Sulfurs as H_2S		**55.9**	**0.05**

PQL = Practical Quantitation Limit (MDL x Analysis Dilution factor)
All compounds concentrations expressed in terms of H_2S.

Dr. Sucha Parmar
Technical Director

1534 Eastman Avenue • Suite A • Ventura, California 93003 (805) 650-1642 • FAX (805) 650-1644

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

Date Analyzed: 10/18/06 **Instrument ID: SCD#2**
Analyst: SW/MW **Units: PPMV**

I - Method Blank - ASTM D-5504

AAC ID	Analyte	MB Conc.
Method Blank	H2S	ND

II-Laboratory Control Spike & Duplicate - ASTM D-5504

Analyte	Spike Added	LCS Result	LCSD Result	LCS % Rec *	LCSD % Rec *	% RPD***
H2S	0.05	0.05	0.05	94	94	0.0

III-Matrix Spike & Duplicate- ASTM D-5504 (060902-20241)

Analyte	Sample Concentration	Spike Added	MS Result	MSD Result	MS % Rec **	MSD % Rec **	% RPD***
H2S	0.00	0.05	0.05	0.04	100	86	15.1

IV - Duplicate Analysis - ASTM D-5504 (060902-20241)

Analyte	Sample Concentration	Duplicate Concentration	Mean	% RPD***
H2S	0.00	0.00	0.00	NA

** Must be 85-115%*

*** Must be 75-125%*

**** Must be < 25%*

Dr. Sucha Parmar
Technical Director

Quality Control/Quality Assurance Report

Date Analyzed: 10/18/2006
Analyst: SW/MW
Calibration Date: 10/16/2006

Instrument ID: SCD#2
Units: PPMV

Opening Calibration Verification Standard

Analyte	Std. Conc.	Result	%Recovery*
H2S	0.05	0.05	**106**

Closing Calibration Verification Standard

Analyte	Std. Conc.	Result	%Recovery*
H2S	0.05	0.06	**110**

* Must be 85-115%

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BLUE SKY ENVIRONMENTAL, LLC
624 San Gabriel Avenue
Albany, CA 94706
510.525.1261 ph/fax
Contact *Guy Worthington*

LAB: ATL
ADDRESS:

ph/fax
Contact

060901

CHAIN OF CUSTODY RECORD

Project Name: BFI - Keller

Project #:

SAMPLE Date	SAMPLE Time	grab or comp	Sample ID (Method-Run-Fraction)	Type/Size of container	Analysis Requested: 8260
10/17			BFI-Keller	Tedlar 1L	✓

20239

All samples submitted to laboratories for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the sample. Samples should be held for 90+ days. The laboratory reserves the right to return unused sample portions.

COMMENTS:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	10/17/06	5	ESO	10/17	15
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				10/18/06	932
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Page 1

BLUE SKY ENVIRONMENTAL, LLC
624 San Gabriel Avenue
Albany, CA 94706
510.525.1261 ph/fax
Contact: *Guy Worthington*

LAB: ATC
ADDRESS:

ph/fax
Contact:

Page __ of __

CHAIN OF COSTODY RECORD

Project Name: BFI - Keller

Project #:

SAMPLE Date	SAMPLE Time	grab or comp	Sample ID (Method-Run-Fraction)	Type/Size of container	55 cc						
10/17			BFI-Keller	Tedlar 1 L	✓						

Analysis Requested

All samples submitted to laboratories for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the sample. Samples should be held for 90+ days. The laboratory reserves the right to return unused sample portions.

COMMENTS:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	10/17/06	5	[signature]	10/17	5
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]			[signature]	10/18/06	2
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

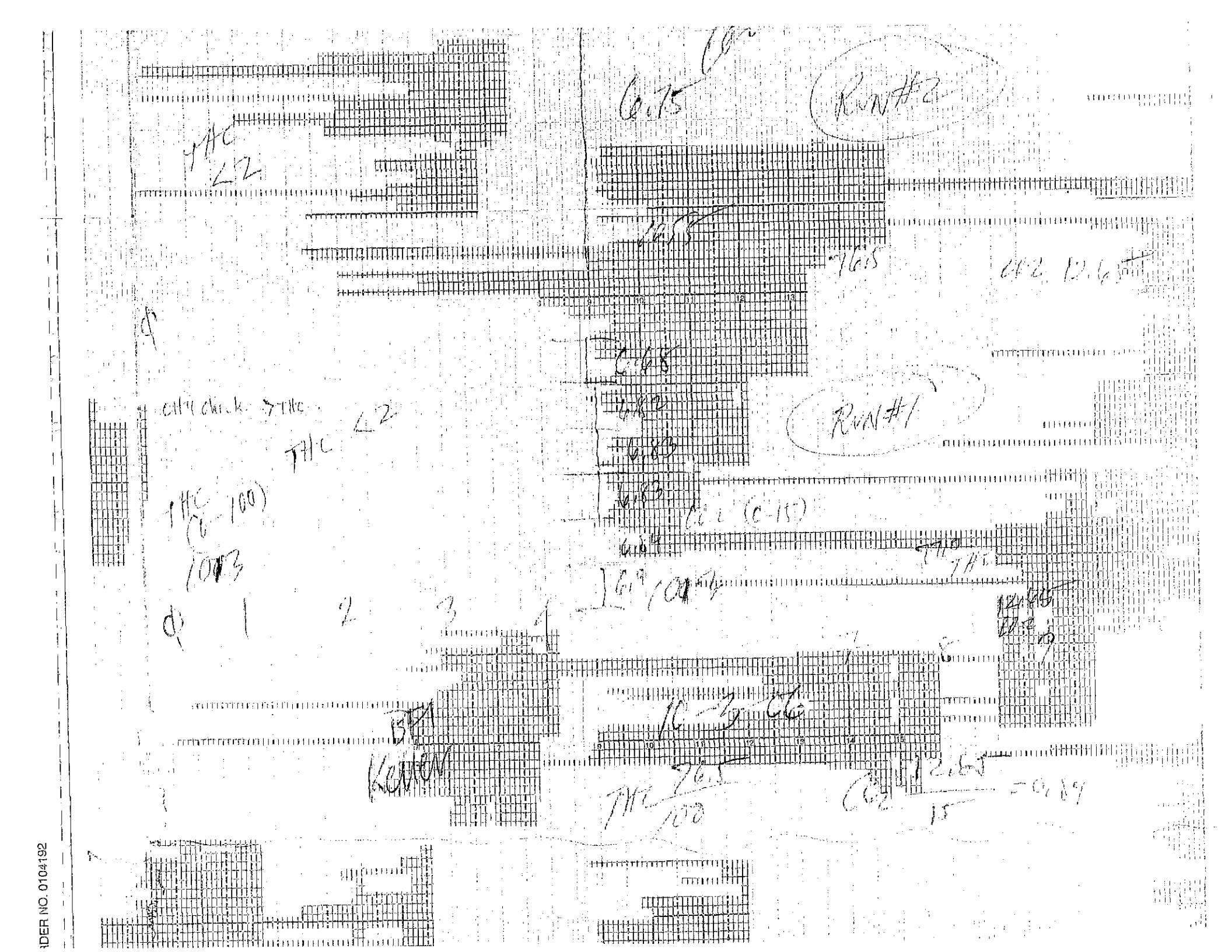
Field Data Sheets

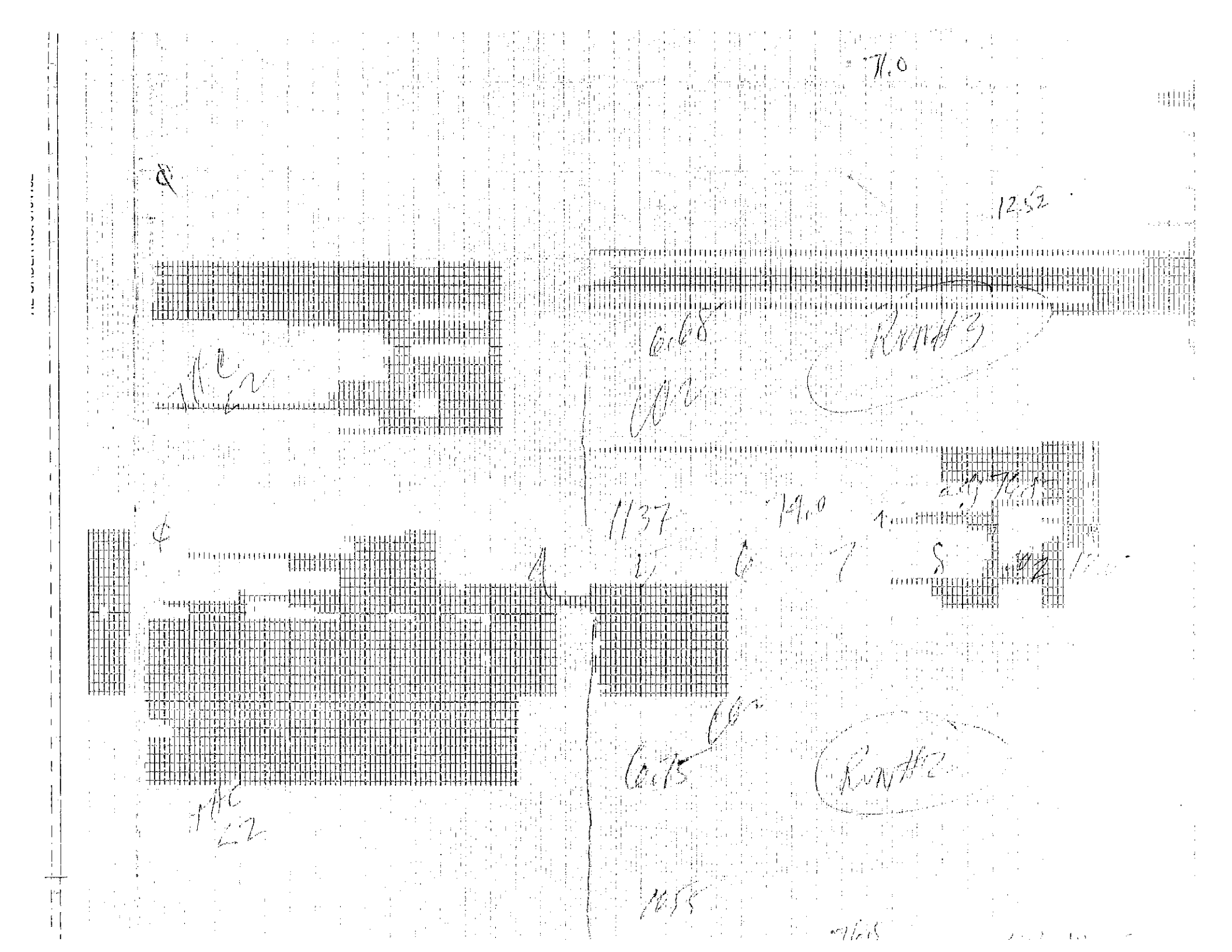
CONTINUOUS EMISSION MONITORING SUMMARY DATA SHEET

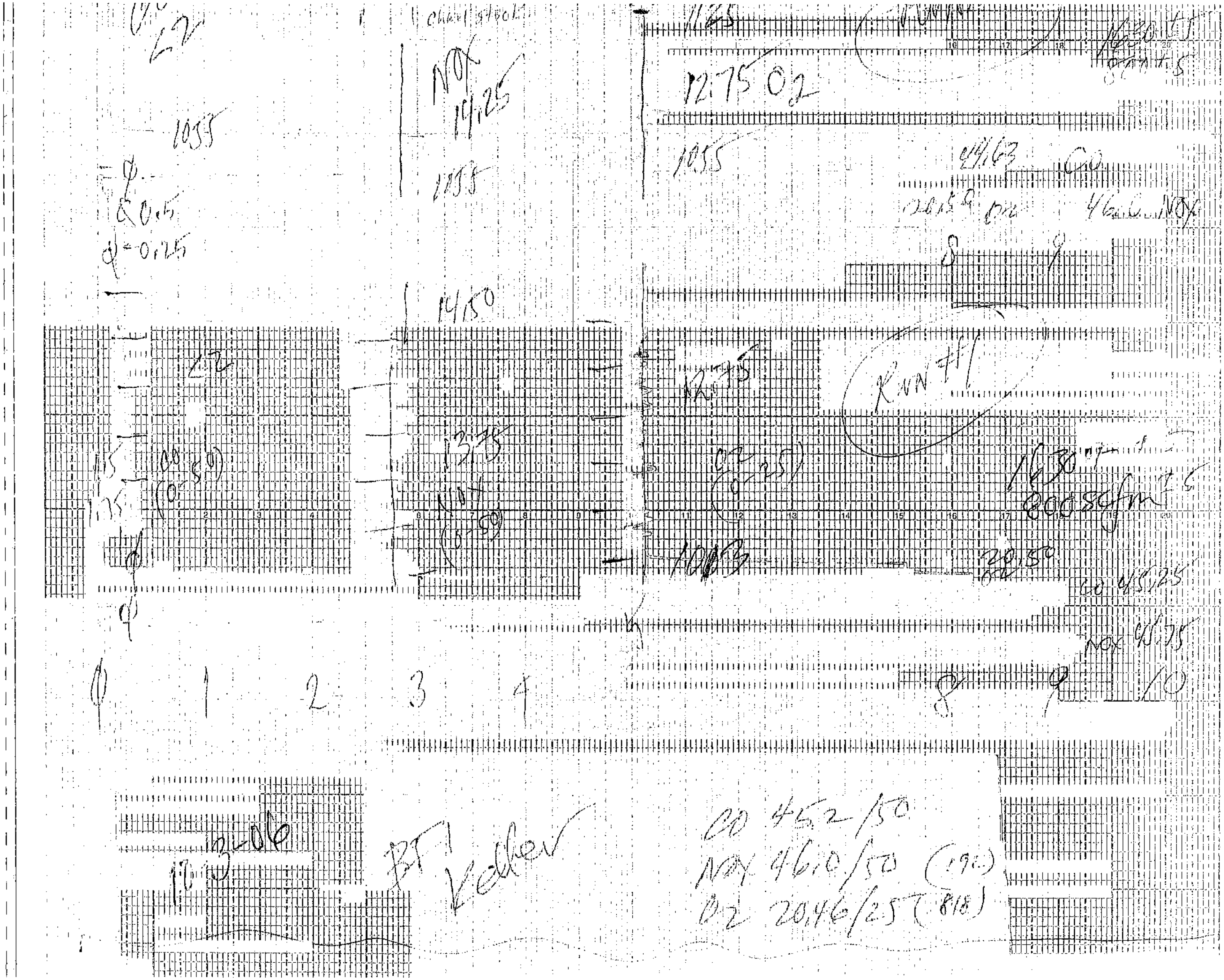
Facility: KELLER CANYON | Test #: 1, 2, 3 | Date: 10-3-06
Location: FLARE | Personnel: GW | Leak Check: ✓
Observers: | Stratification Check:

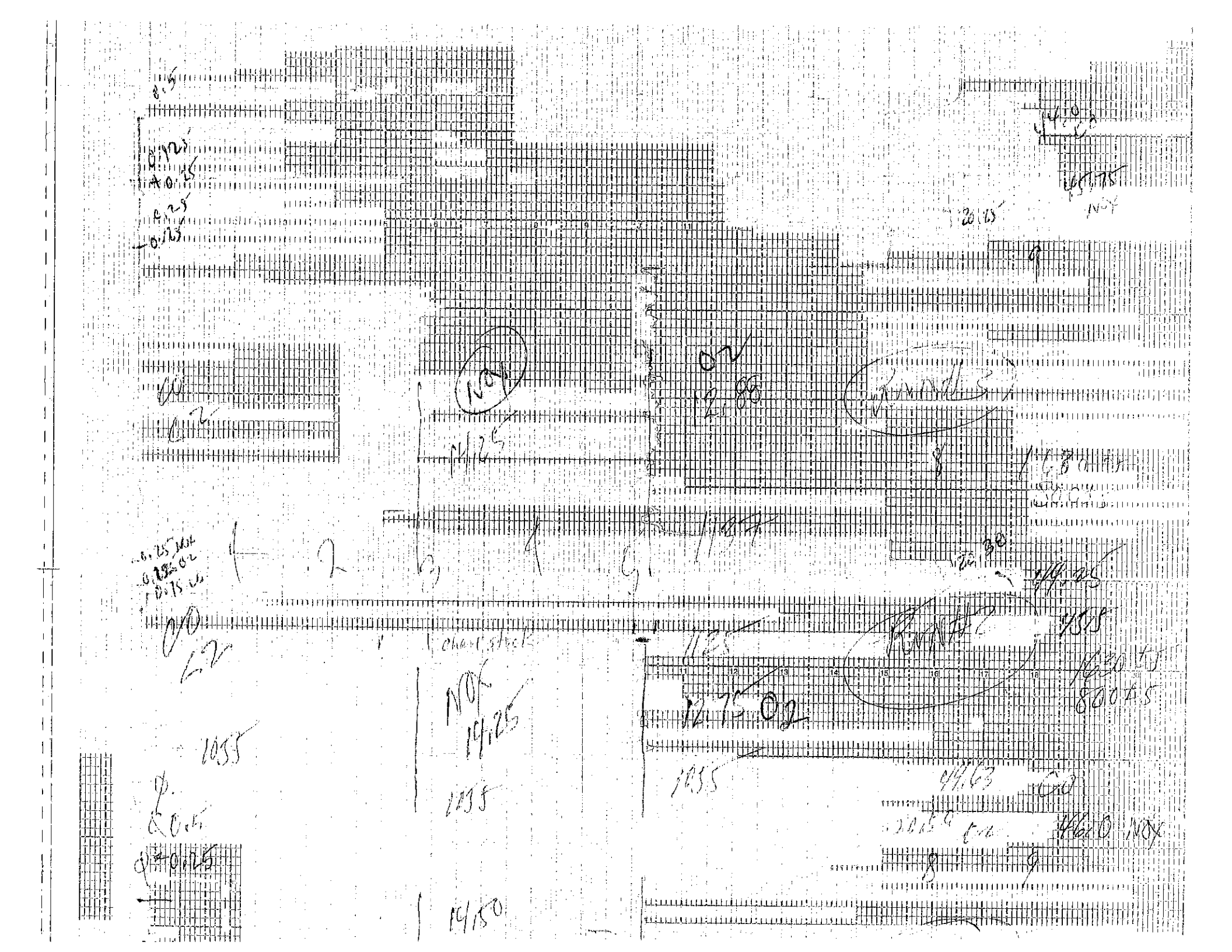
	Parameter	O_2	CO_2	NOx	CO	THC	CH_4	SO_2			Unit Description/Serial #:
	Analyzer	755R	PIR 2000	42C	48C	RS-55	RS-55	721 AT			
	Range	25	15	50	50	100					Operating Conditions:
	Span Value(s)	20.96	12.65	46.0	45.2	76.5					
	Span Value(s)										Fuel:
	Span Value(s)										
	ZERO	0	0	0	0	0					NOTES:
	CAL	20.5	12.65	45.75	45.25	77.0					
1	1013	12.75	6.9	13.75	<2	<2					
	↓	12.75	6.84	13.75	<2	<2					1630°F ±5
		12.75	6.83	13.75	<2	<2					900scfm ±5
		12.75	6.83	13.75	<2	<2					
	↓	12.75	6.82	13.75	<2	<2					
	1043	12.75	6.68	14.50	<2	<2					
	ZERO	0	0	-0.25	0.15	0					
	CAL	20.50	12.65	46.0	44.63	76.5					
	AVG	12.75	6.68	13.88	<2	<2					
2	1055	12.75	6.75	14.25	<2	<2					1630°F
	↓	12.75	6.75	14.25	<2	<2					800 scfm
		12.75	6.75	14.25	<2	<2					
		12.75	6.75	14.25	<2	<2					
	↓	12.75	6.75	14.25	<2	<2					
	1125	12.75	6.75	14.25	<2	<2					
	ZERO	0.125	0	-0.25	0.75	0					
	CAL	20.30	12.65	45.5	44.25	74.0					
	AVG	12.75	6.75	14.25	<2	<2					
3	1137	12.88	6.68	14.25	<2	<2					1630 °F
	↓	12.88	6.68	14.25	<2	<2					800 scfm
		12.88	6.68	14.25	<2	<2					
		12.88	6.68	14.25	<2	<2					
		12.88	6.68	14.25	<2	<2					
	↓	12.88	6.68	14.25	<2	<2					
	1207	—	—	—	—	—					
	ZERO	0.125	0	-0.25	+0.25	0					
	CAL	20.25	12.52	45.75	44.0	74					
	AVG	12.88	6.68	14.25	<2	<2					

Strip Chart Records






NOX 14:25
12:75 O2
CO 45.2/50
NOX 46.0/50 (190)
O2 20.46/25 (818)
BT 1 Keller
10-3-06
Run #1
1650
800 scfm



QC Calibration Gas Certifications

In service 8/10/06

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER BLUE SKY ENV. **P.O NUMBER**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
PROPANE GMIS	vs.SRM#1666	SA 5175	29.9 ppm

ANALYZER READINGS

R=REFERENCE STANDARD *Z=ZERO GAS* *C=GAS CANDIDATE*

1. **COMPONENT** PROPANE GMIS **ANALYZER MAKE-MODEL-S/N** HORIBA, FIA-510, 851135122

ANALYTICAL PRINCIPLE Flame Ionization Detector **LAST CALIBRATION DATE** 06/02/06

FIRST ANALYSIS DATE 06/20/06 **SECOND ANALYSIS DATE**

Z	0.0	R	80.7	C 68.8	CONC. 25.5	Z	R	C	CONC.
R	80.9	Z	0.0	C 69.0	CONC. 25.5	R	Z	C	CONC.
Z	0.0	C	69.0	R 80.9	CONC. 25.5	Z	C	R	CONC.
U/M	ppm			MEAN TEST ASSAY	25.5	U/M	ppm		MEAN TEST ASSAY

Values not valid below 150 psig

THIS CYLINDER NO. CC 80766
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. Rev. 9/97
PROCEDURE G1
CERTIFIED ACCURACY ± 1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 06/20/06
EXPIRATION DATE 06/20/09 **TERM** 36 MONTHS

CERTIFIED CONCENTRATION

PROPANE	25.5 ppm
AIR	BALANCE

76.5

ANALYZED BY HELENA TRAN ***CERTIFIED BY*** PHU NGUYEN

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER BLUE SKY ENV. **P.O NUMBER**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
CARBON DIOXIDE GMIS	vs. SRM82745	CC 139824	14.94%
OXYGEN GMIS	vsSRM#2659a	ALS 30	21.06 %

ANALYZER READINGS

R=REFERENCE STANDARD *Z=ZERO GAS* *C=GAS CANDIDATE*

1. **COMPONENT** CARBON DIOXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Ultramat 5E S/N A12-730

ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 06/01/06

FIRST ANALYSIS DATE 06/16/06 **SECOND ANALYSIS DATE**

Z 0.00	R 14.94	C 12.66	CONC. 12.66	Z	R	C	CONC.
R 14.96	Z 0.00	C 12.66	CONC. 12.64	R	Z	C	CONC.
Z 0.00	C 12.66	R 14.96	CONC. 12.64	Z	C	R	CONC.

U/M % **MEAN TEST ASSAY** 12.65 U/M % **MEAN TEST ASSAY**

2. **COMPONENT** OXYGEN GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Oxymat 5E S/N A12-839

ANALYTICAL PRINCIPLE Paramagnetic **LAST CALIBRATION DATE** 06/01/06

FIRST ANALYSIS DATE 06/16/06 **SECOND ANALYSIS DATE**

Z 0.00	R 21.06	C 20.46	CONC. 20.46	Z	R	C	CONC.
R 21.06	Z 0.00	C 20.46	CONC. 20.46	R	Z	C	CONC.
Z 0.00	C 20.46	R 21.06	CONC. 20.46	Z	C	R	CONC.

U/M % **MEAN TEST ASSAY** 20.46 U/M % **MEAN TEST ASSAY**

Values not valid below 150 psig
O2 concentration is corrected for CO2 interference.

THIS CYLINDER NO. CC 108136
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. Rev. 9/97
PROCEDURE G1
CERTIFIED ACCURACY ± 1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 06/16/06
EXPIRATION DATE 06/16/09 **TERM** 36 MONTHS

CERTIFIED CONCENTRATION

CARBON DIOXIDE	12.65%
OXYGEN	20.46%
NITROGEN	BALANCE

ANALYZED BY YUNG SOO CHUNG ***CERTIFIED BY*** PHU TIEN NGUYEN

Praxair
5700 South Alameda Street
Los Angeles, CA 90058
Telephone: (323) 585-2154
Facsimile: (714) 542-6689

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER BLUE SKY ENV. **P.O NUMBER**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
CARBON MONOXIDE GMIS	SRM#1678c	CC 160155	51.1 ppm
NITRIC OXIDE GMIS	1683b	CC 86260	49.7 ppm

ANALYZER READINGS

R=REFERENCE STANDARD *Z=ZERO GAS* *C=GAS CANDIDATE*

1. **COMPONENT** CARBON MONOXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Siemens Ultramat 5E S/N A12-729
   ANALYTICAL PRINCIPLE NDIR **LAST CALIBRATION DATE** 07/01/05
   FIRST ANALYSIS DATE 07/21/05 **SECOND ANALYSIS DATE** 07/28/05

Z 0.0	R 51.1	C 45.3	CONC. 45.3		Z 0.0	R 51.1	C 45.1	CONC. 45.1			
R 51.1	Z 0.0	C 45.3	CONC. 45.3		R 51.1	Z 0.0	C 45.1	CONC. 45.1			
Z 0.0	C 45.2	R 51.1	CONC. 45.2		Z 0.0	C 45.1	R 51.1	CONC. 45.1			
U/M ppm		MEAN TEST ASSAY 45.3 ppm			U/M ppm		MEAN TEST ASSAY 45.1 ppm				

2. **COMPONENT** NITRIC OXIDE GMIS **ANALYZER MAKE-MODEL-S/N** Beckman 951A S/N 0101354
   ANALYTICAL PRINCIPLE Chemiluminescence **LAST CALIBRATION DATE** 07/08/05
   FIRST ANALYSIS DATE 07/21/05 **SECOND ANALYSIS DATE** 07/28/05

Z 0.0	R 428.3	C 389.5	CONC. 45.2		Z 0.0	R 376.9	C 342.0	CONC. 45.1			
R 426.5	Z 0.0	C 386.2	CONC. 45.0		R 376.4	Z 0.0	C 342.3	CONC. 45.2			
Z 0.0	C 386.7	R 426.0	CONC. 45.1		Z 0.0	C 342.3	R 376.2	CONC. 45.2			
U/M mV		MEAN TEST ASSAY 45.1 ppm			U/M mV		MEAN TEST ASSAY 45.2 ppm				

NOx VALUE FOR REFERENCE ONLY.
VALUE NOT VALID BELOW 150 psig.

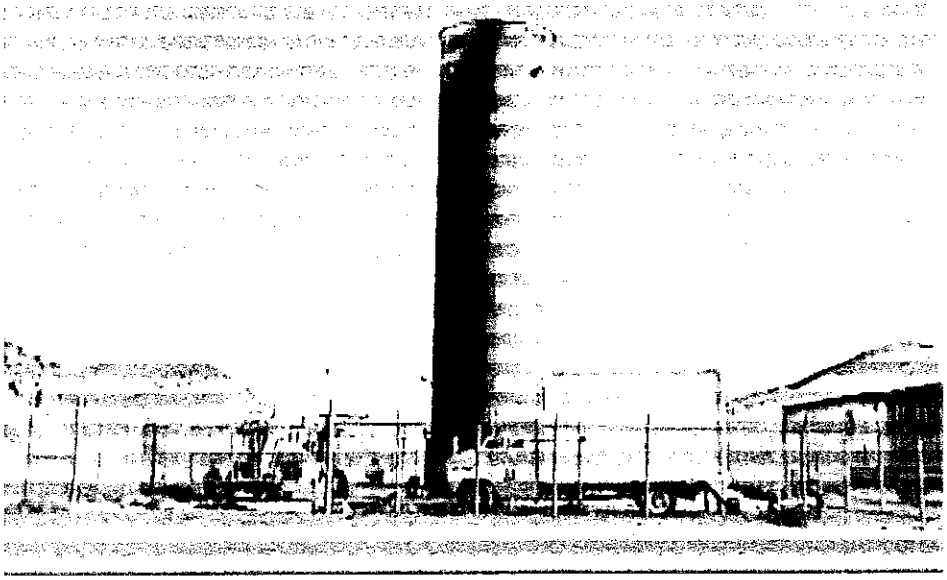
THIS CYLINDER NO. CC 83761
HAS BEEN CERTIFIED ACCORDING TO SECTION EPA-600/R97/121
OF TRACEABILITY PROTOCOL NO. Rev. 9/97
PROCEDURE G1
CERTIFIED ACCURACY ± 1 **% NIST TRACEABLE**
CYLINDER PRESSURE 2000 **PSIG**
CERTIFICATION DATE 07/28/05
EXPIRATION DATE 07/28/07 **TERM** 24 MONTHS

CERTIFIED CONCENTRATION

CARBON MONOXIDE	45.2 ppm
NITRIC OXIDE	45.1 ppm
NITROGEN	BALANCE
NOx	46.0 ppm

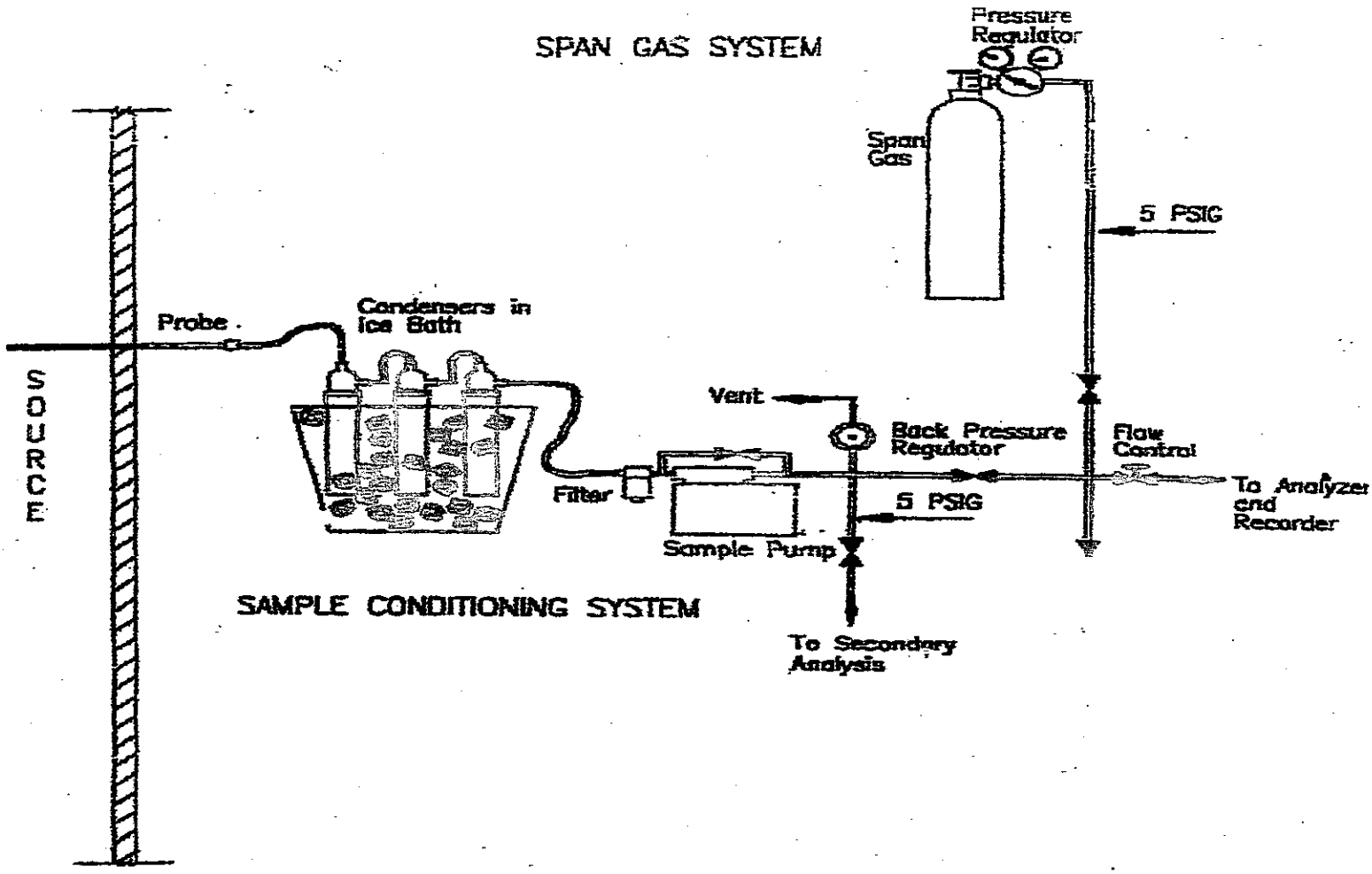
ANALYZED BY CHRIS VU ***CERTIFIED BY*** MICHAEL TSANG

Stack Diagram



BFI-Keller Landfill Flare

Sample System Diagram



BAAQMD ST-5 (CO2)
BAAQMD ST-6 (CO)
BAAQMD ST-7 (THC by FID)
BAAQMD ST-13A (NOx)
BAAQMD ST-14 (O2)
BAAQMD ST-19A (SO2)

Permit/Authority to Construct

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Final

MAJOR FACILITY REVIEW PERMIT

Issued To:

Allied Waste Industries, Inc.
Facility #A4618

Facility Address:
901 Bailey Road
Pittsburg, CA 94565

Mailing Address:
901 Bailey Road
Pittsburg, CA 94565

Responsible Official	**Facility Contact**
Norm Christensen, General Manager	Norm Christensen, General Manager
925-458-9800	925-458-9800

Type of Facility:	Municipal Solid Waste Landfill	BAAQMD Permit Division Contact:
Primary SIC:	4953	Carol S. Allen
Product:	Class II Solid Waste Disposal	

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jack P. Broadbent _____ September 20, 2006

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer — Date

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE:

23. The combustion zone temperature of the A-1 Flare shall be maintained at a minimum temperature of 1504 degrees F, averaged over any 3-hour period. The combustion zone temperature of the A-2 Flare shall be maintained at a minimum temperature of 1400 degrees F, averaged over any 3-hour period. If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise these minimum temperature requirements in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415 and the following criteria. The minimum combustion zone temperature for the flare shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50 degrees F, provided that the minimum combustion zone temperature is not less than 1400 degrees F. (Basis: Regulation 8-34-301, Toxic Risk Management Policy, RACT, 40 CFR 60.758(c)(1)(i))

24. NOx emissions from either the A-1 Flare or the A-2 Flare shall not exceed 15 ppmv of NO_x, expressed as NO_2 at 15% oxygen on a dry basis. (Basis: RACT)

25. CO emissions from the A-1 Flare shall not exceed 114 ppmv of CO at 15% oxygen on a dry basis. CO emissions from the A-2 Flare shall not exceed 81 ppmv of CO at 15% oxygen on a dry basis. (Basis: RACT)

26. [deleted]

27. A flow meter to measure gas flow into each flare shall be installed prior to operation and maintained in good working condition. (Basis: Regulation 8-34-508 and 40 CFR 60.756(b))

28. Each flare shall be equipped with both local and remote alarms, automatic combustion air control, and automatic start/restart system. (Basis: Regulation 8-34-301)

29. [deleted]

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE:

30. In order to demonstrate compliance with Parts 24 and 25 above, Regulations 8-34-301.3 and 8-34-412, 40 CFR 60.8, and 40 CFR 60.752(b)(2)(iii)(B), the owner/operator shall conduct a source test at each flare once every year. The source tests shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The first source test for A-2 shall be conducted within 60 days of initial start-up of A-2. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. Each annual source test shall determine the following:
    a. landfill gas flow rate to the flare (dry basis);
    b. concentrations (dry basis) of carbon dioxide (CO_2), nitrogen (N_2), oxygen (O_2), methane (CH_4), and total non-methane organic compounds (NMOC) in the landfill gas;
    c. stack gas flow rate from the flare (dry basis);
    d. concentrations (dry basis) of NO_x, CO, NMOC, and O_2 in the flare stack gas;
    e. NMOC destruction efficiency achieved by the flare;
    f. NO_x and CO emission rates from the flare in units of pounds per MM BTU,
    g. average combustion zone temperature in the flare during the test period.
    (Basis: Regulation 8-34-301.3, RACT, 40 CFR 60.752(b)(2)(iii))

31. The Permit Holder shall conduct a characterization of the landfill gas concurrent with the annual source test required by Part 30 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in Part 30b, the landfill gas shall be analyzed for the organic and sulfur compounds listed below. All concentrations shall be reported on a dry basis. The sulfur compound data collected pursuant to this part may be used to determine the total reduced sulfur compound concentration expressed as H2S (TRS) and the ratio (R) of total reduced sulfur content versus hydrogen sulfide content, where R=TRS/H2S. This ratio (R) may be used in Part 34 below (in place of the default value of R=1.2) to calculate TRS based on H2S measured by the Draeger tube method. The test report shall be submitted to the Compliance and Enforcement Division and the Source Test Section within 60 days of the test date. (Basis: Toxic Risk Management Policy, Regulations 8-34-301 and 9-1-302, and NSPS)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE:

Organic Compounds	Sulfur Compounds
Acrylonitrile	Carbon Disulfide
Benzene	Carbonyl Sulfide
Carbon Tetrachloride	Dimethyl Sulfide
Chloroform	Ethyl Mercaptan
Ethylene Dibromide	Hydrogen Sulfide
Ethylene Dichloride	Methyl Mercaptan
Methylene Chloride	
Perchloroethylene	
Trichloroethylene	
Vinyl Chloride	

*32. If concentrations of toxic air contaminants (TACs) are above the levels listed below, an additional risk screen run at actual concentrations will be required. Depending on the results of such screen, additional permit conditions may be required if health risks are deemed unacceptable.

Compound	Concentration (ppbv)
Acrylonitrile	500
Benzene	10,000
Carbon Tetrachloride	100
Chloroform	100
Ethylene Dibromide	100
Ethylene Dichloride	400
Methylene Chloride	27,600
Perchloroethylene	3,600
Trichloroethylene	2,300
Vinyl Chloride	1,600

(Basis: Toxic Risk Management Policy)

33. The fugitive emissions of Precursor Organic Compounds (POC) from the S-1 Landfill shall not exceed 40.059 tons per year (expressed asmethane). Fugitive POC emissions from the landfill shall be determined using the procedures and assumptions described in Parts 33a-f below. POC emissions from the landfill shall be calculated at least once every five years or whenever the capacity of the landfill gas emissions control system, A-1 and A-2 Flares, is expanded, whichever is sooner.

a. The current methane generation rate and uncontrolled POC emissions from the S-1 Landfill shall be calculated using the equations described in the most recent revision of AP-42 Chapter 2.4.

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE:

b. The methane generation rate shall be based on the total amount of waste accepted at the landfill to date. The Permit Holder may use either average annual or year-to-year waste acceptance rates.

c. The Permit Holder shall use the AP-42 recommended default values for the methane generation potential and methane generation rate constant. As of April 1, 2005, these default values were:
Lo = 100 m3 CH4/Mg and k = 0.02 year^-1.

d. When calculating uncontrolled POC emissions (UEPOC, pounds/year of POC), the Permit Holder shall use site specific NMOC, NPOC, and methane concentrations (after correcting for air infiltration) and the site specific landfill gas temperature. The site specific values shall be the average of at least three previous years of data collected pursuant to Part 31 above.

e. Total non-methane organic compounds (NMOC) measured in the landfill gas pursuant to Part 31 may be assumed to be 100% POC, or a site specific POC concentration (CPOC) can be calculated using data from Part 33d above, where CPOC = NMOC – NPOC (all concentrations expressed as methane).

f. The fugitive POC emissions from the landfill (FEPOC, pounds/year of POC) shall be calculated using the equation below:
FEPOC = 0.25 * UEPOC

(Basis: Offsets)

34. Total reduced sulfur (TRS) compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control systems exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 300 ppmv (dry). In order to demonstrate compliance with this part, the Permit Holder shall measure the hydrogen sulfide (H2S) content in collected landfill gas on a quarterly basis using the Draeger tube method. The TRS content of the landfill gas shall be calculated according to the following equation: TRS = R * H2S measured by Draeger tube method, where R is either (a) the ratio of TRS/H2S that is determined from the sulfur compound data collected pursuant to Part 31 or (b) a default value of 1.2. The annual laboratory analysis for reduced sulfur compounds, which is required by Part 31 above, may be substituted for one quarterly Draeger tube analysis per year. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the Draeger tube and interpreting the results. (Basis: Cumulative Increase and Regulations 9-1-302 and 2-6-503)

VI. Permit Conditions

Condition # 17309
For S-1 KELLER CANYON LANDFILL, A-1 LANDFILL GAS FLARE, AND A-2 LANDFILL GAS FLARE:

35. The heat input to the flares shall not exceed the following limits: (a) 1744.8 million BTU per day and 636,852 million BTU per year for A-1 and (b) 1824 million BTU per day and 665,760 million BTU per year for A-2. In order to demonstrate compliance with this part, the Permit Holder shall calculate and record on a monthly basis the maximum daily and total monthly heat input to each flare based on the landfill gas flow rate recorded pursuant to Part 27, the average methane concentration in the landfill gas based on the most recent source test, and a high heating value for methane of 1013 BTU/scf. The records shall be retained for five years and shall be made available to the District staff upon request. (Basis: Offsets, Cumulative Increase, and Regulation 2-1-301)

36. The Permit Holder shall limit the quantity of VOC soil handled per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. VOC soil is any soil that contains volatile organic compounds, as defined in Regulation 8-40-213, at a concentration of 50 ppmw or less. Soil containing more than 50 ppmw of VOC is considered to be "contaminated soil" and is subject to Part 37 instead of Part 36. Soil containing only non-volatile hydrocarbons and meeting the requirements of Regulation 8-40-113 is not subject to Part 36. In order to demonstrate compliance with this condition, the Permit Holder shall maintain the following records in a District approved log.
    a. Record on a daily basis the amount of VOC soil handled at the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c below.
    b. Record on a daily basis the VOC content of all soils handled at the landfill. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon (or C_1).
    c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:
    $E = Q * C / 10^6$
    All records shall be maintained on site or shall be made readily available to District staff upon request for at least 5 years from the date of entry. (Basis: Regulation 8-2-301)

*37. Handling Procedures for Soil Containing Volatile Organic Compounds
    a. The procedures listed below in subparts b-l do not apply if the following criteria are satisfied. However, the record keeping requirements in subpart m below are applicable.

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL;
A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	40 CFR 60.753(d)	Y		Surface Leak Limit: ≤ 500 ppmv as methane at 5-10 cm from surface	40 CFR 60.755(c)(1), (4) and (5), 60.756(f), and 60.758(c) and (e)	P/M, Q and E	Monthly Visual Inspection of Cover, Quarterly Inspection with OVA of Surface, Various Reinspection Times for Leaking Areas, and Records
Non-Methane Organic Com-pounds (NMOC)	BAAQMD 8-34-301.3	Y		≥ 98% removal by weight OR ≤ 30 ppmvd @ 3% O_2, expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17309, Parts 30 and 31	P/A	Initial and Annual Source Tests
NMOC	40 CFR 60.752(b)(2)(iii)(B)	Y		≥ 98% removal by weight OR ≤ 20 ppmvd @ 3% O_2, expressed as hexane	40 CFR 60.8 and 60.752(b)(2)(iii)(B) and 60.758 (b)(2)(ii)	P/E	Initial Source Test and Records
Temper-ature of Combus-tion Zone (CT)	BAAQMD Condition # 17309, Part 23	Y		For A-1 Flare: CT ≥ 1504 °F (3-hour average) For A-2 Flare: CT ≥ 1400 °F (3-hour average)	BAAQMD 8-34-501.3 and 507, and BAAQMD Condition # 17309, Part 22	C	Temperature Sensor and Recorder (continuous)

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL; A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Temperature of Combustion Zone (CT)	40 CFR 60.758 (c)(1)(i)	Y		For A-1 Flare: CT ≥ 1504 °F (3-hour average) from ($CT \geq CT_{PF} - 28$ °C), where CT_{PF} is the average combustion temperature during the most recent complying performance test, CT_{PF} was 1554 °F during 10/13/04 test For A-2 Flare: CT will be determined during initial performance test	40 CFR 60.756(b)(1) and 60.758 (b)(2)(i)	C	Temperature Sensor and Recorder (measured every 15 minutes and averaged over performance test time period and 3-hours)
POC	BAAQMD Condition # 17309, Part 33	Y		≤ 40.059 tons per year (fugitive POC from all landfill operations)	BAAQMD Condition # 17309, Part 33	P/E	Calculation Procedure (once every 5 years)
Total Carbon	BAAQMD 8-2-301	Y		≤ 15 pounds/day or ≤ 300 ppm, dry basis only for aeration of or use as cover soil of soil containing ≤ 50 ppmw of volatile organic compounds	BAAQMD Condition # 17309, Part 36a-c	P/E	Records
Amount of Contaminated Soil Aerated or Used as Cover	BAAQMD 8-40-116.1	Y		< 1 cubic yard per project	BAAQMD Condition # 17309, Parts 36a-c and 37m	P/E	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL; A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO_2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes, and ≤0.05 ppm for 24 hours	None	N	NA
SO_2	BAAQMD 9-1-302	Y		For Flares: ≤ 300 ppm (dry)	BAAQMD Condition # 17309, Parts 31 and 34	P/Q	Sulfur Analysis of Landfill Gas
H_2S	BAAQMD 9-2-301	N		Property Line Ground Level Limits: ≤ 0.06 ppm averaged over 3 minutes and ≤ 0.03 ppm averaged over 60 minutes	None	N	NA
Total Reduced Sulfur (TRS) Com-pounds	BAAQMD Condition # 17309, Part 34	Y		Concentration in Landfill Gas: ≤ 300 ppmv (dry)	BAAQMD Condition # 17309, Parts 31 and 34	P/Q	Sulfur Analysis of Landfill Gas
Opacity	BAAQMD 6-301	Y		For Landfill Operations: ≤ Ringelmann No. 1 for 3 minutes in any hour	BAAQMD Condition # 17309, Part 16j-1	P/D	Records of Water and Dust Suppressant Application

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL; A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO_x	BAAQMD Condition # 17309, Part 24	Y		For both A-1 Flare and A-2 Flare: ≤ 15 ppmv of NO_x, expressed as NO_2 at 15% O_2, dry	BAAQMD Condition # 17309, Part 30	P/A	Annual Source Test
CO	BAAQMD Condition # 17309, Part 25	Y		For A-1 Flare: ≤ 114 ppmv of CO at 15% O_2, dry For A-2 Flare: ≤ 81 ppmv of CO at 15% O_2, dry	BAAQMD Condition # 17309, Part 30	P/A	Annual Source Test
Acrylo-nitrile	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 500 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Benzene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 10,000 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Carbon Tetra-chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Chloro-form	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Ethylene Di-bromide	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 100 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Ethylene Di-chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 400 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 KELLER CANYON LANDFILL; A-1 LANDFILL GAS FLARE; AND A-2 LANDFILL GAS FLARE

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Methyl-ene Chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 27,600 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Perchloro-ethylene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 3,600 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Trichloro-ethylene	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 2,300 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Vinyl Chloride	BAAQMD Condition # 17309, Part 32	N		Concentration in Landfill Gas: ≤ 1,600 ppbv	BAAQMD Condition # 17309, Part 31	P/A	Annual Laboratory Analysis
Heat Input	BAAQMD Condition # 17309, Part 35	Y		For A-1 Flare: ≤ 1744.8 MM BTU per day and ≤ 636,852 MM BTU per year For A-2 Flare: ≤ 1824 MM BTU per day and ≤ 665,760 MM BTU per year	BAAQMD Condition # 17309, Part 35	P/M	Records

Source Test Plan

Blue Sky Environmental, LLC
624 San Gabriel Avenue
Albany, California 94706
Ph/Fax (510) 525 1261
Cell (510) 508 3469
blueskyenvironmental@yahoo.com

September 27, 2006

Attn.: Ken Kunaniec
Bay Area Air Quality Management District
Compliance and Enforcement Division
939 Ellis Street
San Francisco, CA 94109

Re: Source Test Plan (STP) for compliance emissions testing of 1 Flare at BFI's Keller Canyon Landfill, Plant # 4618, Source A-1, located at 901 Bailey Road, Pittsburg, California.

Dear Mr. Kunanieac,

Blue Sky Environmental, LLC is pleased to present this Source Test Plan for the above referenced sampling project. Testing will include the following:

- At the flare exhaust, triplicate thirty-minute tests will be performed, using BAAQMD methods, for THC and NMOC's (POC) (ST-7-FID), NOx (ST-13A), CO (ST-6), CO_2 (ST-5) and O_2 (ST-14). Testing is designed to determine compliance with the following BAAQMD Permit conditions;
- The NOx limit is 14 ppm @ 15% O_2, and the CO limit is 114 ppm CO @ 15% O_2. The THC Destruction Efficiency must be >98% and Reg 8 Rule 34 requires that the flare must achieve a 98% Destruction Efficiency of NMOC or be <30 ppm as CH_4 @3% O_2.
- If emissions of NMOC are greater than 30 ppm @ 3% O_2, then three integrated bag samples will be collected of the landfill gas for Non-Methane Organic Compounds (NMOCs) using EPA Method 25C, to determine destruction efficiency.
- One LFG sample will be collected and analyzed for Calderon specified air contaminants, and TAC's (acrylonitrile, benzene, carbon tetrachloride, chloroform, ethylene dibromide, methylene dichloride, methylene chloride, perchloroethylene, trichloroethylene and vinyl chloride. Also, a single integrated sample of landfill gas will be collected and analyzed for CH_4 and BTU & F-factor by ASTM D-3588/D-1945. The fuel analysis (BTU & Fd Factor) will be used to calculate outlet volumetric flow rate using EPA Method 19.
- Flare temperature and fuel flow rate will be recorded using the facility monitors. Independent fuel measurement will be made if accessible ports are available.
- Three copies of the compliance test report will be submitted to the client within four weeks of completion of the test program. The report will include a test description and tables presenting concentrations (ppm), emission rates (lbs/hr) for all sampling parameters. All supporting documents (strip charts, field data sheets, calibrations, calculations, etc.) will also be included.

Testing is scheduled for October 3rd, with a 7:30 am arrival time. The facility contact is Lochlin Caffey who may be reached at 925/458-9800. If you have any questions, please contact Guy Worthington at 510 525 1261, or 510 508 3469.

Sincerely,

Guy Worthington
Principal

BAAQMD FAX **415/749-4922**
Lochlin Caffey **925/458-9891** emailed 9/27/06