



Environmental Protection Division

P.O. Box 1663, MS J978
Los Alamos, New Mexico 87545
505-667-2211/Fax 505-665-8858

Date: August 3, 2007
Refer To: ENV-DO-07-016

Ms. Debra McElroy
Section Chief – Enforcement/Compliance
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo St.
Santa Fe, New Mexico 87505

**SUBJECT: SEMI-ANNUAL MONITORING REPORT FOR JANUARY – JUNE 2007
AIR QUALITY TITLE V OPERATING PERMIT P100-M1 IDEA ID
NO. 856 – LOS ALAMOS NATIONAL LABORATORY**

Dear Ms. McElroy:

Enclosed is a copy of Los Alamos National Laboratory's Title V Operating Permit semi-annual Monitoring Report for the period **January 1 – June 30, 2007** (Enclosure - 1). This submission is required by permit condition 4.2 of NMED Operating Permit P100-M1 dated June 15, 2006, and is transmitted within the allowed 45 days after the end of the reporting period as specified in permit condition 4.3. Included with this report are attachments A through I. Each attachment is labeled with its contents and provides monitoring data to support compliance with conditions listed in the monitoring sections of the permit.

One deviation was identified in this report. On May 1, 2007, the Power Plant exceeded the 20% opacity limit as listed in Permit Condition 2.9.4.10. Verbal notification was made to NMED on May 2, 2007, and a written notification was provided to your bureau in a letter dated May 9, 2007. The ten (10) minute average opacity observed during the observation was 25%.

If you have any questions or comments regarding this submittal or would like to discuss the submittal in greater detail, please contact Steve Story at 665-2169 or David Paulson at 665-8884.

Sincerely,

for Victoria A. George
Division Leader
Environmental Protection Division

DLP:tav

Enc: a/s

Cy: w/o opacity reports

M. Mallory, PADOPS, A102
R. Watkins, ADESH&Q, K491
S. Fong, DOE-LA-SO, A316
P. Wardwell, LC-ESH, A187
D. Wilburn, ENV-EAQ, J978
S. Story, ENV-EAQ, J978
D. Paulson, ENV-EAQ, J978
J. Stanton, SSS-AE-V02, A199

Cy: with opacity reports

ENV-DO file
IRM-RMMSO, A150
ENV-EAQ Title V Monitoring Report File

LA-UR-07-5289

Approved for public release;
distribution is unlimited.

Title: Semi-Annual Monitoring Report
January 1 - June 30, 2007
Air Quality Title V Operating Permit P100M1
Los Alamos National Laboratory

Author(s): David Paulson, ENV-EAQ

Intended for: Ms. Debra McElroy
Section Chief, Enforcement/Compliance
New Mexico Environment Department
Air Quality Bureau
2048 Galisteo St.
Santa Fe. New Mexico 87505



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**Los Alamos National Laboratory
Operating Permit P100M1
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January 1 – June 30, 2007**

Identifying Information

Source Name: Los Alamos National Laboratory County: Los Alamos

Source Address:
City: Los Alamos State: NM Zip Code: 87545

Responsible Official: Victoria A. George Ph No. (505) 667-2211 Fax No. (505) 665-8858
Technical Contact: Steven L. Story Ph No. (505) 665-2169 Fax No. (505) 665-8858

Principal Company Product or Business: National Security and Nuclear Weapons Research Primary SIC Code: 9711

Permit No. P100M1 {IDEA/Tempo ID No. 856} Permit Issued Date: April 30, 2004
M1 June 15, 2006

Certification of Truth, Accuracy, and Completeness

I, Victoria A. George certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached semi-annual monitoring report are true, accurate, and complete.

Signature *Brianne William Wilkin for Victoria A. George* Date: 8/3/2007

Title: Division Leader, Environmental Protection Division

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Sources (by permit section)

- 1. Asphalt Production**
- 2. Beryllium Activities**
- 3. Boilers and Heaters**
- 4. Carpenter Shops, TA-3-38 & TA-15-563**
- 5. Chemical Usage**
- 6. Degreasers**
- 7. Internal Combustion Sources**
- 8. Data Disintegrator, TA-52-11**
- 9. Power Plant at Technical Area 3 (TA-3-22)**

Deviations

Attachments

- A: Asphalt Plant Opacity Reports**
- B: Beryllium HEPA Filter Tests Results**
- C: Boilers and Heaters Natural Gas Usage**
- D: Carpenter Shop Hours of Operation**
- E: Degreaser Solvent Usage**
- F: Internal Combustion Generator Hours of Operation**
- G: Data Disintegrator Box Throughput**
- H: Power Plant Natural Gas and Fuel Oil Usage**
- I: Power Plant Opacity Reports**

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1. Asphalt Production

Permit Section	Monitoring Required	Monitoring Performed
2.1.4.1	Perform monthly six (6) minute opacity readings for each emission point having opacity greater than zero as determined by EPA Method 22.	<p>Monthly opacity reports are provided as Attachment A.</p> <p>Monthly six minute opacity readings are taken using the required EPA Methods.</p>
2.1.4.2	Monitor the differential pressure (inches of water) across the baghouse by the use of a differential pressure gauge, in accordance with condition IV.C.2 of NSR permit number GCP-3-2195G.	<p>A differential pressure gauge is in place to continuously monitor the differential pressure across the baghouse as required by NSR permit GCP-3-2195G condition IV.C.2.</p> <p>The differential pressure is recorded twice each day during operations, once at the beginning of the production run and once at the end. This is consistent with NSR permit GCP-3-2195G condition IV.D.2(e).</p> <p>Records are available on-site for NMED inspection.</p>
2.1.4.3	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL has certified opacity readers on-site who perform opacity readings using 40 CFR 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

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2. Beryllium Activities (Permit Section 2.2.4)

Source	Monitoring Required	Monitoring Performed
TA-3-29 Chemistry and Metallurgy Research Facility	A log shall be maintained during operations which indicate the number of Be samples processed.	<p>The registration for this source has been cancelled. Beryllium work is no longer performed at this location. A letter was sent to NMED on June 5, 2007 making this request.</p> <p>A log with the number of Be samples processed during this six month reporting period is available on-site for NMED inspection.</p>
TA-3-66 Sigma Facility	A log shall be maintained during operations which show the number of metallographic specimens used in the polishing operation and the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.	<p>A log is maintained showing the number of metallographic specimens used in the polishing operation.</p> <p>Logs are maintained showing the weight of Be samples processed in the electroplating/chemical milling, machining, and arc melting/casting operations.</p> <p>Logs are available on-site for NMED inspection.</p>
TA-3-141 Beryllium Technology Facility (BTF)	Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions.	<p>The BTF is equipped with a continuous emissions monitor to measure beryllium emissions. The monitoring system is operated in accordance with LANL Quality Assurance Project Plan ESH-17-BM and emission results are provided to NMED quarterly.</p> <p>Submissions for this period were provided to NMED in reports dated January 29, 2007 [ENV-EAQ:07-017] and May 8, 2007 [ENV-EAQ:07-085]</p>
	Cartridge and HEPA filters will be	Cartridge and HEPA filters are

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Source	Monitoring Required	Monitoring Performed
	equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.	equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.
TA-16-207	Project files shall be maintained of components prepared for testing.	Project files are maintained of components prepared for testing. Files are available on-site for NMED inspection.
TA-35-87	A log shall be maintained during operations which show the number of beryllium filters cut.	A log is maintained showing the number of beryllium filters cut. The log is available on-site for NMED inspection.
TA-35-213 Target Fabrication Facility	Records of the stack emission test results (see Condition 2 of NSR Permit No. 632) and other data needed to determine total emissions shall be retained at the source and made available for inspection by the Department.	Records of stack emission test results are maintained on-site and available for NMED inspection. Stack emission test results are used to determine total emissions from this facility.
TA-55-PF-4 Plutonium Facility	The HEPA filtration systems shall be equipped with a differential pressure gauge that measures the differential pressure (inches of water) across the HEPA filters while the exhaust fans are in operation.	The HEPA filtration systems are equipped with differential pressure gauges that measure the differential pressure across the HEPA filters while the exhaust fans are in operation.
	Control efficiency shall be verified by daily HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters.	Control efficiency is verified by daily HEPA filter pressure drop readings. Readings are recorded in the TA-55 Operations Center. Annual HEPA filter challenge tests of accessible filters are performed. Test results are summarized in Attachment B.

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3. Boilers and Heaters

Permit Section	Monitoring Required	Monitoring Performed
2.3.4.1	Emission units TA-21-357-1, TA-21-357-2, and TA-21-357-3: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	A volumetric flow meter is utilized to measure the total amount of natural gas being used on a monthly basis for emission units TA-21-357-1, TA-21-357-2 and TA-21-357-3. Natural gas usage is summarized in Attachment C.
2.3.4.2	Emission units TA-55-6-BHW-1 and TA-55-6-BHW-2: A volumetric flow meter shall be utilized to measure the total amount of natural gas being used on a monthly basis.	Volumetric flow meters are utilized to measure the total amount of natural gas being used on a monthly basis for emission units TA-55-6-BHW-1 and TA-55-6-BHW-2. Natural gas usage is summarized in Attachment C.
2.3.4.3	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

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4. Carpenter Shops, TA-3-38 & TA-15-563

Permit Section	Monitoring Required	Monitoring Performed
2.4.4.1	The permittee shall maintain logs of the hours the carpenter shops are in operation.	<p>A log is maintained of the hours of operation at the TA-3-38 shop. During this reporting period, hour meters for the cyclone separators were utilized to monitor hours of shop operation. Readings are collected and recorded monthly.</p> <p>The TA-15-563 carpenter shop is equipped with an hour meter on the cyclone separator. The hour meter is read and recorded monthly.</p> <p>Hours of operation are provided in Attachment D.</p>

5. Chemical Usage

Permit Section	Monitoring Required	Monitoring Performed
2.5.4.1	Maintain records of chemical purchasing through facility-wide chemical tracking system, and use the data to calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	Records are maintained in LANL's facility wide chemical tracking system (ChemLog). The data is used to calculate emissions and is submitted in the Semi-Annual Emission Report.

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6. Degreasers

Permit Section	Monitoring Required	Monitoring Performed
2.6.4.1	Record the amount of solvent added to the degreaser, and calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	Records are maintained of the amount of solvent added to the degreaser. This data is used to calculate emissions on a semi-annual basis. LANL's "Historical Solvent Usage Data" report for Jan. 1 – June. 30, 2007 is provided in Attachment E.
2.6.4.2	Complete checklist for work practice standards.	LANL completes work practice checklists for the degreaser operation. The checklists are available on-site for NMED inspection.

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7. Internal Combustion Sources

Permit Section	Monitoring Required	Monitoring Performed
2.7.4 [Stationary Standby Generators]	Track and record hours of operation for stationary standby generators on a semi-annual basis.	LANL tracks and records generator hours of operation on a semi-annual basis. Stationary generator hours of operation for this reporting period are provided in Attachment F.
2.7.4 [TA-33-G-1]	Track hourly and 12-month rolling total kWh.	On May 18, 2006, LANL started the TA-33 diesel generator. Other than the start up test, the generator has not run. A form has been created and will be used for tracking generator start and stop times as well as hours of operation. These hourly readings will be used in tracking the 12-month rolling total of kWh.
	Record hours of operation and the time operation begins and ends each day.	
2.7.4.1	40 CFR Part 60, Appendix A, Method 9 shall be used to determine compliance with the opacity limitation.	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

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8. Data Disintegrator, TA-52-11

Permit Section	Monitoring Required	Monitoring Performed
2.8.4.1	The permittee shall maintain a log of the number of boxes of media that are destroyed and calculate the emissions on a semi-annual basis in accordance with Condition 4.1.	LANL maintains a log of the number of boxes of media that are shredded and calculates the emissions on a semi-annual basis. The actual number of boxes shredded is included in Attachment G.
2.8.4.2	The permittee shall perform regular maintenance and repair on the cyclone and cloth tube filter(s) per manufacturer's recommendations.	LANL maintains a log documenting all maintenance and repairs performed on the cyclone and cloth tube filters. The Data Disintegrator and associated pollution control devices are maintained under a preventative maintenance contract.

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9. Power Plant at Technical Area 3 (TA-3-22)

Permit Section	Monitoring Required	Monitoring Performed
2.9.4.1	Total fuel oil consumption shall be monitored so that combined fuel oil usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total.	Total fuel oil consumption is monitored on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment H contains a summary of monthly fuel oil consumption. Records of daily fuel oil use are available on-site for NMED inspection.
2.9.4.2	Natural gas consumption shall be monitored so that combined natural gas usage of Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 can be calculated on a rolling 365-day total.	A volumetric flow meter is used to measure the total amount of natural gas used on a daily basis. These daily readings are used to calculate a 365-day rolling total. Attachment H contains a summary of monthly natural gas usage. Daily totals are available on-site for NMED inspection.
2.9.4.3	Natural gas consumption shall be monitored so that natural gas usage for Unit TA-3-22 CT-1 can be calculated on a rolling 365-day total.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.4	A certification of total sulfur content of the No. 2 fuel oil used by Units TA-3-22-1, TA-3-22-2 and TA-3-22-3 shall be obtained from the supplier whenever No. 2 fuel oil is delivered to the facility.	No fuel oil was purchased or delivered during this reporting period.
2.9.4.5	If the certification as specified by Condition 2.9.4.4 is not available at delivery, the permittee shall analyze the No. 2 fuel oil to determine the total sulfur content. The analysis shall be	No fuel oil was purchased or delivered during this reporting period.

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Permit Section	Monitoring Required	Monitoring Performed
	conducted using Department approved methods and standards for determining total sulfur content of No. 2 fuel oil.	
2.9.4.6	The operating load of Unit TA-3-22 CT-1 specified by Condition 2.9.3.7 shall be monitored and recorded hourly during normal operations of that unit. Periods of startup and shutdown shall not be included in the hourly monitoring but shall be recorded separately.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.7	Compliance with NOx pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit) and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8. Compliance with NOx annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.1029 pounds NOx per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit).	The Combustion Turbine has not started operations. No monitoring performed.

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Permit Section	Monitoring Required	Monitoring Performed
2.9.4.8	Compliance with CO pound per hour emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the daily total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.731 pounds CO per thousand SCF of gas burned (applicable for worst-case conditions of negative 18 degrees Fahrenheit), and divided by the number of hours of operation of the unit during that day as recorded pursuant to Condition 2.9.3.8). Compliance with CO annual emission limits for Unit TA-3-22 CT-1 shall be determined by multiplying the 365 day total natural gas firing rate for the unit (expressed in thousands of SCF), as recorded pursuant to Condition 2.9.5.3, by the manufacturer's guaranteed emission rate of 0.0613 pounds CO per thousand SCF of gas burned (applicable for annual average conditions of 47.9 degrees Fahrenheit).	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.9	At least once each calendar quarter the permittee shall use the method specified in Conditions 2.9.4.7 and 2.9.4.8 to determine compliance of Unit TA-3-22 CT-1 with the hourly and annual emission limits specified in this permit.	The Combustion Turbine has not started operations. No monitoring performed.
2.9.4.10	Visible emissions from stationary combustion equipment shall not equal or exceed an opacity of 20%. Use of pipeline quality natural gas fuel as defined in Conditions 2.9.3.1 and 2.9.3.4 constitutes compliance with	LANL uses 40 CFR Part 60, Appendix A, Method 9 to determine compliance with the opacity limitation.

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Permit Section	Monitoring Required	Monitoring Performed
	<p>20.2.61 NMAC unless opacity exceeds 20%. At such time as No. 2 fuel oil as defined in Condition 2.9.3.1 is used, opacity shall be measured in accordance with the procedures at 40 CFR 60, Appendix A, Method 9. Opacity measurements shall continue on a quarterly basis per calendar year for each effected unit until such time as pipeline quality natural gas is used.</p>	<p>Delivery of pipeline quality natural gas is specified in the contract with the supplier (PNM).</p> <p>Opacity measurements performed at the TA-03 Power Plant are provided in Attachment I.</p>
2.9.4.11	<p>Initial compliance tests are required on Unit TA-3-22 CT-1 for NO_x and CO. These tests shall be conducted within sixty (60) days after the unit achieves the maximum normal production. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source. The tests shall be conducted in accordance with EPA Reference Methods 1 through 4, Method 7E for NO_x, and Method 10 for CO contained in CFR Title 40, Part 60, Appendix A, and with the requirements of Subpart A, General Provisions, 60.8(f). Alternative test method(s) may be used if the Department approves the change. The permittee shall submit a testing protocol to the Department at least thirty (30) days prior to the test date, and provide notification to the Department at least thirty (30) days prior to the test date.</p>	<p>The Combustion Turbine has not started operations. No monitoring performed.</p>
2.9.4.12	<p>The permittee shall comply with fuel sulfur monitoring requirements at 40 CFR 60.334(h) applicable to Unit TA-</p>	<p>The Combustion Turbine has not started operations. No Monitoring performed.</p>

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Permit Section	Monitoring Required	Monitoring Performed
	3-22 CT-1 by making the required demonstration which shows the fuel combusted in the turbine meets the definition of natural gas at 40 CFR 60.331(u).	

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Deviations

Permit Section 4.2 requires that all instances of deviations from permit conditions, including emergencies, be clearly identified. Listed below are permit deviations this period:

1. On May 1, 2007, from 9:58am to 10:08am, the LANL Power Plant experienced an excess emission with an observed average opacity of 25%. This is a deviation from Operating Permit Condition 2.9.4.10, which states that visible emissions shall not equal or exceed 20% opacity. The excess emission occurred during a boiler startup exercise using fuel oil. During the startup exercise, operational problems were encountered and the unit was brought down quickly to minimize visible emissions. The startup exercise is performed weekly to verify readiness of the system should the commercial natural gas supply be interrupted. These periodic fuel oil startup exercises usually result in only minor opacity readings.

----- Last Entry -----

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**Attachment A
Asphalt Plant Opacity Reports**

Summary Table, Reports Attached

	Source	Date	Time	Average Opacity*
Jan	Top of Shaker	01/16/07	10:32 am	0
	Baghouse Stack	01/16/07	10:38 am	0
	Conveyor Belt	01/16/07	10:45 am	0
Feb	Top of Shaker	02/08/07	12:50 pm	0
Mar	Top of Shaker	03/05/07	9:51 am	0
Apr	Top of Shaker	04/11/07	12:01 pm	0
May	Top of Shaker	05/08/07	8:27 am	0
June**	Entire Plant	06/20/07	1:01 pm	0

* Average opacity for the Asphalt Plant is the sum of the highest consecutive 24 readings divided by 24 (6 minutes of readings). The method is in accordance with 20.2.61 NMAC and condition 2.1.4.1 of the Los Alamos National Laboratory (LANL) Operating Permit P100M1.

** EPA Method 9 was used for all readings except June. In June LANL began using EPA Method 22 to determine if any visible emissions greater than zero were present at the plant. If any emissions are observed using Method 22, a Method 9 observation will be performed on those points. Use of Method 22 is in accordance with condition 2.1.4.1 of the Los Alamos National Laboratory (LANL) Operating Permit P100M1.

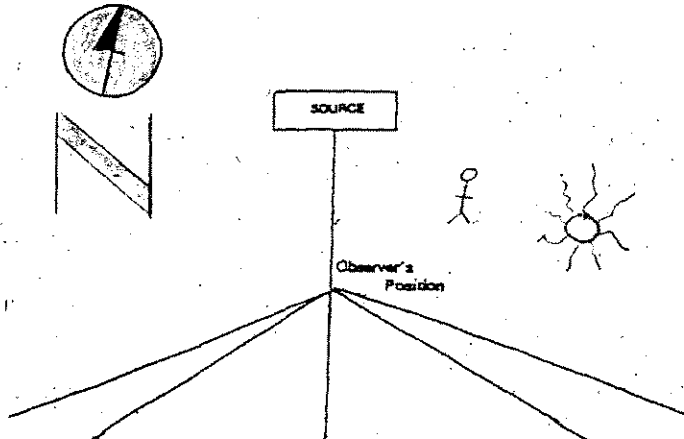
VISIBLE EMISSION OBSERVATION FORM



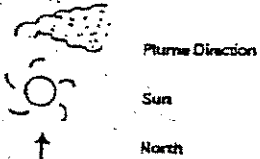
Environmental Improvement Division
RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE		OBSERVATION DATE				START TIME				STOP TIME			
ASPHALT PLANT		JAN 16 2007				10:32 AM				10:37 AM			
LOCATION		Sec				Sec							
TA-60		Min.	0	15	30	45	Min.	0	15	30	45		
Type of Source	Type of Control Equipment												
ASPHALT	BAGHOUSE	32 ¹	0	0	0	13							
Describe Emission Point (top of stack, etc.)													
TOP OF SHAKER		32 ²	0	0	0	14							
Height Above Ground Level	Height Relative to Observer												
45 Feet	40 Feet	34 ³	0	0	0	15							
Distance from Observer	Direction from Observer												
55 Feet	ALNW	35 ⁴	0	0	0	18							
Description of Plume (stack exit only)													
NO EMISSIONS		36 ⁵	0	0	0	17							
Emission Color		Plume Type											
NA		NA											
Water Droplets Present?													
<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached													
At what point in the plume was opacity determined?													
12 TO 14 INCH ABOVE POINT													
Describe Background (i.e. blue sky, trees, etc.)													
CLEAR BLUE													
Background Color	Sky Conditions												
BLUE	CLEAR												
Wind Speed	Wind Direction (i.e. from North to South)												
0 TO 1 mph	NNW												
Ambient Temperature	Wet Temperature	Relative Humidity											
12 °F		29 %											
COMMENTS:		Average Opacity				Range of Opacity Reading							
NO EMISSIONS OBSERVED		0				Min.: 0 Max.: 0							
		OBSERVER (please print)											
		Name: RICHARD COSTA Title: ENGINEER											
		Signature: <i>R. Costa</i>				Date: JAN 16 2007							
		Organization: KSL				Certification Date: 8-30-06							

Draw Arrow in North Direction



IMPORTANT: Please indicate the following by sketch:



I acknowledge receipt of a copy of these visible emissions observations.

Signature: *Richard Costa*

Title: _____

Date: 1-17-07

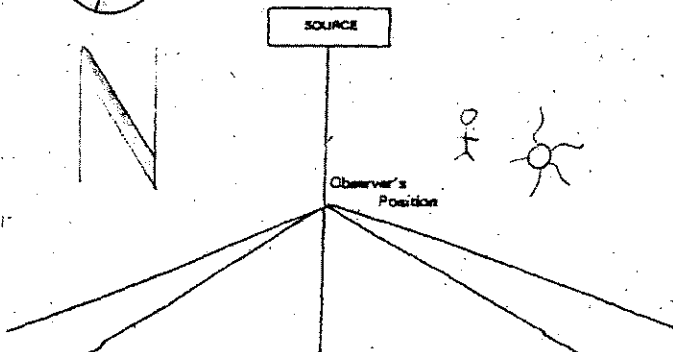
VISIBLE EMISSION OBSERVATION FORM



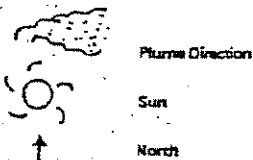
Environmental Improvement Division
RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE	OBSERVATION DATE				START TIME				STOP TIME					
	Sec	0	15	30	45	Min.	0	15	30	45	Min.	0	15	30
ASPHALT PLANT	Jan 16 2009				10:38 AM				10:43 AM					
LOCATION TA-60														
Type of Source ASPHALT PLANT	Type of Control Equipment BAGHOUSE				13									
Describe Emission Point (top of stack, etc.) BAGHOUSE STACK				14										
Height Above Ground Level 25 Feet		Height Relative to Observer 20 Feet		15										
Distance from Observer 45 Feet		Direction from Observer N.W.		18										
Description of Plume (stack exit only) <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> NO EMISSIONS <input type="checkbox"/> Lifting <input type="checkbox"/> Trapping <input type="checkbox"/> Coning <input type="checkbox"/> Fumigation				17										
Emission Color NA		Plume Type NO EMISSIONS		18										
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached				19										
At what point in the plume was opacity determined? 12 TO 14 INCH ABOVE POINT				20										
Describe Background (i.e. blue sky, trees, etc.) CLEAR BLUE				21										
Background Color CLEAR BLUE		Sky Conditions CLEAR		22										
Wind Speed 0 to 1 mph		Wind Direction (i.e. from North to South) N.W.		23										
Ambient Temperature 12 °F		Wet Temperature °F		Relative Humidity 29 %		24								
COMMENTS: NO EMISSIONS OBSERVED				Average Opacity 0				Range of Opacity Readings Min.: 0 Max.: 0						
				OBSERVER (please print) Name: RICHARD COGG Title: ENGINEER										
				Signature: [Signature]				Date: Jan 16 2009						
				Organization: KSL				Certification Date: 7-30-06						

Draw Arrow in North Direction



IMPORTANT: Please indicate the following by sketch:



I acknowledge receipt of a copy of these visible emissions observations.

Signature: [Signature]

Title: _____

Date: 1-17-09

VISIBLE EMISSION OBSERVATION FORM

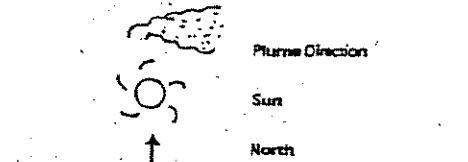
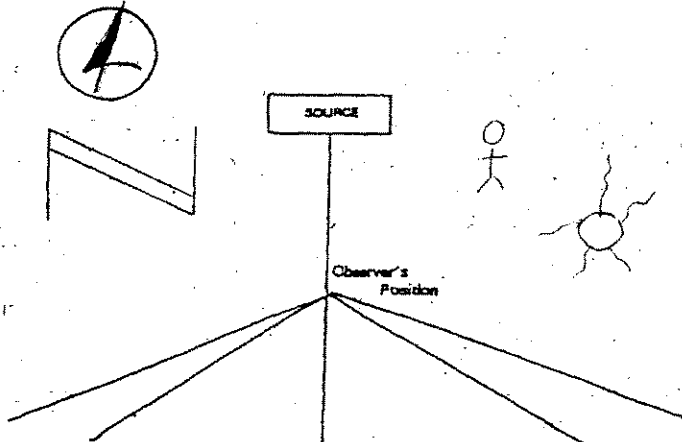


Environmental Improvement Division
RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE		OBSERVATION DATE				START TIME				STOP TIME							
ASPHALT PLANT		Jan 16 2007				10:45 AM				10:50 AM							
LOCATION TA-60		Sec.	0	15	30	45	Sec.	0	15	30	45	Min.	0	15	30	45	
Type of Source ASPHALT PLANT	Type of Control Equipment TRASHHOUSE	41	0	0	0	0	13										
Describe Emission Point (top of stack, etc.) CONVEYER BELT/HOPPER DROP POINT		42	0	0	0	0	14										
Height Above Ground Level 5 Feet	Height Relative to Observer 5 Feet	43	0	0	0	0	15										
Distance from Observer 35 TO 40 Feet	Direction from Observer NW	44	0	0	0	0	18										
Description of Plume (stack exit only) <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> NO EMISSIONS <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Coning <input type="checkbox"/> Fumigation		45	0	0	0	0	17										
Emission Color NA	Plume Type NO EMISSIONS <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent	50	0	0	0	0	18										
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached		7					19										
At what point in the plume was opacity determined? 7 TO 12 ABOVE EMISSION POINT		8					20										
Describe Background (i.e. blue sky, trees, etc.) BLUE SKY		9					21										
Background Color BLUE	Sky Conditions CLEAR	10					22										
Wind Speed 0 TO 1 mph	Wind Direction (i.e. from North to South)	11					23										
Ambient Temperature APPROX 13 °F	Wet Temperature °F	12					24										
Relative Humidity 29 %																	
COMMENTS: NO EMISSION OBSERVED. TRANSFER POINT ON CONVEYER BELT IS COVERED.		Average Opacity 0		Range of Opacity Readings Min.: 0 Max.: 0		OBSERVER (please print) Name: RICHARD COSTA Title: ENGINEER		Signature Date: JAN 16 2007		Organization Certification Date: 8-30-06		KSL					

Draw Arrow in North Direction

IMPORTANT: Please indicate the following by sketch:



I acknowledge receipt of a copy of these visible emissions observations.

Signature: [Signature]
Title: _____
Date: 1-17-07

VISIBLE EMISSION OBSERVATION FORM



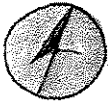
Environmental Improvement Division
RECORD OF VISUAL DETERMINATION OF OPACITY

SOURCE	OBSERVATION DATE				START TIME				STOP TIME										
	Min.	Sec.	0	15	30	45	Min.	Sec.	0	15	30	45							
ASPHALT PLANT	FEB 8 2007				12:50 PM				12:58 PM										
LOCATION TA-60																			
Type of Source ASPHALT	Type of Control Equipment BASHOUSE				50 ¹				13										
Describe Emission Point (top of stack, etc.) TOP OF SHAKER				51 ²				14											
Height Above Ground Level 45 Feet				Height Relative to Observer 40 Feet				52 ³				15							
Distance from Observer 55 Feet				Direction from Observer NNW				53 ⁴				16							
Description of Plume (stack exit only) <input type="checkbox"/> Looping <input type="checkbox"/> Trapping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> Furnigation				54 ⁵				17											
Emission Color NO (WHITE) EMISSIONS				Plume Type N/A				55 ⁶				18							
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached				7				19											
At what point in the plume was opacity determined? 12 TO 14 INCH ABOVE SOURCE				8				20											
Describe Background (i.e. blue sky, trees, etc.) PARTLY CLOUDY (PC)				9				21											
Background Color CLEAR-BLUE-PC				Sky Conditions PC				10				22							
Wind Speed 5 to 6 mph				Wind Direction (i.e. from North to South) NNE				11				23							
Ambient Temperature 49 °F				Wet Temperature 49 °F				Relative Humidity 21 %				12				24			
COMMENTS: NO EMISSIONS WERE OBSERVED FROM ANY EMISSION POINT.				Average Opacity -0-				Range of Opacity Readings Min.: 0 Max.: 0											
				OBSERVER (please print) Name: RICHARD COSTA Title: ENGINEER															
				Signature <i>R. Costa</i>				Date 2-8-07											
				Organization KSL				Certification Date 8-30-06											

RCSA
2-20-07
11AM

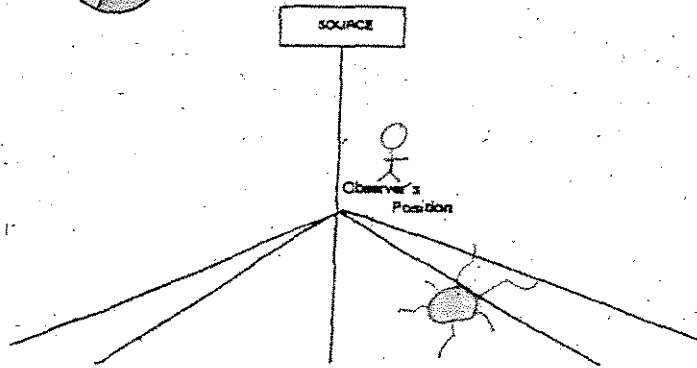
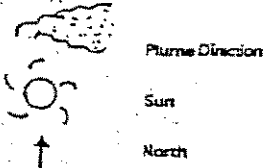
*
RCSA
2-20-07
11AM

Draw Arrow in North Direction



*RCSA
2-19-07
9:20AM

IMPORTANT: Please indicate the following by sketch:



I acknowledge receipt of a copy of these visible emissions observations.

Signature: _____

Title: _____

Date: _____

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name: LANL Asphalt Plant

Source Location: TA-60 (Sigma Mesa)

Type of Source: Asphalt Plant Type of Control Equipment: Baghouse

Describe Emission Point (Top of stack, etc.): TOP OF SHAKER

Height Above Ground Level: 45 Feet Height Relative to Observer: 40 Feet

Distance From Observer: 50 Feet Direction of Source From Observer: N.W.

Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NO EMISSION Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? APPROX 12" TO 14" ABOVE SOURCE

Describe Background (i.e. blue sky, trees, etc.): BLUE SKY

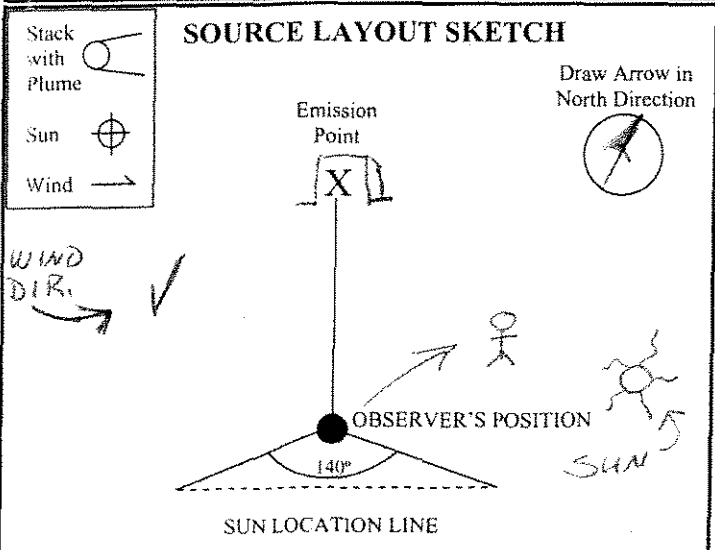
Background Color: BLUE Sky Conditions: CLEAR

Wind Speed: 0 TO 5 mph Wind Direction: NNE TO SSW (provide from/to, i.e. from North to South)

Ambient Temperature: APPROX 45 °F Relative Humidity: APPROX 10 %

Additional Comments/Information: NO EMISSIONS WERE OBSERVED FROM ANY EMISSION POINT.

Observation Date		Start Time				End Time
3-5-07		9:51 AM				9:57 AM
Min	Sec	0	15	30	45	Comments
.51	1	0	0	0	0	
.52	2	0	0	0	0	
.53	3	0	0	0	0	
.54	4	0	0	0	0	
.55	5	0	0	0	0	
.56	6	0	0	0	0	
	7					
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					



Average 6-Minute Opacity: - 0 - Range of Opacity Readings: Min. 0 Max. 0

OBSERVER (please print): RICHARD COSTA Title: ENGINEER

Name: RICHARD COSTA Date: 3-5-07

Signature: [Handwritten Signature] Observer Organization: KSL

Certified by: ETA Certification Date: 2-28-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name: LANL Asphalt Plant

Source Location: TA-60 (Sigma Mesa)

Type of Source: Asphalt Plant Type of Control Equipment: Baghouse

Describe Emission Point (Top of stack, etc.): TOP OF SHAKER

Height Above Ground Level: 45 Feet Height Relative to Observer: 40 Feet

Distance From Observer: 50 Feet Direction of Source From Observer: N.W.

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NO EMISSIONS Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 APPROX. 12" TO 14" ABOVE SOURCE

Describe Background (i.e. blue sky, trees, etc.): BLUE SKY (PT)

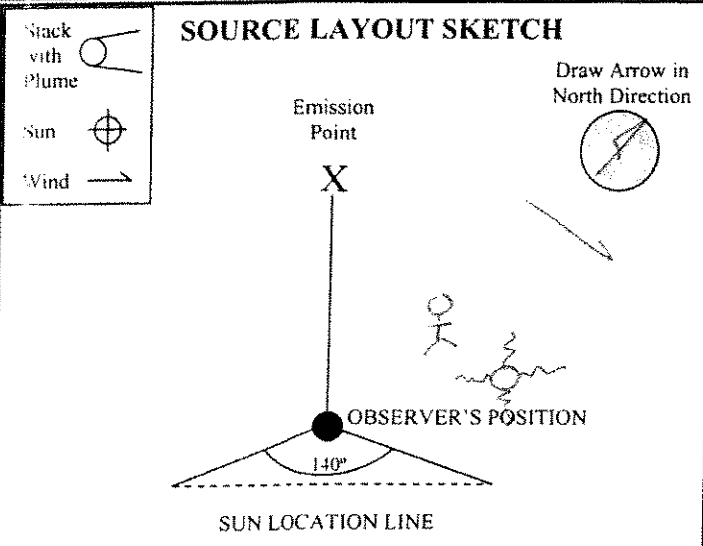
Background Color: BLUE Sky Conditions: PARTLY CLOUDY (PT)

Wind Speed: 18 to 26 mph Wind Direction: WEST TO EAST
 (provide from/to, i.e. from North to South)

Ambient Temperature: 47 °F Relative Humidity: 12 %

Additional Comments/Information:
 NO EMISSIONS WERE OBSERVED FROM ANY EMISSION POINT. (ROADS, TRANSFER POINTS & STOCK PILES)

Observation Date		Start Time				End Time
4-11-07		12:01 PM				12:07 PM
Min	Sec	0	15	30	45	Comments
	1		0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 6-Minute Opacity: 0% Range of Opacity Readings: Min. 0% Max. 0%

OBSERVER (please print)
 Name: RICHARD COSTA Title: ENGINEER

Signature: Date: 4-12-07

Observer Organization: KSL

Certified by: ETA Certification Date: 2-28-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (6 MINUTE)

Source Name: LANL Asphalt Plant

Source Location: TA-60 (Sigma Mesa)

Type of Source: Asphalt Plant Type of Control Equipment: Baghouse

Describe Emission Point (Top of stack, etc.): TOP OF SHAKER

Height Above Ground Level: 45 Feet Height Relative to Observer: 40 Feet

Distance From Observer: APPROX 50 Feet Direction of Source From Observer: N.W.

Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NO EMISSIONS Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? 12" TO 14" ABOVE THE SOURCE

Describe Background (i.e. blue sky, trees, etc.): PARTLY CLOUDY TO CLOUDY

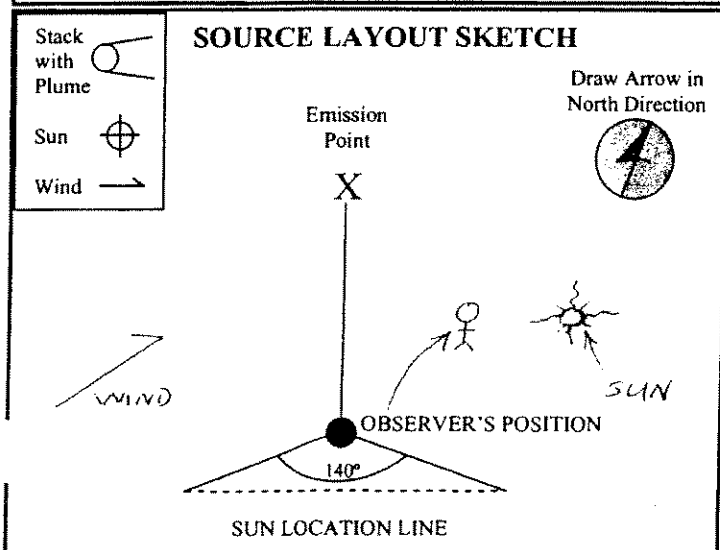
Background Color: BLUE / GRAY Sky Conditions: CLOUDY

Wind Speed: 5.8 mph Wind Direction: SW TO NE
 (provide from/to, i.e. from North to South)

Ambient Temperature: 48.7 °F Relative Humidity: 61 %

Additional Comments/Information:
 NO EMISSIONS WERE SEEN FROM ANY POINT AT THE ASPHALT PLANT FACILITY IS COMPLIANT AT THIS TIME.

Observation Date		Start Time		End Time	Comments
MAY 8, 2007		8:27 AM		8:33 AM	
Min	Sec	0	15	30	45
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 6-Minute Opacity: 0% Range of Opacity Readings: Min. 0% Max. 0%

OBSERVER (please print): RICHARD COSTA Title: ENGINEER

Name: RICHARD COSTA Date: 5-8-07

Signature: Date: 5-8-07

Observer Organization: KSL

Certified by: ETA Certification Date: 2-28-07

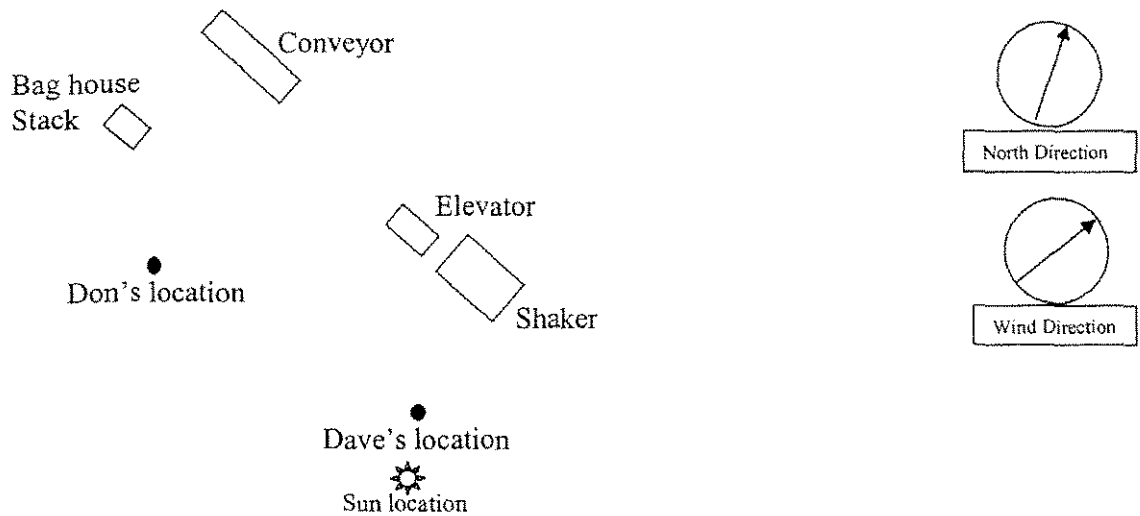
Los Alamos National Laboratory METHOD 22 FUGITIVE OPACITY EMISSION INSPECTION FORM

Location: LANL Asphalt Plant – Sigma Mesa	Observer Affiliation: ENV-EAQ / LANL
Representative: David Paulson ⁽¹⁾	Date of Inspection: June 20, 2007
Sky Conditions: Partly Cloudy	Wind Direction: To the NE
Precipitation: None	Wind Speed: 5-10 mph
Industry: National Defense	Process Unit: All potential fugitive sources

Sketch of Process Unit:

Indicate:

- * observer position relative to source
- * potential emission and/or actual emission points
- * sun location
- * wind direction
- * North direction



Observations: (see note ⁽²⁾ below)			
	Clock Time	Observation period duration (min:sec)	Accumulated emission time (min:sec)
Begin	<u>1:01 pm</u>	<u>8:04</u>	<u>0 ⁽²⁾</u>
	_____	_____	_____
End Observation	<u>1:09 pm</u>	_____	_____

Notes:

⁽¹⁾ The observation was attended by both Dave Paulson (ENV-EAQ) and Don Stone (KSL Environmental). The observation was initiated by Dave at the location on the sketch. Don took a position further to the East to get a clearer view of the conveyor belt and any other potential fugitive emissions from that side of the plant.

⁽²⁾ No visible emissions were observed at the plant. All probable fugitive sources at the plant were observed.

This form is used to document any fugitive emission with opacity greater than zero is observed. If an emission is observed during the Method 22 inspection/observation period (which must be at least 6 minutes for the Asphalt Plant and 10 minutes for all other LANL sources), a Method 9 visible emission test may need to be performed.

SIGNATURE OF OBSERVER/INSPECTOR:

DATE:

David Paulson

6-20-07

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Attachment B
Beryllium HEPA Filter Tests Results

Summary Table, Reports Attached

Unit	Date	Pass/Fail
TA-55 (H-5-1430) (FF-852)	4/11/2007	Pass
TA-55 (H-5-1440) (FF-853)	4/11/2007	Pass

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT A
100 Area Glovebox Exhaust FF-852 Data Sheet

Date: 04-11-07 (8.4.1) LAS Calibration Expiration Date: 03-06-08 (8.4.3) Diluter Calibration Expiration Date: 06-18-07 (8.4.4) Dilution Ratio: 2064 (8.4.2)

Step Number	Item	FF-852 H-5-1430
9.1.12.2	Background concentration (part./cc)	1.412×10^{-2} part. concentration
9.1.12.3	Upstream concentration (part./cc)	2.188×10^6 part. concentration
9.1.12.4	Challenge aerosol concentration between 2.00×10^6 and 2.71×10^6 part./cc	<i>PO</i> Initials
9.1.12.5	1 st stage downstream concentration (part./cc)	6.161×10^1 part. concentration
9.1.12.6	2 nd /3 rd stage downstream concentration (part./cc)	1.412×10^{-2} part. concentration
9.1.12.7	1 st stage Penetration $\leq 5.0 \times 10^{-4}$ (efficiency $\geq 99.95\%$)	2.816×10^{-5}
9.1.12.8	2 nd /3 rd stage Penetration $\leq 2.5 \times 10^{-7}$ (efficiency $\geq 99.999975\%$)	0.00
9.1.13.3 9.1.13.4	Ensure all test port ball valves are closed	<i>PO</i> Initials <i>MMT</i> Independent Verification

Valve	Required Position	Initials	Independent Verification
HV-852-H	Closed and Locked	<i>PO</i>	<i>MMT</i>
HV-852-G	Closed	<i>PO</i>	<i>MMT</i>
HV-852-F	Closed	<i>PO</i>	<i>MMT</i>
HV-852-D	Closed	<i>PO</i>	<i>MMT</i>
HV-852-C	Closed	<i>PO</i>	<i>MMT</i>
HV-852-B	Closed	<i>PO</i>	<i>MMT</i>
HV-852-A	Closed	<i>PO</i>	<i>MMT</i>
HV-852-AA	Closed	<i>PO</i>	<i>MMT</i>

FOR INFORMATION ONLY

Comments:

Surveillance Personnel

Bob R. Oud
Signature

4-11-07
Date

OC On-duty Supervisor

David D...
Signature

4/11/07
Date

100 AREA GLOVEBOX EXHAUST IN-PLACE HEPA FILTER TESTING

ATTACHMENT B

100 Area Glovebox Exhaust FF-853 Data Sheet

Date: 04-11-07 (8.4.1) LAS Calibration Expiration Date: 03-26-08 (8.4.3) Diluter Calibration Expiration Date: 06-18-07 (8.4.4) Dilution Ratio: 2064 (8.4.2)

Step Number	Item	FF-853 H-5-1440
9.2.12.2	Background concentration (part./cc)	-3 3.531x10 ⁻³ part. concentration
9.2.12.3	Upstream concentration (part./cc)	2.400x10 ⁻⁶ part. concentration
9.2.12.4	Challenge aerosol concentration between 2.00 x 10 ⁶ and 2.71 x 10 ⁶ part./cc)	PO Initials
9.2.12.5	1 st stage downstream concentration (part./cc)	7.536x10 ⁻¹ part. concentration
9.2.12.6	2 nd /3 rd stage downstream concentration (part./cc)	1.059x10 ⁻² part. concentration
9.2.12.7	1 st stage Penetration ≤ 5.0 x 10 ⁻⁴ (efficiency ≥ 99.95%)	3.14x10 ⁻⁵
9.2.12.8	2 nd /3 rd stage Penetration ≤ 2.5 x 10 ⁻⁷ (efficiency ≥ 99.999975%)	2.943x10 ⁻⁹
9.2.13.3 9.2.13.4	Ensure all test port ball valves are closed	PO Initials Munt Independent Verification

Valve	Required Position	Initials	Independent Verification
HV-853-H	Closed and Locked	PO	Munt
HV-853-G	Closed	PO	Munt
HV-853-F	Closed	PO	Munt
HV-853-D	Closed	PO	Munt
HV-853-C	Closed	PO	Munt
HV-853-B	Closed	PO	Munt
HV-853-A	Closed	PO	Munt
HV-852-AA	Closed	PO	Munt

Comments:

FOR INFORMATION ONLY

Surveillance Personnel

Paul R. Oost
Signature

4-11-07
Date

OC On-duty Supervisor

Deak Dene
Signature

4/11/07
Date

**Los Alamos National Laboratory
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**Attachment C
Boilers and Heaters Natural Gas Usage**

2007 TA-21 Steam Plant Data Entry / Fuel Use

DATA ENTRY						
Monthly Fuel Use						
TA-21-357						
	Natural Gas (MCF)	Fuel Oil (gallons)	Converted Natural Gas (MMscf)		Natural Gas Use 12-Month Rolling Total (MMscf)	Fuel Oil Use 12-Month Rolling Total (Gallons)
Month				Month		
January	3184	0	3.184	January	29.16	402
February	2895	9	2.895	February	28.58	411
March	2853	10	2.853	March	27.87	421
April	2297	6	2.297	April	27.65	427
May	2172	3	2.172	May	27.82	430
June	1803	41	1.803	June	27.91	471
July				July		
August				August		
September				September		
October				October		
November				November		
December				December		
Annual Totals:	15204	69	15.204			
Jan. - June	15204	69	15.204			
July - Dec.	0	0	0.000			

Permit Limit = 60 MMScf/yr natural gas (12 month rolling total)
and 10,000 gal/yr fuel oil (12 month rolling total)

2007 Small Boilers Data Entry / Gas Use

		Metered Boilers			Total Gas Use		Non-Metered Gas Use	12-Month Rolling Total for all Small Boilers (MMSCF)
		TA-55 Boiler Gas Use (MSCF)		TA-50-2 (MSCF)				
		Month	BHW-1B (B-602)	BHW-2B (B-603)	BS-1	(MSCF)	(MMSCF)	
Data Entry	January	1	2657		81,782	81.78	79.12	502.42
	February	676	1261		66,101	66.10	64.16	508.94
	March	1609	1		54,352	54.35	52.74	505.10
	April	1248	797		44,215	44.22	42.17	513.53
	May	1379	1836		29,468	29.47	26.25	521.07
	June	0	379	0.1	13,530	13.53	13.15	518.20
	July							
	August							
	September							
	October							
	November							
	December							
TOTAL		4913	6931	0.1	289,448	289.45	277.60	Permit Limit = 870

2006 Non Metered Boiler Pool Capacity: 308.7 MMBTU/hr

Estimated Gas-Use per MMBtu rating Jan-June:	0.90	MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu rating July-Dec:	0.00	MMscf/MMBtu/hr
Estimated Gas-Use per MMBtu - Annual	0.90	MMscf/MMBtu/hr

Definitions: MMSCF= Million Standard Cubic Feet
 MSCF = Thousand Standard Cubic Feet
 Metered/Non-metered: Metered boilers are those units that have unit specific volumetric flow meters for the boiler(s) only.

Gas Use Non-Metered (MMSCF)									
AIRS Stack #	015	016	017	018	019	020	021	024	Insignificant Units
Location:	TA-48-1	TA-48-1	TA-48-1	TA-53-365	TA-53-365	TA-59-1	TA-59-1	TA-16-1484	Lab Wide
ID:	BS-1	BS-2	BS-6	BHW-1	BHW-2	BHW-1	BHW-2	Plant 5	Various
Design Rate (MMBTU/hr)	5.336	5.335	7.140	7.115	7.115	5.335	5.335	12.700	253
Calculated Gas Use-Jan-June	4.799	4.798	6.421	6.398	6.398	4.798	4.798	11.421	227.774
Calculated Gas Use-July-Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Calculated Gas Use-Annual	4.799	4.798	6.421	6.398	6.398	4.798	4.798	11.421	227.774

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**Attachment D
Carpenter Shop Hours of Operation**

2007 TA-3 & TA-15 Carpenter Shops

TA-3	Data Entry
Month	Hours of Operation ¹
	TA-3
January	3.1
February	4.3
March	25.6
April	4.6
May	3.4
June	2.3
6 mo. Total	43.30

TA-3	Data Entry
Month	Hours of Operation ¹
	TA-3
July	
August	
September	
October	
November	
December	
6 mo. Total:	0.00

TA-15	Data Entry
Month	Hours of Operation ¹
	TA-15
January	9.4
February	17.4
March	47.2
April	13.6
May	20.6
June	8.9
6 mo. Total	117.1

TA-15	Data Entry
Month	Hours of Operation ¹
	TA-15
July	
August	
September	
October	
November	
December	
6 mo. Total:	0.0

Saws, drills, shaping and sanding equipment shall each not operate in excess of 4368 hours per year.

Reference
1. Based on information provided monthly by the shop foreman from each shop.

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**Attachment E
Degreaser Solvent Usage**

Historical Solvent Usage Data

The usage information for UT Bath degreaser from Jan-01-2007 through Jun-30-2007 is displayed below.

General Degreaser Information

TA: 55

Solvent: Trichloroethylene

Date Measured	Initial Solvent Level (inches)	Volume Added (liters)	Level Added (inches)	Volume Removed (liters)	Level Removed (inches)
Jan-17-2007	7.0	0.98	0.50	0.0	0.0
Feb-06-2007	7.5	0.00	0.00	14.74	7.5
Feb-14-2007	0.0	14.74	7.50	0.0	0.0
Mar-21-2007	7.2	0.30	0.15	0.0	0.0
Apr-04-2007	7.0	0.98	0.50	0.0	0.0
Apr-18-2007	7.5	0.00	0.00	14.74	7.5
Apr-30-2007	0.0	15.73	8.00	0.0	0.0
May-30-2007	8.0	0.00	0.00	0.0	0.0
Jun-26-2007	7.2	15.53	7.90	14.15	7.2

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**Attachment F
Internal Combustion Generator Hours of Operation**

2007 Generator Hours

TA	Bldg	Manufacturer	MODEL	KW	Fuel Type	Previous Reading Date	Previous Reading	First 6 Month Readings 2007			Second 6 Month Readings 2007		
								6 Month Reading Date	Reading	Hours Run	12 Month Reading Date	Reading	Hours Run
3	38	Onan Sons	H1750DSG15	175	Diesel	Dec-06	3054.4	May-07	3057.0	2.6			
3	38	Onan Sons	350DFCC	350	Diesel	Dec-06	2619.4	May-07	2629.4	10.0			
3	38	Cummins	150DGFA	150	Diesel	Dec-06	1147.0	May-07	1158.9	11.9			
3	40	Onan Sons	1500DVE15R31374B	150	Diesel	Dec-06	3.2	May-07	6.1	2.9			
3	223	Onan Sons	45.OEM-15R/10742D	45	Nat. Gas	Dec-06	478.0	May-07	481.1	3.1			
3	440	Cummins	500FDR5051	150	Diesel	Dec-06	121.8	May-07	121.8	0.0			
3	440	Cummins	DFGA-5005210	500	Diesel	Dec-06	69.5	May-07	74.8	5.3			
3	1076	Cummins	DGBB-5601289	35	Diesel	Dec-06	101.2	Jun-07	116.7	15.5			
3	1400	Cummins	DFEH-5699616	400	Diesel	Apr-07	14.0	May-07	14.1	0.1			
3	1404	Cummins	DFLC-5554001	1250	Diesel	Dec-05	287.9	Jun-07	324.2	36.3			
3	1498	Caterpillar	SR-4	600	Diesel	Nov-05	303.0	May-07	315.0	12.0			
3	2322	Onan Sons	DGDA-5005757	80	Diesel	Nov-05	329.1	May-07	336.8	7.7			
16	980	Cummins	KTA50-G2	1100	Diesel	Dec-05	226.3	Jun-07	276.2	49.9			
16	1374	Onan Sons	60ENA	60	Nat. Gas	Nov-05	1039.4	May-07	1058.9	19.5			
18	31	Onan Sons	275DFML29807N	275	Diesel	Dec-05	173.4	Jun-07	180.8	7.4			
21	357	Caterpillar	SR-4	125	Diesel	Nov-05	497.5	May-07	541.0	43.5			
33	20	Kohler	30ROZ	30	Diesel	Nov-05	919.0	Jun-07	919.0	0.0			
33	87	Kurz & Root	MEP 006A	60	Diesel	Jun-07	1555.0	Jun-07	1555.0	0.0			
33	151	Caterpillar	XQ225	225	Diesel	Nov-05	2944.0	Jun-07	2944.0	0.0			
33	208	Kohler	1600ROZD	1600	Diesel	Nov-05	9.3	Jun-07	9.3	0.0			
60	yard	Cummins	DFHD-4964979	1000	Diesel	Feb-07	272.4	Jul-07	293.9	21.5			
33	Point	Onan Sons	80DG10A	80	Diesel	Nov-05	7643.1	Jun-07	7643.1	0.0			
35	2	Onan Sons	100DGDDB	100	Diesel	Dec-05	115.5	Jun-07	115.3	0.0			
35	402	Cummins	DGCB-5674244	60	Diesel	Jun-07	107.4	Jun-07	107.4	0.0			
43	1	Cummins	4BT3.9-GC	50	Diesel	Nov-05	369.4	May-07	379.0	9.6			
43	1	Onan Sons	DVE	150	Diesel	Nov-05	562.6	May-07	589.1	26.5			
46	335	Onan Sons	300DEFCEB	300	Diesel	Nov-05	873.8	May-07	900.4	26.6			
48	45	Onan Sons	DFCB-5740130	300	Diesel	Nov-05	16.0	May-07	24.9	8.9			
50	37	Cummins	680FDR5059FF	500	Diesel	Nov-05	485.1	May-07	489.1	4.0			
50	184	Onan Sons	DGFA-568741	150	Nat. Gas	Nov-05	153.6	May-07	209.7	56.1			
50	188	Onan Sons	L940563879	1250	Diesel	Nov-05	149.0	Jun-07	149.0	0.0			
53	1	Onan Sons	60ENA	60	Nat. Gas	Nov-05	1165.4	May-07	1195.1	29.7			
53	2	Kato Eng.	Kamag-14	50	Diesel	Nov-05	194.3	May-07	194.3	0.0			
53	M	Onan Sons	12.5JC-18R/16095AA	12.5	Nat. Gas	Nov-05	581.5	May-07	581.5	0.0			
54	412	Olympian	95M-07874-F	500	Diesel	Nov-05	292.0	May-07	306.1	14.1			
55	5	Kohler	100RZ71	100	Nat. Gas	Dec-05	71.3	May-07	74.4	3.1			
55	8	Delco/Detroit	E7014DD	600	Diesel	Dec-05	805.3	Jun-07	814.3	9.0			
55	364	Onan Sons	1250DFLC-4987	1250	Diesel	Dec-05	52.6	Jun-07	62.0	9.4			
55	28	Onan Sons	40DL6T	40	Diesel	Dec-05	47.3	Jun-07	47.3	0.0			
55	47	Onan Sons	1465	200	Diesel	Nov-05	515.6	May-07	526.6	11.0			
55	142	Cummins	DFEB-4963414	400	Diesel	Dec-05	88.8	May-07	96.1	7.3			
59	1	Allis Chalmers	2884-0703	90	Diesel	Nov-05	749.3	Jun-07	750.0	0.7			
63	Yard	Murphy	3166-0084	20	Diesel	Nov-05	715.9	Jun-07	715.9	0.0			
64	1	Onan Sons	250DVG	250	Diesel	Nov-05	148.0	May-07	153.1	5.1			
64	39	Onan Sons	20.0DL4-15R	20	Diesel	Dec-05	189.9	Jun-07	189.9	0.0			
69	33	Cummins	DFLC-5568730	1250	Diesel	Nov-05	53.2	May-07	62.5	9.3			

46 Generators in use

TOTAL 455.1

TOTAL 0.0

N/R = Not Read

First half average hours per unit	10.4	Second half average hours per unit
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Annual Average of hours per unit	10.4
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**Attachment G
Data Disintegrator Box Throughput**

2007 TA-52 Data Disintegrator

Data Entry			Data Entry		
Month	Boxes ^(c) Shredded	12-Month Rolling Total	Month	Boxes ^(c) Shredded	12-Month Rolling Total
January	484	9257	July		
February	542	8759	August		
March	2206	10199	September		
April	799	10293	October		
May	1719	10989	November		
June	992	10602	December		
6 mo. Total	6,742		6 mo. Total:	0	

Annual Boxes (2007):	6,742
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**Attachment H
Power Plant Natural Gas and Fuel Oil Usage**

TA-3 Power Plant Fuel Use Totals 2007 (Data Entry)

DATA ENTRY								
Month	TA-3-22 Power Plant Boiler # 1 (Edgemoor Iron Works, 210 MMBTU/hr)		TA-3-22 Power Plant Boiler # 2 (Edgemoor Iron Works, 210 MMBTU/hr)		TA-3-22 Power Plant Boiler # 3 (Union Iron Works, 210 MMBTU/hr)		Monthly Totals	
	Natural Gas (MCF)	Fuel Oil (gallons)	Natural Gas (MCF)	Fuel Oil (gallons)	Natural Gas (MCF)	Fuel Oil (gallons)	Natural Gas (MMCF)	Fuel Oil (gallons)
January	11,719	319	31,832	0	31,733	0	75.284	319
February	36,598	0	21,940	347	611	0	59.149	347
March	38,858	438	4,328	212	8,387	406	51.573	1056
April	9,160	0	3,101	603	29,807	0	42.068	603
May	362	27,893	10,074	438	24,198	50,133	34.634	78464
June	0	0	0	0	0	0	0.000	0
July								
August								
September								
October								
November								
December								
Annual Totals:	96,697	28,650	71,275	1,600	94,736	50,539	262.708	80789
Jan. - June	96,697	28,650	71,275	1,600	94,736	50,539	262.708	80789
July - Dec.	0	0	0	0	0	0	0.000	0

Month	12-Mo. Rolling Total Natural Gas (MMscf)	12-Mo. Rolling Total Fuel Oil (gallons)
January	615.3	21463
February	616.0	21097
March	609.8	21231
April	601.9	21456
May	602.6	99269
June	573.2	98611
July		
August		
September		
October		
November		
December		

	Totals by Fuel Type	
	Natural Gas (MMscf)	Fuel Oil (Gallons)
Annual Totals:	262.71	80789.00
Jan. - June	262.71	80789.00
July - Dec.	0.00	0.00

Permit Limits:	2000 MMscf	500,000 gallons
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**Attachment I
Power Plant Opacity Reports**

Summary Table, Reports Attached

Source	Date	Time	*Average Opacity
TA-3-22 Power Plant	01-11-07	10:22 am	0%
	01-11-07	10:32 am	0%
	01-11-07	10:42 am	0%
	01-11-07	10:52 am	0%
	01-11-07	11:02 am	0%
	01-11-07	11:12 am	0%
	01-11-07	11:22 am	0%
	01-11-07	12:11 pm	18.25%
	01-11-07	12:21 pm	0%
	01-11-07	12:31 pm	0%
	01-11-07	12:47 pm	0%
	01-11-07	12:57 pm	0%
	01-25-07	11:10 am	0%
	01-25-07	11:48 am	0%
	02-08-07	11:12 am	0%
	02-08-07	11:22 am	0%
	02-08-07	11:32 am	0%
	02-22-07	10:37 am	0%
	02-22-07	10:47 am	0%
	02-22-07	11:30 am	4.625%
	02-22-07	12:12 pm	0.875%
	02-22-07	12:22 pm	0.375%
	02-22-07	12:32 pm	0%
	02-22-07	12:46 pm	0%
	02-22-07	12:56 pm	0%
	03-06-07	10:39 am	2.75%
	03-06-07	10:49 am	0%
	03-06-07	10:59 am	0%
	03-20-07	10:35 am	0%
	03-20-07	10:45 am	0%
	03-20-07	10:55 am	0%
	03-27-07	9:52 am	3.5%
	03-27-07	10:02 am	0%
	03-27-07	10:12 am	0.5%
	03-27-07	10:22 am	0%

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TA-3-22 Power Plant	03-27-07	10:32 am	0%
	03-27-07	10:42 am	0%
	03-27-07	10:52 am	0%
	04-10-07	8:00 am	0%
	04-10-07	8:33 am	0%
	04-24-07	10:38 am	0%
	04-24-07	10:48 am	11%
	04-24-07	10:58 am	0%
	04-24-07	11:08 am	0%
	05-01-07	9:48 am	1.25%
	05-01-07	9:58 am	25%
	05-01-07	10:32 am	0.875%
	05-01-07	10:42 am	0%
	05-01-07	10:52 am	0%
	05-11-07	8:35 am	2.0%
	05-11-07	8:45 am	0.875%
	05-11-07	8:55 am	0%
	05-11-07	9:05 am	0%
	05-11-07	9:15 am	0%
	05-11-07	9:25 am	0%
	05-11-07	9:35 am	0%
	05-11-07	9:45 am	0%
	05-11-07	10:12 am	0%
	05-11-07	10:22 am	0.875%
	05-15-07	13:24 pm	10.375%
	05-15-07	13:34 pm	6.25%
	05-15-07	13:44 pm	0.25%
	05-15-07	13:54 pm	0%
	05-15-07	14:04 pm	0%
	05-15-07	14:14 pm	0%
	05-15-07	14:24 pm	0%
	05-15-07	14:34 pm	0%
	05-15-07	14:44 pm	0%

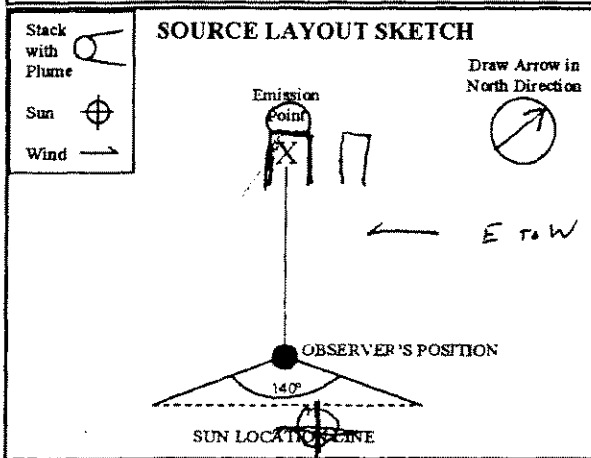
* Average opacity for the Power Plant is the sum of the highest consecutive 40 readings divided by 40 (10 minutes of readings). The method is in accordance with 20.2.61 NMAC.



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: #1 Boiler Fuel Oil
 Source Location: TA 3 SM 22 STEAM PLANT
 Type of Source: DIESEL FUEL Type of Control Equipment: NA
 Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK
 Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet
 Distance From Observer: 72 Yards Direction of Source From Observer: SE
 Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present
 Emission Color: BLACK NONE Plume Type: No Plume Present
 Continuous Fugitive Intermittent
 Water Droplets Present? NO YES If YES, droplet plume is Attached Detached
 At what point in the plume was opacity determined? TOP OF WEST STACK
 Describe Background (i.e. blue sky, trees, etc.): BLUE-WHITE SKY
 Background Color: BLUE-WHITE Sky Conditions: SCATTERED
 Wind Speed: 2-7 mph Wind Direction: E TO WEST
 Ambient Temperature: °F Relative Humidity: %
 Additional Comments/Information:

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



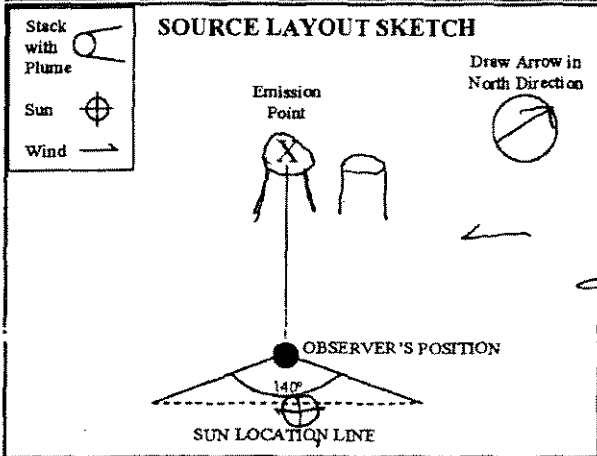
Average 10-Minute Opacity: 0 Range of Opacity Readings: Min. 0 Max. 0
 OBSERVER (please print): Name: LEONARDO PACHECO Title: OPERATOR
 Signature: Date: 1-11-07
 Observer Organization: KSL-Upps
 Certified by: ETA Certification Date: 8-29-06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: #1 BOILER FUEL OIL
 Source Location: TA 3 SM 22 POWER PLANT
 Type of Source: DIESEL FUEL Type of Control/Equipment: NA
 Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK
 Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet
 Distance From Observer: 72 Yards Direction of Source From Observer: SE
 Description of Plume (stack exit only):
 Lifting Trapping Looping Fanning Coning
 No Plume Present
 Emission Color: BLACK/NAIVE Plume Type: No Plume Present
 Continuous Fugitive Intermittent
 Water Droplets Present? NO YES IF YES, droplet plume is Attached Detached
 At what point in the plume was opacity determined? TOP OF WEST STACK
 Describe Background (i.e. blue sky, trees, etc.): BLUE SKY, WHITE CLOUDS
 Background Color: BLUE-WHITE Sky Conditions: SCATTERED
 Wind Speed: 2-7 mph Wind Direction: E-W
 Ambient Temperature: °F Relative Humidity: %
 Additional Comments/Information:

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: 0 Range of Opacity Readings: Min. 0 Max. 0
 OBSERVER (please print): LEONARDO PACHECO Title:
 Signature: Date: 1-11-07
 Observer Organization: KSL UPPS
 Certified by: ETA Certification Date:



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: BOLLER #1 DIESEL FUEL

Source Location: TA 3 SM 22 POWER PLANT

Type of Source: DIESEL FUEL Type of Control Equipment: NA

Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet

Distance From Observer: 72 Yards Direction of Source From Observer: S-E

Description of Plume (stack exit only)
 Lifting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NONE Plume Type: NONE Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.): BLUE SKY - WHITE CLOUDS

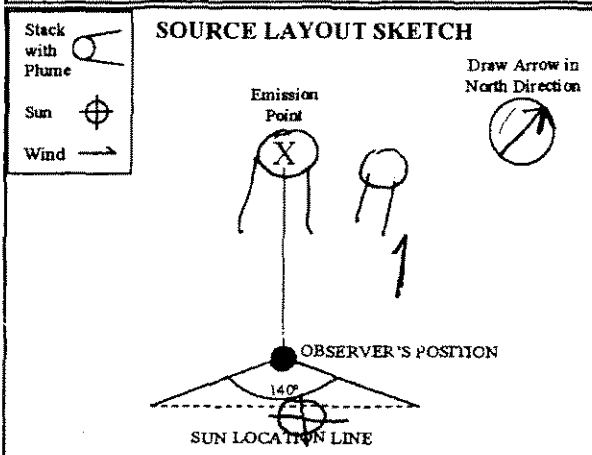
Background Color: BLUE-WHITE Sky Conditions: SCATTERED

Wind Speed: 2-7 mph Wind Direction: S-N
 (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F Relative Humidity: _____ %

Additional Comments/information:

Observation Date		Start Time		End Time	Comments	
1-11-07		1042		1052		
Min	Sec	0	15	30	45	
	1		0	0	0	0
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0		Min.	0	Max.	0	
OBSERVER (please print)						
Name: <u>LEONARDO PALUSCO</u>			Title: <u>OPERATOR</u>			
Signature: <u>[Signature]</u>			Date: <u>1-11-07</u>			
Observer Organization: <u>UPPS KSL</u>						
Certified by: <u>ETA</u>			Certification Date: <u>8-06</u>			

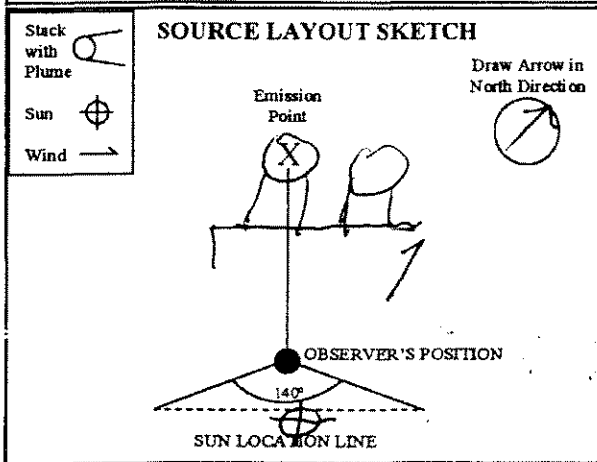




LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **Boiler #1 Fuel Oil**
 Source Location: **TA 3 SM 22 Power Plant**
 Type of Source: **Diesel Fuel** Type of Control Equipment: **NA**
 Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**
 Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet
 Distance From Observer: **72** Yards Direction of Source From Observer: **S E**
 Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present
 Emission Color: **NONE** Plume Type: No Plume Present
 Continuous Fugitive Intermittent
 Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached
 At what point in the plume was opacity determined?
TOP OF WEST STACK
 Describe Background (i.e. blue sky, trees, etc.):
BLUE SKY - WHITE CLOUDS
 Background Color: **BLUE-WHITE** Sky Conditions: **SCATTERED**
 Wind Speed: **2-7** mph Wind Direction: **S.N.**
 (provide from/to, i.e. from North to South)
 Ambient Temperature: °F Relative Humidity: %
 Additional Comments/Information:

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print):
 Name: **LEONARDO PARRILLO** Title: **OPERATOR**
 Signature: Date: **1-11-07**
 Observer Organization: **KSL UPPS**
 Certified by: **ETA** Certification Date: **8-06**



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: POWER #1 DIESEL FUEL

Source Location: TA 3 SM 22 POWER PLANT

Type of Source: DIESEL FUEL Type of Control Equipment: NA

Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK

Height Above Ground Level: 150 Feet
Height Relative to Observer: 170 Feet

Distance From Observer: 72 Yards
Direction of Source From Observer: S-E

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NONE
 Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.)
BLUE SKY - WHITE CLOUDS

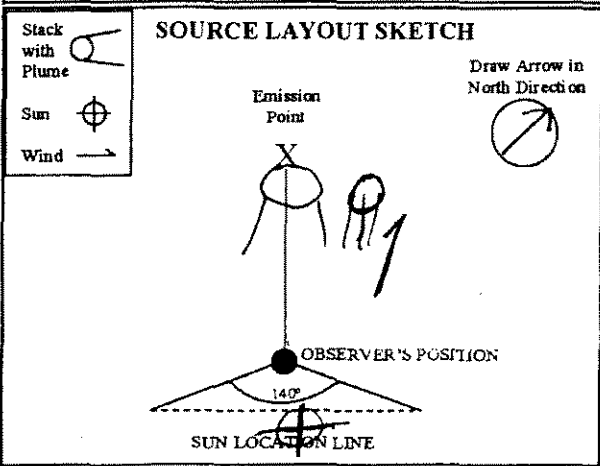
Background Color: BLUE-WHITE Sky Conditions: SCATTERED

Wind Speed: 2-7 mph
 Wind Direction: S-N
 (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F
 Relative Humidity: _____ %

Additional Comments/Information:

Observation Date		Start Time		End Time	Comments	
1-11-07		1102		1111		
Min	Sec	0	15	30	45	
	1		0	0	0	0
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0

Range of Opacity Readings
 Min. 0 Max. 0

OBSERVER (please print)
 Name: LEONARDO PALMICO Title: OPERATOR
 Signature: Date: 1-11-07

Observer Organization: KSL - UPPS

Certified by: ETA Certification Date: 8-06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **BOILER #1 DIESEL FUEL**

Source Location: **TA 3 SM 22 POWER PLANT**

Type of Source: **DIESEL FUEL** Type of Control Equipment: **NA**

Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**

Height Above Ground Level Feet: **150** Height Relative to Observer Feet: **170**

Distance From Observer Yards: **72** Direction of Source From Observer: **SE**

Description of Plume (stack exit only)
 Lifting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **PINK** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.): **BLUE SKY - WHITE CLOUDS**

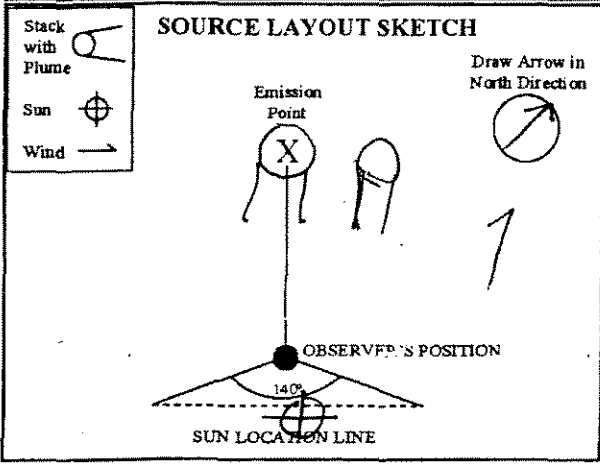
Background Color: **BLUE - WHITE** Sky Conditions: **SCATTERED**

Wind Speed mph: **2-7** Wind Direction (provide from/to, i.e. from North to South): **S-N**

Ambient Temperature °F: _____ Relative Humidity %: _____

Additional Comments/Information: _____

Observation Date		Start Time				End Time
1-11-07		1112				1121
Min	Sec	0	15	30	45	Comments
	1					
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0		Min. 0 Max. 0				
OBSERVER (please print)						
Name: LEONARD PALMICO			Title: OPERATOR			
Signature: <i>[Signature]</i>			Date: 1-11-07			
Observer Organization: KSL - UPPS						
Certified by: ETA			Certification Date: 8-06			





LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **BOILER #1 DIESEL FUEL**

Source Location: **TA3 SM 22 POWER PLANT**

Type of Source: **DIESEL FUEL** Type of Control Equipment: **NA**

Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **72** Yards Direction of Source From Observer: **S.E.**

Description of Plume (stack exit only)
 Lifting Trapping Looping Fanning Coning
 Plume Present

Emission Color: **NONE** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?: **TOP OF WEST STACK**

Describe Background (i.e. blue sky, trees, etc.): **BLUE SKY - WHITE CLOUDS**

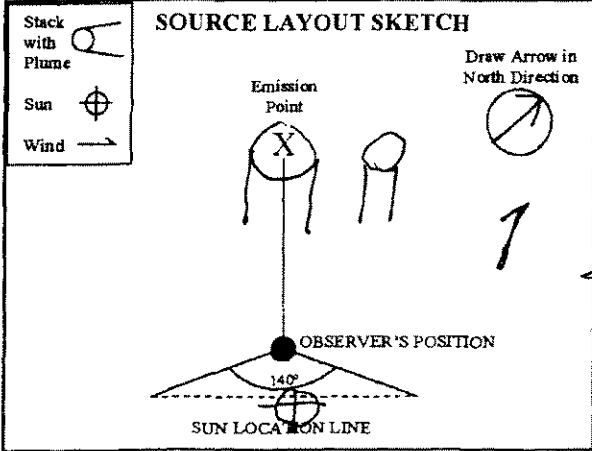
Background Color: **BLUE-WHITE** Sky Conditions: **SCATTERED**

Wind Speed: **2-7** mph Wind Direction: **S.N** (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F Relative Humidity: _____ %

Additional Comments/Information:
BOILER STABLE - STOPPED TAKING READINGS BUT STAYED OUT OBSERVING

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Average 10-Minute Opacity: 0					Range of Opacity Readings Min: 0 Max: 0
OBSERVER (please print) Name: LEONARD PALMICO Title: OPERATOR					
Signature: <i>[Signature]</i> Date: 1-11-07					
Observer Organization: KSL - UPPS					
Certified by: ETA Certification Date: 8-06					





LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **BOILER #1 DIESEL FUEL**

Source Location: **TAB SK-22 POWER PLANT**

Type of Source: **DIESEL FUEL** Type of Control Equipment: **NA**

Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **72** Yards Direction of Source From Observer: **SE**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **BLACK** Plume Type: No Plume Present Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.): **BLUE SKY**

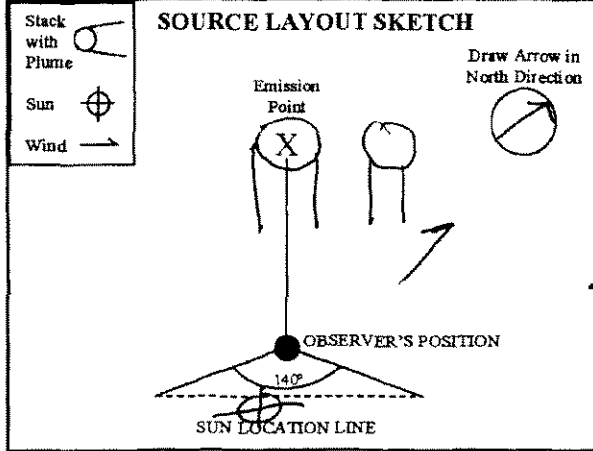
Background Color: **BLUE** Sky Conditions: **CLEAR**

Wind Speed: **2-7** mph Wind Direction: **S N**
 (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F Relative Humidity: _____ %

Additional Comments/Information: **1-11-07 LP
 AIR TO CASCADE SWITCHED TO AUTO
 FROM MANUAL
 (OIL VALVE STUCK)**

Observation Date		Start Time				End Time
1-11-07		12:11				12:24
Min	Sec				Comments	
	0	15	30	45		
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	100	100 "2" off	
9	100	100	100	100		
10	100	100	25	5		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: **18.25**

Range of Opacity Readings: Min. **0** Max. **100**

OBSERVER (please print): **LEONARDO PACHECO** Title: **OPERATOR**

Signature: Date: **1-11-07**

Observer Organization: **KSL URS**

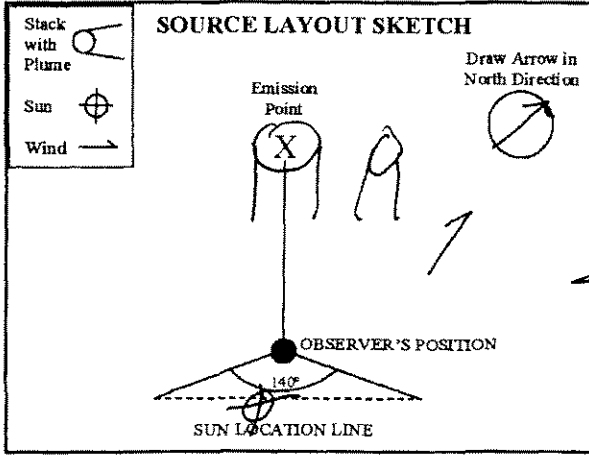
Certified by: **ETA** Certification Date: **8-06**



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Boiler #1 Diesel Fuel
 Source Location: TA 3 SM 22 power plant
 Type of Source: DIESEL FUEL Type of Control Equipment: NA
 Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK
 Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet
 Distance From Observer: 72 Yards Direction of Source From Observer: SE
 Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present
 Emission Color: NONE Plume Type: No Plume Present
 Continuous Fugitive Intermittent
 Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached
 At what point in the plume was opacity determined?
TOP OF WEST STACK
 Describe Background (i.e. blue sky, trees, etc.):
BLUE SKY
 Background Color: BLU Sky Conditions: CLEAR
 Wind Speed: 2-7 mph Wind Direction: S-N
 (provide from/to, i.e. from North to South)
 Ambient Temperature: _____ °F Relative Humidity: _____ %
 Additional Comments/Information:

Observation Date	Start Time				End Time
1-11-07	1221				1230
Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: 0 Range of Opacity Readings: Min. 0 Max. 0
 OBSERVER (please print):
 Name: LEONARDO PACHECO Title: OPERATOR
 Signature: [Signature] Date: 1-11-07
 Observer Organization: KSL - UPPS
 Certified by: ETA Certification Date: 8-06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **BOILER #1 DIESEL FUEL**

Source Location: **TA 3 SM 22 POWER PLANT**

Type of Source: **DIESEL FUEL** Type of Control Equipment: **NA**

Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **72** Yards Direction of Source From Observer: **SE**

Description of Plume (stack exit only)
 Lifting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **NONE** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.):
BLUE SKY

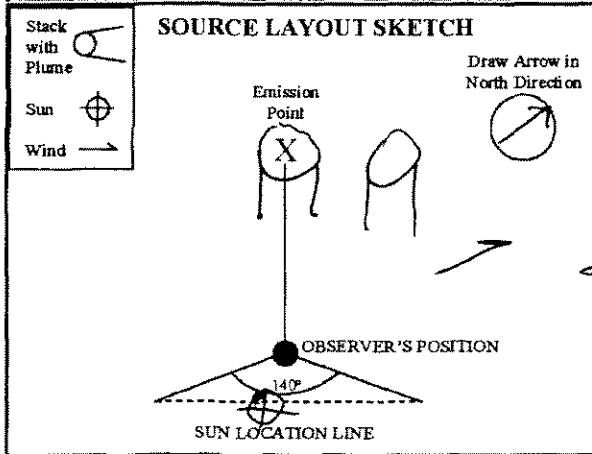
Background Color: **BLUE** Sky Conditions: **CLEAR**

Wind Speed: **2-7** mph Wind Direction: **S-NE**
 (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F Relative Humidity: _____ %

Additional Comments/Information:

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **LEONARD PACHECO** Title: **OPERATOR**

Signature: Date: **1-11-07**

Observer Organization: **KSL - UPPS**

Certified by: **ETA** Certification Date: **8-06**



LOS ALAMOS NATIONAL LABORATORY (LANL) 1-11-07
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE) LP

Source Name: **BOILER #1 DIESEL FUEL**

Source Location: **TA 3 SM-22 POWER PLANT**

Type of Source: **DIESEL FUEL** Type of Control Equipment: **NA**

Describe Emission Point (Top of stack, etc.): **TOP OF WEST STACK**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **72** Yards Direction of Source From Observer: **SF**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **NONE** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

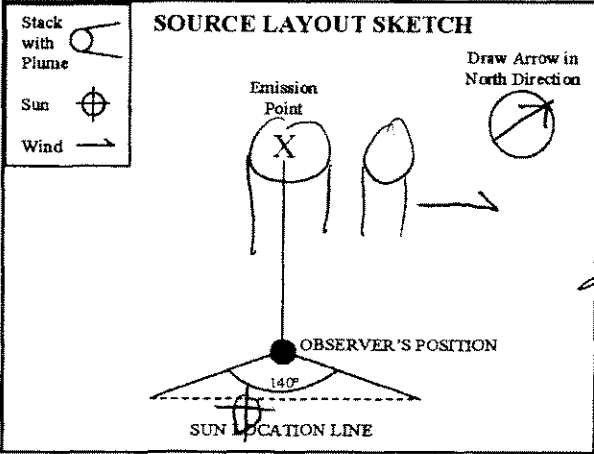
Describe Background (i.e. blue sky, trees, etc.)
BLUE SKY
 Background Color: **BLUE** Sky Conditions: **CLEAR**

Wind Speed: **2-7** mph Wind Direction: **W-E**
 (provide from/to, i.e. from North to South)

Ambient Temperature: °F Relative Humidity: %

Additional Comments/Information:
**BRINGING UP LOAD ON #1 BOILER
 1247**

Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **LEONARD SACHICO** Title: **OPERATOR**
 Signature: *[Signature]* Date: **1-11-07**

Observer Organization: **KSL-Upps**

Certified by: **ETA** Certification Date: **8-06**



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: BOILER #1 DIESEL # FUEL

Source Location: TA 3 SM 22 POWER PLANT

Type of Source: DIESEL FUEL Type of Control Equipment: NA

Describe Emission Point (Top of stack, etc.): TOP OF WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet

Distance From Observer: 72 Yards Direction of Source From Observer: SE

Description of Plume (stack exit only)
 Looping Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NONE Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF WEST STACK

Describe Background (i.e. blue sky, trees, etc.): BLUE SKY

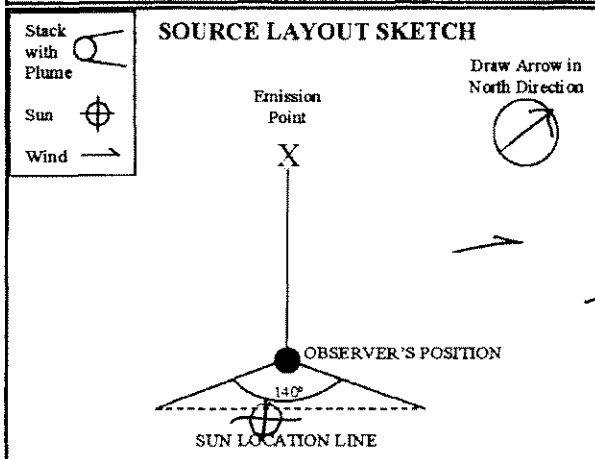
Background Color: BLUE Sky Conditions: CLEAR

Wind Speed: 2.7 mph Wind Direction: W-E
 (provide from/to, i.e. from North to South)

Ambient Temperature: _____ °F Relative Humidity: _____ %

Additional Comments/Information:
1301 OFF OF FUEL OIL

Observation Date		Start Time		End Time	Comments
Min	Sec	0	15	30	
1-11-07		1257		1301	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: 0 Range of Opacity Readings: Min. 0 Max. 0

OBSERVER (please print)
 Name: LEONARD PACHECO Title: OPERATOR
 Signature: [Signature] Date: 1-11-07

Observer Organization: VSL - COPS

Certified by: ETA Certification Date: 8-06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Fuel Oil # 1 Boiler

Source Location: T3 SM 22 Power Plant

Type of Source: Fuel Oil Type of Control Equipment: N/A

Describe Emission Point (Top of stack, etc.): Top of stack

Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet

Distance From Observer: 250 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black Plume Type: Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
Approx. 1 Foot Above Stack

Describe Background (i.e. blue sky, trees, etc.): Blue Sky

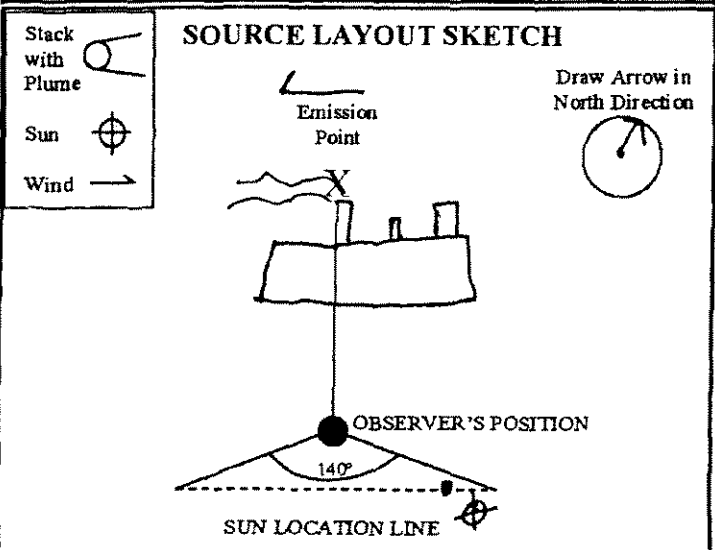
Background Color: Blue Sky Conditions: Clear

Wind Speed: 0-5 mph Wind Direction: From NE to SW
(provide from/to, i.e. from North to South)

Ambient Temperature: N/A °F Relative Humidity: N/A %

Additional Comments/Information:

Observation Date		Start Time				End Time
1-25-07		11:10				11:40
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	#4 Burned
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0 Max. 0.0

OBSERVER (please print)
Name: BRIAN OETZ Title: Maint. head man

Signature: Date: 1-25-07

Observer Organization: KSL

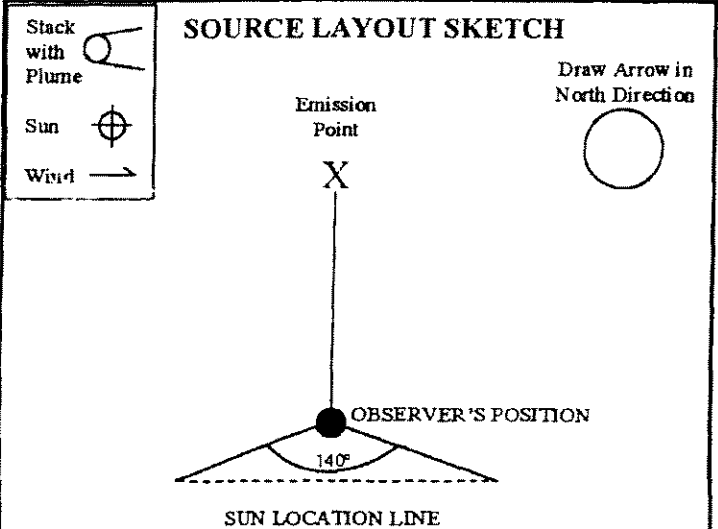
Certified by: ETA Certification Date: 8/29/06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name:	
Source Location:	
Type of Source	Type of Control Equipment
Describe Emission Point (Top of stack, etc.)	
Height Above Ground Level Feet	Height Relative to Observer Feet
Distance From Observer Yards	Direction of Source From Observer
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> No Plume Present	
Emission Color	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined?	
Describe Background (i.e. blue sky, trees, etc.)	
Background Color	Sky Conditions
Wind Speed mph	Wind Direction (provide from/to, i.e. from North to South)
Ambient Temperature °F	Relative Humidity %
Additional Comments/Information:	

Observation Date		Start Time		End Time	Comments
Min	Sec	0	15	30	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	



Average 10-Minute Opacity	Range of Opacity Readings Min. Max.
OBSERVER (please print) Name: _____ Title: _____	
Signature _____	Date _____
Observer Organization _____	
Certified by _____	Certification Date _____



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: _____

Source Location: _____

Type of Source _____ Type of Control Equipment _____

Describe Emission Point (Top of stack, etc.) _____

Height Above Ground Level _____ Height Relative to Observer _____
Feet Feet

Distance From Observer _____ Direction of Source From Observer _____
Yards

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color _____ Plume Type No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? _____

Describe Background (i.e. blue sky, trees, etc.) _____

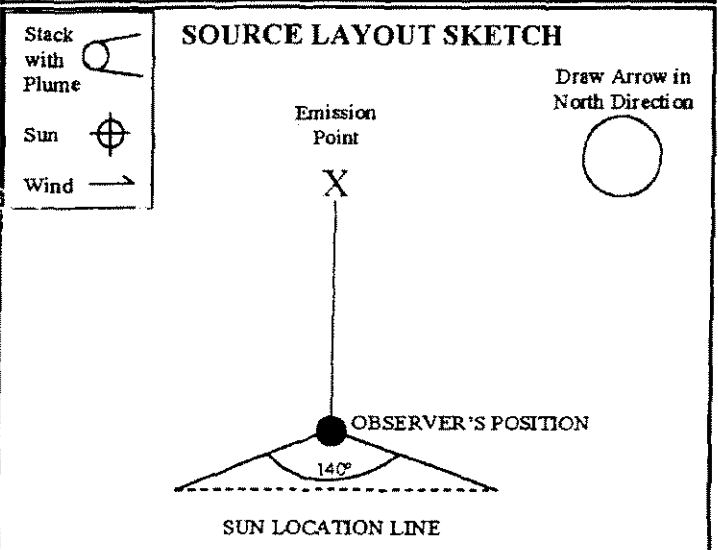
Background Color _____ Sky Conditions _____

Wind Speed _____ mph Wind Direction _____
(provide from/to, i.e. from North to South)

Ambient Temperature _____ °F Relative Humidity _____ %

Additional Comments/Information: _____

Observation Date	Start Time				End Time
					11:40
Min	0	15	30	45	Comments
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stopped Reading Boiler Tripped



Average 10-Minute Opacity _____ Range of Opacity Readings
Min. _____ Max. _____

OBSERVER (please print)
Name: _____ Title: _____

Signature _____ Date _____

Observer Organization _____

Certified by _____ Certification Date _____



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Fuel oil #1 Boiler

Source Location: TA 3 sm 22 Power Plant

Type of Source: Fuel oil Type of Control Equipment: N/A

Describe Emission Point (Top of stack, etc.): Top of Stack

Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet

Distance From Observer: 250 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
Approx. 1 Foot Above Stack

Describe Background (i.e. blue sky, trees, etc.): Blue Sky

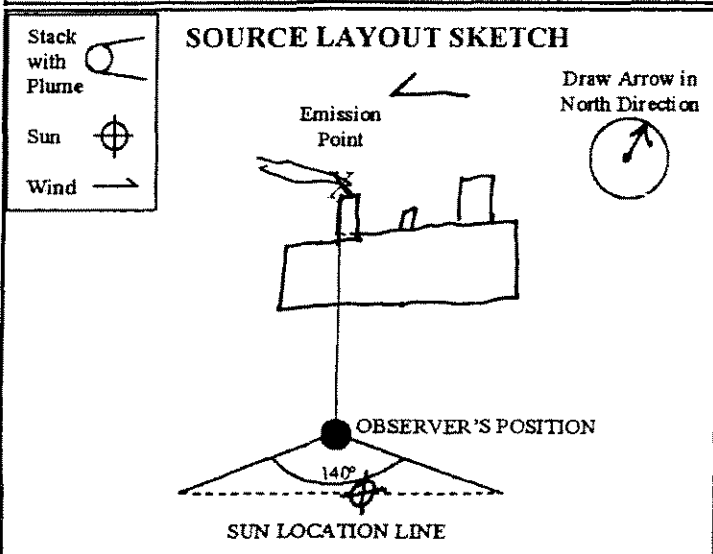
Background Color: Blue Sky Conditions: Clear

Wind Speed: 0-5 mph Wind Direction: FROM NE to SW
 (provide from/to, i.e. from North to South)

Ambient Temperature: N/A °F Relative Humidity: N/A %

Additional Comments/Information:

Observation Date		Start Time				End Time
1-25-07		11:48				11:58
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0 Max. 0.0

OBSERVER (please print)
 Name: BRIAN OLIZ Title: maint head man

Signature: Date: 1/25/07

Observer Organization: KSL

Certified by: ETA Certification Date: 8/29/06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **Fuel oil #2 Boiler**

Source Location: **TA3 SM22 Power Plant**

Type of Source: **Fuel oil** Type of Control Equipment: **NONE**

Describe Emission Point (Top of stack, etc.): **TOP OF STACK**

Height Above Ground Level: **150'** Feet Height Relative to Observer: **100** Feet

Distance From Observer: **97** Yards Direction of Source From Observer: **NE**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
ONE FOOT ABOVE STACK

Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

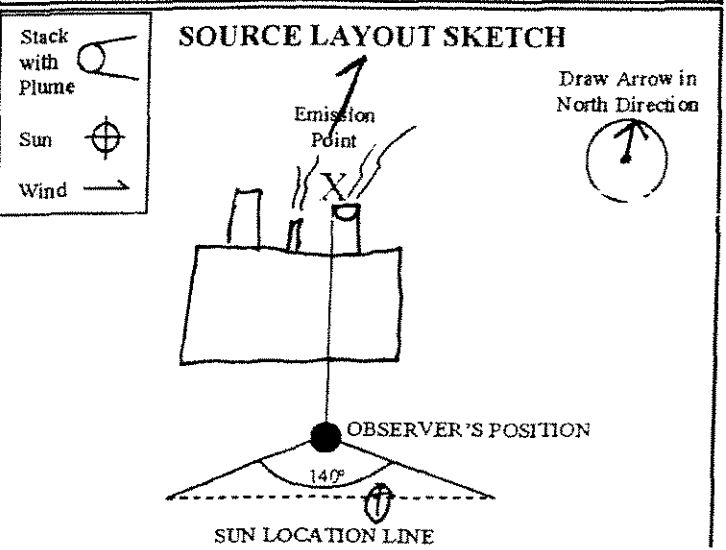
Background Color: **Blue** Sky Conditions: **Clear**

Wind Speed: **0-3** mph Wind Direction: **FROM SE TO NW**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **19.9** °F Relative Humidity: **38** %

Additional Comments/Information:

Observation Date		Start Time				End Time
2-8-2007		11:12				11:22
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	#3 Barrel
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
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16						
17						
18						
19						
20						



Average 10-Minute Opacity: **0.0 %**

Range of Opacity Readings: Min. **0.0** Max. **0.0**

OBSERVER (please print)
 Name: **BRIAN OETA** Title: **Lead Maint. Man**

Signature: Date: **7-8-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **8/29/06**



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Fueloil #2 Boiler

Source Location: TAB SM 22 Power Plant

Type of Source: Fueloil Type of Control Equipment: None

Describe Emission Point (Top of stack, etc.): top of stack

Height Above Ground Level: 150 Feet Height Relative to Observer: 100 Feet

Distance From Observer: 97 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
one foot above stack

Describe Background (i.e. blue sky, trees, etc.): Blue sky

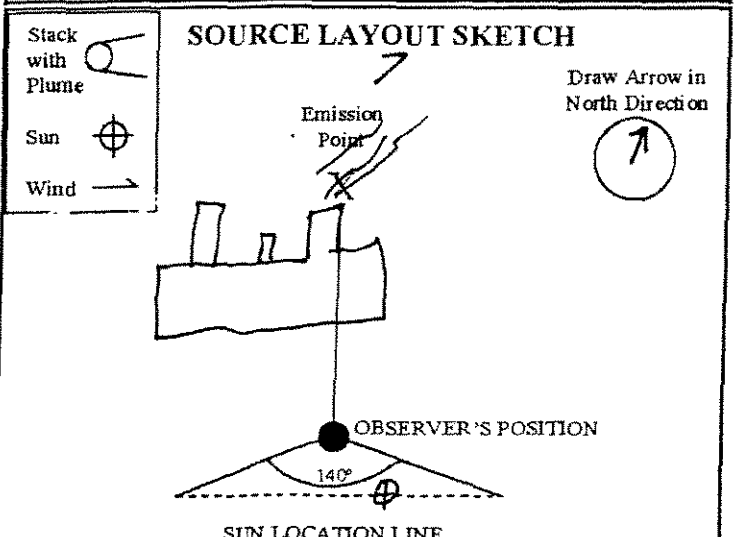
Background Color: Blue Sky Conditions: Clear

Wind Speed: 0-3 mph Wind Direction: FROM SE to NW
 (provide from/to, i.e. from North to South)

Ambient Temperature: 19.9 °F Relative Humidity: 38 %

Additional Comments/Information:

Observation Date		Start Time				End Time
2-8-07		11:22				11:32
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
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17						
18						
19						
20						



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0 Max. 0.0

OBSERVER (please print)
 Name: BRIAN OLTEZ Title: Lead Maint Man

Signature: Brian Oltez Date: 2-8-07

Observer Organization: KSL

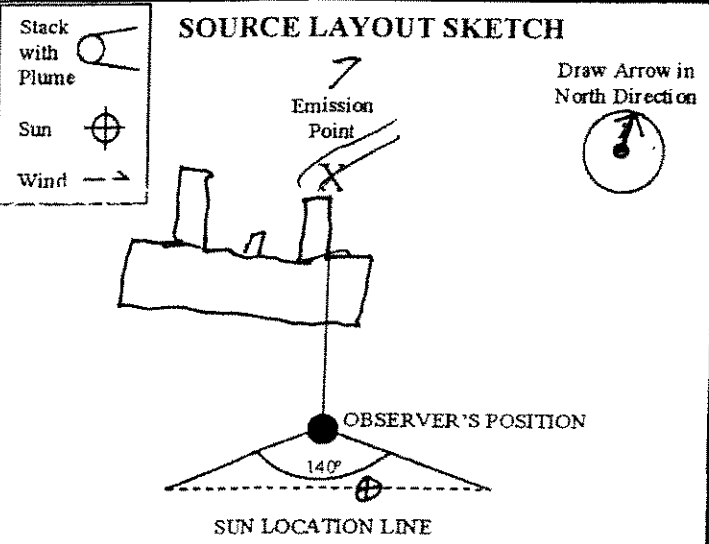
Certified by: ETA Certification Date: 8/29/06



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: <i>Fuel oil #2 Boiler</i>	
Source Location: <i>T43 SM22 Power Plant</i>	
Type of Source: <i>Fuel oil</i>	Type of Control Equipment: <i>NONE</i>
Describe Emission Point (Top of stack, etc.) <i>Top of Stack</i>	
Height Above Ground Level: <i>150</i> Feet	Height Relative to Observer: <i>100</i> Feet
Distance From Observer: <i>97</i> Yards	Direction of Source From Observer: <i>NE</i>
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Ruffling <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> No Plume Present	
Emission Color: <i>Black</i>	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? <i>one foot above stack</i>	
Describe Background (i.e. blue sky, trees, etc.) <i>Blue Sky</i>	
Background Color: <i>Blue</i>	Sky Conditions: <i>Cloud</i>
Wind Speed: <i>0-3</i> mph	Wind Direction: (provide from/to, i.e. from North to South) <i>From SE to NW</i>
Ambient Temperature: <i>19.9</i> °F	Relative Humidity: <i>38</i> %
Additional Comments/Information:	

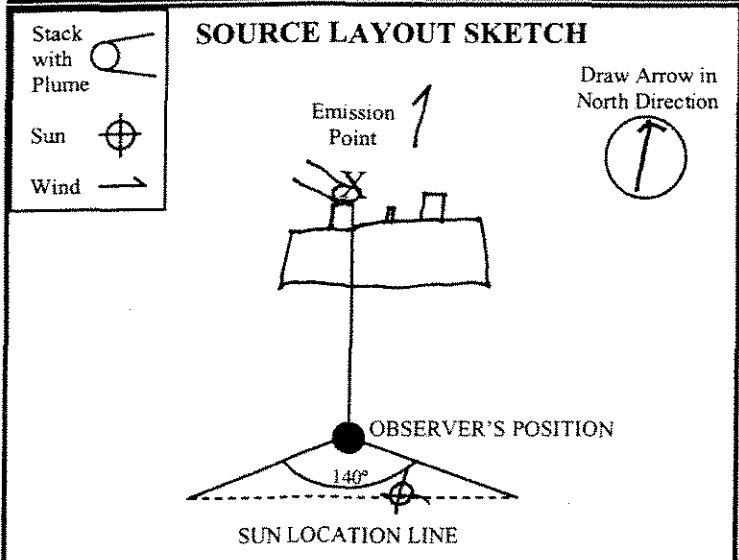
Observation Date	Start Time	End Time				
<i>2-8-07</i>	<i>11:32</i>	<i>11:42</i>				
	30°					
Min	0	15	30	45	Comments	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity <i>0.0</i>	Range of Opacity Readings Min. <i>0.0</i> Max. <i>0.0</i>
OBSERVER (please print) Name: <i>BRIAN ULTIZ</i> Title: <i>Lead Maint Man</i>	
Signature: <i>Brian</i>	Date: <i>2-8-07</i>
Observer Organization: <i>KSL</i>	
Certified by: <i>ETA</i>	Certification Date: <i>8-29-06</i>

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Fuel Oil	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Most West Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 170 Feet
Distance From Observer 250 Feet	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Black	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? ONE FOOT ABOVE STACK	
Describe Background (i.e. blue sky, trees, etc.) Partly Cloudy Skies	
Background Color Bluesky + white clouds	Sky Conditions Partly Cloudy
Wind Speed 0-3 mph	Wind Direction (provide from/to, i.e. from North to South) From N to S From SW to N.
Ambient Temperature 42° °F	Relative Humidity 45% %
Additional Comments/Information:	

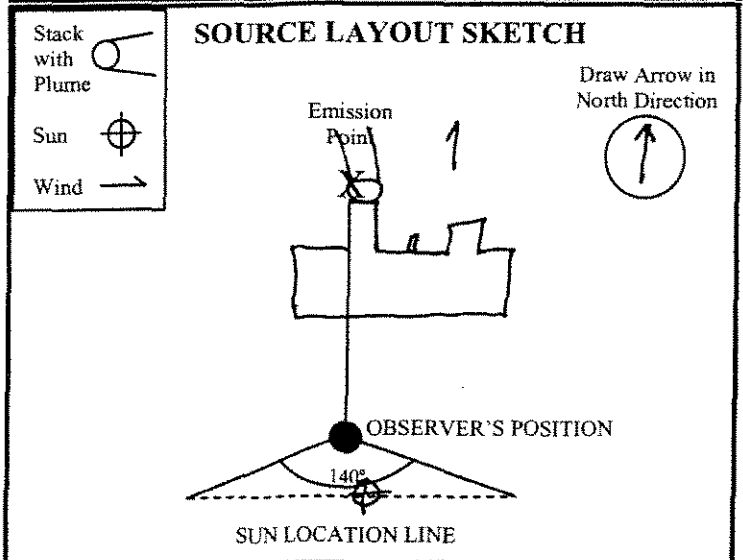


Observation Date		Start Time				End Time
2/22/07		10:37				10:47
Min	Sec				Comments	
	0	15	30	45		
1	0	0	0	0	#3 Bursee	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0.0%		Min. 0.0 Max. 0.0				
OBSERVER (please print)						
Name: BRIAN ORTIZ				Title: Maint Leadman		
Signature:				Date: 2/22/07		
Observer Organization KSL						
Certified by ETA				Certification Date 8/29/06		

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Fuel oil	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Most Westew Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 170 Feet
Distance From Observer 250 Feet	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Black	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? ONE FOOT ABOVE STACK	
Describe Background (i.e. blue sky, trees, etc.) Partly Cloudy Skies	
Background Color Blue/Whit	Sky Conditions Partly Cloudy
Wind Speed 0-3 mph	Wind Direction (provide from/to, i.e. from North to South) From S to N
Ambient Temperature 42° °F	Relative Humidity 45% %
Additional Comments/Information:	

Observation Date 2/22/07		Start Time 10:47				End Time 10:57
Min	Sec				Comments	
	0	15	30	45		
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
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14						
15						
16						
17						
18						
19						
20						

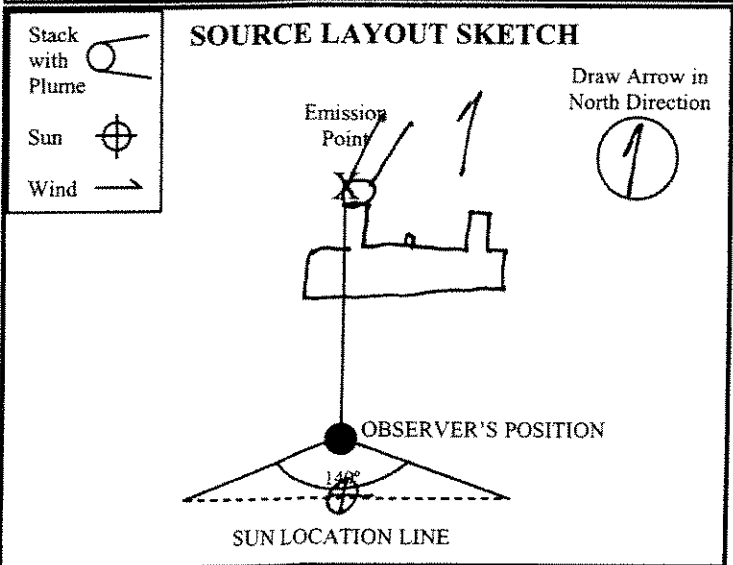


Average 10-Minute Opacity 0.0%	Range of Opacity Readings Min. 0.0 Max. 0.0
OBSERVER (please print) Name: Brian Ortiz Title: Maint. Leadman	
Signature:	Date: 2/22/07
Observer Organization KSL	
Certified by ETA	Certification Date 8/29/06

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Fuel Oil	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Mast. Wastew. Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 170 Feet
Distance From Observer 250 Feet	Direction of Source From Observer NW
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> No Plume Present	
Emission Color Black	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? ONE FOOT ABOVE STACK	
Describe Background (i.e. blue sky, trees, etc.) PARTLY CLOUDY SKIES	
Background Color Blue/white	Sky Conditions PARTLY CLOUDY
Wind Speed 0-3 mph	Wind Direction (provide from/to, i.e. from North to South) From S to N
Ambient Temperature 43 °F	Relative Humidity 45% %
Additional Comments/Information: Attempted to put Air on Cascade Had to take it off cause of smoke	

Observation Date 2/22/07		Start Time 11:30		End Time 11:40	
Min \ Sec	0	15	30	45	Comments
1	0	5	5	5	Put Air on Cascade
2	5	15	40	50	
3	30	25	5	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity 4.625%	Range of Opacity Readings Min. 0.0 Max. 50
OBSERVER (please print) Name: Brian Ortiz Title: Maint + Lead Man	
Signature 	Date 2/22/07
Observer Organization KSL	
Certified by ETA	Certification Date 8/29/06

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Top of Most Western Stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **250** Feet Direction of Source From Observer: **NW**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: Continuous Fugitive Intermittent
 No Plume Present

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
one foot above stack

Describe Background (i.e. blue sky, trees, etc.): **Grey Skies**

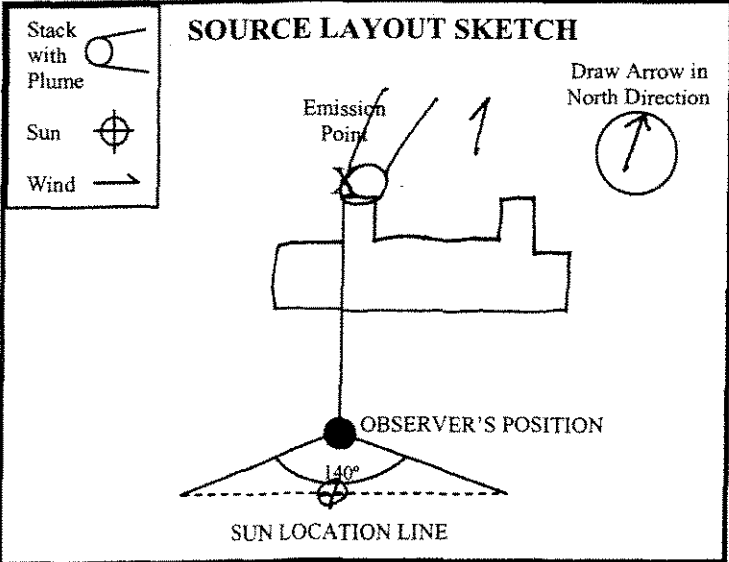
Background Color: **Grey** Sky Conditions: **Cloudy**

Wind Speed: **0-3** mph Wind Direction: **From SKO N**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **43** °F Relative Humidity: **45** %

Additional Comments/Information:

Observation Date		Start Time				End Time
2/22/07		18:12				12:22
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	Paul Parker running
2		0	0	0	0	Test of cascade mode
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	5	
9		5	5	5	5	
10		5	5	0	0	
11						
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19						
20						



Average 10-Minute Opacity: **0.875%** Range of Opacity Readings: Min. **0.0** Max. **5%**

OBSERVER (please print) Name: **BRIAN OTERO** Title: **Maint Leadman**

Signature: *Brian Otero* Date: **2/22/07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **8/29/06**

LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Fuel oil / Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): Top of Most Western Stack

Height Above Ground Level: 150 Feet / Height Relative to Observer: 170 Feet

Distance From Observer: 250 Feet / Direction of Source From Observer: NW

Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black / Plume Type: Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? One Foot Above Stack

Describe Background (i.e. blue sky, trees, etc.): Grey Skies

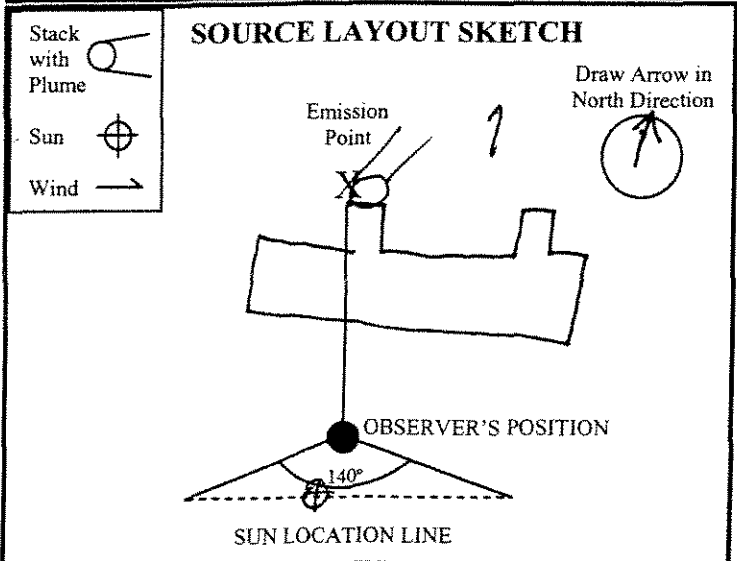
Background Color: Grey / Sky Conditions: Cloudy

Wind Speed: 0-3 mph / Wind Direction: From SE to N

Ambient Temperature: 45 °F / Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
2/22/07		12:22				12:32
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		5	5	5	0	
9		0	0	0	0	
10		0	0	0	0	
11						
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19						
20						



Average 10-Minute Opacity: 0.375 / 0

Range of Opacity Readings: Min 0.0 Max 5%

OBSERVER (please print) Name: BRIAN ORTIZ Title: Maint Leadman

Signature: [Signature] Date: 2/22/07

Observer Organization: KSL

Certified by: ETA Certification Date: 8/29/06

LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Fuel oil Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): top of most western stack

Height Above Ground Level: 150 Feet Height Relative to Observer: 170 Feet

Distance From Observer: 250 Feet Direction of Source From Observer: NW

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?: one foot above stack

Describe Background (i.e. blue sky, trees, etc.): Grey Skies

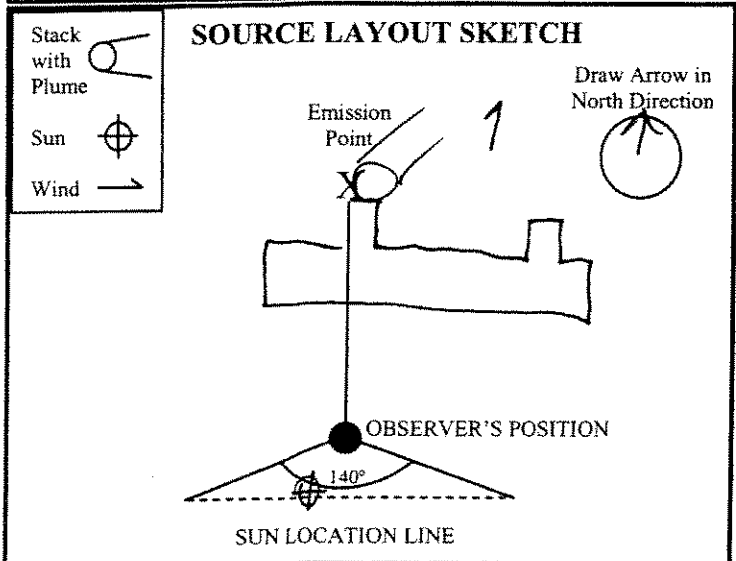
Background Color: Grey Sky Conditions: Cloudy

Wind Speed: 0-3 mph Wind Direction: From S to N

Ambient Temperature: 45 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date	Start Time				End Time
2-22-07	12:32				12:42
Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0 Max. 0.0

OBSERVER (please print) Name: Brian Ortiz Title: Maint. Leadman

Signature: *Brian Ortiz* Date: 2/22/07

Observer Organization: KSL

Certified by: ETA Certification Date: 8/29/06

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel Oil** / Type of Control Equipment: **No Particulate Control**

Describe Emission Point: (Top of stack, etc.)
Top of most western stack

Height Above Ground Level: **150** Feet / Height Relative to Observer: **170** Feet

Distance From Observer: **250** Feet / Direction of Source From Observer: **NW**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** / Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
one foot above stack

Describe Background (i.e. blue sky, trees, etc.)
grey skies

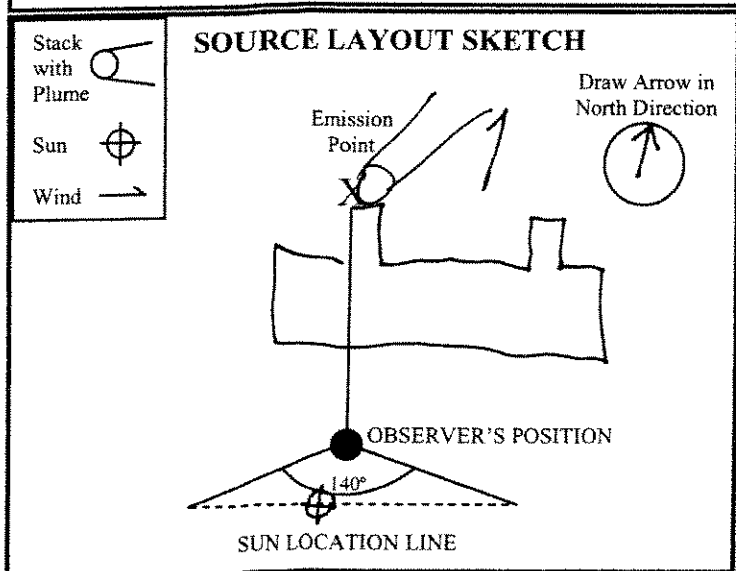
Background Color: **grey** / Sky Conditions: **cloudy**

Wind Speed: **0-3** mph / Wind Direction: **from S to N**

Ambient Temperature: **45** °F / Relative Humidity: **45** %

Additional Comments/Information:

Observation Date		Start Time				End Time
2/22/07		12:46				12:56
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	Running tests
2		0	0	0	0	on Cascade
3		0	0	0	0	make
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
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18						
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20						



Average 10-Minute Opacity: **0.0%** / Range of Opacity Readings: Min. **0.0** Max. **0.0**

OBSERVER (please print): **BRIAN OLIVER** / Title: **Maint Leadman**

Signature: *Brian Oliver* / Date: **2/22/07**

Observer Organization: **KSL**

Certified by: **ETA** / Certification Date: **8/29/06**

LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Top of most Western Stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **250** Feet Direction of Source From Observer: **NW**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
ONE FOOT ABOVE STACK

Describe Background (i.e. blue sky, trees, etc.): **Grey Skies**

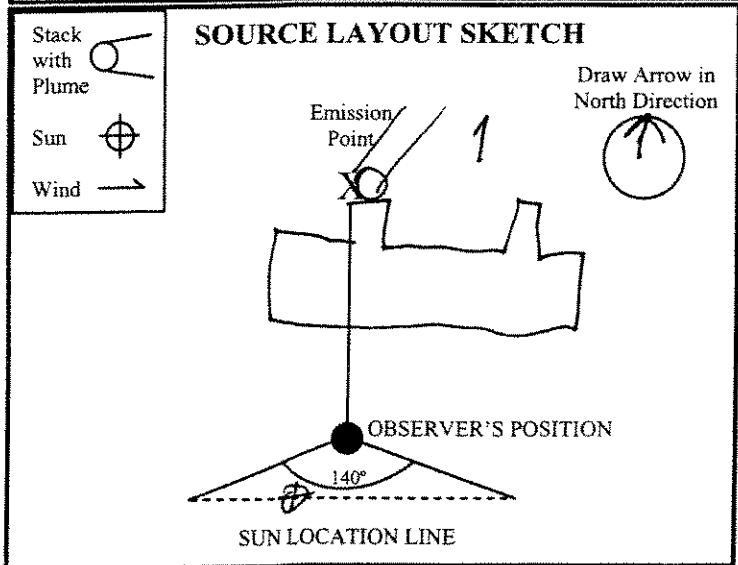
Background Color: **Grey** Sky Conditions: **cloudy**

Wind Speed: **0-3** mph Wind Direction: **From S to N**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **45** °F Relative Humidity: **45** %

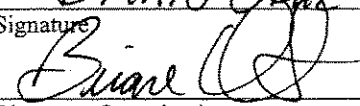
Additional Comments/Information:

Observation Date		Start Time				End Time
2-22-07		12:56				1:06
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
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19						
20						



Average 10-Minute Opacity: **0.0** Range of Opacity Readings: Min. **0.0** Max. **0.0**

OBSERVER (please print)
 Name: **BRIAN O'NEILL** Title: **Maint. lead man**

Signature:  Date: **2/22/07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **8/29/06**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3 Boiler #2**

Source Location: **TA-3-22**

Type of Source **3-6-07 *FP*** **Fuel oil (Boiler #2)** Type of Control Equipment **No Particulate Control**

Describe Emission Point (Top of stack, etc.)
West stack

Height Above Ground Level Feet **150** Height Relative to Observer Feet **170**
Same

Distance From Observer Feet **71 yards** Direction of Source From Observer **SW 1/4 N 4-11-07**
East wind

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color **3-6-07 *FP*** **Black dark & Black no color** Plume Type No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF STACK

Describe Background (i.e. blue sky, trees, etc.)
Blue sky & white clouds

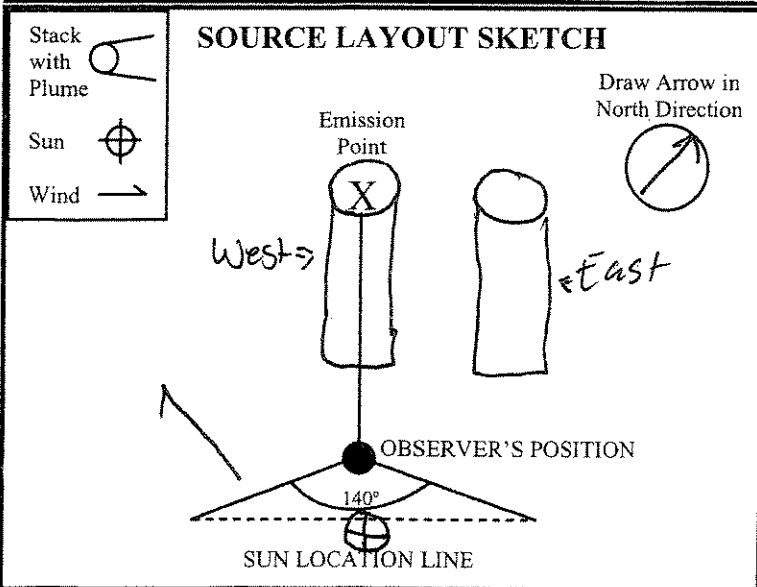
Background Color **Blue & white** Sky Conditions **Clear**

Wind Speed mph **3-5** Wind Direction (provide from/to, i.e. from North to South) **SE from SE**
2P 3-6-07

Ambient Temperature °F **40** Relative Humidity **% 15**

Additional Comments/Information:
FUEL OIL TEST

Observation Date		Start Time <i>3-6-07</i>		End Time <i>3-6-07</i>	Comments
Min	Sec	0	15	30	
1	0	0	0	0	
2	0	0	0	0	
3	0	20	25	30	
4	25	10	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
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20					



Average 10-Minute Opacity **2.5% 2.75%** Range of Opacity Readings
Min. **0** Max. **30**

OBSERVER (please print)
Name: **Lucas M. Miller** Title: **Operator**

Signature Date: **3-6-07**

Observer Organization
KSL

Certified by **EPA** Certification Date **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3 Boiler #2**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler #2)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yards** Direction of Source From Observer: **East NW 85° 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black color** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? **Top of stack**

Describe Background (i.e. blue sky, trees, etc.): **Blue sky's & white clouds**

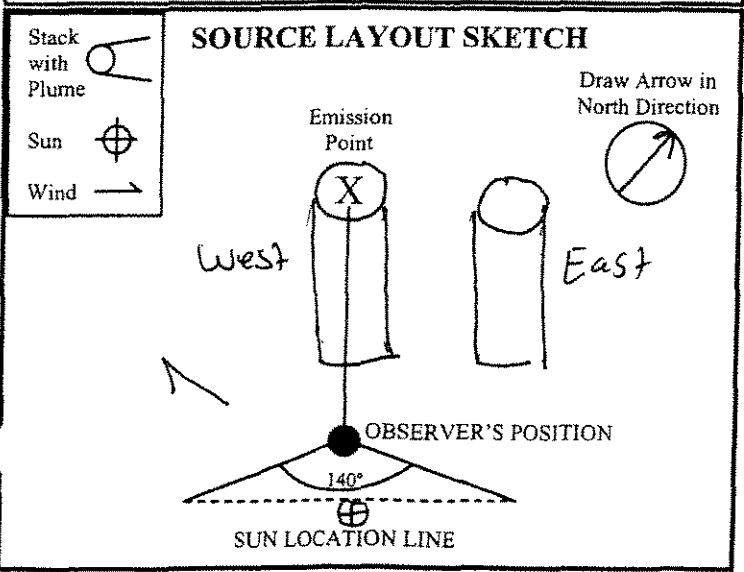
Background Color: **blue & white** Sky Conditions: **clear**

Wind Speed: **3-5** mph Wind Direction: **SE from SE** 3-6-07

Ambient Temperature: **40** °F Relative Humidity: **15** %

Additional Comments/Information: **Fuel oil test**

Observation Date		Start Time				End Time
3-6-07		10:49 AM				10:59 AM
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucas M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **3-6-07**

Observer Organization: **KSL**

Certified by: **EFA** Certification Date: **3-01-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3 Boiler #2**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stacks**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **2100** Feet Direction of Source From Observer: **West NW winds 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black color** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF STACK

Describe Background (i.e. blue sky, trees, etc.): **Blue sky's & white clouds**

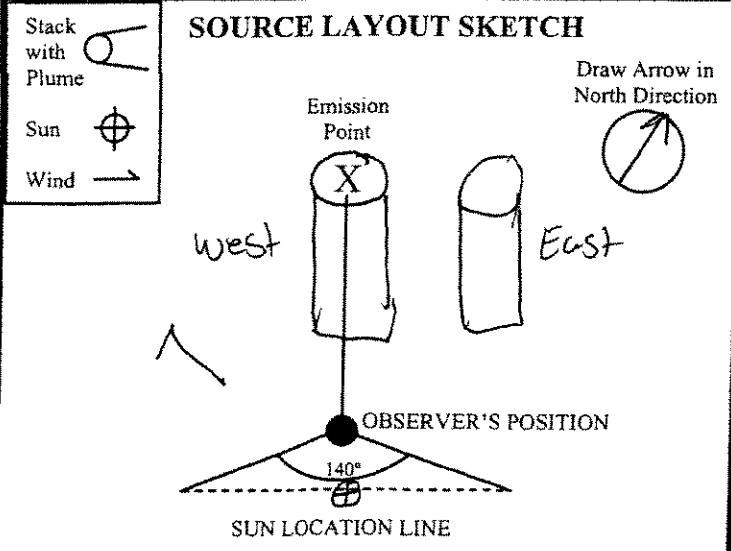
Background Color: **Blue & white** Sky Conditions: **Clear**

Wind Speed: **3-5** mph Wind Direction: **From SE**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **40** °F Relative Humidity: **15** %

Additional Comments/Information:
Fuel Oil test

Observation Date		Start Time				End Time
3-6-07		16:59 AM				11:09 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucas M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **3-6-07**

Observer Organization: **KSC**

Certified by: **EFA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler #3)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **East stack 1ft above stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **170** Feet

Distance From Observer: **71 yards** Feet Direction of Source From Observer: **SE NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF STACK

Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

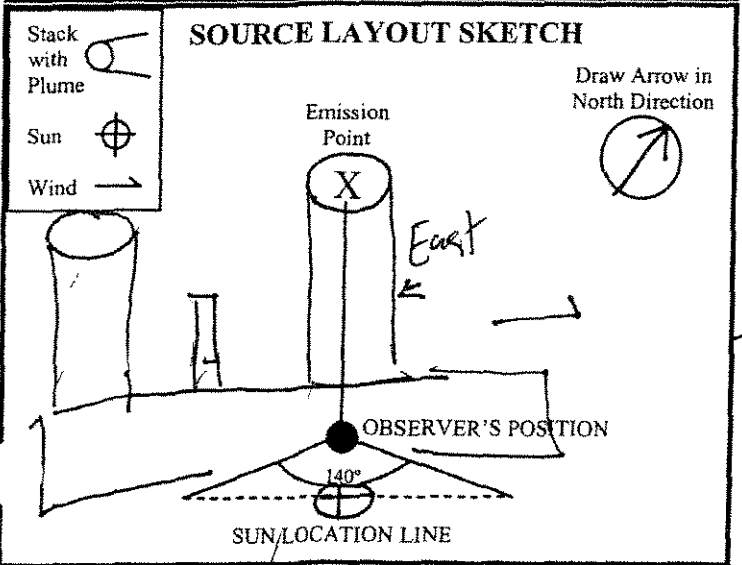
Background Color: **Blue** Sky Conditions: **Clear**

Wind Speed: **6-10** mph Wind Direction: **NW to SE** (provide from/to, i.e. from North to South)

Ambient Temperature: **53** °F Relative Humidity: **26** %

Additional Comments/Information:
Fuel Oil Test

Observation Date		Start Time				End Time
3-20-07		10:35 AM				10:45 AM
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucas M. Mills** Title: **Operator**

Signature: Date: **3-20-07**

Observer Organization: **KSL**

Certified by: **EPA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler #3)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **East stack 1FK above stack**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yards** Direction of Source From Observer: **SE NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Stack Clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
Top of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

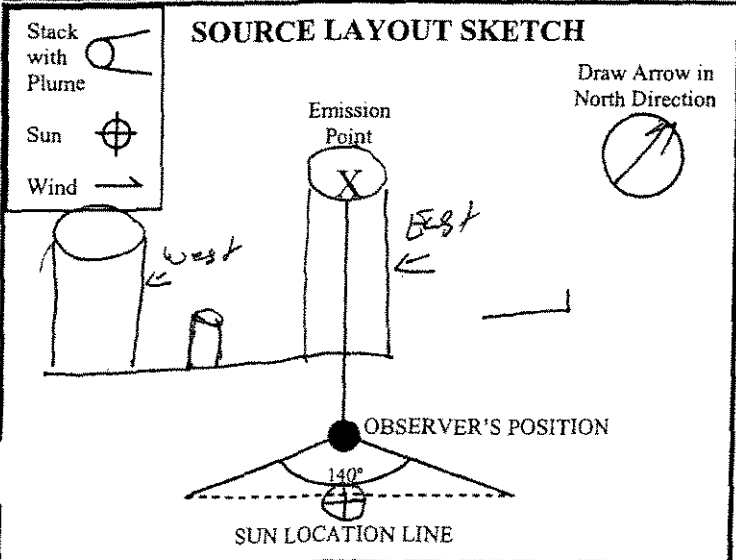
Background Color: **Blue** Sky Conditions: **Clear**

Wind Speed: **6-10** mph Wind Direction: **NW to SE 4-11-07**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **°F 53** Relative Humidity: **% 26**

Additional Comments/Information:
Fuel Oil Test

Observation Date		Start Time				End Time
3-20-07		10:45 AM				10:55 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Gregory M. Miller** Title: **operator**

Signature: *[Signature]* Date: **3-20-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **East stack 1ft above stack**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yards** Direction of Source From Observer: **SE-NW N³⁰ E 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? **Top of stack**

Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

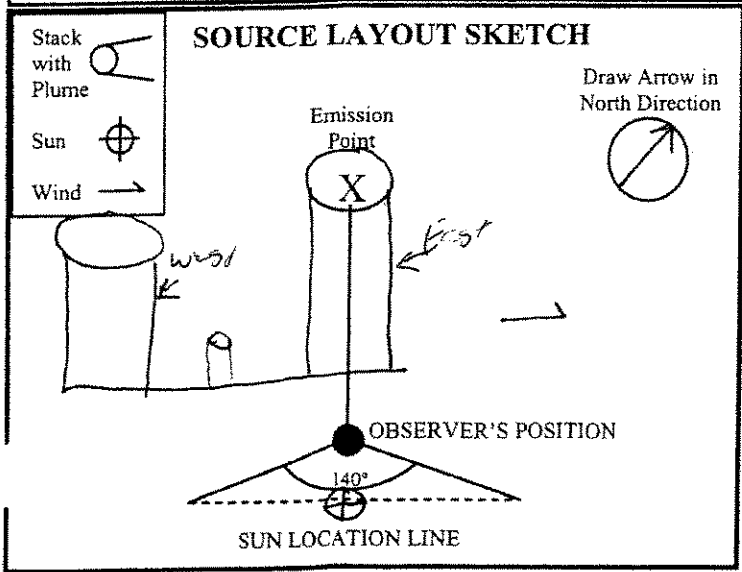
Background Color: **Blue** Sky Conditions: **Clear**

Wind Speed: **6-10** mph Wind Direction: **West to East**
(provide from/to, i.e. from North to South)

Ambient Temperature: **53** °F Relative Humidity: **25** %

Additional Comments/Information: **Fuel Oil Test**

Observation Date		Start Time				End Time
3-20-07		10:55 AM				11:05 AM
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Wesley M. Miller** Title: **Operator**

Signature: Date: **3-20-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **fuel oil (Boiler #1)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack 1ft above stack**

Height Above Ground Level: **150 Feet** Height Relative to Observer: **170 Feet**

Distance From Observer: **71 yards** Direction of Source From Observer: **SE NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
Top of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky & Stackhead**

Background Color: **Blue** Sky Conditions: **Stackhead**

Wind Speed: **5-10 mph** Wind Direction: **From SW to S South east 4-11-07**

Ambient Temperature: **48.2 °F** Relative Humidity: **% 54**

Additional Comments/Information:
fuel Oil Test

Observation Date		Start Time				End Time
3-27-07		9:52 AM				10:02 AM
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	20	25	30	30		
3	20	10	5	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
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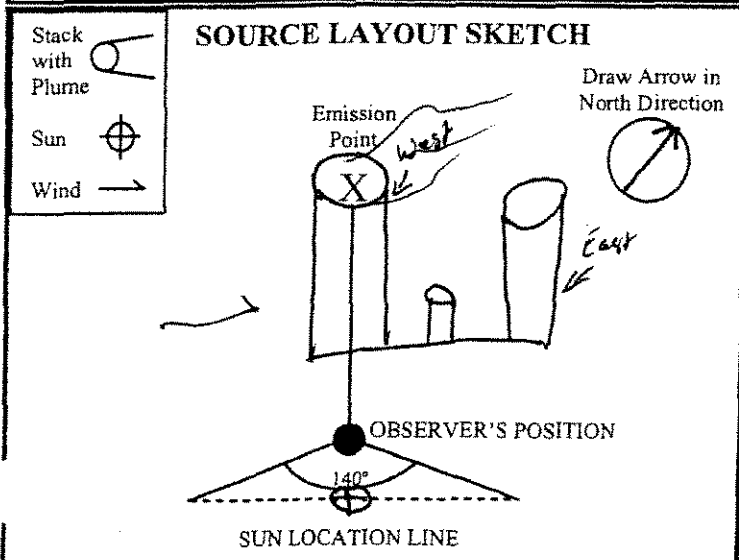
Average 10-Minute Opacity: **3.5** Range of Opacity Readings: Min. **0** Max. **30**

OBSERVER (please print)
 Name: **Lucas M. Miller** Title: **operator**

Signature: *[Signature]* Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**



**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel Oil (Boiler #1)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West Stack 1st above stacks**

Height Above Ground Level: **Feet 56** Height Relative to Observer: **Feet 176**

Distance From Observer: **71 yards** Direction of Source From Observer: **SEWN 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black Clean** Plume Type: Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
Top of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky & scrubbers**

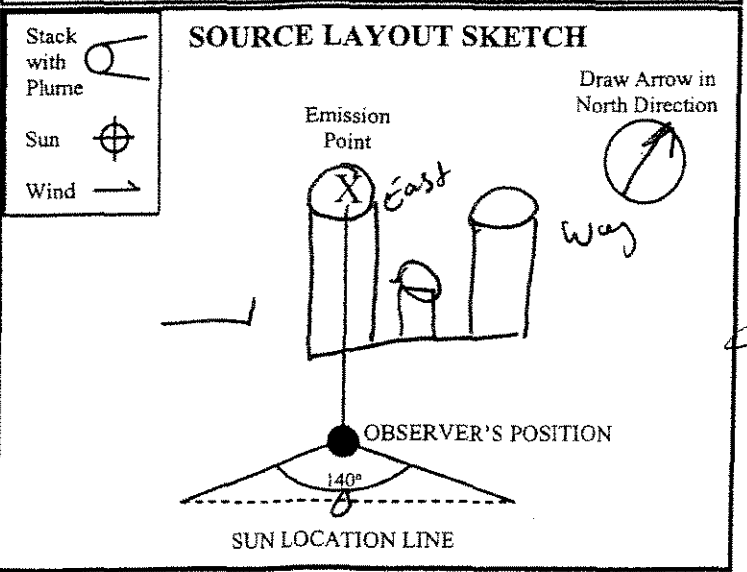
Background Color: **Blue & white** Sky Conditions: **Scrubbed**

Wind Speed: **5-10** mph Wind Direction: **from SW to SE 3-27-07**
(provide from/to, i.e. from North to South)

Ambient Temperature: **°F 48.2** Relative Humidity: **% 54**

Additional Comments/Information:
Fuel Oil Test

Observation Date		Start Time				End Time
3-27-07		10:02 AM				10:11 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucas M. Miller** Title: **Operator**

Signature: Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler #)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack 1ft above stack**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yard** Direction of Source From Observer: **SE NW 2/4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky scattered**

Background Color: **Blue & white** Sky Conditions: **Scattered**

Wind Speed: **5-10** mph Wind Direction: **Southwest from SW 2/27-07**
(provide from/to, i.e. from North to South)

Ambient Temperature: **°F 48.2** Relative Humidity: **% 54**

Additional Comments/Information:
Fuel Oil Tank

Observation Date		Start Time				End Time
3-27-07		10:12 AM				10:27 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	5	
9		5	5	5	0	
10		0	0	0	0	
11						
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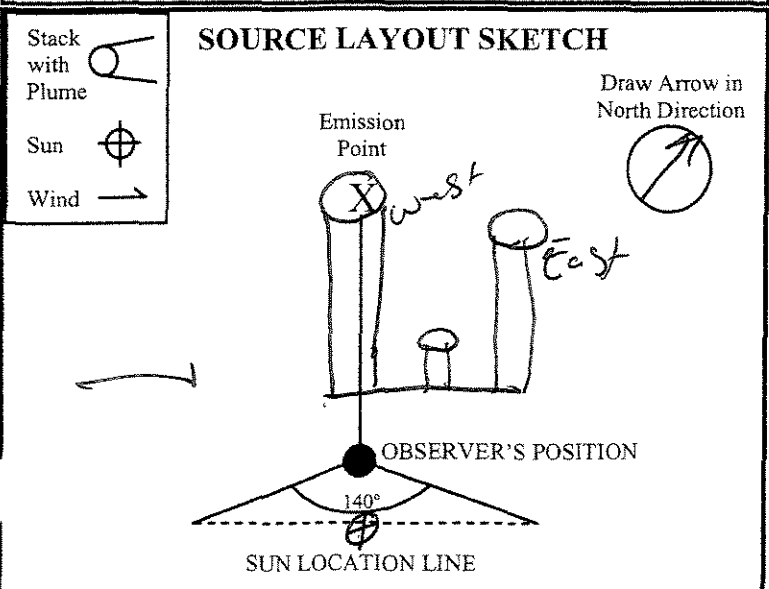
Average 10-Minute Opacity: **0.5** Range of Opacity Readings: Min. **0** Max. **5**

OBSERVER (please print)
 Name: **Wendy M. Miller** Title: **operator**

Signature: *[Signature]* Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**



**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **East of TA-3-22**

Type of Source: **Fuel oil (Balt #1)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West side 1ft above stack**

Height Above Ground Level: **7 ft above** Feet **156** Height Relative to Observer: **170** Feet

Distance from Observer: **7 yards** Feet Direction of Source from Observer: **SE NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black/Gray** Plume Type: Continuous Fugitive Intermittent
 No Plume Present

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined? **TOP of stack**

Describe Background (i.e. blue sky, trees, etc.): **Blue & Scattered**

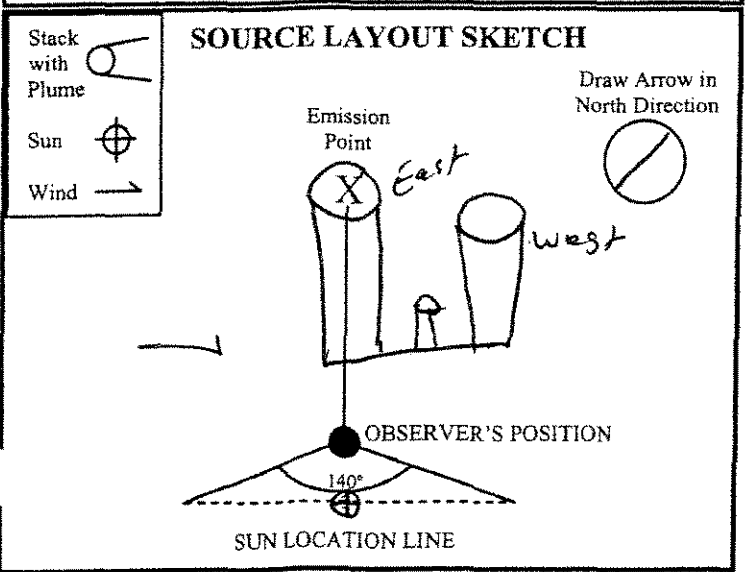
Background Color: **Blue & white** Sky Conditions: **Scattered**

Wind Speed: **5-10** mph Wind Direction: **from SW 3-27-07**
(provide from/to, i.e. from North to South)

Ambient Temperature: **48.2** °F Relative Humidity: **54** %

Additional Comments/Information: **Fuel Oil Test**

Observation Date		Start Time				End Time
3-27-07		10:22 AM				10:32 AM
Min	Sec	0	15	30	45	Comments
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print) Name: **Wayne M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel oil (Boiler #1)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack 1 ft above stack**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yard** Direction of Source From Observer: **see NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black** Plume Type: Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
BP of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue and scattered**

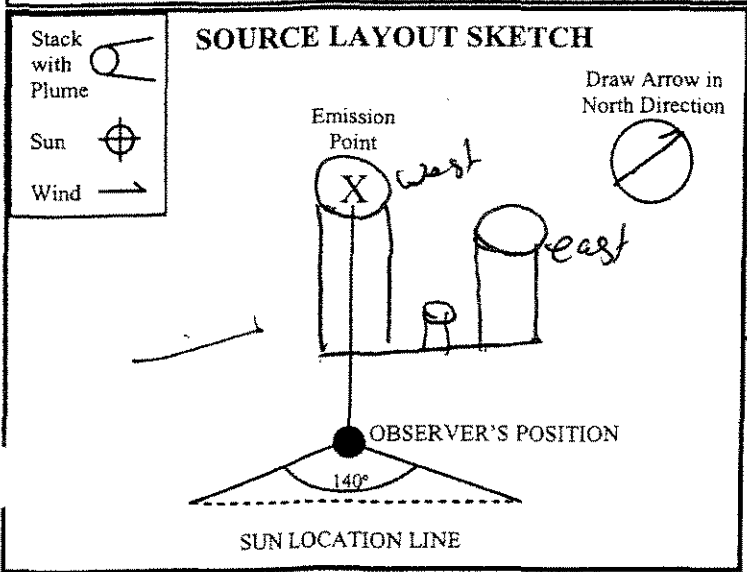
Background Color: **Blue & white** Sky Conditions: **scattered**

Wind Speed: **5-10** mph Wind Direction: **from NW 3-27-07**
(provide from/to, i.e. from North to South)

Ambient Temperature: **°F 49.2** Relative Humidity: **% 54**

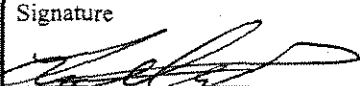
Additional Comments/Information:
fuel oil mist

Observation Date		Start Time				End Time
3-27-07		10:32				10:42
Min	Sec	0	15	30	45	Comments
	1		0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
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20						



Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucy M. Miller** Title: **OP&E**

Signature:  Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **EPA** Certification Date: **3-1-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel Oil (Boiler #1)** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack (FT above stack)**

Height Above Ground Level: **Feet 150** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yard** Direction of Source From Observer: **SE NW 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black Clear** Plume Type: Continuous Fugitive Intermittent
 No Plume Present

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
TOP OF STACK

Describe Background (i.e. blue sky, trees, etc.): **Blue sky & scattered**

Background Color: **Blue & white** Sky Conditions: **Scattered**

Wind Speed: **5-10** mph Wind Direction: **from SW** (provide from to, i.e. from North to South)

Ambient Temperature: **°F 48.2** Relative Humidity: **% 54**

Additional Comments/Information: **Fuel Oil Test**

Observation Date		Start Time				End Time
3/27/07		10:42 AM				10:52 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
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19						
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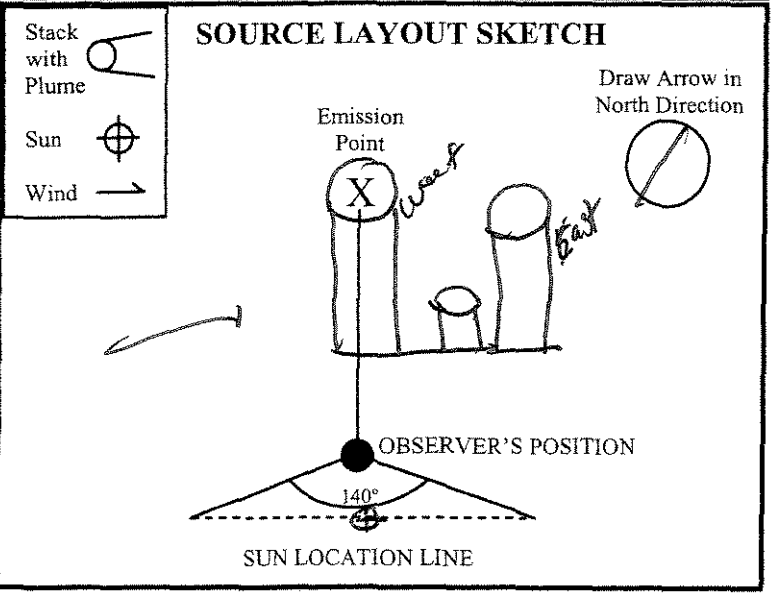
Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucas M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **3-27-07**

Observer Organization: **HSL**

Certified by: **ETA** Certification Date: **3-1-07**



**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Fuel Oil Boilers #1** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **West stack 1st above stack**

Height Above Ground Level: **Feet 50** Height Relative to Observer: **Feet 170**

Distance From Observer: **71 yards** Direction of Source From Observer: **SE 2/20 4-11-07**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black dense** Plume Type: Continuous Fugitive Intermittent
 No Plume Present

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
top of stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky's scattered**

Background Color: **Blue & white** Sky Conditions: **Scattered**

Wind Speed: **5-10** mph Wind Direction: **South east from SW 3-27-07**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **°F 48.2** Relative Humidity: **% 54**

Additional Comments/Information:
Fuel Oil Test

Observation Date		Start Time				End Time
3-27-07		10.52				11.07
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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19						
20						

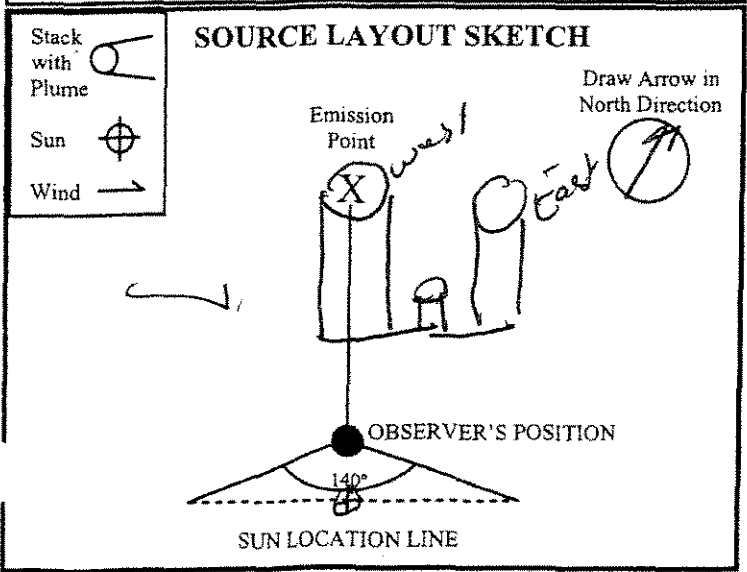
Average 10-Minute Opacity: **0** Range of Opacity Readings: Min. **0** Max. **0**

OBSERVER (please print)
 Name: **Lucy M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **3-27-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **3-1-07**





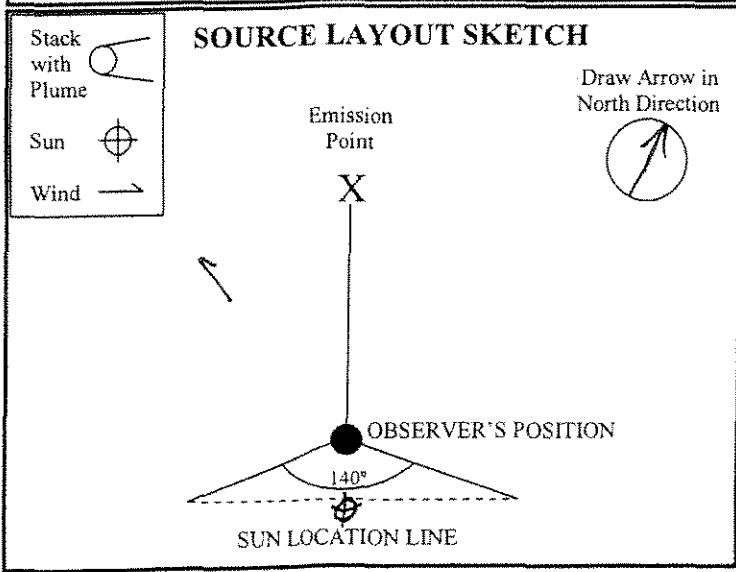
**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of West Boiler Stack	
Height Above Ground Level 152 Feet	Height Relative to Observer 174 Feet
Distance From Observer 73 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 Ft. above top of stack	
Describe Background (i.e. blue sky, trees, etc.) Cloudy	
Background Color Grey	Sky Conditions Cloudy
Wind Speed 13 mph	Wind Direction (provide from/to, i.e. from North to South) From Southeast
Ambient Temperature 32.5 °F	Relative Humidity 61 %
Additional Comments/Information: Fuel Oil Test Unit tripped - came back at 8:30 a.m	

Observation Date 4-10-07		Start Time 8:00 a.m.			End Time 8:10 a.m.
Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
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Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
Signature 	Date 4-10-07
Observer Organization KSL	
Certified by ETA	Certification Date 2-28-07

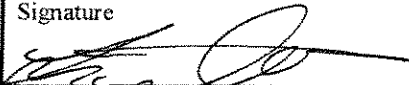


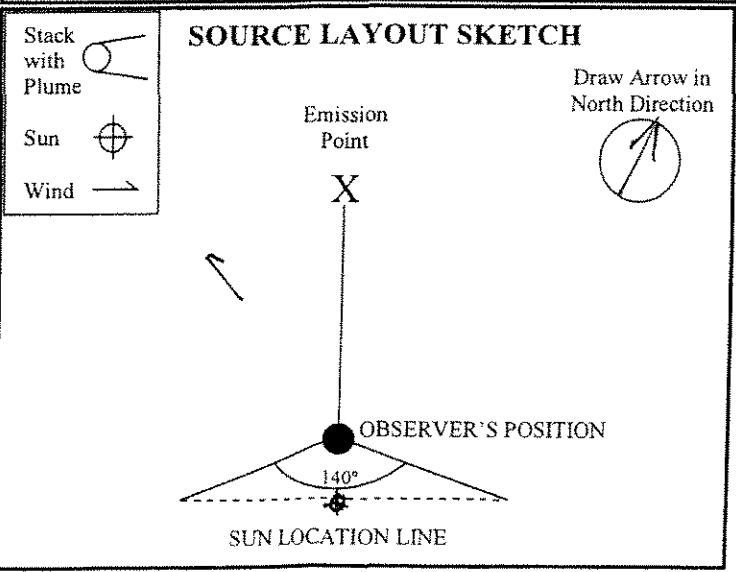
**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of West Boiler Stack	
Height Above Ground Level 152 Feet	Height Relative to Observer 174 Feet
Distance From Observer 73 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 Ft. above top of stack	
Describe Background (i.e. blue sky, trees, etc.) Cloudy	
Background Color Grey	Sky Conditions Cloudy
Wind Speed 13 mph	Wind Direction (provide from/to, i.e. from North to South) From Southeast
Ambient Temperature 32.5 °F	Relative Humidity 61 %
Additional Comments/Information: Fuel Oil Test Unit tripped - came back at 8:30 a.m	

Observation Date 4-10-07		Start Time 8:33 a.m.			End Time 8:43 a.m.
Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
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Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
Signature 	Date 4-10-07
Observer Organization KSL	
Certified by ETA	Certification Date 2-28-07



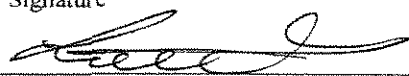
**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 175 Feet
Distance From Observer 71 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> No Plume Present
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 Ft. above top of stack	
Describe Background (i.e. blue sky, trees, etc.) Cloudy	
Background Color Grey	Sky Conditions Cloudy
Wind Speed 5-10 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 37.4 °F	Relative Humidity 64 %
Additional Comments/Information: Fuel Oil Test	

Observation Date		Start Time			End Time	
4-24-07		10:38 a.m.			10:48 a.m.	
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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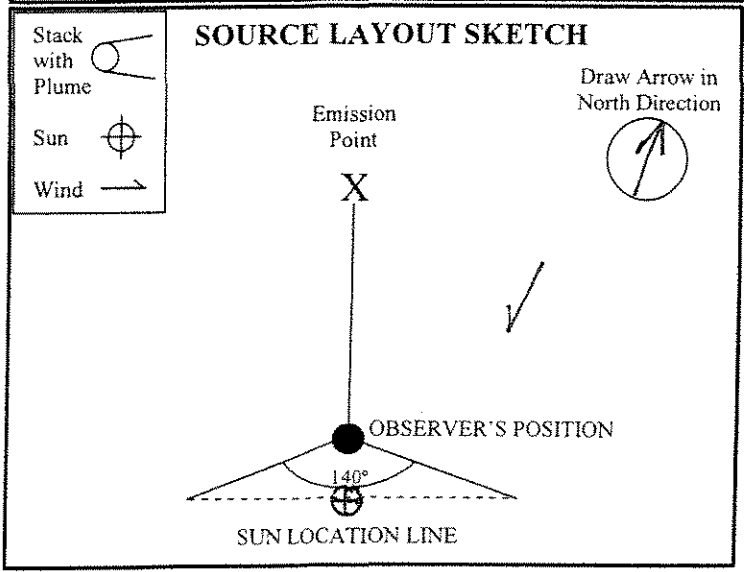
Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
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Signature 	Date 4-24-07
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Observer Organization KSL

Certified by ETA	Certification Date 2-28-07
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**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler # 2** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Top of Boiler Stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **175** Feet

Distance From Observer: **71** Yards Direction of Source From Observer: **NW**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Clear/Black/clear** Plume Type: **No Plume Present**
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1 Ft. above top of stack

Describe Background (i.e. blue sky, trees, etc.): **Cloudy**

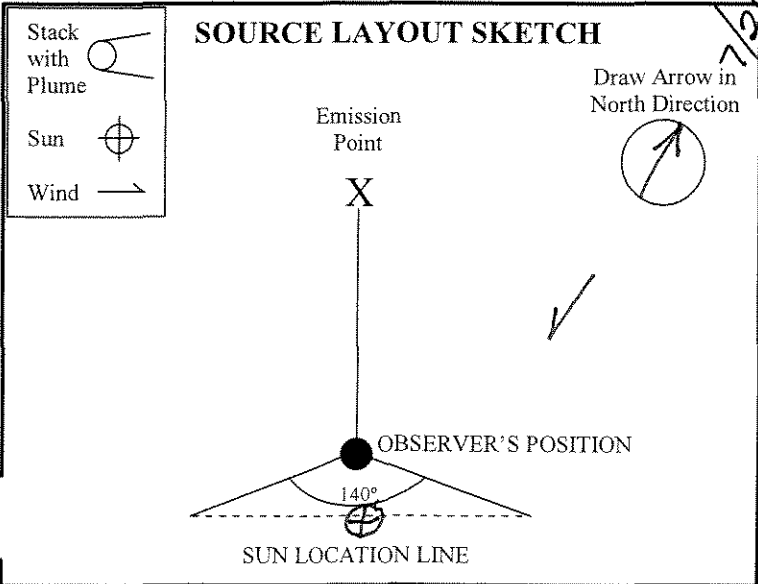
Background Color: **Grey** Sky Conditions: **Cloudy**

Wind Speed: **5-10** mph Wind Direction: **From North to South**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **37.4** °F Relative Humidity: **64** %

Additional Comments/Information:
Fuel Oil Test

Observation Date		Start Time			End Time	
4-24-07		10:48 a.m.			10:58 a.m.	
Min	Sec	0	15	30	45	Comments
	1	0	100	100	100	
2	50	50	30	10		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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Average 10-Minute Opacity: **11.0% - 8.5%**

Range of Opacity Readings
 Min. 0% Max. 100%

OBSERVER (please print)
 Name: **Lucas Miller** Title: **Operator**

Signature: Date: **4-24-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **2-28-07**


**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 175 Feet
Distance From Observer 71 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 Ft. above top of stack	
Describe Background (i.e. blue sky, trees, etc.) Cloudy	
Background Color Grey	Sky Conditions Cloudy
Wind Speed 5-10 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 37.4 °F	Relative Humidity 64 %
Additional Comments/Information: Fuel Oil Test	

Observation Date 4-24-07		Start Time 10:58 a.m.		End Time 11:08 a.m.	Comments
Min	Sec	0	15	30	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
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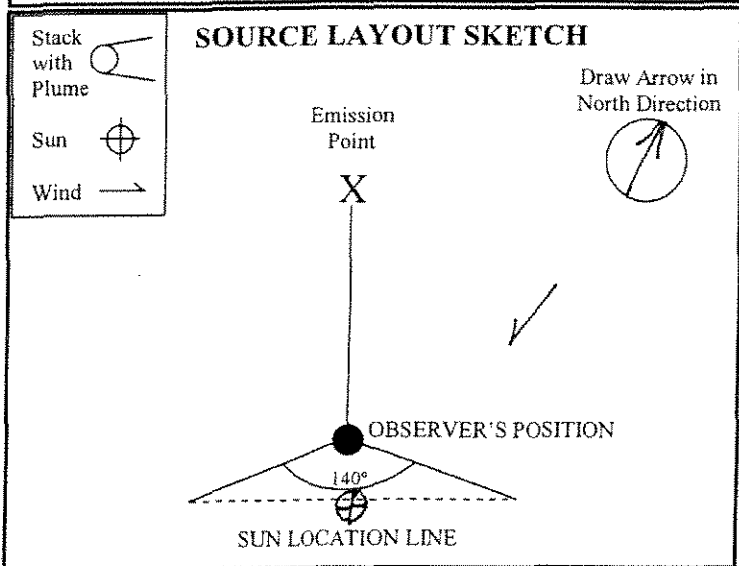
Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
--	--

OBSERVER (please print)
Name: **Lucas Miller** Title: **Operator**

Signature:  Date: **4-24-07**

Observer Organization
KSL

Certified by: **ETA** Certification Date: **2-28-07**

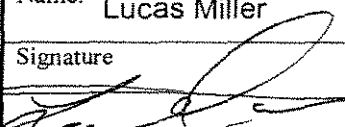


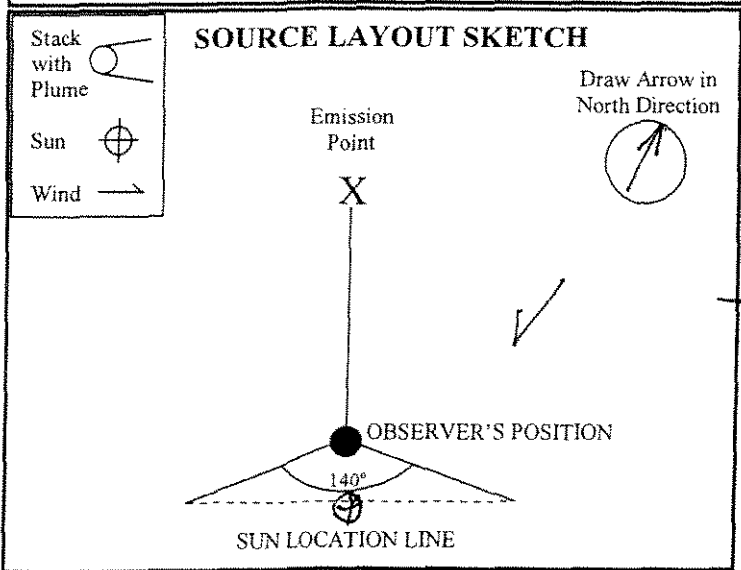
**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 175 Feet
Distance From Observer 71 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 Ft. above top of stack	
Describe Background (i.e. blue sky, trees, etc.) Cloudy	
Background Color Grey	Sky Conditions Cloudy
Wind Speed 5-10 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 37.4 °F	Relative Humidity 64 %
Additional Comments/Information: Fuel Oil Test	

Observation Date	Start Time				End Time
4-24-07	11:08 a.m.				11:18 a.m.
Min \ Sec	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
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16					
17					
18					
19					
20					

Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
--	--

OBSERVER (please print) Name: Lucas Miller Title: Operator	
Signature 	Date 4-24-07
Observer Organization KSL	
Certified by ETA	Certification Date 2-28-07



**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler # 2** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Top of Boiler stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75** Yards Direction of Source From Observer: **NW**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **black/clear** Plume Type: Continuous Fugitive Intermittent
 No Plume Present

Water Droplets Present? NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1 ft. above stack

Describe Background (i.e. blue sky, trees, etc.): **Clear skys**

Background Color: **blue** Sky Conditions: **clear**

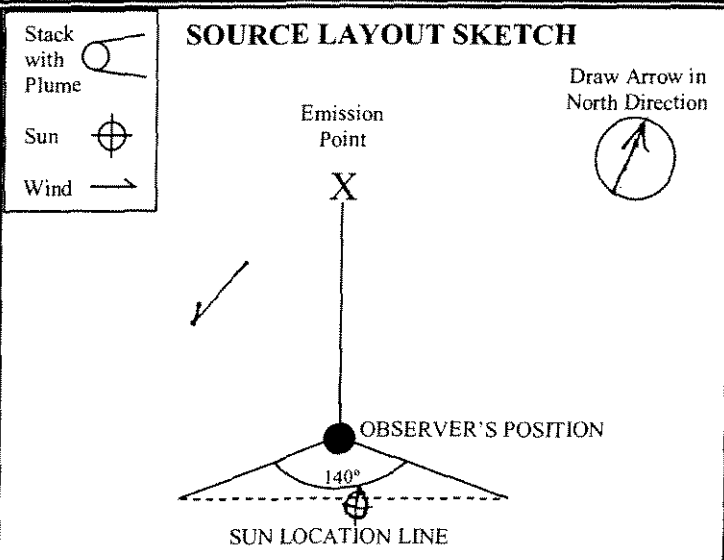
Wind Speed: **3-5** mph Wind Direction: **From North to South**
(provide from/to, i.e. from North to South)

Ambient Temperature: **61** Relative Humidity: **51** %

Additional Comments/Information:
Boiler #2 Fuel Oil Testing

Observation Date		Start Time			End Time	
5-1-07		9:48 a.m.			9:58 a.m.	
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	5		
3	5	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	10		
7	10	5	5	0		
8	0	5	5	0		
9	0	0	0	0		
10	0	0	0	0		
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20						

Average 10-Minute Opacity 1.25%	Range of Opacity Readings Min. 0% Max. 10%
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OBSERVER (please print)
 Name: **Lucas Miller** Title: **Operator**

Signature: Date: **5-1-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **2-28-07**

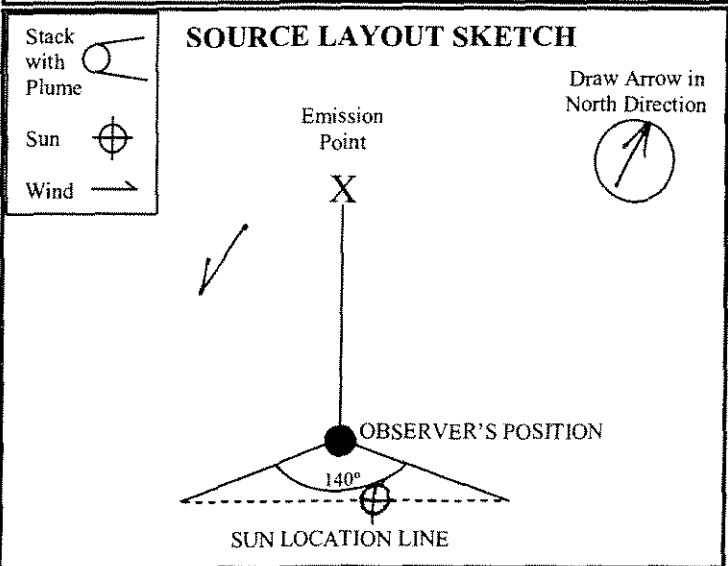
**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet
Distance From Observer 75 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Lifting <input type="checkbox"/> Trapping <input checked="" type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color black/clear	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 ft. above stack	
Describe Background (i.e. blue sky, trees, etc.) Clear skys	
Background Color blue	Sky Conditions clear
Wind Speed 3-5 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 61	Relative Humidity 51 %
Additional Comments/Information: Boiler #2 Fuel Oil Testing Told by James to standby - having problems with valves.	

Observation Date		Start Time				End Time
5-1-07		9:58 a.m.				10:08 a.m.
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	100	100	100	100		
3	100	100	50	50		
4	25	20	15	10		
5	10	10	5	0		
6	0	5	25	50		
7	20	15	5	0		
8	0	0	0	0		
9	0	50	25	10		
10	0	0	0	0		
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17						
18						
19						
20						

Average 10-Minute Opacity 25%	Range of Opacity Readings Min. 0% Max. 100%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
Signature 	Date 5-1-07
Observer Organization KSL	
Certified by ETA	Certification Date 2-28-07



**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet
Distance From Observer 75 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color black/clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 ft. above stack	
Describe Background (i.e. blue sky, trees, etc.) Clear skys	
Background Color blue	Sky Conditions clear
Wind Speed 3-5 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 61	Relative Humidity 51 %
Additional Comments/Information: Boiler #2 Fuel Oil Testing	

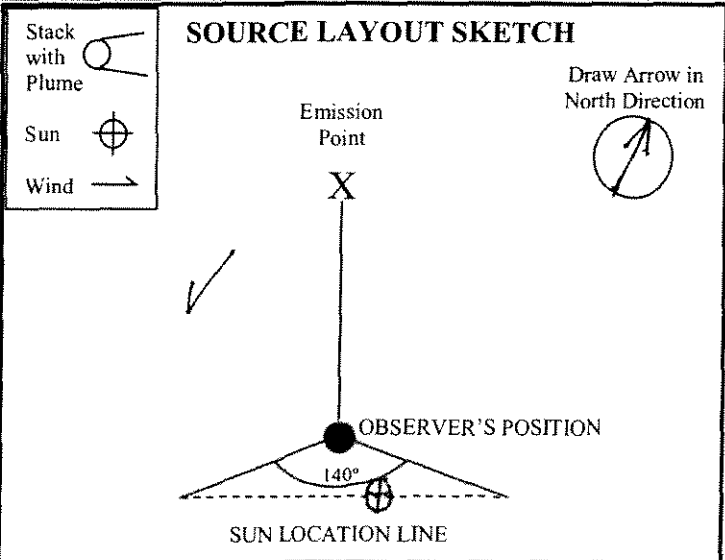
Observation Date		Start Time			End Time	
5-1-07		10:32 a.m.			10:42 a.m.	
Min	Sec	0	15	30	45	Comments
	1	20	10	5	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
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15						
16						
17						
18						
19						
20						

Average 10-Minute Opacity 0.875%	Range of Opacity Readings Min. 0% Max. 20%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
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Signature <i>Lucas Miller</i>	Date 5-1-07
Observer Organization KSL	

Certified by ETA	Certification Date 2-28-07
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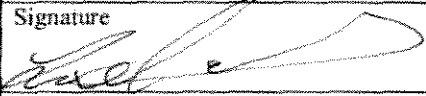
**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet
Distance From Observer 75 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color clear	Plume Type <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> No Plume Present
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 ft. above stack	
Describe Background (i.e. blue sky, trees, etc.) Clear skys	
Background Color blue	Sky Conditions clear
Wind Speed 3-5 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 61 F	Relative Humidity 51 %
Additional Comments/Information: Boiler #2 Fuel Oil Testing	

Observation Date		Start Time		End Time	Comments
5-1-07		10:42 a.m.		10:52 a.m.	
Min	Sec	0	15	30	45
	1	0	0	0	0
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
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16					
17					
18					
19					
20					

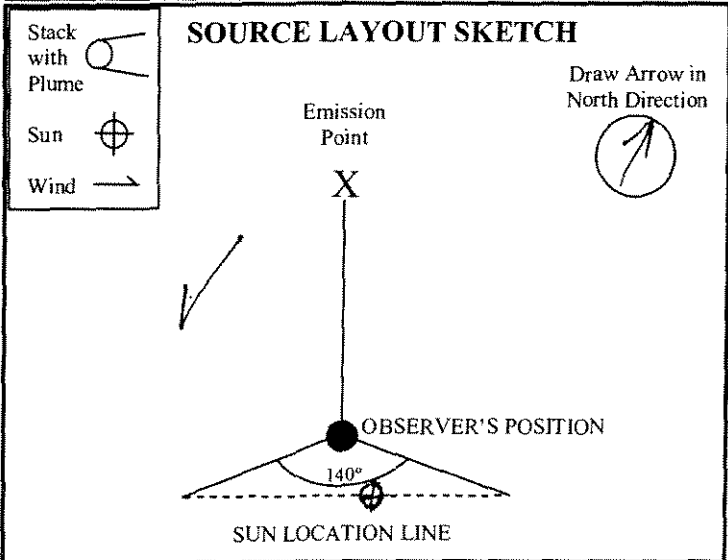
Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
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OBSERVER (please print) Name: Lucas Miller	Title: Operator
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Signature 	Date 5-1-07
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Observer Organization KSL

Certified by ETA	Certification Date 2-28-07
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**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 2	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) Top of Boiler stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet
Distance From Observer 75 Yards	Direction of Source From Observer NW
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color clear	Plume Type <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> No Plume Present
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1 ft. above stack	
Describe Background (i.e. blue sky, trees, etc.) Clear skys	
Background Color blue	Sky Conditions clear
Wind Speed 3-5 mph	Wind Direction (provide from/to, i.e. from North to South) From North to South
Ambient Temperature 61 F	Relative Humidity 51 %
Additional Comments/Information: Boiler #2 Fuel Oil Testing	

Observation Date 5-1-07		Start Time 10:52 a.m.		End Time 11:02 a.m.
Min \ Sec	0	15	30	45
				Comments
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

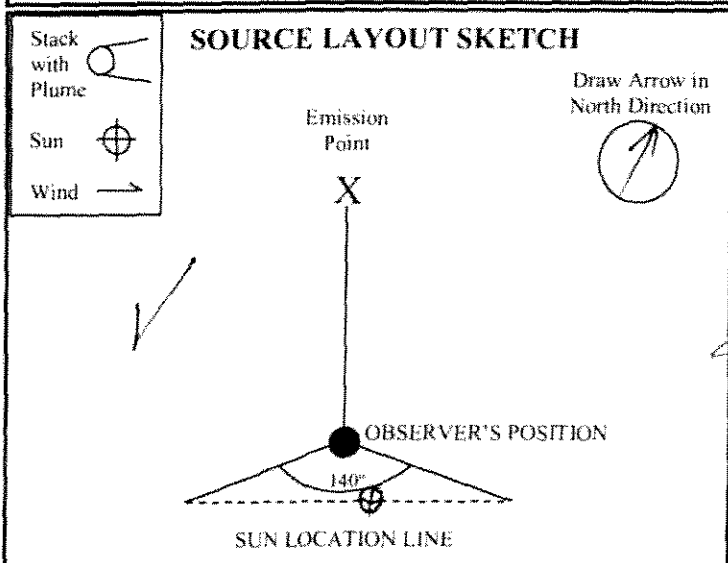
Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
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OBSERVER (please print) Name: Lucas Miller Title: Operator	
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Signature 	Date 5-1-07
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Observer Organization KSL

Certified by ETA	Certification Date 2-28-07
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**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **1ft above ~~stack~~ TOP of Boiler Stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75** Feet Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black to clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1ft. above stack

Describe Background (i.e. blue sky, trees, etc.):
Blue sky's

Background Color: **Blue sky's** Sky Conditions: **clear**

Wind Speed: **69** mph Wind Direction: **West South west**
(provide ~~map~~ to, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
Start up on Boiler #3

Observation Date		Start Time				End Time
5-11-07		8:35 AM				8:45 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	25	
6		25	25	5	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

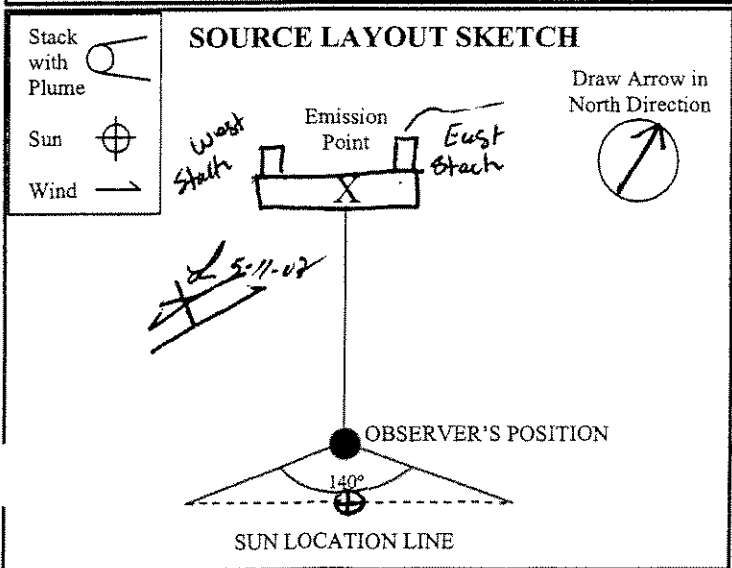
Average 10-Minute Opacity: **2.0 %** Range of Opacity Readings: Min. **0 %** Max. **25 %**

OBSERVER (please print)
Name: **Laura M. Miller** Title: **Operator**

Signature: *[Signature]* Date: **5-11-07**

Observer Organization: **NSL**

Certified by: **EJA** Certification Date: **2-28-07**



**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **at 1 ft. above boiler**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75** Feet Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black to clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1 ft. above stack

Describe Background (i.e. blue sky, trees, etc.):
Blue sky

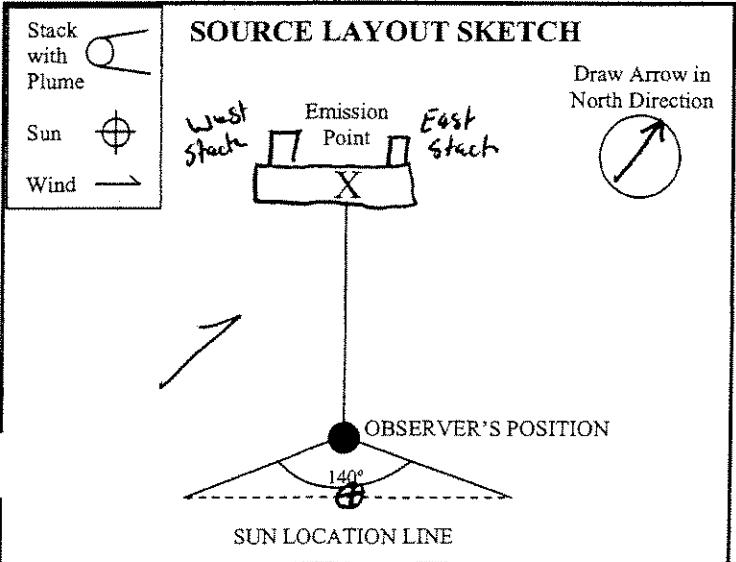
Background Color: **Blue sky** Sky Conditions: **Clear**

Wind Speed: **6.9** mph Wind Direction: **West South West**
(provide from 0 to 360, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
Adding More Fuel to Burners

Observation Date		Start Time		End Time	Comments
5-11-07		8:45 AM		8:55 AM	
Min	Sec	0	15	30	45
	1	0	0	0	0
2	0	0	0	0	
3	5	5	5	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	5	5	5	5	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
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17					
18					
19					
20					



Average 10-Minute Opacity: **0.89%** Range of Opacity Readings: Min. **0%** Max. **5%**

OBSERVER (please print)
Name: **Lucas M Miller** Title: **Operator**

Signature: *[Signature]* Date: **5-11-07**

Observer Organization: **KSL**

Certified by: **ETA** Certification Date: **2-28-07**

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler #3 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): #1 - 11' - 0" Boiler #3 Above Stack

Height Above Ground Level: 150 Feet Height Relative to Observer: 200 Feet

Distance From Observer: 75 feet Direction of Source From Observer: North West

Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Clear Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 1ft. above stack

Describe Background (i.e. blue sky, trees, etc.): Blue sky

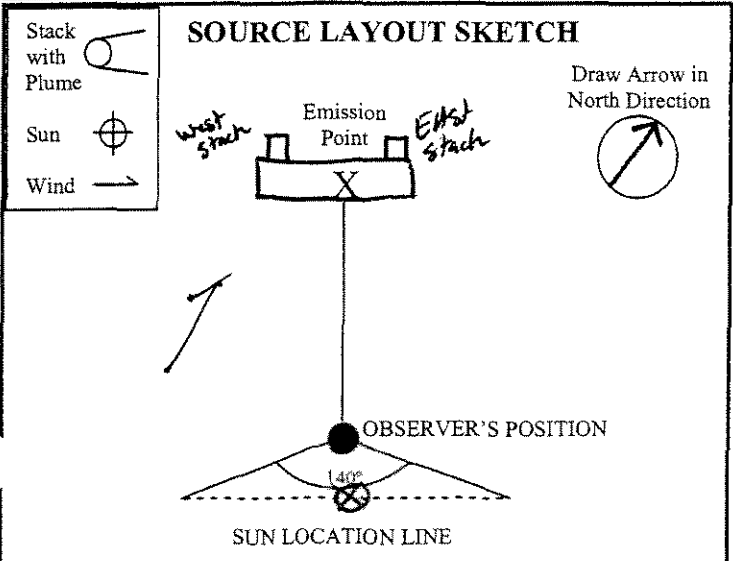
Background Color: Blue sky Sky Conditions: Clear

Wind Speed: 6.9 mph Wind Direction: West South West
 (provide from to, i.e. from North to South)

Ambient Temperature: 47.3 °F Relative Humidity: 62 %

Additional Comments/Information:
 Fuel oil Burn

Observation Date		Start Time				End Time
5-11-07		8:55 AM				9:05 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
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15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0 %

Range of Opacity Readings: Min. 0 % Max. 0 %

OBSERVER (please print):
 Name: Lucas M. Miller Title: Operator
 Signature: Date: 5-11-07

Observer Organization: KSL

Certified by: ETIA Certification Date: 2-28-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Boiler #3 + 4 ft above stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75** Feet Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1 ft above stack

Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

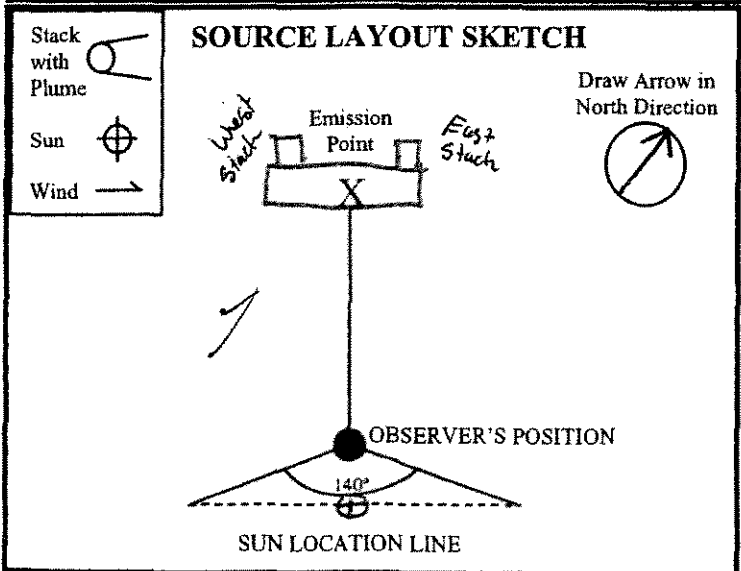
Background Color: **Blue** Sky Conditions: **Clear**

Wind speed: **6.9** mph Wind Direction: **West South West**
 (provide from/to, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
Fuel oil #3 Boiler

Observation Date		Start Time				End Time
5-11-07		9:05 AM				9:15 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: **00/0**

Range of Opacity Readings: Min. **00/0** Max. **00/0**

OBSERVER (please print)
 Name: **Lucas M. Mills** Title: **Operator**

Signature: Date: **5-11-07**

Observer Organization: **KSL**

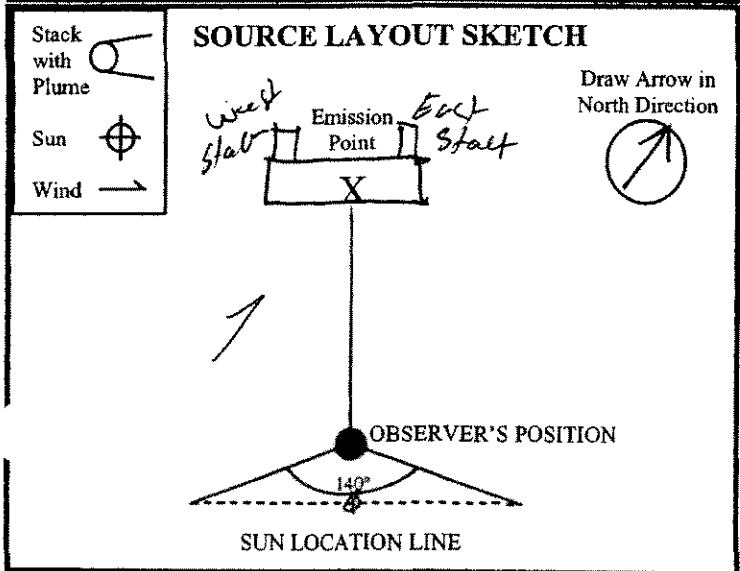
Certified by: **E+H** Certification Date: **2-28-07**

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source: Boiler #3	Type of Control Equipment: No Particulate Control
Describe Emission Point (Top of stack, etc.) TOP of Boiler #3 stack	
Height Above Ground Level: 150 Feet	Height Relative to Observer: 200 Feet
Distance From Observer: 75 yard Feet	Direction of Source From Observer: North west
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color: Clear	Plume Type: <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1ft above stack	
Describe Background (i.e. blue sky, trees, etc.) Blue sky	
Background Color: Blue	Sky Conditions: Clear
Wind Speed: 6.9 mph	Wind Direction: (provide from to, i.e. from North to South) West South West
Ambient Temperature: 47.3 °F	Relative Humidity: 62 %
Additional Comments/Information:	

Observation Date		Start Time				End Time
5-11-07		9:15 AM				9:25 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
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20						


Average 10-Minute Opacity: 0%	Range of Opacity Readings Min. 0% Max. 0%
OBSERVER (please print) Name: Wes M. MIA Title: Operator	
Signature: <i>[Signature]</i>	Date: 5-11-07
Observer Organization: KSL	
Certified by: EJA	Certification Date: 2-28-07

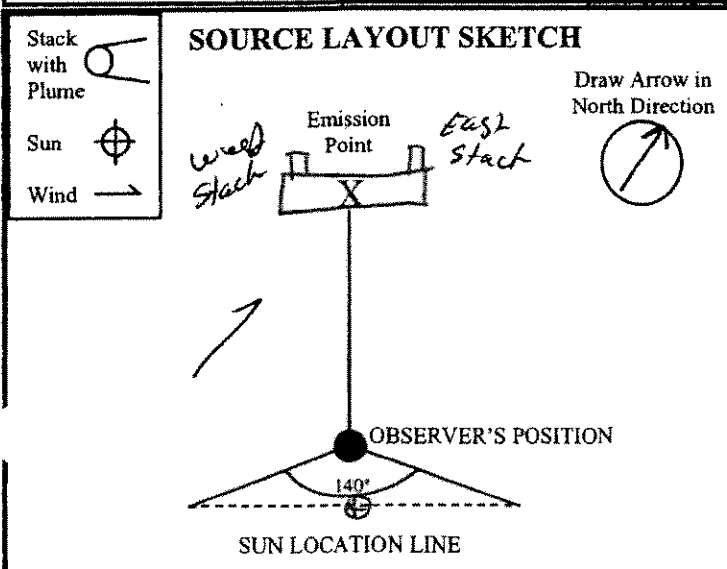


**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source: Boiler #3	Type of Control Equipment: No Particulate Control
Describe Emission Point (Top of stack, etc.): Top of Boiler #3 stack	
Height Above Ground Level: 150 Feet	Height Relative to Observer: 200 Feet
Distance From Observer: 75 Feet	Direction of Source From Observer: North west
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color: Clear	Plume Type: <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1ft above stack	
Describe Background (i.e. blue sky, trees, etc.): Blue sky	
Background Color: Blue	Sky Conditions: Clear
Wind Speed: 6.9 mph	Wind Direction: (provide from to, i.e. from North to South) west south west
Ambient Temperature: 47.3 °F	Relative Humidity: 62 %
Additional Comments/Information: Fuel oil burning on #3 Boiler	

Observation Date		Start Time				End Time
5-11-07		9:25 AM				9:35 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
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16						
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19						
20						

Average 10-Minute Opacity: 0%	Range of Opacity Readings Min. 0% Max. 0%
OBSERVER (please print) Name: Lucas M. War Title: ORCA	
Signature: 	Date: 5-11-07
Observer Organization: KSI	
Certified by: ETA	Certification Date: 2-28-07



**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

S - Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **TOP OF Boiler #3 stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **750** Feet Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1ft above stack

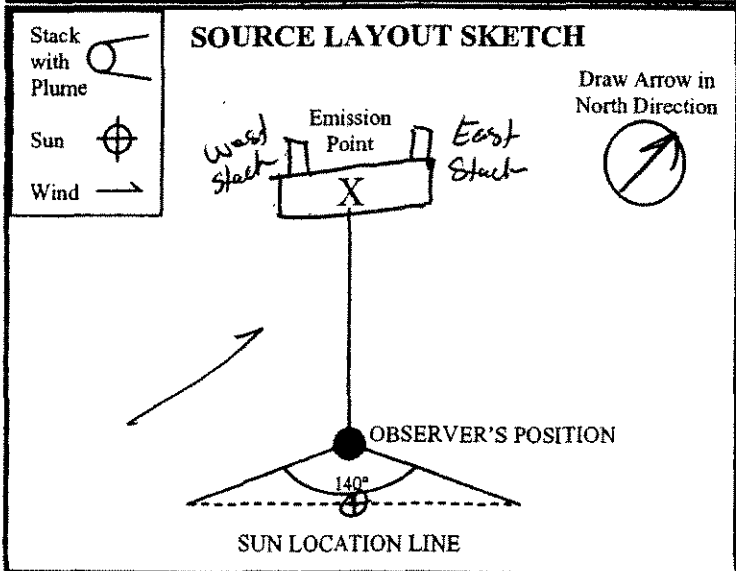
Describe Background (i.e. blue sky, trees, etc.): **Blue sky**

Background Color: **Blue** Sky Conditions: **Clear**

Speed: **6-9** mph Wind Direction: **West south west**
(provide from to, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
Fuel oil Barring on #3 Boiler



Observation Date		Start Time				End Time
5-11-07		9:35 AM				9:45 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0%		Min. 0% Max. 0%				
OBSERVER (please print)						
Name: Wesley Miller				Title: Operat		
Signature:				Date: 5-11-07		
Observer Organization: KSL						
Certified by: EJA				Certification Date: 2-28-07		



**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **Top of Boiler #3 stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75 yards** Feet Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1ft above stack

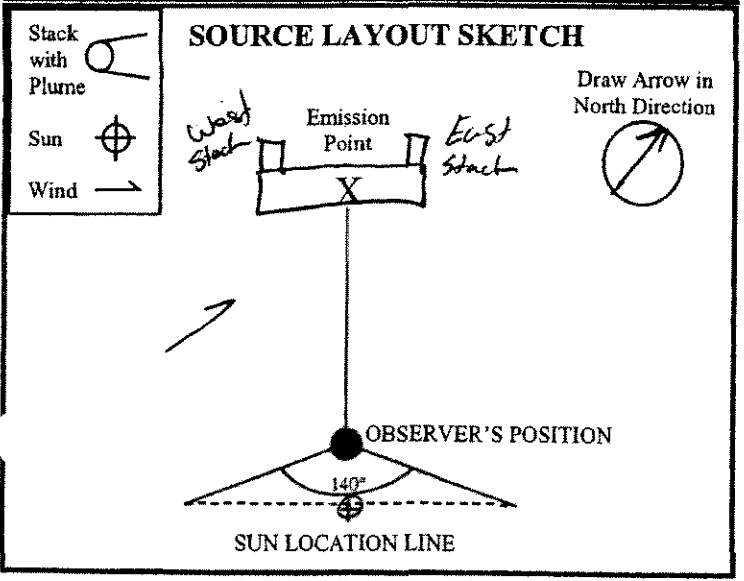
Describe Background (i.e. blue sky, trees, etc.): **Blue Skys**

Background Color: **Blue Skys** Sky Conditions: **Clear**

Wind Speed: **6-9** mph Wind Direction: **west south west**
 (provide from to, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
We stabilized At 9:55 Am on fuel oil



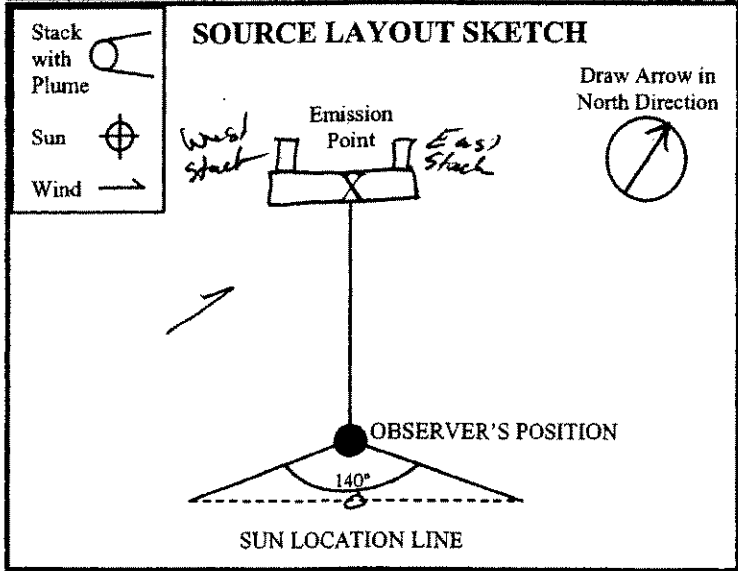
Observation Date		Start Time				End Time
5-11-07		9:45 AM				9:55 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0%		Min. 0% Max. 0%				
OBSERVER (please print)						
Name: Lucas M. Miller			Title: Operator			
Signature:			Date: 5-11-07			
Observer Organization: KSL						
Certified by: EJA				Certification Date: 2-28-07		

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler #3	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) TOP OF Boiler #3 Stack	
Height Above Ground Level 150 Feet	Height Relative to Observer 200 Feet
Distance From Observer 75 yards Feet	Direction of Source From Observer North West
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color Clear	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? 1ft of stack	
Describe Background (i.e. blue sky, trees, etc.) Blue Skys	
Background Color Blue Skys	Sky Conditions Clear
Speed 69 mph	Wind Direction (provide from to, i.e. from North to South) West South West
Ambient Temperature 47.3 °F	Relative Humidity 62 %
Additional Comments/Information: Put A New Beacon in Boiler #3 Per Randy A. James Williams PALB/O	

Observation Date 5-11-07		Start Time 10:12 AM		End Time 10:22 AM	
Min	Sec				Comments
	0	15	30	45	
1	0	0	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Average 10-Minute Opacity 0%	Range of Opacity Readings Min. 0% Max. 0%
OBSERVER (please print) Name: Lucas Miller Title: Operator	
Signature 	Date 5-11-07
Observer Organization KSL	
Certified by ETA	Certification Date 2-28-07



**LOS ALAMOS NATIONAL LABORATORY (LANL)
 VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Name: **Power Plant at TA-3**

Source Location: **TA-3-22**

Type of Source: **Boiler #3** Type of Control Equipment: **No Particulate Control**

Describe Emission Point (Top of stack, etc.): **TOP of Boiler #3 stack**

Height Above Ground Level: **150** Feet Height Relative to Observer: **200** Feet

Distance From Observer: **75 yards** Direction of Source From Observer: **North west**

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: **Black to clear** Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
1ft above stack

Describe Background (i.e. blue sky, trees, etc.): **Blue Skys**

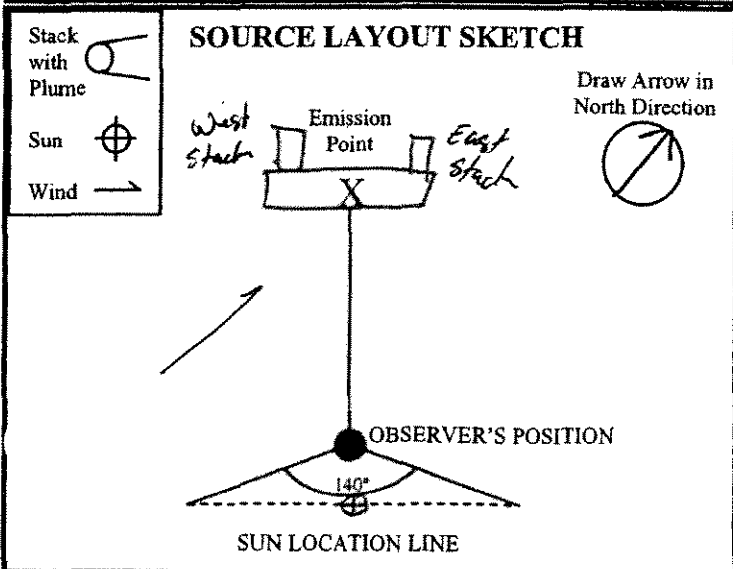
Background Color: **Blue Skys** Sky Conditions: **Clear**

Speed: **6.9** mph Wind Direction: **West South West**
 (provide from to, i.e. from North to South)

Ambient Temperature: **47.3** °F Relative Humidity: **62** %

Additional Comments/Information:
stop taking readings at this time stabilize with new burner per James on 10:32am

Observation Date		Start Time				End Time
5-11-07		10:22 AM				10:32 AM
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	5	5	5	
4		5	0	0	5	
5		5	5	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity		Range of Opacity Readings				
0.47%		Min. 0% Max. 5%				
OBSERVER (please print)						
Name: Lucas M. Miller			Title: Operator			
Signature:			Date: 5-11-07			
Observer Organization: KSL						
Certified by: EJA			Certification Date: 2-28-07			



LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler # 1 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): TOP OF MOST WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 150 Feet

Distance From Observer: 200 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: Black Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 ONE FOOT ABOVE STACK

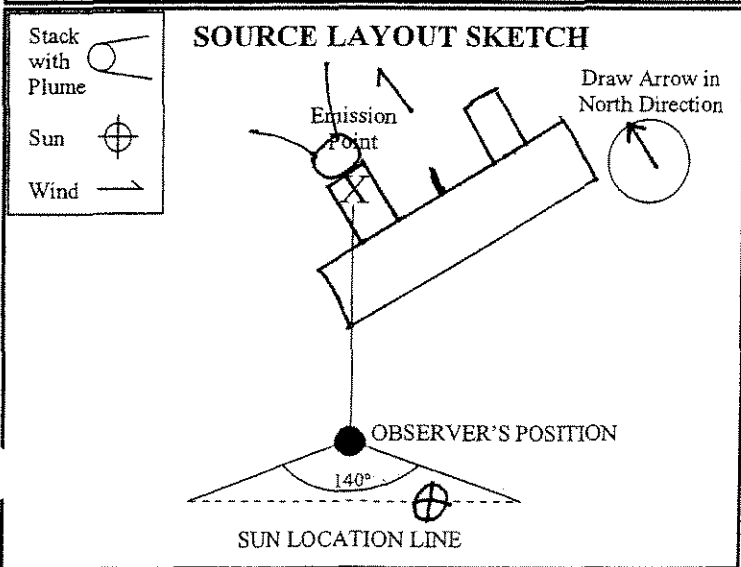
Describe Background (i.e. blue sky, trees, etc.): Blue/Grey Sky

Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North
 (provide from/to, i.e. from North to South)

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:
 Boiler to be put on line to run turbine

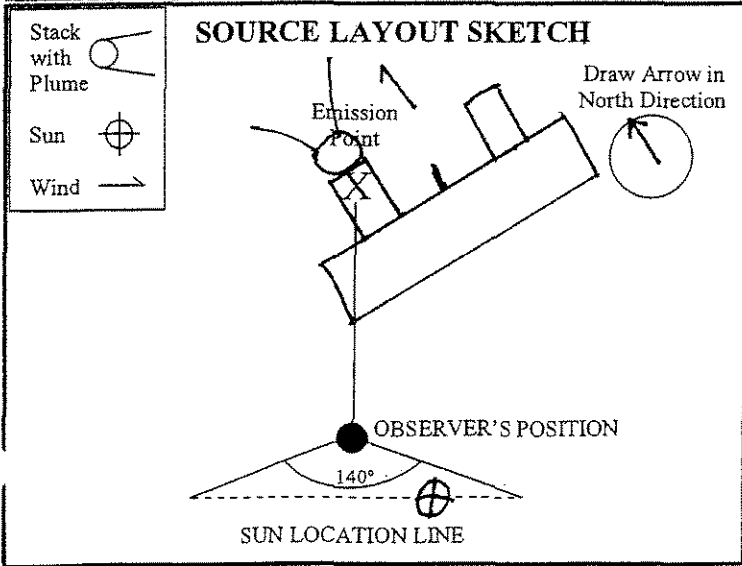


Observation Date		Start Time				End Time
5/15/07		1324				1334
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	Lit #4 Buenel
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	75	100	100	
9		100	25	10	5	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Average 10-Minute Opacity				Range of Opacity Readings		
10.375 %				Min.	Max.	
				0.0%	100%	
OBSERVER (please print)						
Name: BRIAN OLIVER				Title: Maint. head MAN		
Signature: Brian Oliver				Date: 5/15/07		
Observer Organization: KSL						
Certified by: ETA				Certification Date: 3-15-07		

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) TOP OF MOST WEST STACK	
Height Above Ground Level 150 Feet	Height Relative to Observer 150 Feet
Distance From Observer 200 Yards	Direction of Source From Observer NE
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> No Plume Present	
Emission Color Black	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? ONE FOOT ABOVE STACK	
Describe Background (i.e. blue sky, trees, etc.) Blue/Grey Sky	
Background Color Blue/Grey	Sky Conditions Mostly Cloudy
Wind Speed 12 mph	Wind Direction (provide from/to, i.e. from North to South) From South to North
Ambient Temperature 62.5 °F	Relative Humidity 45 %
Additional Comments/Information:	

Observation Date 5/15/07		Start Time 1334		End Time 1344	Comments	
Min	Sec	0	15	30		45
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	lit # 2 Burner
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	75	75	100	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

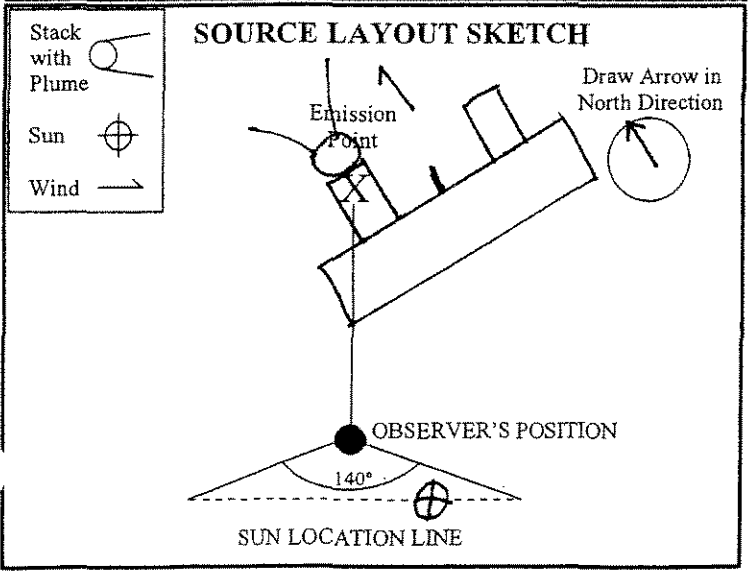


Average 10-Minute Opacity 6.25%	Range of Opacity Readings Min. 0.0% Max. 100%
OBSERVER (please print) Name: BRIAN OETZ Title: Maint. head MAN	
Signature <i>Brian Oetz</i>	Date 5/15/07
Observer Organization KSL	
Certified by ETA	Certification Date 3-15-07

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) TOP OF MOST WEST STACK	
Height Above Ground Level 150 Feet	Height Relative to Observer 150 Feet
Distance From Observer 200 Yards	Direction of Source From Observer NE
Description of Plume (stack exit only) <input checked="" type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input type="checkbox"/> No Plume Present	
Emission Color Black	Plume Type <input type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input checked="" type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? one foot Above Stack	
Describe Background (i.e. blue sky, trees, etc.) Blue/Grey Sky	
Background Color Blue/Grey	Sky Conditions Mostly Cloudy
Wind Speed 12 mph	Wind Direction (provide from/to, i.e. from North to South) From South to North
Ambient Temperature 62.5 °F	Relative Humidity 45 %
Additional Comments/Information:	

Observation Date 5/15/07		Start Time 1344		End Time 1354	Comments
Min	Sec	0	15	30	
1	5	5	0	0	
2	0	0	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					



Average 10-Minute Opacity .25%	Range of Opacity Readings Min. 0.0% Max. 5%
OBSERVER (please print) Name: BRIAN OLIVER Title: Maint. head MAN	
Signature <i>Brian Oliver</i>	Date 5/15/07
Observer Organization KSL	
Certified by ETA	Certification Date 3-15-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler # 1 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): TOP OF MOST WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 150 Feet

Distance From Observer: 200 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: NONE Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 ONE FOOT ABOVE STACK

Describe Background (i.e. blue sky, trees, etc.): Blue/Grey Sky

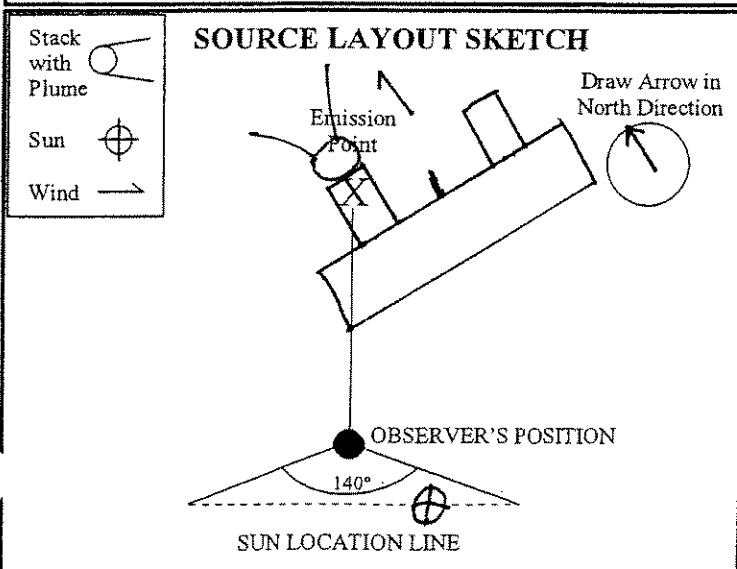
Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North
 (provide from/to, i.e. from North to South)

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
5/15/07		1354				1404
Min	Sec	0	15	30	45	Comments
	1		0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0% Max. 0.0%

OBSERVER (please print) Name: BRIAN OLTIZ Title: Maint. head MAN

Signature: *Brian Oltiz* Date: 5/15/07

Observer Organization: KSL

Certified by: ETA Certification Date: 3-15-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler # 1 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): TOP OF MOST WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 150 Feet

Distance From Observer: 200 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: None Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 one foot above stack

Describe Background (i.e. blue sky, trees, etc.): Blue/Grey Sky

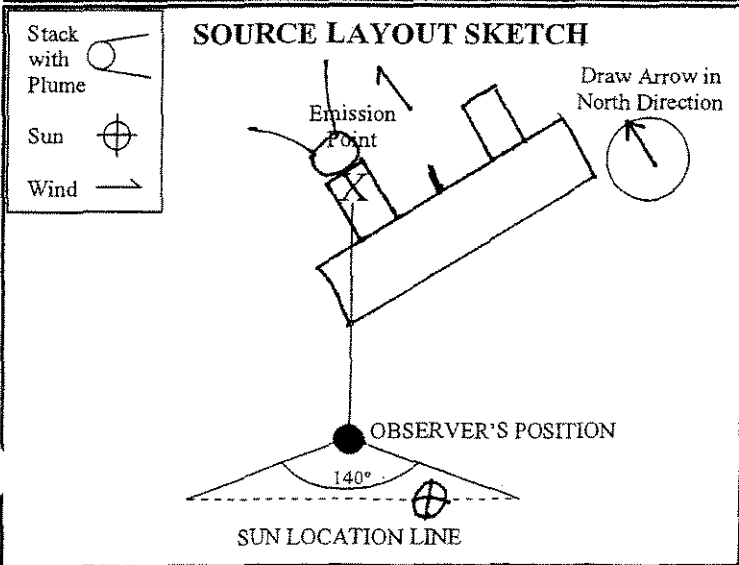
Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North
 (provide from/to, i.e. from North to South)

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
5/15/07		1404				1414
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0% Max. 0.0%

OBSERVER (please print): Name: BRIAN DETZ Title: Maint. head MAN

Signature: Brian Detz Date: 5/15/07

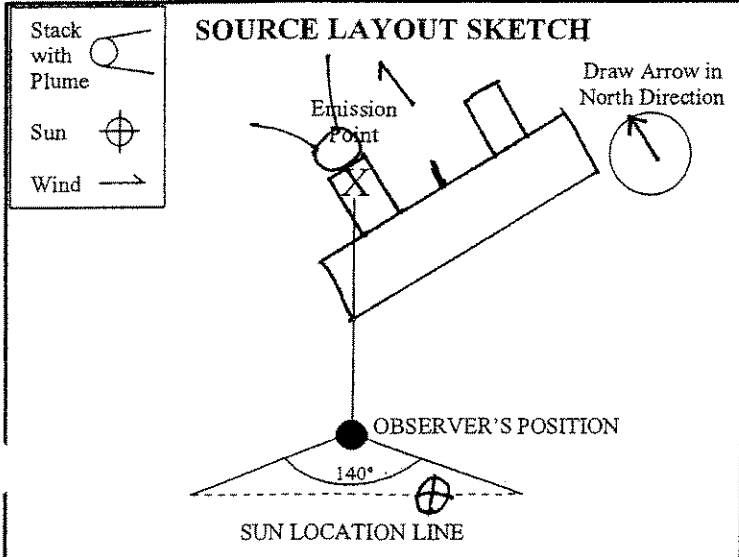
Observer Organization: KSL

Certified by: ETA Certification Date: 3-15-07

**LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)**

Source Name: Power Plant at TA-3	
Source Location: TA-3-22	
Type of Source Boiler # 1	Type of Control Equipment No Particulate Control
Describe Emission Point (Top of stack, etc.) TOP OF MOST WEST STACK	
Height Above Ground Level 150 Feet	Height Relative to Observer 150 Feet
Distance From Observer 200 Yards	Direction of Source From Observer NE
Description of Plume (stack exit only) <input type="checkbox"/> Lofting <input type="checkbox"/> Trapping <input type="checkbox"/> Looping <input type="checkbox"/> Fanning <input type="checkbox"/> Coning <input checked="" type="checkbox"/> No Plume Present	
Emission Color NONE	Plume Type <input checked="" type="checkbox"/> No Plume Present <input type="checkbox"/> Continuous <input type="checkbox"/> Fugitive <input type="checkbox"/> Intermittent
Water Droplets Present? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES If YES, droplet plume is <input type="checkbox"/> Attached <input type="checkbox"/> Detached	
At what point in the plume was opacity determined? ONE FOOT ABOVE STACK	
Describe Background (i.e. blue sky, trees, etc.) Blue/Grey Sky	
Background Color Blue/Grey	Sky Conditions Mostly Cloudy
Wind Speed 12 mph	Wind Direction (provide from/to, i.e. from North to South) From South to North
Ambient Temperature 62.5 °F	Relative Humidity 45 %
Additional Comments/Information:	

Observation Date	Start Time				End Time	
5/15/07	1414				1424	
Min	Sec	0	15	30	45	Comments
1		0	0	0	0	
2		0	0	0	0	
3		0	0	0	0	
4		0	0	0	0	
5		0	0	0	0	
6		0	0	0	0	
7		0	0	0	0	
8		0	0	0	0	
9		0	0	0	0	
10		0	0	0	0	
11						
12						
13						
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16						
17						
18						
19						
20						



Average 10-Minute Opacity 0.0%	Range of Opacity Readings Min. 0.0% Max. 0.0%
OBSERVER (please print) Name: BRIAN OLTZ Title: MAINT. head MAN	
Signature 	Date 5/15/07
Observer Organization KSL	
Certified by ETA	Certification Date 3-15-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler # 1 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): TOP OF MOST WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 150 Feet

Distance From Observer: 200 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only):
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: none Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES IF YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 one foot above stack

Describe Background (i.e. blue sky, trees, etc.): Blue/Grey Sky

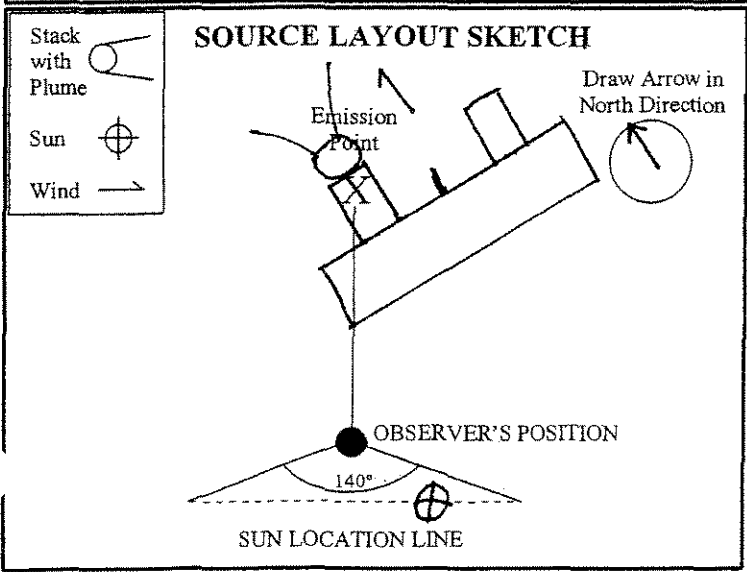
Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North
 (provide from/to, i.e. from North to South)

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
5/15/07		1424				1434
Min	Sec				Comments	
	0	15	30	45		
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0% Max. 0.0%

OBSERVER (please print) Name: BRIAN OETZ Title: Maint. head MAN

Signature: *Brian Oetz* Date: 5/15/07

Observer Organization: KSL

Certified by: ETA Certification Date: 3-15-07

LOS ALAMOS NATIONAL LABORATORY (LANL)
VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

Source Name: Power Plant at TA-3

Source Location: TA-3-22

Type of Source: Boiler # 1 Type of Control Equipment: No Particulate Control

Describe Emission Point (Top of stack, etc.): TOP OF MOST WEST STACK

Height Above Ground Level: 150 Feet Height Relative to Observer: 150 Feet

Distance From Observer: 200 Yards Direction of Source From Observer: NE

Description of Plume (stack exit only)
 Lofting Trapping Looping Fanning Coning
 No Plume Present

Emission Color: none Plume Type: No Plume Present
 Continuous Fugitive Intermittent

Water Droplets Present?
 NO YES If YES, droplet plume is Attached Detached

At what point in the plume was opacity determined?
 one foot above stack

Describe Background (i.e. blue sky, trees, etc.): Blue/Grey Sky

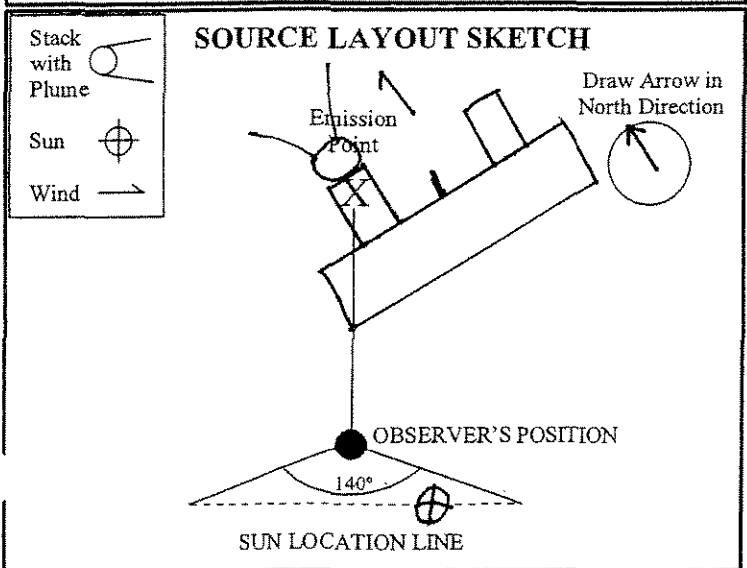
Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
5/15/07		1434				1444
Min	Sec				Comments	
	0	15	30	45		
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0.0% Range of Opacity Readings: Min. 0.0% Max. 0.0%

OBSERVER (please print) Name: BRIAN OLIVER Title: Maint. head MAN

Signature: [Signature] Date: 5/15/07

Observer Organization: KSL

Certified by: ETA Certification Date: 3-15-07

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VISIBLE EMISSION OBSERVATION FORM (10 MINUTE)

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 No Plume Present

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Water Droplets Present?
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At what point in the plume was opacity determined?
 one foot above stack

Describe Background (i.e. blue/sky, trees, etc.): Blue/Grey Sky

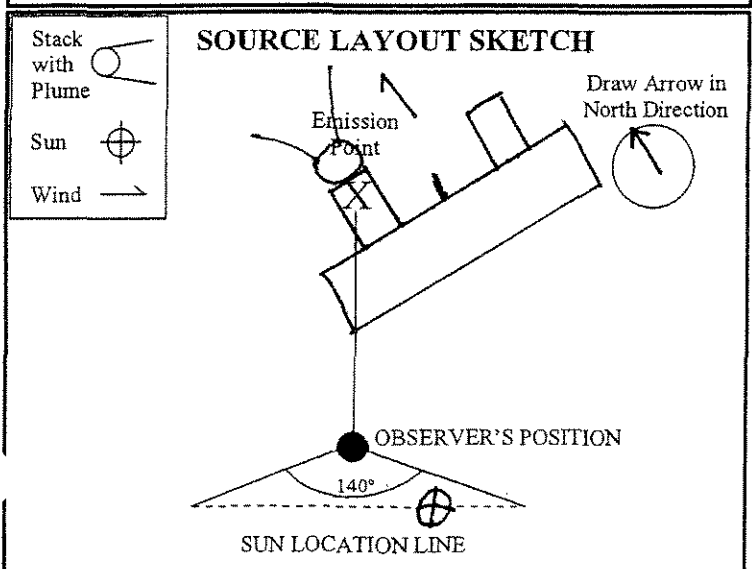
Background Color: Blue/Grey Sky Conditions: Mostly Cloudy

Wind Speed: 12 mph Wind Direction: From South to North
 (provide from/to, i.e. from North to South)

Ambient Temperature: 62.5 °F Relative Humidity: 45 %

Additional Comments/Information:

Observation Date		Start Time				End Time
5/15/07		1444				1454
Min	Sec	0	15	30	45	Comments
	1	0	0	0	0	
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11						
12						
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16						
17						
18						
19						
20						



Average 10-Minute Opacity: 0.0 % Range of Opacity Readings: Min. 0.0% Max. 0.0%

OBSERVER (please print) Name: BRIAN DETRZ Title: Maint. head MAN

Signature: *Brian Detrz* Date: 5/15/07

Observer Organization: KSL

Certified by: ETA Certification Date: 3-15-07